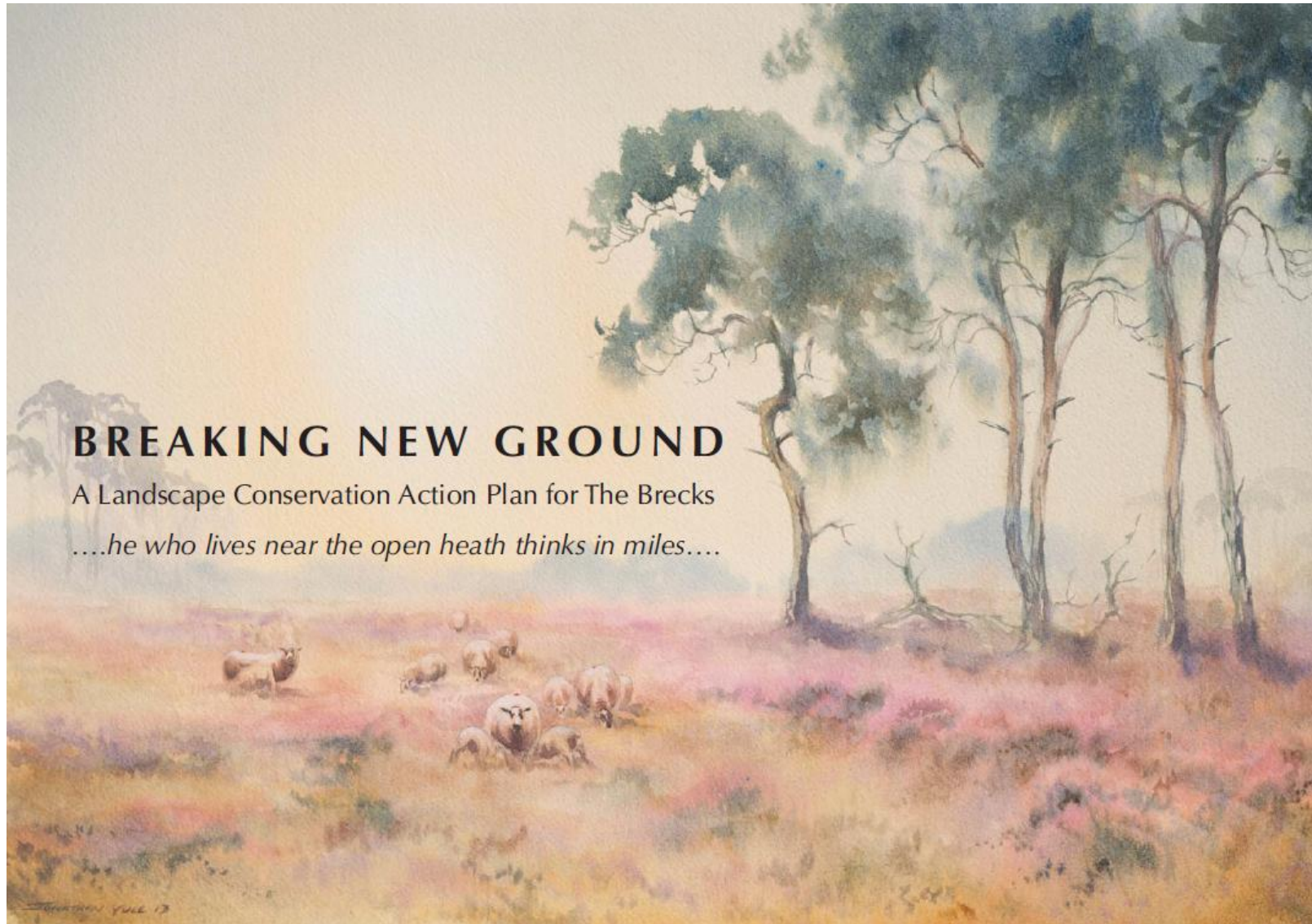


Breaking New Ground Landscape Conservation Action Plan - APPENDIX



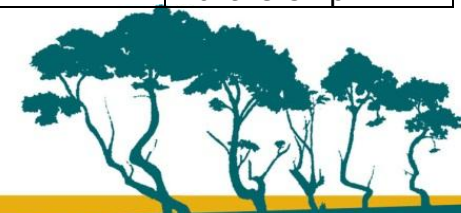
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A1- Ground Disturbance

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
A1: Ground Disturbance	Natural England (Norfolk Wildlife Trust RSPB Forestry Commission Suffolk CC Norfolk CC University of East Anglia)	Opportunity mapping and recreation of areas of traditional 'Brecks' by various methods of Ground Disturbance on selected areas, leading to a better understanding of management requirements for Brecks species diversity. This is a (literally) ground breaking project to establish and disseminate best practice guidance for land management throughout the Brecks	Landscape and Heritage Professionals Landowners, Land managers, volunteers, interest groups	Development of detailed Historic Environment Opportunity GIS mapping 10+ Ha of new ground disturbance treatment undertaken at 15 sites including SSSIs, Roadside Nature Reserves and agricultural holdings 15 community events and volunteer engagement,	Ensures that all BNG projects can be undertaken successfully without damaging landscape. Provides guidance to enable future work to be undertaken in full knowledge of historic importance of sites Populations of characteristic Brecks plants, invertebrates and birds expanded and secured. Landscape scale habitat links created Long-term volunteer engagement in bare	Project total £134,868 HLF: £86,390 (64%) In-kind: £35,978 (27%) Volunteer: £4,250 (3%) Cash: £8,250 (6%) Historic Environment work (£23,918) Ground Disturbance: Weeting Heath (£33,538) Brecks Heath Partnership



				<p>Legacy event held to share best practice Best practice guidance</p> <p>Consultation with landowners / managers</p> <p>On-line guidance document produced</p>	<p>ground creation Increasing collaboration between professions.</p> <p>Involving volunteers in historic environment work and visits.</p> <p>Dissemination of knowledge and best practice guidance which will inform land management techniques throughout the Brecks and nationally</p>	<p>sites(4) (£21,350)</p> <p>Stanton Street (£20,703)</p> <p>Roadside Nature Reserves (£20,100)</p> <p>Monitoring (£13,200)</p> <p>Best Practice Guidance (£2,059)</p>
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Delivery Partner organisations:

<p><i>Organisation:</i></p> <p>Norfolk Wildlife Trust</p> <p>RSPB</p> <p>Forestry Commission</p> <p>Natural England</p> <p>Norfolk County Council</p> <p>Suffolk County Council</p> <p>University of East Anglia</p>	<p><i>Role:</i></p> <p>Delivery partners</p>
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Project Need

This project is literally breaking new (and old) ground. There has been an historical decline in the creation of broken/bare ground in The Brecks – an area of unique climate and soils and historical grazing, cultivation and fallow. There has been a consequent decline in the flora and fauna associated with bare ground (Dolman *et al* 2010). Partnership (FC, UEA, Butterfly Conservation and Plantlife) experiments have now shown that different types of ground disturbance have a range of beneficial effects for these bare-ground dependent species (Pedley *et al* 2013).

The Breckland Biodiversity Audit (BBA) not only recorded 12, 845 species in Brecks, but identified 2149 of national importance as Brecks priority species. The Brecks supports 28% of all UK BAP species in just 0.4% of the UK's land area, including rare species of heath and coastal habitats. The BBA highlighted the importance of grazing and disturbance in combination for 149 priority invertebrate and plant species and physical disturbance with light or no grazing supporting 144 priority species. This includes arable cultivated margins as habitats for rare species. The audit also highlighted the strong need to understand the best techniques and regimes to fully support these species – hence why further practical works are required in the Brecks (Dolman *et al* 2011).

Therefore a range of different disturbance treatments in the Brecks will benefit these characteristic Brecks species – increasing populations of plants, invertebrates and birds through varied habitat management and mosaic creation.

40% of the Brecks NCA is under nationally important SSSI designation, with the majority of these sites notified as European sites – SPA and SAC, for their importance at that wider scale.

The BBA demonstrated there is a need to develop and steer SSSI and agricultural management to maintain these important sites in favourable condition. Dispersal of plant material to maintain populations can be encouraged through increased site connectivity and could also be aided by roadside nature reserves. Inclusion of Forestry Commission land will benefit the 50%+ of priority heathland carabid beetles and plants which occur in Breckland forest rides and early stage plantations (Dolman *et al* 2011).

A number of the sites in this project are publically accessible and/or utilised for public engagement, which will increase public awareness of the role of bare ground in the Brecks and also provide an opportunity to learn about the characteristic flora and fauna associated with it. Volunteering opportunities will provide long term engagement. Monitoring will provide the scientific



community, conservation and land management professionals with increased understanding of different ground disturbance treatments. Involvement of land owners in an agricultural context will increase understanding of how arable land can contribute to biodiversity conservation in the Brecks and support optimal agri-environmental management and delivery. Involvement in educational strands of the wider BNG project could encourage schools and other interest groups to undertake disturbance work and monitoring in their own back yards, further highlighting techniques to increase local biodiversity.

Various partners have been involved in habitat management and disturbance projects across the project area and beyond. These working relationships can be enhanced and expanded through this project, including through voluntary input and increased skills provision. Many partners from the Brecks Biodiversity Audit have come together to undertake this Ground Disturbance project, which means that some of the actions identified as being so important can be driven forward and further progress made. A more joined up approach will be beneficial, experimenting with different techniques, with increased monitoring, coordinating information and sharing best practice among land owners, managers and the wider community.

A strategic and coordinated approach will provide a pool of evidence and guidance for future management to optimise the biodiversity value of the Brecks, whilst sustaining the historic value of this landscape and adapting to challenges brought about by climate change and demands for food and fibre.

Detailed Project Description

Historic Environment

Proposed four main strands to historic environment work:

Historic Environment input to the sites where ground disturbance will take place. Each one will probably involve 2 days of Norfolk County Council Historic Environment Service (NCCHES) or Suffolk County Council Archaeology Service (SCCAS) time (desk-based assessment, field visit, briefs, advice etc). Both departments are willing to offer two days per site as an in-kind contribution. Archaeological contractors' work has been included as an overall project budget of £10,000.

Historic Environment input into the proposed best practice document

Historic Environment input into best practice events, such as conferences, walks and the Heath Practitioners Forum.



A Historic Environment Opportunities Map, providing a strategic historic environment overview for all sites likely to be subject to bare ground disturbance. The following project outline covers this element.

Historic Environment Opportunity Map Project Outline

The Breckland Biodiversity Audit confirmed the need for ground disturbance works to be carried out across the Brecks on a regular basis. It also suggested that 'archaeological interests need to be resolved without requiring a separate impact assessment for each operation and site' (Dolman, Panter and Mossman 2010, 122–125, 152–154 and 188–189). Natural England and the Forestry Commission have raised the need for a strategic approach in discussions with Norfolk County Council's Historic Environment Service on a number of occasions. This sub-project aims to address this identified need while ensuring that the historic environment is fully considered in all future bare ground disturbance projects in the BNG area. As a result, the Historic Environment Opportunities Map will provide a legacy that can be used by environmental organisations, historic environment professionals and volunteers.

Sub-project aim and objectives

The Historic Environment Opportunity Map sub-project aims to address the need for a strategic historic environment approach to ground disturbance works in the Brecks. Its objectives are as follows:

- To produce a GIS Historic Environment Opportunity Map for the BNG Project area that organisations involved in bare ground disturbance works can consult during the development of projects.
- To produce a user guide to accompany the Historic Environment Opportunity Map.
- To produce best practice guidance to support bare ground disturbance works in the Brecks and in other areas of East Anglian heathland.
- To involve volunteers in developing strategic advice and best practice guidance.
- To increase the skills and experience of volunteers in the Brecks.

Sub-project methodology

Initially the project will identify areas suitable for bare ground disturbance works across the BNG Project area. The areas will be identified using work previously undertaken by Norfolk County Council's Biodiversity and Countryside team and during



discussions with a range of partners, including Natural England, Forestry Commission, Norfolk and Suffolk Wildlife Trusts, Butterfly Conservation, Plantlife and the Suffolk Biodiversity Partnership.

Historic maps, aerial photographs, the Norfolk and Suffolk Historic Environment Records and information held by project partners will be used to map areas of Historic Environment Opportunity. These areas will range in size from whole land parcels to individual HER records, with the extent being dependent on the information available, known historic environment features, historic landscape character and an assessment of the potential for previously unrecorded historic environment features. Each mapped area will be accompanied by a record in a GIS table. As a final step, each mapped area will be assigned a statement of Historic Environment opportunity.

Statements of Historic Environment Opportunity are likely to include:

- No Historic Environment consultation required.
- Commission an archaeological contractor to carry out a Rapid Identification Survey¹.
- Consultation with local authority Historic Environment Service required².
- No ground disturbance works permitted.

The fields within the GIS table are likely to include:

- Unique identifier
- Historic Environment Opportunity statement.
- Reason behind Historic Environment Opportunity statement (free text).
- Land use on late 18th-century maps (Faden for Norfolk and Hodkinson for Suffolk).
- Land use on Enclosure maps.
- Land use on Tithe maps.
- Land use on Ordnance Survey 1st edition 6 inch maps.
- Land use on 1940s aerial photographs.
- Land use on 1980s aerial photographs.
- Current Historic Landscape Characterisation type.
- HER record/s (yes/no).
- HER record numbers.
- HER significance scores.



- HER survival scores.
- HER record/s summary.

The GIS table will be produced using MapInfo as a stand-alone file. The Norfolk section will be compiled by Norfolk County Council's Historic Environment Service; the Suffolk section by Suffolk County Council Archaeology Service. Before completion its content will be reviewed by Norfolk County Council and Suffolk County Council's Biodiversity and Countryside team. On completion the GIS table will be incorporated into the mapping section of the Norfolk and Suffolk Historic Environment Records.

Although the mapping of areas, the population of the table and the assessment of Historic Environment Opportunity will primarily be a desk-based exercise, a group of volunteers will be recruited and trained to visit and assess areas that have not been visited previously by archaeologists and are thought to be of high historic environment potential. Volunteers will be recruited from those currently working on Norfolk Monuments Management Project's volunteer condition monitoring project and local archaeological organisations. It is possible volunteers working on other Breaking New Ground projects may wish to be involved. Field visits to the ten sites included in the main Ground Disturbance Project will also provide valuable information.

During the mapping and assessment work, opportunities will be taken to enhance existing Historic Environment Record records. This work will include producing significance and survival scores for all Historic Environment Records encountered.

Norfolk County Council's Historic Environment Service will produce a user guide and best practice guidance document to accompany GIS table. These documents will be reviewed by Suffolk County Council Archaeology Service and Norfolk County Council's Biodiversity and Countryside team before completion.

On completion the GIS table will be supplied to all interested partner organisations either as a MapInfo file (.tab) or shapefile (.shp). The user guide and best practice guidance document will be provided as a .pdf document.



Sub-project timetable

The project will be carried out after *Breaking New Ground's* Brecks Landscape Aerial Photograph Mapping project has been completed (data produced by this project will play a pivotal role in assigning Statements of Opportunity). As a result, it is expected to start in April 2015 and be completed by the end of March 2017 (during years 2 and 3 of *Breaking New Ground*).

Monitoring and analysis

All monitoring will follow a single protocol to provide equivalent data to enable scientific analysis by UEA. NCC/NBIS and volunteers will undertake plant monitoring and UEA will undertake pitfall trap sampling, identification of species, sample preparation. This will include staff time, travel and visit costs. Analysis will be in terms of management guilds (what types of species are being benefitted) as well as abundance of species of conservation concern.

Monitoring should be spring and summer following treatment, annually, with initial analysis and reporting in winter of first year after treatment, final analysis and reporting winter three years after application of treatment.

- One visit for plants and vegetation structure.
- Standardised pitfall monitoring (on three occasions in the year, each involving two visits with traps set out for one week between visits, i.e. 6 visits per annum) for spiders, ants, beetles.
- One visit for flying hymenoptera.

Best practice guidance

The best practice guidance will bring together the results, analysis and evidence gathered from this project, along with previous work undertaken by UEA, project partners and others to best inform future work.

It will be produced in year three, so will evolve as the project progresses, but aims to incorporate:

- Rationale for why bare ground/disturbance is needed
- Collation of examples of disturbance work across SSSIs (one of BBA desired outcomes)
- Collation of the evidence base – this would be a combination of published research, together with any other survey/monitoring data available e.g. Plantlife, Butterfly Conservation, NWT, etc.
- A review of the different techniques, e.g. for each approach (scarification, rotavation, ploughing, etc) – summarise what has been done where, what the benefits were (species, vegetation structure, longevity), including pros and cons of



different techniques (including practical considerations), what works for different species, what doesn't, relevance of soil type, aspect, etc.

- Recommendations for the different techniques
- Recommendations for monitoring, which site managers could adopt
- Dissemination of guidance as hard copy, internet downloads, legacy event to share findings and launch new guidance

Ground Disturbance

Forestry Commission – Santon Street

Delivery lead: Forestry Commission

Delivery partner organisations: Friends of Thetford Forest - volunteer participation

Project aims and objectives

This project's objectives are to increase understanding of bare-ground creation, origins, methods and benefits to local wildlife.

This project aims to re-create the firebreak on the north side of the Brandon to Thetford Railway line.

This will provide bare ground (Pedley *et al* 2013) habitat for many Breckland conservation priority species (Dolman *et al* 2010), especially solitary bee and wasp species, with over 50% of UK species recorded along Santon Street.

Project summary

Re-create a significant (40,600m²) area of bare ground firebreak along Santon Street in Thetford Forest. Until the advent of diesel trains, the length of the Thetford to Brandon railway line was firebreaked, by ploughing, to prevent sparks from steam trains setting fire to the forest. This would have provided ideal habitat for now rare invertebrates, plants and birds. Much of this area is now either closed turf or scrub.

The full Santon Street sub-project includes:-

1. Scrub Removal (FC and volunteer in kind contribution).
2. Rotovation/Discing of bare ground (FC in-kind contribution).
3. Hand turfing (Volunteer in-kind contribution).
4. Mechanical Turf stripping (Contractor).



Project need

A range of different disturbance treatments along this landscape corridor will benefit the characteristic Brecks species as described by Pedley *et al* 2013. It will also provide opportunities for volunteers to learn bare ground creation skills. As the area is publically accessible it will also provide the public the opportunity to learn about the characteristic flora and fauna associated with bare ground. Monitoring will provide the scientific community with increased understanding of different bare-ground treatments.

Detailed project description

1. *Scrub Removal* Removal of 1.3ha of gorse, birch, pine and willow scrub encroaching previously open ground, freeing up areas for bare-ground creation and providing open habitat links between areas. This will be delivered via an FC contract (1.1ha) in 2014 and through activity of the Friends of Thetford Forest (0.2ha) in 2014, 15 & 16. These will be an FC and volunteer in-kind contribution.
2. Rotovation/Disc harrowing of 1.5ha of previous bare-ground. This will re-create bare-ground on areas that have formed a closed turf from previously bare-ground. This will be delivered directly by FC staff in 2014, 15 & 16. This will be an FC in-kind contribution.
3. Hand turfing of 600m² of previous bare-ground. This will re-create bare-ground on areas that have formed a closed turf from previously bare-ground. Hand turfing will be used in areas too sensitive for mechanical re-creation eg. existing rare plant interest. This will be delivered by the Friends of Thetford Forest (FoTF) conservation volunteers in 2014, 15 & 16. This will be a Volunteer in-kind contribution.
4. Mechanical Turf stripping to create 6 areas of bare ground. This will create 2.5ha of new bare ground that forms a continuous bare-ground habitat link of different types along Santon Street. This will be delivered by contractors managed by FC in 2015. This will be a project cost and an FC in-kind contribution.



Outputs

1.3 ha of scrub removal. Bare ground creation along Santon Street, Thetford Forest.

40,600 m² of bare ground created

10 volunteers gained bare ground creation skills.

Populations of characteristic Breckland plants, invertebrates and birds expanded and secured. Landscape scale habitat links created. Increased public awareness of the role of bare ground in the Brecks. Long-term volunteer engagement in bare ground creation.

Location

The bare-ground creation work will take place between TL79518741 & TL83898737 along Santon Street, north of Thetford to Brandon railway line (FC Fire Route21).

Land owned by Forestry Commission

External contractors

External contractor costs for mechanical turf stripping are based on recent WREN funded work carried out in Thetford Forest by Butterfly Conservation (S. Hearle pers comm.)

Weeting Heath

Outputs

Weeting Heath: the creation of 0.7ha of bare ground by rotavation adjacent to an existing arable weed reserve managed under an HLS agreement by an adjacent landowner, to benefit early pioneer stage Breckland specialities/rudurals. The creation of 0.8ha of bare ground by turf removal including offsite disposal* to benefit Breckland specialities which are currently declining at Weeting Heath esp. Spanish Catchfly.

Management legacy

Weeting Heath: The re establishment of rabbits (addressed in Breaking new Burrows) may be key to the extent of the management legacy necessary for this project. The absence of rabbits may necessitate foraging costs @£1K/ha/annum as follow up to annual weedwiper work (£230/ha/annum) for the first 5 years to control unwanted rudurals from the area where



humus has been scraped and disposed offsite (again at this site there is no option for disposal of humus onsite). To maintain rotavated arable weed area, annual rotavations may be required according to the species present.

Measurement of Success & Evaluation

The final year of the project will involve a survey and report of project success regarding growth of ruderals, Breckland specialities and sward development. Collation of the quantity of guided walks and talks for Weeting Heath, undertaken by the NWT Brecks Reserve Manager.

Audience

NWT has a visitor centre at Weeting Heath. Talks and guided walks undertaken at both sites by the Brecks Reserves Manager reach audiences including NWT members groups and the wider community.

Public benefit

Weeting Heath is a CROW access sites, which restrict public access associated with nesting Stone Curlews between March and October. Outside the restrictions NWT invites the public to visit these sites. In addition, the Weeting visitor centre provides access during the summer to part of the site and hides during Stone Curlew nesting

Monitoring

Historical and biological monitoring will be undertaken as per all sites, as well as fixed point photography undertaken by NWT.

Brecks Heath Partnership sites

Brandon, Santon Street, Laines Farm and Cranwich Heath

One of the remits of the project is to experiment with management techniques for restoration of heathland from Forestry – afforestation, along with agricultural use of land, has been a major cause of decline of heathland.

Outputs

Brandon: the creation of 2ha of bare ground by scraping and reprofiling, to improve diversity of sward structure of dwarf shrub heath and provide south facing aspects for invertebrates and reptiles.



Santon Street: 1 ha rotavation to provide substrate for pioneer Breckland grass species and expose mineral soil for invertebrates

Laines farm: 1 ha rotavation to provide substrate for pioneer Breckland grass species and expose mineral soil for invertebrates

Cranwich Heath: 0.8 ha rotavation to provide substrate for pioneer Breckland grass species, expose mineral soil for invertebrates and provide suitable surface to encourage rabbit burrowing.

Management legacy

These former forestry areas within the Thetford Forest have produced mixed results with regards previous ground disturbance projects due to the disturbed nature of the profile. It is recognised that repeat rotavations may be necessary to ensure depletion of organic matter and encourage leaching. Follow-up weed control is likely at both Brandon and Cranwich Heath to control the growth of undesirable ruderals (thistles, etc) (costs as in final year of project are likely for the next 5 years. The BHP partnership commits the parties to 2018/2019).

Measurement of Success & Evaluation

The final year of the project will involve a survey and report of project success regarding growth of ruderals, Breckland specialities and sward development.

Audience

The BHP partnership between NWT, Natural England and FC provides an ideal opportunity to disseminate knowledge gained from ground disturbance projects

Public benefit

Brandon, Santon Street and Cranwich Heath are sites where public access is welcomed by FC and NWT, subject to sensitivities around rare ground nesting birds.



Ground Disturbance on Roadside Verges– Norfolk and Suffolk

Aims and objectives

Roadside verges within the Brecks provide important areas of often ungrazed land where specialist plant species can exist without competition from animals or the dense grass ground cover that forms as a result of grazing.

The aim of this project is to increase the abundance of key vascular plants and the associated plant assemblages that are found within the Brecks, by disturbing the current ground flora to create bare/ disturbed ground for the target species to seed into.

Four roadside verges in Norfolk and four verges in Suffolk have been selected (see financial spread sheet), the majority of which are within Sites of Special Scientific Interest.

The 8 selected sites will be managed by skilled contractors rotavating or turf cutting carefully identified areas in autumn/winter.

Monitoring

Historical and biological monitoring will be undertaken as per all sites, as well as fixed point photography undertaken by NWT.

The sites will be surveyed by skilled botanists and volunteers the following spring/summer.

Management and monitoring

Botanical monitoring of the ground disturbance sites will be carried out each spring.

In year one, prior to disturbing the soil, the survey will be to establish a baseline of what species are present and identify exact areas where disturbance will not have adverse effects on existing flora.

Creation of disturbed ground on roadside verges

Outputs

- 4 - 6m² of disturbed ground created on each plot per year
- A total of ~ 95 – 150m² of disturbed ground across the 8 sites in the Brecks by the end of the project
- An increase in total numbers of target plants on each site



- 8 'reservoirs' of specialist Brecks plant species created as a source of seed for re-colonising other areas within the Brecks, including Special Areas for Conservation, Special Protection Areas and SSSI's

Landowner

Weeting Heath, NWT

Santon Street – FC

Brandon Heath, – BHP/FC

Cranwich Heath, – BHP/FC

Laines Farm, – BHP/FC

Santon Street – BHP/FC

RNRs – NCC/SCC management

All site managers have been involved in the planning of the project

Audiences

- General Public – Site interpretation and enhanced biodiversity value, events. Increases audiences involved.
- Volunteers – Participation and knowledge gain
- Conservation community – Monitoring, workshops, learning new techniques and lessons of different techniques. Improves and updates management knowledge and skills.
- Scientific community – Monitoring and increased scientific data and understanding. Ties together all elements of the project.
- This project aims to increase understanding of bare-ground creation, origins, methods and benefits to local wildlife
- General Public – Site interpretation, knowledge, access to conservation trials and areas
- Volunteers – Participation in creation and monitoring and historic environment site assessments, learning, increasing skills
- Conservation community – Monitoring, workshops, understanding of different techniques, better management, guidance, coordination with others, input to scientific research
- Scientific community – Monitoring, gathering new data and evidence
- General Public – Site interpretation, knowledge, access to conservation trials and areas
- Volunteers – Participation in creation and monitoring and historic environment site assessments, learning, increasing skills



- Conservation community – Monitoring, workshops, understanding of different techniques, better management, guidance, coordination with others, input to scientific research
- Scientific community – Monitoring, gathering new data and evidence

Site interpretation and participation. Understanding the landscape and conservation – biologically and historically – what has shaped it, why work is undertaken, what the outcomes are, how they can take part.

Opportunities for participation in bare-ground creation and monitoring, input to future guidance for land managers, potential links with educational projects to undertake school grounds/local green space work.

Through the volunteer hub, links to other BNG projects, links with agricultural community.

Local communities will have opportunities to engage in ground disturbance creation and monitoring, activities and events. Visitors and local communities will have greater understanding of the origins and importance of ground disturbance in Breckland through interpretation, events, BNG website, local press.

'Buy in' is established for all parties involved in putting together this proposal, which will in turn feed out to established volunteer groups and associated.

Volunteers

Volunteer involvement is documented in project plans in the financial spread sheet and currently accounts for 255 days –this will include Friends of Thetford Forest, NBIS/NCC recorders, historic environment volunteers, NWT and RSPB volunteers, possibly Plantlife plant recorders and new volunteers recruited through the BNG project. The partners involved are experienced in involving volunteers in their work.

There will be opportunities to participate in workshop(s) and monitoring developed by NBIS/UEA, and undertake practical work and historic involvement.



Conditions & Consents

SSSI consent/assent and Habitats Regulations approval will be sought from Natural England before any work is finally agreed and commences.

Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Archaeological restrictions	Med	Med	There is a strong possibility that historic environment features could restrict the proposed bare ground disturbance work within the ten sites. To reduce this risk, a standard approach will be applied, involving early liaison with Norfolk County Council Historic Environment Service and Suffolk County Council Archaeology Service. Both services are willing to assess the ten sites (as a Contribution in kind) and devise approaches that allow bare ground disturbance works to take place while ensuring the conservation of the historic environment. Assessments will involve desk-based and site based work; if necessary these may lead to the

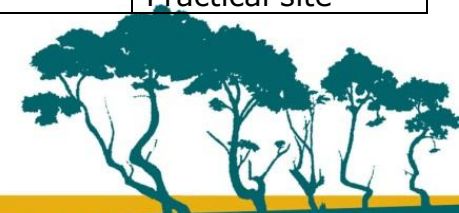


			employment of archaeological contractors to mitigate the impact of bare ground disturbance works.
Bird nesting – sensitive species, with closed areas	Med/High	Low/Med	Work with stone curlew team
Lack of volunteers	Low	Med	Increase effort to recruit
Overspend	Low	Med	Contingency and manage budget and works appropriately
Not getting consent for work/altering work to be consented	Low	High	Discussions have been happening and will continue and formal consent/assent sought
Low event attendance	Low/Med	Med	Increase events and recruitment and advertising



A2- Conserving the Brecks Wildlife Sites

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
A2: Conserving the Brecks Wildlife Sites	Norfolk Wildlife Trust	The project to ensure the conservation of the County Wildlife Sites (CWS) in the BNG Project area which will survey and develop management statements for each site and identify new sites, especially those which connect the ecological network. It will provide advice and support to landowners to manage the sites including practical management works	Landowners and managers of CWSs, interest groups	Condition of 30 CWS within the project area assessed	Database of CWSs condition statements	Project total: £48,425 HLF: £33,775 (70%) In-kind: £10,150 (21%) Volunteer: £4,500 (9%)
				Identify, survey and create management statement for 5 new CWSs Management plans written for 14 existing CWS Management takes place on 12 CWS 2 CWS management training workshops	Creation of 5 new CWS contributing to the conservation of Brecks Biodiversity Management objectives identified for CWSs Practical management works carried out and condition improved	Surveys, assessments and management statements (£14,625) Advice and engagement with managers and landowners (£4,900) Practical site



						management works (£28,000)
						Training workshops (£900)

Project Aims/Objectives

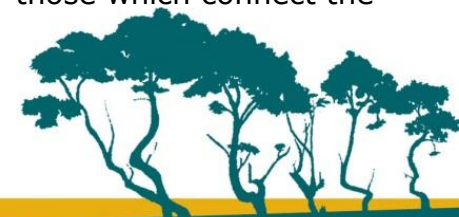
The project will carry out a condition assessment of all County Wildlife Sites (CWS) in the Brecks BNG Project area and develop management statements for each site. It will provide advice and support to landowners to manage the sites identified in the condition assessments. Implementation of management advice will be carried out on priority sites.

Project Need

In 2009, the University of East Anglia led an initiative to collate information about the wildlife species to be found in the Brecks. It was carried out over 18 months, pooling nearly a million records collected by scientists and dozens of volunteer enthusiasts. The Audit, highlighted for the first time the immense diversity of life in Breckland. Over 12,000 species were recorded with 2,149 a priority for conservation and 317 listed on the UK's. The Brecks Biodiversity Audit identified the lack of appropriate management on many County Wildlife Sites and highlighted the need to review the notified features, conservation objectives and condition assessment criteria. Most County Wildlife Sites are privately owned but are not in favourable management because landowners in many cases cannot fund the required management or have not received the advice and support they require. County Wildlife Sites are recognised as providing a key component of any ecological network recognised by the Lawton Review (Making Space for Nature 2011) which has also highlighted the poor state of management of County Wildlife Sites and stated that this should be improved.

Detailed Project Description

This project relates to CWS identified by partnerships comprising the Wildlife Trusts, County Councils, local biological record centres and Natural England. They represent an important biodiversity resource complementing the SSSI network as recognised by the Lawton Review (Making Space for Nature 2011). The project will carry out a condition assessment of all CWS in the Brecks and develop management statements for each site; identify new sites, especially those which connect the



ecological network. It will provide advice and support to landowners to manage the sites identified in the condition assessments. This will involve 2 training workshops for landowners and managers looking managing land for biodiversity and heritage. The project will involve local community groups in practical management and local recorders will undertake survey work. Local interpretation of sites will be made available through incorporation of sites into local walks leaflets for the Heritage Trail.

Outputs and Outcomes		
Activity	Outputs	Outcomes
Assess Condition of CWS	Condition of 30 CWS assessed	Improved knowledge of condition of CWS
Produce written conservation management plans for site owners	Management plans written for 14 CWS	Management objectives identified for CWS
Implement management measures on CWS	Management takes place on 12 CWS	Management carried out and condition improved on CWS
Support for land managers	2 Training workshops for land managers	Long-term sustainable management of

Location

BNG Project Area

Landowner

Various private landowners, Trusts and local authorities. Most are already working with NWT and SWT

Audiences

The project will engage primarily with landowners and managers of CWS as their willingness is essential to assessing and carrying out conservation management work on these sites.



NWT and SWT have many years experience in engaging with landowners and managers of wildlife sites and this expertise should allow us to successfully address this audience.

The project will engage with landowners and farmers who are often under-represented in community related work

The results of the project will allow information on interesting and valuable local wildlife sites to be incorporated in to local walk and interpretation leaflets

Volunteers

Expert volunteers will be involved in site surveys and condition assessments. Practical community based volunteers will be involved in management work unless this work is more appropriately carried out by machinery or skilled labour (e.g. stock proof fencing).

Involving survey volunteers will help to bring forward a new generation of wildlife recorders (augmenting Wildlife Recorders of Tomorrow project). Practical volunteers will help generate a sense of community ownership of local wildlife sites.

Volunteers will be sought through Norfolk and Suffolk Wildlife Trust channels, including website, volunteer adverts etc and we will also liaise with other projects to reach new local volunteers.

Legacy - Securing lasting benefits

NWT and SWT employ conservation advisory staff whose job is to advise CWS owners on management of sites. These staff will be able to give ongoing back-up to owners and managers of sites after HLF project finishes. NWT and SWT will seek to help landowners and managers to maintain CWS in good condition through continued conservation advice and helping them to seek funding through agri-environment schemes and other sources of funding that may arise.

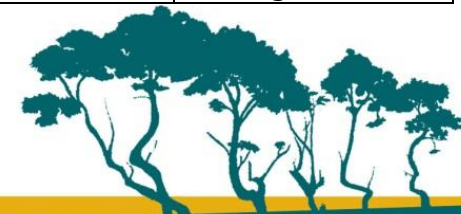


Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Refusal of access to CWS for condition assessment	Low	Low	The percentage of CWS to be surveyed in relation to total number of CWS in project area is in line with level of permissions given in past CWS survey projects
Refusal to allow works to be carried out	Medium	Medium	The percentage of CWS recommended for practical restoration work, in relation to total number of CWS surveyed, is in line with level of permissions given in past CWS surveys undertaken

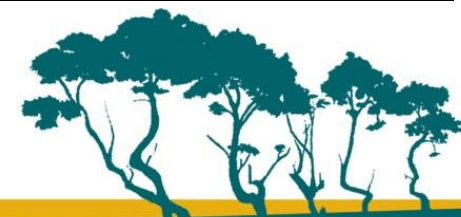


A3- Pingo Project

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
A3: Pingo Project	Norfolk Wildlife Trust (Amphibian and Reptile Conservation, Private Landowners)	<p>The Pingo Project will take forward the findings of the Norfolk Pingo Mapping Project (2008) by carrying out surveys and assessments of pingo sites in the BNG area and will include the creation of management plans and advice for landowners.</p> <p>Practical restoration management work will take place on 3 priority sites with c.24 pingos including Thompson Common, which has been identified as a second Brecks re-</p>	Landowners and managers, Volunteers, interest groups, general public	<p>Surveys and assessments of 8 (c.64 pingos) known sites and the identification, survey and assessment of 3 (c.24 pingos) new ones</p> <p>Creation of management plans with engagement and advice for landowners/managers.</p> <p>Restoration of pingos and surrounding landscape at 2 priority sites identified during the assessment</p>	<p>Better information on extent and condition of pingos in BNG area</p> <p>Creation of an extended network of restored pingos in BNG area</p> <p>Creation of suitable Pool frog habitat at Thompson Common pingos</p> <p>Pool frog</p>	<p>Project total: £73,851 HLF: £50,401 (68%) In-kind: £20,350 (28%) Volunteer: £3,100 (4%)</p> <p>Pingo surveys and assessments (£5,075)</p> <p>Landowner engagement and advice (£1,400)</p> <p>Practical site management</p>



		<p>introduction site for pool frog.</p> <p>Restoration work at Thompson Common will ensure that they provide suitable habitat for pool frog. Volunteers will be involved in the restoration work and there will be provision for public access and interpretation which will highlight the value of pingos for biodiversity</p>		<p>process</p> <p>Scrub clearance and emergent vegetation removal around Thompson common pingos</p> <p>Reintroduction of Pool Frog at Thompson Common over 2 years</p> <p>Post release monitoring</p> <p>Volunteer engagement</p> <p>Interpretation panel</p>	<p>population established at Thompson Common</p> <p>Data recording on project success</p> <p>Education and public engagement</p> <p>Formal guidance for landowners and managers on pingo restoration and management</p>	<p>works (£6,000)</p> <p>Management guidance & report (£700)</p> <p>Pool frog reintroduction: Preparation of reintroduction plan (£24,250)</p> <p>Habitat management works and release programme year 2015/16 (£19,509)</p> <p>Habitat management works and release programme year 2016/17 (£16,917)</p>
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Project Aims/Objectives

The aims of the Pingo Project are to identify pingo sites in the BNG project area and to carry out conservation management and restoration work on priority sites. In particular, it will focus on restoration of pingos on Thompson Common in order to re-introduce native pool frog to a second site in the Brecks.

Delivery Partner organisations:	
<i>Organisation:</i> Amhibian and Reptile Conservation Private landowners	<i>Role:</i> Re-introduction and monitoring of pool frog Landowner

Project Need

Many pingos are becoming overgrown with scrub and trees and are losing their special ecological value. The Breckland Biodiversity Audit states that "Pingos are important and unique standing-water elements. The available ecological information for 47 Breckland conservation priority species mentioned pingos" and goes on to say that both open and un-shaded pingos and shaded pingos are important with a total of 480 priority species in open un-shaded habitats. It goes on to recommend that "resources permitting, the majority of each significant fen, wetland, pingo and mere site should be predominantly cleared of woody vegetation, while retaining some wet woodland resource."

There is a need to bring these sites into favourable management and to provide for the future sustainability of that management. Pingos are also a rare landscape feature nationally as well as being an important and scarce habitat. Pool frog used to occur in pingos in the Brecks and Thompson Common was the last known location of the native pool frog. Although it has been re-introduced to one Brecks pingo site there is an urgent need to expand the population to at least one other site to reduce the vulnerability of the species to a second extinction. Re-introduction of pool frog is listed as an objective in the Framework for Action published by the Brecks Biodiversity Delivery Group in 2012.



Detailed Project Description

Year 1:

Using the findings of the Norfolk Pingo Mapping Project 2008 (Norfolk Wildlife Trust) and subsequent work the project will update that assessment and survey pingos within the BNG project area that are a priority for restoration. A total of 13 likely pingo sites that have not previously been visited have been identified in the BNG area. Of these, permission has been given to visit at least 8 sites.

Work with landowners and managers to prepare the ground for restoration of 2 sites (excluding Thompson Common). This will include agreeing any legal or contractual arrangements that are necessary to allow restoration to take place.

The work in year 1 at Thompson Common will include preparation of the pool frog re-introduction site.

Year 2 and 3:

Work would be carried out on up to 2 sites (excluding Thompson Common) which have multiple pingos on each. This may include practical conservation management work such as tree and scrub clearance and removal of emergent vegetation. Volunteers will be involved in the restoration work.

Capture and rearing of founder pool frog stock will take place with release at Thompson Common. This will be followed by further restoration work once frogs have left the pingos for that year. This work will be repeated during the third year.

<i>Outputs and Outcomes</i>		
Activity	Outputs	Outcomes
Identify and assess pingo sites for restoration	Survey and assessment of 8 known pingo sites and 3 new sites.	Better information on extent and condition of pingos in BNG area
Restoration of pingo and surrounding landscape	Restoration management work takes place at 2 pingo sites	There is an extended network of restored pingos in BNG area



	(excluding Thompson Common)	
Scrub clearance, emergent vegetation removal around Thompson Common pingoes	Thompson Common pingos restored	Thompson Common pingos provide suitable habitat for pool frog
Re-introduce pool frog at Thompson pingoes over 2 years	Pool frog present in pingos	Pool frog population established at Thompson Common

Location

Various and Thompson Common

Landowner

Landowners to be agreed in year 1. Agreement in place for work at Thompson Common landowner.

Agreement needs to be sought with owners of two further pingo sites. Sites can't be identified until first stage surveys completed, so not possible to get landowner agreement at present

Audiences

The project will engage primarily with landowners and managers as restoration of pingos cannot take place or be maintained unless they are willing to engage. A major element of the work will be on a Norfolk Wildlife Trust reserve and close liaison will take place with the reserve manager of this site. Engagement will also take place with national amphibian and reptile experts with regard to pool frog re-introduction.

NWT has many years experience in engaging with landowners and managers of wildlife sites and this expertise along with knowledge of pingo sites that was gained through the Pingo Mapping Project should allow us to successfully address this audience.

With regard to pool frog, NWT have experience of working with other specialist conservation groups and experts with regard to species re-introductions.



The project will help to spread awareness of the unique geological and ecological value of pingos through helping to educate not only landowners and managers but also volunteers will be involved in restoration.

Existing conservation audiences will be reached through reports, meetings and conferences. New audiences will be reached primarily through the wider BNG partnership and information about this project will be supplied to educational based projects within the BNG Partnership.

The project will engage with landowners and farmers who are often under-represented in community related work

Volunteers

The project will involve volunteers in practical site management work at Thompson common. It also hopes to involve them in survey and assessment of pingos that could potentially be restored. From experience, volunteers enjoy practical conservation work, particularly when returning to the same site as this generates a "sense of ownership". At the same time they contribute vital manpower to managing conservation sites that are no longer "farmed" in the traditional way. Volunteers will be recruited through NWT volunteer procedures.

Legacy - Securing lasting benefits

NWT conservation advisory staff whose job is to advise landowners and managers on management of sites will be able to give ongoing back-up after HLF project finishes.

The pool frog re-introduction will help ensure the viability of the species in the Brecks and make a major contribution to the status of this rare species. As the location is a NWT reserve, we will be able to ensure that the population is monitored and protected and that any necessary ongoing practical management work is carried out.

NWT will continue to engage with owners and managers of pingos after the end of the project as part of our ongoing conservation advice work. NWT also continue to work with volunteer surveyors on similar projects. NWT will continue to manage Thompson Common SSSI



Conditions & Consents

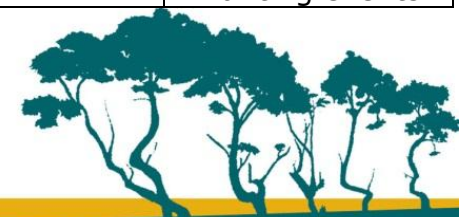
Natural England consent is needed for species re-introduction and an initial approach has indicated that approval would be likely. A licence will be applied for by ARC and will be in place before the re-introduction stage of the project starts in year 2.

Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Landowners not willing to allow resoration of pingo	Medium	Medium	Alternative pingos and owners sought for restoration.
Licence to re-introduce pool frog declined	Low	High	ARC will apply to NE before re-introduction starts. This is very unlikely to be refused
Pool frog release site needs to be kept secret initially	Medium	Medium	Restoration work is publicised but no reference is made to re-introduction until the population is established.



A4- Pine Lines and Pine Connections

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
A4: Pine Lines and Pine Connections	Farm Conservation	<p>Pine lines contribute significantly to the landscape character of the Brecks and to the biodiversity, fulfilling an important habitat connectivity role.</p> <p>This project will research historic management techniques and identify the most appropriate methods for creating, restoring and maintaining pine lines. It will engage with the public and landowners to promote Pine lines, their management and creation.</p> <p>Practical restoration work will engage schools conserve 8km of Brecks Pine lines</p>	Landowners and Land managers, interest groups, volunteers, general public, schools	<p>Create 2 km and restore 8 km of Brecks pine line.</p> <p>Run 6 planting days to involve 150+ school children and volunteers in pine line creation.</p> <p>Train 40 volunteers to monitor pine lines.</p> <p>Report outlining pine line management techniques.</p>	<p>Creation of 2km of new pine lines to connect additional habitats and support biodiversity</p> <p>Restoration of 8km of pine lines ensuring habitat and biodiversity connectivity</p> <p>Public engagement to educate and enthuse, encouraging volunteers to take ownership of pine lines</p>	<p>Project total: £63,105 HLF: £51,705 (82%) In-kind: £1,800 (3%) Volunteer: £9,600 (15%)</p> <p>Pine line research, advisory visits and creation of management plans (£16,180)</p> <p>Pine Line creation and restoration (£27,880)</p> <p>Planting events</p>



		Suitable locations for new pine lines will be identified using the data assembled under the University of East Anglia's 'Brecks Pine Lines Report 2010, and information from advisory visits to farms and estates and 2km of new pines planted.		<p>Production of 15 pine line management plans for landowners in the core area.</p> <p>Production of a pine line information guide for the general public.</p> <p>Project report to summarises the achievements of the project,</p> <p>Creation of an online recording facility</p>	<p>Guidance and support for long term future management for the pine lines in the BNG area.</p> <p>Long term public involvement in recoding and the ability to monitor changes over time</p>	<p>(£11,940)</p> <p>Surveys and monitoring (£2,100)</p> <p>Interpretation, information guide, on-line recording system and report (£3,505)</p> <p>Ongoing landowner support and maintenance (£1,500)</p>
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Project Aims/Objectives

Over time the distribution of pine lines has decreased, and there is now a need to manage, restore and replant these distinctive landscape features of the Brecks to prevent them disappearing.



This project aims to:

- Research management techniques and identify methodology for establishing & managing pine lines.
- Work with private landowners, public bodies and specialist organisations to work to conserve and restore the iconic pine lines of the Brecks. It is envisaged that at least ten kilometres of pine line will be restored & enhanced during the three year scheme. This will include 2 km of pine line creation & 8 km of restoration.
- Implement plans for the future management of The Brecks pine lines
- Increase understanding of pine line management amongst land managers and land owners.
- Increase awareness of the importance of pine lines in The Brecks by working with school children and the wider local community.

Delivery Partner organisations:	
<i>Organisation:</i> Jason Kidman, freelance woodland specialist Anglia Farmers (agricultural purchasing co-operative)	<i>Role:</i> Jason Kidman will be responsible for running the tree planting days and carry out additional tree planting Anglia Farmers will source the trees for the tree planting

Project Need

Pine lines are a distinctive feature of The Brecks that contribute significantly to the landscape character of the area. The majority of these lines were planted as hedges during the early 1800's, and they consist of single rows of Scots pine trees exhibiting varying degrees of twisting and contortion. The rows have been singled out by numerous writers on topography and landscape history as a major contributor to the region's 'sense of place'.

Pine lines and their associated margins also contribute significantly to the biodiversity of The Brecks. It has been calculated that Scots pines have 91 associated insect species nationally (compared with 41 for ash, 28 for hawthorn, but 284 for oak), and 132 associated lichen species. Additionally, the associated grass strips and earth banks support diverse invertebrate assemblages, including several rare moths, nationally scarce species of beetle.

Despite the fact that pine lines are a key defining feature of The Brecks (and they found in almost all images of the The Brecks landscape), little attention is given to managing, restoring or establishing new pine lines. The Brecks National



Character Area Profile (published in Dec 2012) identified "*Encouraging the replanting of late enclosure windbreak hedgerows and Scots pine lines where they have been lost and positively managing and maintaining those that have become neglected to bring about ecological and landscape benefits*" as a key management opportunity for the Brecks area. Additionally, the two main conclusions of a recent report by University of East Anglia – The Brecks Pine Rows: History, Ecology and Landscape Character – were that:

- The pine rows are an important and characteristic feature of the Brecks landscape, and every attempt should be made in the future to protect and enhance surviving examples, and to establish new ones.
- Further research is urgently needed into the character of the fauna, and especially the insects, associated with the mature pines which make up the 'rows'.

The distribution of pine lines has decreased over the years, leading to a need for managing the remaining pine lines and also replanting these distinctive landscape features of the Brecks. This project deals with land management and involves working with private landowners, public bodies, specialist organisations, volunteers, local community & school groups. It can therefore enhance a number of other schemes within Breaking New Ground. For example:

The Landscape Revolution will raise awareness of how the Brecks' landscape has been transformed since 1700s, and as pine lines were initially planted in the early 1800's they will feature significantly in this project. The Pine Lines project will add value to the Landscape Revolution by giving volunteers the opportunity to plant pine trees that will become the iconic pine lines of tomorrow.

Brecks Uncovered & Breaking New Ground in the School Grounds are two projects that are aimed at engaging children and students in their local natural environment and landscape. The Pine Lines & Pine Connections project will significantly enhance these projects by identifying suitable sites for creating new pine lines, and giving school groups the opportunity to plant trees that they have propagated. Through the planting days the children will have the opportunity to shape the pine lines of the future.

Brecks Wildlife Recorders of Tomorrow will encourage local groups to adopt a site and regularly record wildlife there. The Pine Lines project will enhance the Recorders project by offering additional recording site (e.g. on private land) and also offer the opportunity to record and monitor wildlife at newly established sites (new pine lines).



Detailed Project Description

This three year project will work to conserve and restore the iconic pine lines of the Brecks, and will involve and engage local communities in this process.

This project will be delivered through a range of mechanisms. Each element of the project will be considered in turn:

1. Researching pine line creation and management techniques

Pine line creation, management and restoration techniques will be researched by The Landscape Group at UEA and a report will be produced. This will ensure that optimum management approaches are implemented during this project, and this information will inform the long term management of pine lines in The Brecks.

2a. Organising 1:1 farm visits to advise on management, creation and restoration of pine lines.

15 1:1 farm visits will be delivered by Farm Conservation within the BNG project area during the first 2 years of this project. One of the key aims of these visits is to initiate interest amongst the farming community in creating new pine lines, and to identify suitable pine line creation sites for years 2 & 3 of the project.

These visits will be tailored to the farm and will:

- A. assess all the pine lines on the holding and offer management advice on protecting, restoring and enhancing these features
- B. highlight and discuss any potential opportunities for creating new pine lines
- C. Raise awareness with land managers of the importance of pine lines both in the landscape and for biodiversity.

2b. Following each visit a management plan will be produced that covers the points highlighted above. These plans will also include maps to show existing pine lines, management approaches & creation opportunities. These documents will be sent to landowners to guide future management decisions, and they will also be made available electronically. When landowners agree to create pine lines through this project, their management plans will include detailed prescriptions for the long term management of the newly created pine lines.



3. Identifying suitable locations for new pine lines using the data from the University of East Anglia's 'Brecks Pine Lines Report 2010, and the 1:1 visits outlined above

In years 1 & 2 a desk based comparison of various mapping documents (including existing pine line distribution (2010), 1st edition OS maps (~1880), current aerial images, and current Ordnance Surveys maps) will be carried out by Farm Conservation to identify potential pine line creation locations. A scoring sheet will be drawn up so that each potential site can be assessed against how closely it meets all the objectives of the project, and sites will be prioritised accordingly. The following factors will be taken in to account during this assessment process:

Habitat connectivity *– sites will be scored more highly if linking up existing habitats and/or extending existing pine lines.

Historical information about the site *– e.g. if there is historical evidence of a pine line at the location it will score more highly

Current management *– planting in open landscapes will be prioritised over planting along woodland boundaries.

Visibility within the landscape * – more visible sites will be prioritised

Proximity to PROWs – sites adjoining/adjacent to PROWs will be prioritised

* This information will be collected during 1:1 visits.

Following identification & prioritisation of potential planting sites, this information will be presented to a discussion group comprising of Farm Conservation, UEA, Brecks Partnership, & Natural England. This group will meet in year 1, to agree priority sites for year 2 planting, and again in year 2 to agree sites for year 3 planting. Capital works funding will be directed to the highest priority sites each year.

4. Pine Line planting

4a. Running planting days for schools and the wider community.

Once pine line creation sites have been identified Farm Conservation will organise school and community group planting days and will run 6 volunteer planting days over the course of the project. Scot's Pine trees grown from seed by school groups will be used wherever possible. These planting days will be run by Jason Kidman (freelance woodland expert) and Farm Conservation.



The aim will be to get at least 25 volunteers to attend each planting event.

A talk will be delivered to the volunteers at each event to help them learn about the pine lines in the Brecks landscape. The talk will include information on: the origin & distribution of Brecks pine lines, management, and the wildlife and landscape value of these sites.

Wildlife recording and the wildlife identification training days will be promoted at these events, to encourage volunteers to take ownership of the pine lines that they have helped to create.

4b Additional tree planting

It is envisaged that 500 m of pine lines will be created through the community planting days. The remaining pine lines will be planted during years 2 and 3 by contractors. The material and contractors for this work will be sourced locally.

5. Training volunteers to carry out wildlife surveys of the pine lines

Forty volunteers will be trained to carry out ecological surveys of the pine lines. This training will be incorporated in to the training days that are being organised through the Recorders of the Future project.

A recording sheet will be drawn up to assist volunteers with surveys and encourage them to record regularly. It is hoped that this will encourage volunteers to take ownership of pine lines. An online recording facility will also be set up to monitor changes over time and to help inform long term management of these features.

6. Producing a pine line information guide for the general public.

This guide is intended to increase interest in pine lines amongst the general public, and encourage individuals to get involved in monitoring these features. Hard copies of the guide will be distributed at the planting days and it will be made available online for download. The following information will be included in the guide: pine line origin, management, and distribution.



7. Producing a final project report

In February 2017 a final report will be produced to summarise the achievements of the project, and outline long term future management for the pine lines in the BNG area. The report will include information on distribution of newly created pinelines, pine line creation methodology and future management. The report will be made available electronically.

Two examples of iconic The Brecks Pine Lines are shown below (source The Breckland Pine Rows: History, Ecology and Landscape Character). The pine lines differ significantly in structure and this reflects varying management techniques over time.



Outputs and Outcomes		
Activity	Outputs	Outcomes
Researching management techniques	Report outlining potential management techniques	Inform pine line creation, management and restoration works
Delivering 1:1 advisory visits to land managers	15 visits over years 1 & 2 of the project, followed up by individual management plans	Increased interest in pine lines amongst farmers Improved management of existing pine lines. Identification of suitable pine line creation sites
Organising 6 community tree planting events	6 events over years 2 & 3. 25 + volunteers at each event. At least 500m of pine line will be created through the planting days	150 local volunteers will be involved in practical conservation that will have a long term positive benefit on the The Brecks landscape. Increased engagement and interest in the The Brecks landscape amongst local residents Local character of the area will be strengthened through the practical work
Employing a contractor to plant & restore pine lines	1.5 km of pine line created and 8 km restored.	Habitat connectivity will be improved Landscape character of the local area will be reinforced
Wildlife identification training days for volunteers	40 volunteers will be trained through 3 training sessions	Increased awareness of the value of pine lines for biodiversity. Regular recording will encourage volunteers to take ownership of local



		pine lines
Producing a final report that will be publically available	Report will include information: on all pine lines that are created and restored through the project; practical techniques used during creation/restoration	Improved knowledge of pine line creation and management techniques. Useful resource in the future for individuals/ groups wanting to create/enhance pine lines
Producing a pine line information booklet for the public	The guide will be distributed to volunteers at planting days and through other BNG networks. It will also be made available electronically.	Increased awareness and appreciation of the importance of pine lines in the local landscape

Location

Yet to be decided. Pine line creation sites will be within the BNG area and they will be identified following 1:1 visits.

Landowner

Yet to be decided

Audiences

The project will engage with a range of audiences including young people & families, people with lower educational attainment, minority ethnic communities & people on low incomes.

Farmers, land owners, farm managers, contractors and agricultural workers are ultimately responsible for the management of pine lines and the The Brecks landscape. This group includes people with lower educational attainment, minority ethnic communities & people on low incomes.



Engaging young people and families in planting and monitoring pine lines will encourage greater long-term appreciation of the natural environment.

This project will increase the appreciation of pine lines in the The Brecks landscape among the target audiences outlined above. It will also provide opportunities for all local residents to play a part in shaping the The Brecks landscape of the future through tree planting events.

The tree planting events will include a talk on the origin, management and distribution of the The Brecks pine lines & associated wildlife. This will teach the audience about their local heritage and give them an opportunity to play a part in shaping it.

The planting events will be widely publicised through community groups, schools and farm workers so that under-represented groups will be involved in the events.

Contact details will be collected from volunteers at planting days so that they can be sent updates about the progress of the project. This will inspire long term interest in The Brecks pine lines. Some of the new pine lines will be visible for the Heritage Trail, which will engage visitors.

The project will be engaging, interesting and fun for all because they will be able to make a lasting difference in the landscape.

There may be some language barriers in engaging with migrant agricultural labourers. If required, suitable translators will be found.

Volunteers

Volunteers will be involved with the delivery of the project through the 6 community planting days that will be organised. Volunteers will also be involved in the monitoring of the project through the online recording facility that will be set up.



The project will involve volunteers in the project to increase engagement of the general public, and to encourage the local community to take ownership of these iconic features in the local landscape.

Tree planting volunteers will be recruited through: BNG in the School Ground Project, Farm Conservation contacts, Norfolk Biodiversity Information System, social media, BNG publicity and the local newspaper. Volunteer surveyors will be recruited through the planting days & through the same channels at the Records of the Future volunteers

Volunteer costs have been considered in the budget. Volunteers on the planting & identification days will be covered by the contractors insurance.

Legacy - Securing lasting benefits

The newly created pine lines will remain in situ indefinitely. Existing pine line were planted around 200 years ago, and so it is hoped that the pine lines planted through this project will still be standing in 2315. Both the wildlife and landscape value of these trees will increase over time.

Also, it hoped that the work carried out through this project will inspire others in The Brecks (outside of the BNG area) to restore and create pine lines on their land.

To encourage individuals to monitor the pine lines after the end of the project, the online wildlife recording system for The Brecks pine lines will continue to be available. Over time, this database will become a valuable record of species associated with pine lines, and how the assemblage of species varies with pine line age.

The long term management of new pine lines will be carried out by the land manager, and Farm Conservation employees will be available to advise on this work. Where possible, land managers will be encouraged to allow the public to assist with management activities. Farm Conservation will keep a record of this work to inform management of other sites.

If funding is available through agri-environment schemes for the management of pinelines, landowners will be directed towards these funding sources by Farm Conservation.



Conditions & Consents

Risk assessments for tree planting days & wildlife identification days will be carried out by Farm Conservation. SSSI designations and protected species will be taken in to account when selecting sites

Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Land managers not signing up for 1:1 visits within BNG core area	Low	High	Good publicity via BNG delivery team & Farm Conservation.
Inability to find land managers that are willing to create new pine lines within BNG core area	Low	High	Contact & offer visits to all landowners in the project area.
Not being able to recruit volunteers for planting days	Low	High	Good publicity via BNG delivery team, Norfolk Biodiversity Partnership & Farm Conservation, Schools involved in BNG in School Grounds will be contacted prior to setting dates for planting events.
Not being able to recruit volunteers for wildlife identification courses	Low	High	Good publicity via BNG delivery team and BNG partners, including Norfolk Biodiversity Partnership, Norfolk Biodiversity Information Service, The Brecks Society, Norfolk Wildlife Trust & Farm Conservation.

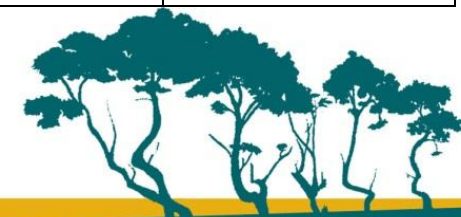


			Check dates of other events in the area to ensure that there are no clashes.
Inclement weather on planting days/wildlife identification days	Medium	Medium	Carry out risk assessments. Advise participants to wear appropriate clothing.
Personal injury on planting days/ wildlife identification courses e.g. tripping	Low	Medium (depending on nature of injury)	Carry out risk assessments. Participants to be covered by contractor's public liability insurance. First Aid kit and trained appointed person will be available at the events.



A5 – Brandon Engine House Restoration

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
A5: Brandon Engine House Restoration	BNG delivery team	Restoration of a mid 19 th C flint pump/engine house and secondary building for the creation of a centre for long term use as a volunteer centre. The planning and construction work will be carried out primarily by Students from West Suffolk College with additional opportunities for heritage skills training for interested people. Space will also be made available for extensive interpretation relating to the park, Brecks landscape and Heritage and the restoration project	Students, volunteers, interest groups	Restoration of engine house/pump house and related building with the creation of a linking structure using traditional heritage building skills. Engagement and training of students and volunteers in heritage building skills Creation of a volunteer centre	Brecks Heritage asset restored and interpreted Heritage building Skills and training opportunities	Project total £185,000 HLF: £170,000 In-kind: 15,000 Volunteer: £0
						Design, planning and permissions (£7,695) Site prep, fencing and drainage (£24,000) Renovation of existing buildings (£93,550) New link building (£39,375)



				for use by BNG partners and community groups		Electrics and fit-out (£15,380)
				Brecks heritage display and interpretation facility		10 year maintenance (£5,000)

Project Aims/Objectives

To restore an old Engine House in the grounds of Brandon Country Park in Suffolk to it's former glory to secure its heritage for future generations.

Delivery Partner organisations:	
Organisation: West Suffolk College	Role: <i>Student engagment in design, restoration and interpretation works</i>

Project Need (See also the Engine House Conservation Statement)

The need for this project was first outlined in the 2006 Brandon Country Park Conservation management plan. The building is a great example of a late C19th functional bulding that housed a well, pump and engine for supply of water and later electricity to the Brandon Park House. It contains much original machinery and is currently threatened by continuing deterioration. Restoration of this building and long term use as a facility for volunteer groups and training will preserve this valuable heritage asset for future generations and provide a significant asset.

Detailed Project Description

Brandon Country Park was originally a country estate of extensive parkland, established on part of the medieval Brandon Warren. Brandon Park House was built in 1826 by Edward Bliss but is now a private nursing home. The house was supplied



with electricity as early as the 1920s and it is the Engine House which is the focus of conservation. The 1921 Messrs. Lacy Scott & Sons sale brochure lists the engine/pump house with the following text : ENGINE HOUSE- with Hornsby's Oil Engine for generating light, Dynamo, Accumulator House, Workshop with saw bench, Granary, Blacksmith's Shop, etc



The 2005 Conservation Management plan funded by HLF and produced by Historic Landscape Management describes the general current historic design of Brandon Park as of regional and local importance and if the original design had been retained today it would have been of national importance.

The well house (engine/pump house) was historically associated with the running and functioning of the estate. The plan also recommends that the vision for the country park should be to create and maintain a thriving country park which acts, as a gateway to the Brecks, and as a destination in itself, for both visitors and the local community. Projects such as the conservation and restoration of historic features and buildings in the park must be of the highest standard, retaining or enhancing the historic, nature conservation, social and cultural interests of the site and entice people to be involved in its future.



The work to restore it will involve training in traditional building skills, under supervision of the Society for the Protection of Ancient Buildings and the training scheme will be targeted at the unemployed in Brandon as well as at builders wishing to specialise. The building will then be used as a base for volunteers and as a volunteer workshop and training centre. The Country Park is currently managed for wildlife and recreation as a partnership between Suffolk County Council and Forest Heath District Council but negotiations are being held with regards to its future operations.

There is a need to promote and pass on the skills required for the conservation of flint buildings in the Brecks. This volunteer base and workshop in which training can be carried out will help sustain the benefits of 'Breaking New Ground' and meet the need for a focus for volunteer use.

Location

Brandon Park, Brandon

Landowner

Forestry Commission, Lease arrangements (Heads of Terms) currently being agreed for long-term management as part of Brandon Country Park (Owned and managed by Suffolk County Council)

Audiences

Students, interest groups and volunteers

Volunteers

Some elements of the restoration, such as site clearance, may be carried out with the help of volunteers from Brandon Country Park.

Legacy - Securing lasting benefits

The Engine House will be leased by Suffolk County Council for a minimum of 20 years and will be managed as part of Brandon Country Park. The building will continue to be used as a centre for volunteering in the Brecks and as a resource for heritage skills training



Conditions & Consents

This project is subject to planning consent and archaeological and ecological surveys which will be undertaken in year 1 once the detailed plans have been completed by students engaged in the project.

Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
West Suffolk College unable to continue as lead partner	LOW	MED	Project will be delivered in-house using conservation builders. Skills training gains will be delivered through inclusion of work experience placements as part of the contract
Failure to gain consent due to archaeological or ecological issues	LOW	HIGH	Initial investigation undertaken during the development phase indicates no Archaeological or ecological issues. Contingency allows for some mitigation works
Cost over-run	MED	LOW	5% contingency allowance in the project cost estimates. Specification of final fit-out can also be reduced
Lack of interest in using the building by partner organisations and volunteer groups	LOW	MED	The building would continue to be maintained and used for it's intended purpose by Brandon Country Park



A6 – Breaking New Ground Grant Fund

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
A6: BNG Grant Fund	BNG delivery team	<p>The Grant fund will offer grants of between £500 and £5000 for projects that will conserve, enhance, celebrate and increase understanding of the historic landscape of the scheme area</p> <p>Project criteria will include a 25% cash match funding requirement to ensure value and commitment from the applicants</p>	Community organisations and interest groups	<p>Minimum of 6 grants awarded</p> <p>Minimum of 6 heritage & landscape features conserved and enhanced</p>	<p>Conservation and enhancement of key heritage features of the BNG LPS</p> <p>Local community groups and interest groups engaged in decision making about their heritage and landscape</p> <p>Improved understanding of, and engagement with the local heritage and conservation</p>	<p>Project total £45,900 HLF: 30,000 In-kind: 8,400 Volunteer: 0 Cash: 7,500</p>



Project Need

This project is the result of an identified need for a flexible resource that can enable the delivery of small scale community led projects. The BNGLPS will promote heritage conservation and generate a number of opportunities through its projects and training opportunities – the grants will enable community groups to apply for funding for their own projects (subject to meeting the criteria).

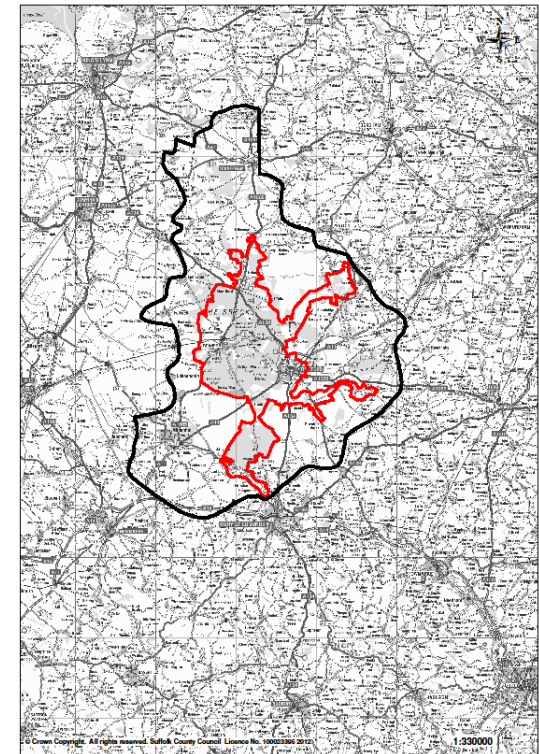


Detailed Project Description

As part of the Landscape Partnership Scheme Breaking New Ground has a small grants fund of £30,000 over three years. This fund is intended to support individuals, organisations, and communities seeking assistance with their own projects which also meet Breaking New Ground's objectives.

There will normally be up to two application windows each year, one in March, and if funds remain unallocated, a second in autumn. In this first year applications must be received by 16th October.

We anticipate that funds will be allocated over each of the three years of Breaking New Ground in roughly equal amounts, but this is not an absolute requirement and the assessment panel will have some discretion to bring funding forward should there be excellent applications totalling more than £12,000 in one year. Equally, we reserve the right not to allocate all the money available if there should be insufficient applications for



the required quality.

It is expected that individual grants will normally be in the range £500 - £5000 although the board wishes to retain the ability to make exceptions.

The Fund and its Management

Grants will be administered by Breaking New Ground and managed by a small panel composed of the Breaking New Ground Project Manager and four members of Breaking New Ground's governing Partnership Board. The panel will be chaired by the Vice Chairman of the BNG Board

Geographical Area for the Fund

The Breaking New Ground project area is shown in the attached map. The Breaking New Ground Project team will advise potential applicants about eligibility.

Essential Criteria and Priorities

Breaking New Ground is particularly keen to encourage projects that are pertinent to one or more of its key objectives:

- improve understanding of the natural and cultural heritage of the Brecks ("the heritage" includes the area's rich social history as well as its natural and built heritage),
- capture and tell stories about the changing Brecks landscape;
- restore, manage and Brecks habitats and cultural heritage;
- actively involve people in caring for The Brecks;
- improve access to The Brecks, but also manage the impacts of that access;
- work with young people to inspire the next generation of custodians;
- produce materials that enhance people's experience of the area;

and above all;

- improve community engagement with the heritage of the area and involvement in decision making



Desirable Criteria

In addition to the essential criteria the organisation/proposed project may wish to consider the following desirable criteria which may add value to the project and increase its chances of success;

- actively involves members of the wider community beyond those immediately involved in running the project
- demonstrates innovation or best practice
- promotes social inclusion
- promotes the involvement of young people in the heritage of The Brecks
- a project that has little or no access to alternative funding sources
- a project that leverages contributions (in cash, time, or kind) from other sources
- a project that is an interesting “story” that can be used to promote Breaking New Ground as well as the particular project in question

A project might be a physical item of work (creating, restoring or replacing something), collecting information and making it accessible, or simply one or more events with no specific physical legacy. This is not a comprehensive list and other activities could qualify for a grant – if you think you have a good idea, talk to the Project Manager.

Breaking New Ground grants can be used as part of a funding package for larger projects, indeed this is encouraged. However Breaking New Ground grants cannot be used to support organisations’ general running costs, staff salaries, and the like.

Applications

- The Fund is open to organisations or groups from the public, private, voluntary and community sectors from within or outside the Breaking New Ground project area
- Whilst applications from individuals are not precluded, there needs to be wider public benefit and it is expected that in most cases applications will be submitted on behalf of organisations or groups of people.
- Applicants need not necessarily come from, or be based in, the project area. However, projects must further the objectives of Breaking New Ground.



Grant Conditions

Applications will be assessed by the panel. They will look at the objectives and criteria above to judge how well the proposed project meets those aspirations. The panel may decide to make an offer for less than the full amount requested. They may also give guidance to the Breaking New Ground project team to discuss certain aspects of the project with the applicant to clarify details before they give their final advice.

The level of grant support will not normally exceed 75% of the total cost, although the remainder may be composed of help 'in kind' (e.g. volunteer time, valued at £50/day, or the loan of equipment, premises or land). Up to 100% will be available for exceptional projects that will contribute significantly to Breaking New Ground's objectives and where a good case has been made that other support cannot be obtained or where the nature of the particular project makes it inappropriate.

It is important for the panel to see the financial details of a project, with quotes for work where appropriate. The application form should have a detailed breakdown of the expenditure and income of the project. It is important for the panel to see how the money is likely to be spent. It is appreciated that some elements may be hard to cost but it is important that expenditure is not lumped together under large general headings or that guesses, rather than informed estimates, are made about costs.

Grant Management

Applications will be normally acknowledged within five working days. The panel will meet to assess applications about two weeks after the deadline. Applicants may in some instances be asked to provide further information to allow a decision to be taken.

The Breaking New Ground Project Manager will undertake a simple eligibility assessment and will normally come back to applicants if there is missing information or they feel the project is not eligible. However it is the responsibility of the applicants, not the Project Manager, to see that they have supplied all the required information.

Applicants will be informed within five working days of the funding meeting whether their application has been successful, and if so the amount of grant they have been offered. This will be followed up by written confirmation and a formal offer of grant aid for successful applicants.



All grants will come with certain conditions. These will include;

- That the grant will only be used to support the project specified in the application form
- That the offer of grant is accepted in writing within a certain period, and the project is completed and the grant claimed within a specified time period (usually within one year)
- That Breaking New Ground and the Heritage Lottery Fund are acknowledged in a manner to be agreed in all associated publicity, annual accounts, publications etc as appropriate
- That at least three good quality photos of the project are submitted to Breaking New Ground for use in its own promotions and those of the Heritage Lottery Fund.

The offer will also specify the evidence required to prove the project has been completed that will need to accompany the claim for the grant. This will normally include receipts but might also include, for instance, volunteer work records, evaluation forms and feedback forms from participants at an event.

Payment of Grant

The payment of the grant will be dependent on the submission of relevant records (e.g. receipted invoices) as detailed in the grant offer letter or agreed in writing subsequently with the applicants.

Grants are usually paid in arrears, on successful completion of the project. A case can be made with the application, or exceptionally when returning the acceptance of the grant offer, for money to be released up front – i.e. before the project is started. This is to help with issues of cash flow for smaller organisations and is unlikely to be more than 50% of the grant offer. Confirmation of receipt of other funds is also required (where relevant).

If the application is from non VAT registered organisation/body/individual the AAF can fund the gross cost of the project (i.e. VAT cost can be met by the fund). If the application is from a VAT registered organisation the fund cannot meet any VAT costs (i.e. use figures excluding VAT).

If a project is unable to fulfil its aims or meet its conditions, or complete by the agreed time, then the panel has the right to agree with the Project Manager to “call in” the grant, and not award the funds.



Monitoring and Publicity

The Breaking New Ground will monitor the progress of projects and may, if required, carry out site inspections. If this monitoring highlights difficulties with the project there may be a need for discussion and negotiation. It is the desired intention to help all projects reach a satisfactory conclusion, but the Breaking New Ground will wish to safeguard the wise and legitimate use of the Fund and ensure compliance with the Heritage Lottery Fund's requirements.

Meeting HLF requirements is essential as Breaking New Ground must in turn be able to reclaim the money awarded back from HLF.

Monitoring:

Monitoring forms are required halfway through the agreed grant period and are a necessary part of the feedback to Breaking New Ground and the Heritage Lottery Fund

In addition, the Breaking New Ground Project Manager will request a short Final Report to be emailed to nick.dickson@suffolk.gov.uk . The grant will not be paid until the Final Report and an invoice is received.

This report will include an overview of the project achievements, lessons learnt/difficulties encountered and how the terms and conditions were met.

Promotion and Publicity:

The Breaking New Ground will reserve the right to use any material submitted for publicity purposes.

Breaking New Ground and the Heritage Lottery Fund will be acknowledged on all completed projects and mentioned in all press releases and publicity material relating to projects.

Audiences

Community groups, schools and interest groups



Legacy - Securing lasting benefits

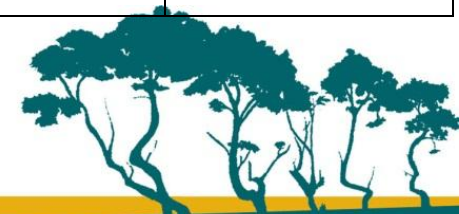
Grant recipients will need to demonstrate project legacy and will be encouraged to seek further funding for additional projects. Project outcomes will be recorded and made accessible on the BNG website and promoted via local media and social media.

Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Lack of take-up of grant funds	LOW	MED	The BNG grant will be publicised on all partner web sites and through local media.
Project not completed during delivery period	LOW	LOW	Project timing will be assessed as part of the awarding process. Projects will be monitored by the BNG team.



B1 – People’s History of Thetford Forest

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
B1: People’s History of Thetford Forest	Forestry Commission (Friends of Thetford Forest)	This project will create an oral history database of the creation of Thetford Forest which is the largest lowland land use change in Britain.	Local communities, interest groups, volunteers	<p>Research into the creation and development of Thetford Forest</p> <p>Creation of an Oral History Archive Dedicated Web-pages Illustrated Report Leaflet</p> <p>Training of 10 volunteers in oral history interviewing skills</p> <p>Training for 5</p>	<p>Community and volunteer engagement in Brecks Heritage research</p> <p>An increase in information in the public domain</p> <p>Preservation of oral histories for posterity</p> <p>Improved skills base for local history research and oral history recording</p>	<p>Project total: £20,184 HLF: £6,184 (31%) In-kind: £6,500 (32%) Volunteer: £7,500 (37%)</p> <p>Volunteer led research and fieldwork (£6,450)</p> <p>Production of report, leaflet and web text (£3484)</p> <p>Training events</p>



				volunteers in archival cataloguing skills	Increased public awareness of the important role of Thetford Forest in shaping the landscape of the Brecks	(£1,500) Archival creation, collation and maintenance (£3,700) Equipment (£1,150) Project publicity and celebration event (£900) Long-term Project support (£3,000)
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Project Aims/Objectives

This project aims to document, conserve and promote understanding of the creation and development of Thetford Forest as part of the Public Forest Estate and create an oral history database.

It aims to improve accessibility to this aspect of the Brecks' heritage by overcoming physical, social, cultural and intellectual barriers and thereby providing opportunities for understanding, enjoyment and participation.

It aims to develop a skilled and sustainable volunteer base through training and volunteering opportunities in heritage skills.

It aims to provide training and promotes those skills necessary to record, manage and enhance the Brecks landscape.



It aims to engage with schools and young people to raise awareness of this aspect of the Brecks' heritage and the need to conserve it.

By promoting the history and heritage of forestry in the Brecks to both residents and visitors, it aims to encourage visits and hence spend in the local economy

It aims to engender pride and a 'sense of place' for residents and visitors.

This project's will:

- connect people with the landscape and promote greater understanding and ownership of the area, its history and the issues it faces, especially those of forestry and the Public Forest Estate.
- facilitate their involvement with opportunities for participation, learning and training.
- make a difference to the heritage of forestry through documentation of its history.
- develop partnerships with both professional and voluntary organisations to ensure sustainability.

Delivery Partner organisations:	
<i>Organisation:</i> Friends of Thetford Forest The Breckland Society Retired Foresters Association	<i>Role:</i> Providing volunteers Providing volunteers Providing Interviewees and Information.

Project Need

With Thetford Forest occupying such a large area of the Brecks and making a hugely significant contribution to its landscape character, it is important to record its development in terms of the history of the landscape and to record people's memories of it's creation before they are lost.



Detailed Project Description

This project will create an oral history database of the creation of Thetford Forest People working in as many different roles in the Forestry Commission and allied trades, involved in the establishment of Thetford Forest from the 1920s, will be interviewed to record a history from different viewpoints of the largest lowland land-use change in Britain. Interviews will also be held with those in equivalent roles today, to compare changes in working practices and conditions. This data will be added to the appropriate county historic environment records.

Photographic and oral history material produced during the project will be copied to the Forestry Commission archive. Volunteers will be trained in research, interviewing, oral history and cataloguing techniques.

The project will add to knowledge and understanding of the development of the modern landscape of the Brecks and provide volunteers with new heritage skills.

<i>Outputs and Outcomes</i>		
Activity	Outputs	Outcomes
Research into the creation and development of Thetford Forest	An Oral History Archive Dedicated Webpages Illustrated Report Leaflet	Knowledge and memories in the public domain which would otherwise be lost.
Training volunteers in oral history interviewing skills	10 volunteers trained to carry out oral history interviewing.	New and Improved skills for heritage projects.
Training volunteers in archival cataloguing skills	5 volunteers trained in archival cataloguing skills	New and Improved skills for heritage projects.

Location

Thetford Forest and surrounding communities



Landowner

N/A

Audiences

The project aims to engage with all audience types as it is important that everyone is given the opportunity to enjoy, understand and participate in the Brecks' heritage. The project will offer opportunities for everyone to become involved.

The project will provide a range of opportunities and it will offer training in heritage skills tailored to meet audience needs

The project will help extend the perceived limited local engagement with the landscape. It will put information about the history of Thetford Forest into the public domain and show how the landscape of the forest reflects its multi-use management.

It will provide a range of opportunities for participation so that it has the widest possible appeal, from undertaking research in the Forestry Commission's Archives to conducting oral history interviews. It will provide training in the necessary heritage skills. It will seek to involve schools and students undertaking forestry courses and provide opportunities for their involvement.

The Project will make use of partners in the BNG Scheme to help it reach audiences currently under-represented, including Keystone Development Trust; Moving Thetford Forward; Moving Brandon Forward and others. It will promote the project and recruit volunteers at High Lodge Forest Centre, the main visitor hub from Thetford Forest.

A range of volunteering opportunities will be provided and the project will focus on local communities learning about their own Forest landscape through participation and enjoyment of it.

The Project will make use of partners in the BNG Scheme to help it reach audiences currently under-represented. It will ensure that the language of the project is not specialised or exclusive.



The two main voluntary groups in the Brecks, Friends of Thetford Forest (FOTF) and the Breckland Society already have a very successful record of engaging with communities and involving volunteers in projects.

Volunteers

The project will include volunteers at every stage, from development to delivery.

Volunteers will be involved so that they have opportunities to learn a wide range of heritage-related skills.

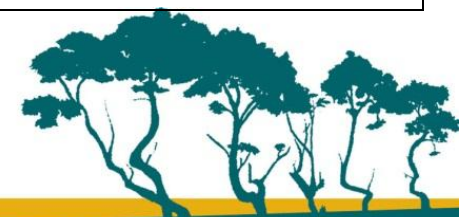
They will be recruited through publicity in the press and media; through links to other voluntary groups and organisations in Norfolk and Suffolk; through the BNG website; through the Forestry Commission website and FOTF website and newsletters; at High Lodge Forest Centre.

Legacy - Securing lasting benefits

The oral history archive and webpages will ensure that the project's outcomes remain in the public domain.

The Archival material will be kept in the general archives of the Forestry Commission in the East of England and with the Norfolk and Suffolk Record Offices and the HER.

Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Organisational : A lack of those with the skills needed to deliver the project	Low	High	Provide clear briefs so that providers match to skills needed. Have a supportive network of partnership working. Have systems in place to give early warning of potential problems.

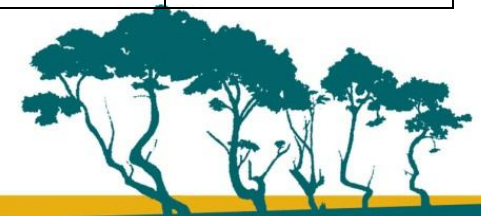


Social A lack of volunteers	Low	High	Have widespread publicity about the volunteering opportunities and benefits of being involved. Make sure that volunteers are supported, trained, motivated, managed and valued by all partners and staff. Regularly monitor and evaluate volunteer participation. Have systems in place to give early warning of potential problems.
Technological: oral history recording equipment does not function effectively or fails.	Low	Low	Purchase good quality, fit-for-purpose equipment drawing on advice from the Oral History Society. Make sure volunteers fully trained in use. Monitor use and have emergency plans in place and a system to provide early warning of potential problems.
Financial : Budget for the project exceeded	Low	High	Put in place a system to give early warning of potential problems.



B2 – Enchanted Forest

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
B2: Enchanted Forest	Forest Heath District Council	The project will transform Brandon Country Park into the most amazing Enchanted Forest which will bring to life it's history, showcasing the work and outcomes of the BNG LPS for families in a fun, interactive way. The event, which will be held over a weekend during the summer in the final year will offer a range of educational opportunities for schools and community groups to engage with.	Local Communities, Schools, Families, children	<p>A two day celebratory event for 100 families (2250 children)</p> <p>Opportunities for BNG partners and volunteers to showcase the results of the BNG projects</p> <p>Music, Performances, Story-telling, Promotion of Local crafts, food and products</p>	<p>Increased awareness of the Brecks heritage</p> <p>Children and families encouraged to enjoy the outdoors and signposted to regular formal or informal activity</p> <p>BNG outcomes celebrated and new engagement opportunities promoted</p>	<p>Project total £28,300 HLF: £24,000 (85%) In-kind: £2,300 (8%) Volunteer: £2,000 (7%)</p> <p>Performances (£10,500)</p> <p>Equipment (£8,000)</p> <p>Marketing (£2,000)</p> <p>Professional services and</p>



						staffing (£7,800)
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Project Aims/Objectives

The projects aims to engage with a wide audience in heritage and conservation projects by celebrating the work of the Breaking New Ground projects over the past three years.

Delivery Partner organisations:	
<i>Organisation:</i> Local Primary Schools Suffolk County Council CYP Services Norfolk County Council CYP Services The Matthew Project	<i>Role:</i> All of the agencies mentioned will work with us to identify families where access is a barrier to participation and help us engage with them.

Project Need

The Suffolk Foundation Hidden Needs Assessment

(<http://www.cchpr.landecon.cam.ac.uk/Downloads/Hidden%20Needs%20Report%20LR.pdf>) identifies the following:

- Although Suffolk has many affluent areas, some of the areas that are identified as disadvantaged are amongst some of the most deprived in the UK.
- More than 7% of young people aged 16-18 are not in education, training or employment – this is one of the highest rates for rural England and has serious implications for mental wellbeing and economic prospects for both the individuals and their communities.
- County and district-level rates of deprivation can obscure the numbers of poor households that are living in a less deprived area. These 'hidden' deprived households are likely to be particularly vulnerable when resources are allocated to areas with the highest levels of need.
- Childhood poverty also affects educational attainment; only 43% of low-income pupils claiming free school meals achieved 5 GCSEs at grades A* - C, compared to 69% of pupils overall.



Evaluation of the social impact of Heritage Lottery Funded projects has shown community benefits which have included; encouraging social inclusion, improving inter-generational understanding and strengthening bonds of trust between communities or between communities and institutions.

Detailed Project Description

Brandon Country Park will be transformed into the most amazing Enchanted Forest with dazzling visuals and innovative design set against a stunning summer woodland setting.



The event will give everyone involved in the Breaking New Ground Project the opportunity to showcase their outcomes at the event through an interactive, fun series of activities such as story telling, arts and crafts, face painting, live music and much more....it will create an outdoor experience which will set the imagination alight!

Enchanted forests are described in the oldest folklore from regions where forests are common, and occur throughout the centuries to modern works of fantasy. The forest can feature as a place of threatening danger, or one of refuge, or a chance at adventure.



The forest as a place of magic and danger is found among folklore wherever the natural state of wild land is forest: a forest is a location beyond which people normally travel, where strange things might occur, and strange people might live, the home of monsters, witches and even fairies. The perfect backdrop to engage, enthuse and educate people about the beauty and wonder of The Brecks.

By bringing the Brecks to life families will experience 'woodland reality', an opportunity to discover 'Brecks Life'.....life as a bug, an animal or a tree. Parts of the forest will be divided to provide different magical experiences including a magical kingdom and forest folklore.

It is anticipated that the weekend will attract both the local community and visitors to the area and the opportunity will be used to highlight local food and drink producers.

Outputs and Outcomes		
Activity	Outputs	Outcomes
Various activities celebrating the achievements of the Breaking New Ground Project in a backdrop of an enchanted forest	1000 Families 2250 Children	Children and families encouraged to enjoy the outdoors and signposted to regular formal or informal activity

Location

Brandon Country Park

Landowner

Suffolk County Council

Audiences

Audience will be open access for children and families, bringing to life The Brecks and engaging with hard to reach families.



Throughout the action packed weekend various projects within the Breaking New Ground Programme will have the opportunity to showcase and celebrate their work and outcomes.

The weekend will encourage participation and signpost to regular family activities The weekend will remove barriers to participation by offering free activities.

Bringing together the partners involved in the Breaking New Ground Programme to share outcome with not only other organisations but the communities of the Brecks.

The weekend will bring heritage to life in a meaningful way. Forest Heath District Council along with St Edmundsbury Borough Council have excellent working relationships with County Council and colleagues who can engage with families and communities to encourage their attendance.

Volunteers

Brandon Country Park has a long history of encouraging volunteering and a bank of volunteers who would be happy and willing to help out, encouraging the event to become a community event run by the community.

Forest Heath District Council has an extremely effective Community Champions Volunteer Scheme which has been run for a number of years and has recruited and trained over 500 people to help with community events and activities

Legacy - Securing lasting benefits

The event has a great opportunity to engage with children and families across the Brecks area and encourage them take up regular formal and informal outdoor activities.



Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Bad Weather	Med	Med	Wet weather plan developed with partners to ensure the safe delivery of the event.
Parking	Med	Med	Visitors encouraged to use public transport. Consider the viability of a Park and Ride offer. Parking to be well signed and marshalled.
Budget Overspend	Med	Med	Careful monitoring of the project spend. Consider including a contingency fund.



B3- Family Fun

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
B3: Family fun	Forest Heath District Council	The project aims to give 'hard to reach' families the opportunity to come together and enjoy outdoor space and celebrate all that the Brecks has to offer. Breaking down barriers to participation by offering free transport and free activities for families who would otherwise find it difficult to engage.	Local Communities, Schools, Families, children	3 annual events engaging 50 families (150 children) in Forest Schools Activity Showcasing BNG projects Story Telling Interactive Family Activities	Bring the Brecks to life to an audience that would otherwise not engage	Project total (£14,250) HLF: £8,250 (58%) In-kind: £4,500 (31.5%) Volunteer: £1,500 (10.5%) Professional services and Marketing (£6,750) Transport for participants (£4,500) Activities (£3,000)



Project Aims/Objectives

The project aims are to give families the opportunity to come together and enjoy outdoor space and celebrate all that the Brecks has to offer. Breaking down barriers to participation by offering free transport and free activities for families who would otherwise find it difficult to engage.

Delivery Partner organisations:	
<i>Organisation:</i> Local Primary Schools Suffolk County Council CYP Services Norfolk County Council CYP Services The Matthew Project	<i>Role:</i> All of the agencies mentioned will work with us to identify families where access is a barrier to participation and help us engage with them.

Project Need

The project will give partners an opportunity to engage with hard to reach families from across the Brecks area.

'Stronger Communities' have been identified as priorities for both Forest Heath District Council and St Edmundsbury Borough Council in their respective strategic plans.

Suffolk County Council conducted some research in Brandon which identified the lack of community aspiration as a key barrier to participation.

Detailed Project Description

The Event

The day aims to give families the opportunity to enjoy the great outdoors and showcase what the Brecks has to offer, to a hard to reach element of the community.

Working with a range of partners the annual event will be held in each year of the programme and will:

1. Integrate the different communities that exist in Brandon and Thetford.



2. Encourage use of the forest and outdoor on the doorstep of the community.
3. Develop parenting and play between parents and their children.
4. Educate people on what the Brecks has to offer.
5. Showcase the work of the programme to date.



There will be a strong element of learning through child-led play at the event following the Forest Schools concept. The main goals of forest schools in primary age children include encouraging curiosity and exploration with all of the senses, empowering children in the natural environment, and encouraging spatial awareness and motor development

The children will learn about flora and fauna but gain more abstract benefits in social skills such as team-building and cooperation, risk management, project planning and recognition of each student's own achievements.

Personal skills such as team-building, goal setting, planning and achieving, increasing cooperation to achieve goals, as well as reviewing and recognising own achievements are developed, particularly in secondary school age students. Consistent with Attention Restoration Theory, children taking part in forest schools have been described as more relaxed. Relationships between the children and each other, with adults, and with the environment, are important.

Forest schools are part of the broader area of outdoor education. Outside the school curriculum, this extends to summer holiday camps, Scouting, Outward Bound projects and many other activities.



Outputs and Outcomes		
Activity	Outputs	Outcomes
Forest Schools Activity	50 Families 150 Children	Bring the Brecks to life to an audience that would otherwise not engage.
Showcasing BNG projects		
Story Telling		
Interactive Family Activities		

Location

Brandon Country Park

Landowner

Suffolk County Council

Audiences

Hard to reach children and families who would otherwise not engage in the project due to barriers to participation such as transport, cost etc.

The day will not only provide free, fun, interactive, child led activities but will encourage families to play together and signpost to both formal and informal regular activity.

The Family Forest Fun Days will bring the projects under the umbrella of Breaking New Ground to life in an interactive and fun way.

The day is targeted to hard to reach families for two distinct reasons; it provides free, open access activities for families who would not usually be able to participate due to the barriers of transport and cost at the same time as opening up The Brecks to an audience who would be unlikely to otherwise participate.



The event will undoubtedly help to put Brandon Country Park and The Brecks 'on the map'. The associated marketing and word of mouth advertising will help not only make the day a success but equally enhance the opportunities for secondary visits.

Both Forest Heath District Council and St Edmundsbury Borough Council have a great track record of providing activities and events in its parks and open spaces. There is also a great relationship with partners to ensure that those people that would benefit most from activities and events are targeted and encouraged wherever possible to attend.

To engage with hard to reach children and families strong relationships between partners will not be enough on its own and the project will need a 'personal touch' from Key Workers, School Teachers and Community Leaders.

Volunteers

Brandon Country Park has a long history of encouraging volunteering and a bank of volunteers who would be happy and willing to help out, encouraging the event to become a community event ran by the community.

Forest Heath District Council has an extremely effective Community Champions Volunteer Scheme which has been run for a number of years and has recruited and trained over 500 people to help with community events and activities.

Training is an essential part of the volunteering package. Both Forest Heath District Council and St Edmundsbury Borough Council have a policy by which volunteers are covered at Council run events and activities.

Legacy - Securing lasting benefits

The event has a great opportunity to engage with children and families across the Brecks area and encourage them to take up regular formal and informal outdoor activities.

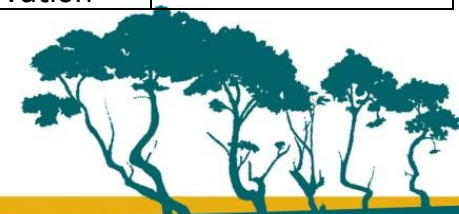


Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Poor Weather	Med	Med	Develop a wet weather plan
Access / Parking	Med	Med	Parking Plan will be put in place with a one-way system and marshals at key areas to ensure appropriate use of space.
Budget Overspend	Med	Med	The budget will be regularly monitored to ensure it remains on-track



B4 – Wildlife Recorders of Tomorrow

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
B4: Wildlife Recorders of Tomorrow	Norfolk Biological Information Service	<p>The overall aim of the project is to increase the number of volunteer wildlife recorders in the Brecks</p> <p>The project will operate at 3 levels:</p> <p>1) Beginner: This level aims to provide training and encouragement to those new to recording wildlife.</p> <p>2) Species surveillance: This level aims to help people take the next step into more serious recording of site. This will allow a number of important sites in the Brecks</p>	Volunteers, interest groups, local communities, Landscape and biodiversity professionals	<p>60 volunteers engaged in biodiversity recording and a long term recording network established</p> <p>At least 10 Brecks sites selected and biodiversity fully recorded with an additional 40 sites monitored</p> <p>Little Ouse surveyed annually for non-</p>	<p>Improved local biodiversity knowledge and skill base. Brecks sites better recorded. Local people involved in recording biodiversity</p> <p>Biodiversity benefits of projects documented</p> <p>Data available for use by local authorities, national conservation</p>	<p>Project total £150,250</p> <p>HLF: £31,800 (21%)</p> <p>In-kind: £8,200 (55.5%)</p> <p>Volunteer: £110,250 (73.5%)</p>
						<p>Volunteer training and venue hire (£15,000)</p> <p>Equipment pool (£5,000)</p> <p>Volunteer co-ordination and</p>



		<p>to be monitored and will also help to ensure sustainable long-term monitoring of sites where work is taking place as part of other BNG projects.</p> <p>3) River corridor survey – Little ouse headwaters to Brandon: A survey of the Little Ouse river, from its headwaters at Redgrave and Lopham Fens to Brandon. This is the only major river in Norfolk which has not yet been fully surveyed for non-native species and this type of survey is well suited to volunteers</p>		<p>native invasive species from source to Brandon</p> <p>BNG project sites recorded and monitored</p> <p>2000+ biodiversity records per year being entered on-line</p>	<p>bodies and future Brecks projects</p>	<p>support (£10,800)</p> <p>Professional services for project development, (£6,450)</p> <p>Online recording system (£1750)</p> <p>Site monitoring and data recording (£108,000)</p> <p>Verification and validation of data (£2250))</p> <p>Project end and legacy development event (£1,000)</p>
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Project Aims/Objectives

To establish a group of volunteer wildlife recorders and support network who will regularly record in a structured way at a number of sites across the BNG area. There will be a tiered approach to the network with a beginners aspect for those that are new to recording, and also the opportunity for more skilled and interested recorders to take part in structured species surveillance at a number of reference sites and at sites which form part of a other BNG projects.



The project will;

- Increase local communities' knowledge and understanding of biodiversity
- Provide volunteers with the skills and experience necessary to investigate and record their local biodiversity
- Provide a set of resources and support for those interested in recording the biodiversity of the Brecks.

Support a continuing programme of volunteer biodiversity recording in the Brecks

Delivery Partner organisations:

<p><i>Organisation:</i> Norfolk Non-native Species Initiative</p>	<p><i>Role:</i> Co-ordination of Little Ouse river corridor survey and training on recording of non-native species</p>
<p>Norfolk and Norwich Naturalists' Society</p>	<p>County recorders (skilled local wildlife experts) will be providing training at the workshops</p>
<p>Norfolk Wildlife Trust</p>	<p>Will be providing resources and support via Putting Local Wildlife on the Map. Linking work of this project with their Brecks Living Landscape where</p>



	<i>possible.</i>
Suffolk Biological Records Centre	<i>Support with recording and management of data</i>

Project Need

There are a number of factors which illustrate the need for increased volunteer recording in the Brecks:

- Recent work by the Brecks Biodiversity audit has shown the importance of the area for Wildlife both in a UK and international context. With 12845 species being recorded here. Of these many are of conservation significance. However much of these species records are from a few well recorded designated sites and there is a need for wider recording of the Brecks area. Much recording is also ad hoc with little in the way of structured species surveillance and monitoring taking place outside of these same few designated sites. This means that it is often difficult to detect changes in the biodiversity of the area.
- Most recording is undertaken by highly skilled amateur recorders. However it is well recognised that the recording community is getting older with less new recorders coming through to replace the current network. For this reason it is important to foster a new generation of recorders.
- At the same time that less recording is happening there is an increasing requirement for up to date biodiversity information both at a national level for reporting on requirements such as Biodiversity 2020 and at a local level for planning development. The latter is particularly of relevance for Thetford which has been named as a growth point.
- There is a need for a long-term sustainable method of monitoring the gains made by the projects in BNG.

This project addresses all of the above issues by providing a way into recording for volunteers at a number of levels. The project also offers a way to establish a network of volunteers to monitor the biodiversity of sites where work is undertaken as part of other BNG projects. In particular:

- Ground disturbance
- Conserving the Brecks County Wildlife Sites
- Pingo project
- Pine lines



There is also scope to use the volunteers to record and monitor in relation to

- Brecks uncovered
- Brecks Heritage Trail

The structured species surveillance aspect of this work links to Norfolk Species Surveillance Network which is a long term species monitoring programme operating across Norfolk with 6 sites in the BNG area. These sites offer existing sites for volunteers to record and train on. The methodology developed through this project will be used to train volunteers and standardise recording at the monitoring sites.

Volunteers who want to record bats at sites in the BNG area will be taught to use the methods of the Norfolk Bat Survey and data collected will feed into this county wide project.

Detailed Project Description

This project will establish a network of volunteers recording wildlife throughout the BNG area. It will operate in a way that will offer beginners support and training to enable them to take up wildlife recording. Alongside this it will establish a core group of more skilled recorders who can undertake structured species surveillance at a number of sites across the BNG area. By developing a base of volunteer recorders the project will provide a sustainable way of recording and monitoring wildlife in the Brecks.

This latter group of recorders will help to collect data which will feed into the Norfolk Species Surveillance Network. The methodology devised for this project offers a standardised way of undertaking structured species surveillance. They will also be available to undertake any monitoring needed for sites in BNG projects such as the ground disturbance project.

All data collected will be entered online to an existing recording system developed by NBIS for the Norfolk Species Surveillance Network. This ensures that all data will meet the NBN standards and can be transferred to the NBN Gateway for use by those who need it. This online recording system will be used to display the data collected by the volunteers

All data collected will be made available for use via the Local Records centres and NBN gateway. This will ensure that it can be used by conservation bodies, Local Authorities, ecological consultants, academics and the public.



There are a number of key ways in which the project will meet the aims of HLF with regards volunteers and biodiversity:

- The project will encourage community participation in conservation activities and support volunteers in developing biological identification and recognition skills
- The project will involve volunteers in site survey and monitoring
- The project will provide training and support for community groups to survey the habitat condition of a site
- Records gathered will meet the minimum standards of data quality and accessibility established by the National Biodiversity Network (NBN)
- Data will be provided to the Local Records Centres for Norfolk and Suffolk
- The project will help volunteers to participate in and develop biological recording, identification and survey techniques
- The project will involve people in learning and exploring biodiversity around them
- The project will involve the collation, management and provision of local biodiversity data and information
- The project will create opportunities for people to gain new or increased skills
- The project will provide a good-quality volunteering experience and a useful contribution to UK biodiversity
- The project aims to increase and develop volunteer skills both of new participants and of experienced volunteers
- The project will increase the number and diversity of volunteers involved in biological recording

Volunteers & training

The project will establish a network of at least 60 volunteers with at least 10 of these undertaking structured species surveillance.

Based on lessons learnt from previous projects undertaken by NBIS such as the Norfolk Species Surveillance Network and Norfolk Bat Survey it is clear that the best way to ensure good buy-in from volunteers is to allow them to choose the sites and species to be recorded. For this reason the first year will focus on establishing the network of volunteers. A number of training workshops will be organised in advance of the project start so that there is something to advertise to generate interest but the main bulk of the workshops and their location will be determined by talking to the volunteers that come forward. There are several groups that will be targeted:

- Local groups who care for a site
- Conservation volunteer work groups



- Existing recorders who want to undertake monitoring
- Individuals who want to take up recording
- Volunteers from other BNG projects who want to develop biodiversity recording skills

It is likely that a core set of workshops will happen each year regardless of those chosen by volunteers. These are:

- Structured Species Surveillance methods
- Bat survey
- Vascular plants
- Birds
- Butterflies

Each workshop will be a whole day and aim for 20 attendees. There will be a total of 10 workshops per year as an average. As the first year will be used to establish the volunteer network it may be that there are less workshops during 2014 and more in the subsequent years.

In addition to the workshops organised through this project NBIS also organise a number of more advanced training workshops each year such as grass and moss ID training. These will be advertised to the volunteers, as will any other relevant training opportunities.

There will be a celebratory event or conference at the end of the final year to bring together the volunteers and showcase what has been learnt and achieved.

Sites

At least 10 sites chosen by the volunteers will be recorded by the project. Ideally these will be a mixture of community sites, wildlife sites and sections of path or river. Volunteers will also be encouraged to record more widely outside of these established sites.

There are also around 40 sites which have some need for monitoring in the BNG projects and as many of these that can be covered will be monitored. The leads for these projects will be asked to prioritise sites for monitoring. The volunteers who



sign up to undertake the monitoring will be advised of the priorities to help them to choose the monitoring sites. There will be less choice over which monitoring sites are covered as we will need to report on the success of the work. However as these volunteers will have signed up to a more structured approach to recording they should understand the need to dictate the sites to be recorded.

An annual survey of the Little Ouse will be undertaken to record any non-native invasive species. This will be suitable for recorders at a beginner level as the species of interest are easily identified.

Recording

Those new to recording training will be given in the basics - what makes up a biological record, how to record a variety of taxa, where to submit records and what they are used for. There will be an emphasis given to the importance of repeated recording of a site. The training will make it clear that anyone can record wildlife and that they can do it as part of an everyday routine, for instance recording what they see once a week on their regular dog walking route. Submission of the records will be made as easy as possible by offering a number of routes such as online recording. The survey of the Little Ouse will be suitable for beginners.

Those signing up to the structured species surveillance aspect of the project will be expected to follow a methodology devised by NBIS as part of Norfolk Species Surveillance Network. This is outlined in a handbook, and detailed training will be given. The recording will take place on a set of reference plots established on the monitoring sites and will cover the following taxa:

- Fungi
- Lichen
- Bryophytes
- Vascular plants
- Beetles
- Flying invertebrates – Hymenoptera, Diptera
- Butterflies and day-flying moths
- Bats



Data

The importance of collecting accurate and complete biological records will be made clear at each training workshop. There will be an online recording system for the project which will ensure that only a complete record can be entered. Recording forms will be produced for use in the field to ensure that the correct information is collected. All data will conform to NBN standards and will be held by the local records centres and also published on the NBN Gateway. The online recording system is built using iRecord which has been developed by NBN and BRC.

As well as species records the volunteers will be trained in how to record the structure and management of site in order to monitor the condition.

Equipment

A pool of equipment for use by the volunteers will be established. This will be based at a location in the Brecks. The Norfolk Bat Survey successfully uses a network of centres for loaning out equipment which we will utilise for this projects. These include libraries and wildlife reserves.

The equipment needs will be established by working with the volunteers but will be likely to include:

- Bat detectors – SM2 Bat detectors are used by the Norfolk Bat Survey and at least 2 of these in use in the BNG area would give very useful information.
- GPS units to aid accurate recording
- ID guides
- Hand lenses
- Microscope for use by the monitoring volunteers

Access

Permission to record will be obtained for all sites in the project. Where sites are designated this will include permission from relevant conservation bodies as well as the land owner.



Outputs and Outcomes		
Activity	Outputs	Outcomes
Training volunteers in biodiversity recording techniques	60 volunteers trained and recording.	Improved local biodiversity knowledge and skill base. Brecks sites better recorded. Local people involved in recording biodiversity
Brecks sites recorded	At least 10 brecks sites chosen and recorded by local groups/recorders	Improved local biodiversity knowledge and skill base. Brecks sites better recorded. Local people involved in recording biodiversity
Annual river corridor survey	Little ouse surveyed for non-native invasive species from source to Brandon	Improved local biodiversity knowledge and skill base. Brecks sites better recorded. Local people involved in recording biodiversity
Monitoring of BNG project sites	Up to 40 sites from NBG projects such as ground disturbance being monitored	Biodiversity benefits of projects documented.
Biodiversity records being passed to NBIS and NBN via online recording system	2000 records per year being entered online	Improved local biodiversity knowledge and skill base. Brecks sites better recorded. Local people involved in recording biodiversity. Data available for use by Local authorities, national conservation bodies, LRCs.

Location

Recording sites throughout BNG area. Workshop event locations to be confirmed again based on volunteers.



Landowner

N/A

Audiences

Events will be open to and publicised to all. The preferred attendees are those based in the BNG area as it is more likely that long term recording will take place in areas close to the volunteers homes or sites that they have an interest in. People who have an interest in wildlife and want to develop their skills in relation to wildlife recording. People from existing local wildlife groups who want to develop their skills with regard to species monitoring. Local conservation groups who want to record sites where they work.

The project will provide training in recording and identifying wildlife. The project will provide an online species recording system. The project will provide a pool of equipment for use by volunteers. The project will provide links to experts who will help with species ID and will verify and validate all the species data collected.

The project will give volunteers the training, access to equipment, skills, experience and support they need to undertake wildlife recording.

The project will be publicised to existing recorders and those interested in wildlife through publicising the project via Norfolk Wildlife Trust, Norfolk and Norwich Naturalists' Society and other local wildlife and recording groups. A wider non-engaged audience will hopefully be reached via the publicity around BNG. The project will be promoted via press releases, social media and by promotion at events attended by NBIS such as Wild About Norfolk.

By training local recorders they will develop a deeper understanding of their heritage and a connection to the area. By setting up a structured way of recording sites within the Brecks we will learn more about sites in general and the way in which they change.

By providing training for beginners we will be encouraging participation by those who have no existing recording skills. These training sessions will be built around giving the people the confidence to undertake wildlife recording. They will be very much about showing that anyone can do it.



There are existing recorders in the Brecks but this project aims to identify new volunteers. Minority groups are always under represented within the wildlife recording community so it is expected that this will be the case in BNG. This project will work with the BNG delivery team to promote the opportunities for volunteering. The project will also make links with the schools project and make contact with groups already working with minority communities in the BNG area, in order to promote the volunteer opportunities.

Volunteers

Each of the workshops will be delivered to volunteers and will give them the skills to undertake recording of sites in the Brecks. These volunteers will then undertake the recording work that comprises this project. This is the only sustainable way to record wildlife in the Brecks.

The project will be publicised to existing recorders and those interested in wildlife through publicising the project via Norfolk Wildlife Trust, Norfolk and Norwich Naturalists' Society and other local wildlife and recording groups. A wider non-engaged audience will hopefully be reached via the publicity around BNG. The project will be promoted via press releases, social media and by promotion at events attended by NBIS such as Wild About Norfolk.

Volunteers will be trained via a programme of workshops. The workshops will be dictated by the interests of the volunteers, particularly in the 2nd and 3rd years as the network of volunteers develops. Volunteers will be supported in recording sites of their choosing.

The volunteers will be managed by staff here at NBIS who will keep in regular contact with them outside of the workshops, providing support and advice, and signposting any training opportunities that arise outside of the BNG project.

Volunteers are covered by NCC whilst on activities for NBIS. Long term insurance for monitoring will need to be investigated.

Legacy - Securing lasting benefits

A network of skilled volunteers will be in place to record sites in the Brecks. Volunteers will be monitoring a network of reference sites for a variety of taxa. Sites that are part of BNG projects will be monitored long-term. Long term maintenance



of equipment will be covered by in-kind contribution by NBIS. Long term maintenance of the online recording facility will be undertaken by NBIS as it is part of our day to day work.

Conditions & Consents

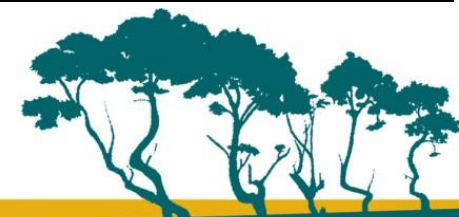
Landowner permission will be obtained prior to surveying any sites. Where sites are designated permission will be obtained from the licensing body. NCC policies will apply to all workshops organised by NBIS.

Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Lack of volunteers	Med	High	Publicise the project as widely as possible. Continue to recruit volunteers throughout the project. Make links to existing recording network and community groups. Link to other BNG projects with volunteers
Restrictions on access to sites	Low	High	Choose sites without known restriction (e.g. stone curlew). Make requests for access as early as possible. Use sites where access has already been granted for other projects such as norfolk Species Surveillance Network. Use sites owned or managed by partners such as NWT
Lack of tutors for workshops	Low	Med	Organise workshops early. Work with partners to identify potential tutors at an early stage.



C1 – Brecks Forest Way

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
C1: Brecks Forest Way	Norfolk County Council	This project will create a multi-use route (walking, cycling and horse-riding) with short sections and circular paths connecting Thetford to Brandon along the Little Ouse valley as well as the connecting Thetford Forest Park. It will provide a free local resource for community activities, schools and others to engage with the environment and learn about their heritage as well as taking exercise and addressing health issues related to obesity and poor lifestyle.	Local communities, visitors, volunteers,	<p>8 miles of walking trail to Norfolk trails standard.</p> <p>5 circular paths established</p> <p>Upgrade of Bridges to multi-use specification</p> <p>Improved signage and path furniture to enable multi-use</p> <p>Surface improvement</p>	<p>Improved links between the two main communities in the BNG area, to the wider rights of way network and Open Access land</p> <p>Increased confidence in new users by improved surfacing and guidance</p> <p>New opportunities for use by multiple user types</p>	<p>Project total £100,000 HLF: £80,000 (80%) In-kind: £10,000 (10%) Volunteer: £0 Cash: £10,000 (10%)</p> <p>Audit , consultation and production of walks info (Maps & web material) (£17,000)</p> <p>Surface improvement works and bridge</p>



				works	(walking, cycling, horses)	upgrades (64,000)
				Installation of counters, monitoring and inspections	Improved feedback on use of the resource adding to a better understanding of the needs of visitors	Interpretation , gates and benches (£6,000)
				Downloadable mapping and route information		Monitoring and maintenance (£13,000)

Project Aims/Objectives

To connect the market towns of Thetford and Brandon to the surrounding landscape, promote informal recreation and sustainable travel.

Delivery Partner organisations:	
Organisation: Norfolk County Council The Forestry Commission Suffolk County Council Norfolk Local Access Forum Sustrans	Role: <i>Lead partner with expertise in public access, environmental management, education and public health</i> <i>Land-owner and manager with expertise in conservation and recreation</i> <i>Public access provision where the route is in Suffolk</i> <i>Advises Norfolk County Council on public access, community engagement, land management, healthy activities, cultural and natural heritage</i> <i>Knowledge of sustainable transport links, walking and cycling</i>



Project Need

There are a number of existing trails which have been created in the past including the Little Ouse Path, the Icení Way, Hereward Way and St. Edmund Way enabling people to walk from Thetford and Brandon along the Little Ouse valley and connecting them to routes into the forest. They all run along Public Rights of Way but although they are mostly passable, there are areas where the river has moved and created wet areas that were not there previously and they have not been well maintained making walking difficult.

The Thetford Loops report

(<http://www.breckland.gov.uk/sites/default/files/Uploads/Thetford%20Loops%20Stage%202%20Final%20Report.pdf>) identified that “existing forest tracks are in place, mostly of an adequate standard. These can provide the basis of a fun, traffic-free experience, for both adults and children. The status of some Public Rights of Way, i.e. footpaths, may need to be altered to allow legal shared use, as well as surface improvements. The Riverside route and the vital link out to High Lodge should be the first priority, followed by making the most of any opportunities to enhance and improve the more urban network. Including this route, the Priority 1 recommendations are a riverside route – Nuns’ Bridges to High Lodge”. However the costs associated with the recommended improvements are high and not within the resources of this project and will be better addressed by funding through Highway improvements and DOT cycling funds or Green Infrastructure funding through the Community Infrastructure Levy.

Although much of the area where the access proposals are located is covered by Special Protection Area (SPA) status, Natural England “welcomes and supports the Thetford Loops initiative, which has at its core the creation, promotion, and enhancement of a sustainable transport cycle network across Thetford. The project also encourages access into the natural environment, which is an aspiration very much shared by Natural England.” There is a need to audit the route and establish links and the potential for walking, cycling and riding as a starting point. Barriers to walking for people with poor mobility or with pushchairs is also an issue along parts of the existing route – these need to be identified as part of the audit – and then issues addressed as part of the improvements.

Detailed Project Description

The routes along the river Little Ouse were originally on maps as tow paths, but are now crumbling and in places the river has changed its course, making passage difficult. Promoted routes already exist along the Little Ouse Valley including the



the Little Ouse Path, the Icen Way, Hereward Way and St. Edmund Way but they do not have the support of Norfolk County Council, which means that they are not of an agreed standard and their future is unsure. This project will establish a route, with associated circular paths to the standard of Norfolk Trails, which will ensure its maintenance and viability in the future is secure.

The route will be walked and established in consultation with local groups and the community; then audited and priorities for work established in a plan. This will focus on Access for all aiming to remove stiles, steps and other barriers to access, as well as ensuring that the surface is suitable for multi-use where appropriate.

The improvement work will then be undertaken including mapping, clear signage, improved surfaces, counters for monitoring etc. Circular routes and connections to key sites such as Grimes Graves.

Outputs and Outcomes		
Activity	Outputs	Outcomes
Auditing route in consultation with the community	1 route with at least 5 circular paths established	Access for all to the area improved

Location

From Thetford Railway Station to Brandon Station

Landowner

Forestry Commission and others

Audiences

The project will work with the community and local groups to develop Easy Access routes and information that is appropriate to the groups



Volunteers

Community volunteers will be engaged and trained to audit and give feedback to the Council on the condition of the routes. They will also be trained on leading walks, and giving information about local history and biodiversity. The Norfolk Ramblers already have a group interested in supporting this activity.

Volunteers are often people who go out into the countryside, walking and riding anyway. If they are trained to feedback on the condition of routes while they are out there, it will provide a sustainable method for monitoring in the future. They are also often people who are interested and knowledgeable about their local area and again with appropriate training can offer a sustainable resource to engage and teach people about their area for the future.

The Council already has a volunteer scheme for monitoring routes in other parts of the County, with people who walk, cycle and ride regularly. This scheme would be replicated in this area.

Legacy - Securing lasting benefits

The route will be established, upgraded and promoted as part of Norfolk Trails. People will be able to walk, cycle or ride as appropriate. The new route will form part of Norfolk Trails and Norfolk County Council is committed to supporting the maintenance of Norfolk Trails for the foreseeable future. The set up of a volunteering and/or Friends Group will enable the community to get involved and develop a sustainable resource beyond the life of the project.

Conditions & Consents

All routes will be on Public Rights of Way

Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Route not suitable for a variety of users	Med	Med	Route already subject to a stage 1 audit for cutting and no immediate

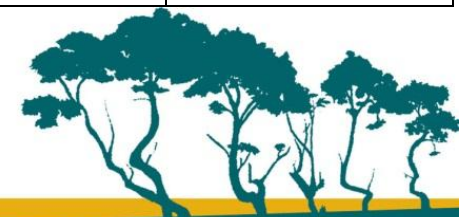


Low volunteer recruitment	Low	Med	problems evident Volunteers already identified – Ramblers
Environmental Sensitivity to Access	Med	High	Work with Forestry Commission and Natural England to ensure balance



C2 – Brecks Earth Heritage

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
C2: Brecks Earth Heritage Trail	Norfolk Geodiversity Partnership	The Trail aims to introduce visitors, students and local people to the area's little-known wealth of Earth heritage features through a Trail interpretive project. Eighteen publicly-accessible points of interest are chosen for their geology, landforms, and links with earliest human settlement, and may be visited in any order. There will be no installations on the ground, e.g. way-mark posts. Interpretive details of Earth Heritage features will be communicated using a publicity leaflet supported by more detailed information in Web pages, EPUB format and a Smartphone application.	Local communities, interest groups, visitors	<p>Digital Earth Heritage trail detailing 18 sites of geological interest</p> <p>23-page website</p> <p>3-fold A3 Publicity leaflet</p> <p>e-Pub information for e-readers</p> <p>Printed Booklet</p> <p>Augmented reality</p>	<p>Increased understanding of the underlying geology of the Brecks and its relationship with the current landscape</p> <p>Multi format access to trail information</p>	<p>Project total £17,727 HLF: £16,527 (93%) In-kind: £1,200 (7%) Volunteer: £0</p> <p>Research and development including landowner liaison (£4,200)</p> <p>Mapping (£1040)</p> <p>Monitoring and evaluation (£330)</p>



				Smartphone application		Smartphone development (£8040) Website design (£1120) EPUB Book (£600) Leaflets and illustrations (£2,397)
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Project Aims/Objectives

Introducing people to the wealth of geodiversity features in the Brecks through an informal network of 18 publicly-accessible points of interest, supported by Web information, a publicity leaflet, ePUB book with hard-copy print-outs, and downloadable smartphone apps.



Delivery Partner organisations:	
Organisation: <ul style="list-style-type: none"> ▪ <i>English Heritage</i> ▪ <i>John Browning (Weatherhill Farm, Icklingham)</i> ▪ <i>Thetford Town Council</i> ▪ <i>Forest Enterprise</i> ▪ <i>Norfolk Wildlife Trust</i> ▪ <i>Suffolk Wildlife Trust</i> 	Role: <ul style="list-style-type: none"> <i>Grimes' Graves</i> <i>Ramparts Field</i> <i>Barnhamcross Common</i> <i>The Devil's Punchbowl, Frost's Common, Brandon Park, Tanner's Well, Lynford Hall Pit, Redhill Pits, Botany Bay Brickpit, Beeches Pit, High Lodge Column, Lingheath flint mines</i> <i>Thompson Common, Ringmere & Langmere, Cranberry Rough. Knettishall Heath, Lackford Lakes</i>

Project Need

Geodiversity underpins the biodiversity and historical interest of the Brecks. It is the physical aspect of this unique landscape, and has set the scene for what we see today: the shape of the land and its component landforms, the nature and distribution of rock types and soils, the patterns of its river valleys, the nature of its groundwater. It records the profound story of environmental change over millennia, also the evidence of early human settlement dating back some half a million years. However, there is a low level of general awareness of the contribution that geodiversity makes to this distinctive area. One answer is to promote geotourism through trails and other outreach initiatives.

By raising awareness of geodiversity, the Trail will add to the effective delivery of the interpretive aspects of the whole BNG programme. In particular it will complement and contribute information to the following initiatives:

- 'Doing the Groundwork' strand – connecting with restoration work and conservation work at Brecks County Wildlife Sites and Pingo sites.
- 'Finding Common Ground' strand – connecting with community participation projects relating to flint in the Brecks and the archaeology projects.
- 'Feet on the Ground' strand – connecting with access enhancement and public enjoyment of the Brecks, notably the Brecks Heritage Trail; also to intellectual access provision by providing information to teachers and the BNG website. It will draw on the LiDAR project for its digital terrain map. It will also support the delivery of the 'Communicating the Brecks' and 'Geological Landscapes for Land Managers' day schools.



Detailed Project Description

The Brecks Earth Heritage Trail project will provide contextual information related to 18 points of Earth heritage interest located in the BNG project delivery area. It will provide a resource for visitors to the Brecks wishing to know more about the area's environmental history over deep time, and how it links with landscape, wildlife and historical features visible today. Geology and soils represent archives of the past which specialist knowledge is needed to interpret. The Trail will open this archive to more people through engaging and interesting interpretation of the key sites, stories and messages using digital as well as more traditional techniques. Due to their scattered locations in the project area, the points of interest will not be presented in any necessary sequence.

The 18 points of interest have been chosen for a combination of significance, public accessibility, visibility and geographical spread.

Planned outputs will include:

1. **Web pages** with in-depth information about the points of interest to visit, with:
 - A Brecks digital terrain base map;
 - Trail locality maps using Google Maps to show location and extent of each feature;
 - Photographs;
 - Illustrations of reconstructed wildlife and past environments of the Brecks.
2. A first-contact paper **publicity leaflet** for the Trail, introducing the theme of geodiversity in the Brecks, summarising the 18 points of interest in relation to a Brecks map; also providing information for people to find out more.
3. **Downloadable Trail materials**, comprising:
 - Information in PDF and ePUB formats specifically for eBook readers; these will be rendered out of the Web pages.
 - AR applications for iPhone and Android, containing edited information for smartphone users.
4. **Printed copies of Trail materials** as a version of the Web pages / EPUB information, for users who do not have access to the Internet or smartphone technology.

For examples of the use of AR smartphone applications for heritage interpretation, see:

- 'Sunken Secrets' interpreting underwater features on the Isle of Wight - <http://www.hwtma.org.uk/sunkensecrets>.



- How Hill Visitor Information Project interpreting the environment of How Hill, Ludham, - <http://www.how-hill.info/mobiles.html>.

For an example of the use of digital terrain map for interpreting the geological dimension of landscape, see <http://www.bedfordshiregeologygroup.org.uk/landforms.html>

This project will draw on the approach taken by the Mousehold Heath Earth Heritage Trail (Norfolk Geodiversity Partnership, 2012). See: <http://www.norwich.gov.uk/Environment/ParksAndOpenSpaces/WoodlandsHeathsAndMarshes/MouseholdHeathTrail/Pages/default.aspx> for further information.

This included use of digital terrain mapping and commissioned illustrations, for example:



Digital terrain map showing the landscape context of Mousehold Heath



Examples of trail sites



The Devils' Punchbowl- Fluctuating mere



Frost's Common- pingo ponds



Knettishall Heath- patterned ground



Botany Bay-kiln waters



Lynford Lakes- Neanderthal butchery site



Lynford Lakes- Neanderthal flint tools



Outputs and Outcomes		
Activity	Outputs	Outcomes
Web pages	Three introductory pages, 18 site pages, two back-end pages.	People using computers will be able to access Trail content at home and print off detailed information.
Publicity leaflet	One three-fold A3 leaflet.	People at visitor centres, museums, etc, will have a first encounter with the Trail and its themes. Through this they will be able to access the Trail materials and then visit the sites.
EPUB information	Edited content from Web pages available as reading matter on eBook readers.	People with eBook readers will be able to access Trail content while out in the field as well as at home.
Printed information	Edited content from Web pages available as paper-based reading matter.	People do not have access to the Internet or smartphone technology will be able to access Trail information.
Augmented Reality smartphone application	iPhone and Android apps.	People with smartphones will be able to access contextual Trail information when they are at Trail sites in the field.

Location

Various



Landowner

<i>Name</i>	<i>Contact details</i>
Forest Enterprise	Richard Brooke, Planning & Environment Manager, Forest Enterprise, Santon Downham, Brandon, Suffolk IP27 0TJ; richard.brooke@forestry.gsi.gov.uk ; 01842-816 018
Norfolk Wildlife Trust	Darrell Stevens, Breckland Officer, darrells@norfolkwildlifetrust.org.uk ; 07747 - 844 118
John Browning	Messrs J & M.G Browning, Weatherill Farm, Icklingham, Bury St Edmunds, IP28 6PP; 01284-728 839
English Heritage	William Fletcher, East of England Office, 24 Brooklands Avenue, Cambridge CB2 8BU Tel. 01223 582 700; eastofengland@english-heritage.org.uk
Thetford Town Council	The Town Clerk, King's House, Thetford IP24 2AP; 01842-754 247; mail@thetfordtowncouncil.gov.uk
Suffolk Wildlife Trust	William Cranstoun, SWT Reserves Manager West, Lackford Lakes, Bury St Edmunds IP28 6HX; william.cranstoun@suffolkwildlifetrust.org ; 01284-728 541
<i>Landowner agreement in place? (If relevant)</i> Agreement for inclusion of site in the Trail and co-operation over visitor access arrangements will be sought from land owner / managers	<i>Give details:</i> All sites are on accessible land, or features are visible from footpaths. See below.

Audiences

The Trail aims to engage with anyone interested in knowing more about the history of the Brecks environment, the development of its landscape, and its conservation. It will particularly appeal to visitors of local or regional origin.



The Brecks Visitor Centre Feasibility Study, 1999, analysed demographic survey information for visitors to the Brecks and identified categories of people to whom the distinctive environmental and historical story of the area is most likely to appeal¹. The Trail is most likely to appeal to the categories of 'empty nesters', young couples (with double incomes, no kids) and enthusiasts, as they have the means and motivation to visit several sites in one day, particularly if those sites are linked in thematic terms, and tend to be repeat visitors². Many visitors originate from within the Brecks or adjacent areas, so there is a distinct local component to the visitor profile

The Trail will engage the interest of the target audience through the first contact leaflet and general BNG publicity; it will enable them to plan their visit in advance, via the website information including maps; it will enable them to download information for on-site use, whether as website printouts, eBook or smartphone information.

The Trail information will include comprehensive information about a range of geodiversity features in the landscape, including landforms created in past environments, old quarries and stone pits which provide access points into local rocks and sediments (physical archives of geological and archaeological information) and which relate to industrial history, and sites which provide special habitat for wildlife. Its interpretive approach will thus enable people to make linkages between geodiversity, biodiversity and human history.

The Day School will reach existing, new and wider audiences through effective publicity carried out by the BNG delivery team and by the Trail web pages.

The Trail will develop and improve engagement with heritage for local people and visitors through adding an Earth heritage dimension to their awareness of the natural world. The origins and details of rocks, sediments, soils and landforms are largely overlooked by most people, and the deep time is unfamiliar to them. Gravel is gravel; chalk is chalk. The Trail will introduce them to some examples of Brecks geodiversity which have been chosen because of their interpretive potential to tell an interesting story. It will hopefully lead to them to understand and value the physical aspect of nature, and hence

¹ 'Market Opportunities', Chapter 5, in: Stuart, E (1999): Brecks Visitor Centre Feasibility Study; Touchstone Heritage Management Consultants, Tarbert.

² Stuart 1999, *ibid*; pages 13, 14.



increase an understanding of the need for geoconservation and integrated thinking about conserving all aspects of the environment.

The Trail will complement planned BNG volunteering initiatives (e.g. 'Flint in the Brecks' in the 'Finding Common Ground' strand; 'Training in Discovering the Archaeological Landscape of the Brecks' in the 'On Solid Ground' strand).

There are several potential barriers to engagement with the Trail.

- Language. The Brecks has a substantial immigrant population of circa 10,000 Portuguese and East European economic migrants whose first language is not English³. Provision of translation will be investigated.
- Impaired mobility. The outdoor aspects of the Trail means that it will not be possible to accommodate the needs of less able-bodied people. However the provision of good quality information and images in Trail materials may in some measure compensate.
- Financial. Trail materials will be free at the point of delivery.
- Intellectual. The information will be communicated in a way that presumes no previous knowledge of the subject matter.

The Trail is likely to have established 'buy-in' among motivated users. These are people who may be involved in other aspects of the BNG programme (through volunteering work, for example).

The audiences likely to create the greatest challenge to involvement in the Trail are those with little interest in the natural world. Attractive publicity is the only way that waverers or less motivated people could be encouraged to discover the Trail. The Brecks Visitor Centre Feasibility Study identified family groups as one of the potential markets for the Brecks as a visitor concept⁴. Earth heritage is most likely to be interesting to children if their imagination can be fired by high-quality images showing environmental reconstructions e.g. featuring mammoths, Neanderthal humans, life in the Cretaceous seas. These will be provided in the Trail literature.

³ Schneider, C and Holman, D (2005): *A profile of migrant workers in the Breckland area*; Anglia Polytechnic University

⁴ Stuart 1999, *ibid*; page 14.



Legacy - Securing lasting benefits

The Trail interpretation and signage will continue to exist as web pages and downloads beyond the life of BNG, and funding will be sought for replacements if/when required

Conditions & Consents

N/A

Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Accidents by people at Trail sites e.g. tripping, falling	Low	Medium to High (depending on nature of injury)	Carry out risk assessment for each Trail site. Trail literature to include hazard warnings and info about local NHS facilities. Insurance covered by Trail partners PLI.
Environmental hazards encountered by people at Trail sites e.g. falling branches, thorn bushes	Low	Medium to High	Carry out risk assessment for each Trail site. Trail literature to include hazard warnings and info about local NHS facilities. Insurance covered by Trail partners PLI.
Biohazards encountered by people at Trail sites e.g. ticks	Low	Low (incidental)	Carry out risk assessment for each Trail site. Trail literature to include hazard warnings and info about local NHS facilities. Insurance covered by Trail partners PLI.



C3 – Brecks Rides

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
C3: Brecks Rides	Suffolk County Council	<p>The Brecks Rides will be a 15.5 mile (25km) long-distance linear trail (south to north), between West Stow and Santon Downham.</p> <p>The route will use existing public rights of way to explore the heathland and forest landscape of the Brecks and connect visitor attractions, tourism destinations and open access sites across the area.</p> <p>The project will comprise of developing a hand-held guide "The Brecks Rides" to promote the route with waymarkers on the ground and distance signage between key destinations to indicate the route to users.</p>	Local communities, visitors, cyclists, walkers and Horse riders	<p>Route survey to identify points of interest</p> <p>Way-mark and distance signage</p> <p>Brecks rides leaflet (5,000 copies) and on-line guidance</p> <p>Launch event and promotion</p>	<p>Improved connections between communities, the wider rights of way network and areas of open access</p> <p>Increased opportunities for sustainable travel through the area</p> <p>Increased awareness of the heritage of the Brecks through interpretation</p> <p>Increased offer for informal recreation and sustainable tourism</p>	<p>Project total £11,019 HLF: £3,500 (33%) In-kind: £7519 (67%) Volunteer: £0</p> <p>Brecks Rides Survey (£7,019)</p> <p>Waymarkers and distance markers (£1,500)</p> <p>Brecks Rides leaflets design and print (£2,000)</p> <p>Year 5 leaflet reprint (£500)</p>



Project Aims/Objectives

This project will create and promote a long distance trail for cycling, walking and horse riding through the Brecks New Ground project area and the Brecks landscape to raise awareness of the Brecks as a distinct tourist destination for outdoor leisure activities.

Delivery Partner organisations:	
<i>Organisation:</i> Suffolk County Council (SCC) The Brecks Society Brecks Earth Heritage Trail Forestry Commission Landowners Suffolk Local Access Forum	<i>Role:</i> Lead partner, highway authority BNG Partner BNG Partner Land owner/manger of forest estate Owners of land over which trail will run Advisory role to local authority

Project Need

The project will raise awareness of the Brecks as a distinct geographical area and effectively manage visitor flows between and towards tourist destinations, key sites of interest and lesser known locations. This will help manage visitors away from more environmentally sensitive sites where there may be ground nesting birds or rare species.

The Brecks Rides will meet a growing demand for safe, off-road cycling meeting the needs of the family audience as well as more experienced cyclists. The route would also be suitable for walking and for horse riding, creating a long distance multi-use trail for the Brecks.

The project will help to position the Brecks as a key tourism destination for outdoor countryside pursuits, promoting the area for its distinct landscape, heritage and tourism facilities.



Detailed Project Description

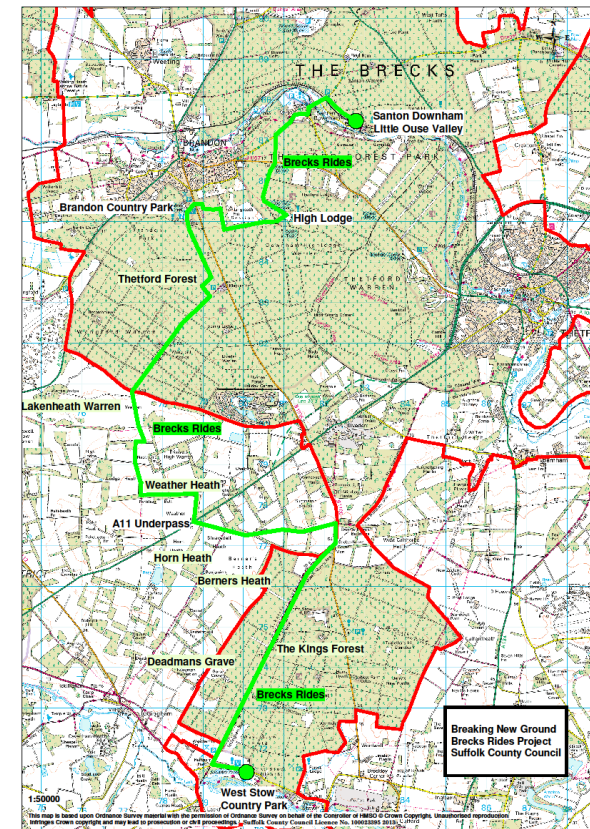
The focus of this project is the effective management of visitors to the Brecks. The Brecks area contains a number of environmentally sensitive sites with a high concentration of open access land. Open access provides the legal “right to roam” without constraints.

However, the availability of open access land and enabling the “right to roam” can create conflict with conservation. A promoted trail offers a means of managing access effectively by encouraging visitors to keep to set routes and avoid more sensitive areas. This principle has been employed by Suffolk County Council in partnership with the RSPB at Snape Warren Open Access site. At that site a marked trail (the Snape Warren Trail), guides walkers away from areas within the site where there are ground nesting birds. This project is an opportunity to employ the same principles in the Brecks, where the environment has similar issues.

The project would create a 25km linear route between West Stow and Santon Downham – “The Brecks Rides”. The route could be explored in its entirety, explored in sections, explored in either direction or extended to link in with the wider rights of way network.

The Brecks Rides would link West Stow and Santon Downham. From West Stow Country Park it would pass through the King’s Forest to cross the A11 at a new underpass currently being installed. This new underpass is due to open in spring 2014 (the dualled A11 is due for completion in autumn 2014).

Although just outside the BNG area, this underpass will provide the only safe, off-road crossing point of the dualled A11 within the Brecks. This element will be funded by SCC and is necessary as it provides the opportunity to link safely, for the very first time, the landscape on the north side of the A11 with that on the



south side of the A11 and unite the Brecks area within Suffolk.

North of the A11, the Brecks Rides will pass through Lakenheath Warren and enter Thetford Forest at Brandon Country Park to continue to High Lodge Visitor Centre and then Santon Downham to end at St Helen's picnic site.

The Brecks Rides would connect countryside sites, tourist attractions and tourism businesses at West Stow, Elveden, Brandon and Santon Downham, benefitting the local rural tourism economy (the value of a day visitor to the countryside is estimated at £18/person).

The Brecks Rides will also join a family of "Rides" leaflets developed by SCC in partnership with local communities, Forest Heath District Council and St Edmundsbury Borough Council to promote cycling in the north and west of Suffolk.

Existing Rides leaflets include the Mildenhall Rides, Newmarket Rides, King's Forest Cycle Rides and the Stanton Rides. Each leaflet promotes off-road cycle and horse riding routes, using public rights of way to explore the countryside. Combined, the series creates an almost continuous network of promoted off-road rides across north-west Suffolk. All leaflets are distributed through local businesses, Tourist Information Centres and libraries. They are also available online through Suffolk County Council's countryside website – www.discoversuffolk.org.uk

The Brecks Rides would complete this series by promoting the area beyond The King's Forest and Mildenhall, linking those Rides with Brandon and Santon Downham.

The target audience for the Brecks Rides will be cyclists. However, the Rides will use public rights of way of bridleway status and above. This creates a trail that is also suitable for walking and horse riding, creating a multi-use route.

The Brecks Rides would be launched to celebrate the development of the new route and to generate media attention for the Ride, the Brecks area and the BNG Project. Discover Suffolk contributes monthly to The Suffolk Magazine (gaining 6 pages of coverage each month). This includes a double-page "route of the month" feature. One month would feature this new route. This offers an excellent opportunity to gain valuable editorial in a publication reaching over 40,000 readers each month and the target audience for the outdoors in Suffolk.



Editorial would also be offered to other regional publications across East Anglia including Suffolk Norfolk Life, to raise awareness of the new route.

Finally, although not part of this project, a longer-term opportunity for the Brecks Rides could be a long distance, off-road cycling event that would further raise awareness and the profile of the Brecks as a distinct tourism destination for outdoor recreation.

Outputs and Outcomes		
Activity	Outputs	Outcomes
Brecks Rides survey	Survey of route to identify points of interest along the trail. (This will determine the exact alignment of the route taking into account points of interest, rest stops, views and facilities)	The survey will enable text to be drafted and images of the route to be gathered. The survey will determine the location for waymarkers and signage along the route.
Brecks Rides signage	Waymark and distance mark the route	This will effectively manage visitor flow through the Brecks area with clear directional signage promoting destinations and points of interest. Clear signage increases confidence amongst the public when following public rights of way, confirming where you can go and how long it may take to get to places.
Brecks Rides leaflet	Print run of 5,000 copies of Brecks Rides, plus online download version promoted on the Discover Suffolk website.	Promote the Brecks Rides and raise awareness of the Brecks as a distinct destination for outdoor recreation.



Location

TL 8002 7146 – TL 8265 8737

Landowner

Although land owner discussions would be held, land owner agreements are not required to create, sign or promote a long distance trail on public rights of way.

Audiences

This project will engage with visitors wanting to experience the wider countryside and explore the full range of landscapes in the Brecks in Suffolk.

This project will;

- engage with an expanding outdoor market providing interest to cyclists of all abilities from family groups experiencing short sections of the route to experienced cyclists wanting the challenge of completing the full ride.
- engage with walkers wanting to explore the Brecks on foot by linking Open Access sites with a promoted, waymarked trail. It will also engage with horse riders in an already popular riding location.
- meet the needs of local communities, raising awareness of the countryside on their doorstep, plus position the Brecks as a location for outdoor activities to in-bound tourists (day-trip and overnight).
- provide a safe, off-road route through the Brecks that is easy to follow, waymarked and promoted, connecting areas of interest in the natural environment.
- guide visitors to tourist attractions which interpret the Brecks heritage. It also has the potential to link other BNG projects which are aiming to interpret the Breck's landscape, history and heritage.
- make it easier for visitors to discover lesser known locations in the Brecks reaching out to a wider audience than the more experienced outdoor audience. The leaflet will be distributed to local outlets, including tourism businesses (pubs, cafes etc.), local amenities (libraries, visitor centres) and Tourist Information Centres.
- engage with family audiences that lack opportunities for safe, off-road cycle, walking and horse riding routes away from traffic.
- make it easy for visitors to navigate their way through the Brecks landscape, linking tourism destinations and countryside sites. This will be achieved by installing easy to follow waymarkers and distance markers that guide visitors between locations.



- link places of interest and visitor attractions that interpret the heritage of the Brecks. For local communities, this will raise awareness of the countryside on their doorstep. For visitors it will raise awareness of the landscapes, including large areas of Open Access land, within the Brecks.

The Rides series has been developed as a direct result of user demand for more promoted safe, off-road cycle routes in the countryside.

The route will keep to public rights of way on which people have a legal right to walk, ride a bicycle or ride a horse.

No challenges are envisaged to this project.

Volunteers

Volunteers will be encouraged to report on route condition as part of the legacy arrangements of this project

Legacy- Securing lasting benefits

The Brecks Rides will use public rights of way, all of which are protected and maintained by SCC. Signage of the route will have a life span beyond the timescale of the scheme. Promotional leaflets will be made available online.

This ensures the Brecks Rides will provide a long-term legacy for the HLF investment.

The Brecks Rides will use public rights of way and public highways, all of which are managed and maintained by the Highway Authority, which is SCC.

Conditions & Consents

N/A

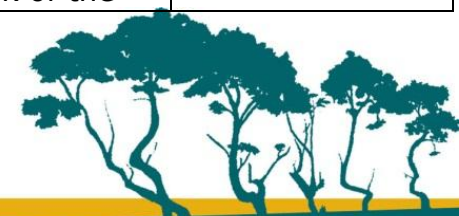


Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Failure to of the highways Agency to complete the A11 underpass in April 2014	Low	Med	This work forms part of a national road scheme and if there are delays to it's completion the project launch will be delayed to reflect this



C4 – Wings Over the Brecks

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
C4: Wings over the Brecks	Forestry Commission (RSPB, Norfolk Wildlife Trust)	<p>The unique landscapes of Thetford Forest and Brecks heaths are home to many species of interesting and charismatic birds, although some are elusive, well camouflaged or sensitive to disturbance and are not easy to see, particularly during the nesting season.</p> <p>This project will connect the local community, school groups, and visitors to the Brecks with some of these distinctive species and their habitats via a series of 'nest cams' installed in the Forest and heaths.</p>	Local communities, schools, visitors, interest groups	<p>Three cameras set up to film different bird species over the nesting season.</p> <p>Footage displayed on monitor at Visitor Centres. 130,000 people will view the images.</p> <p>20 volunteers recruited, trained and managed to cover busy periods at High Lodge to talk to members of the public about the wildlife and interpret the nesting bird</p>	<p>Increased awareness of wildlife in the Brecks, focussing on forest and heathland birds, amongst visitors to High Lodge and Weeting Heath Visitor Centres. With estimated audience of 130,000</p> <p>Increased participation of local people in the conservation work of the</p>	<p>Project total £99,600 HLF: £48,950 In-kind: £29,400 Volunteer: £21,250</p> <p>Project development, management, promotion and overheads (£24,300)</p> <p>Equipment £23,698</p> <p>Annual deployment and nest location</p>



		<p>Live footage of nesting birds such as goshawks, stone-curlews, hobbies and woodlarks will be streamed to the High Lodge and Weeting Heath Visitor Centres where teams of trained volunteers will interpret the images to the public.</p> <p>Regular events and displays will be held over the lifecycle of the project at High Lodge, Weeting Heath and in Thetford and Brandon. The project will offer existing and new audiences opportunities to learn about the wildlife and heritage of the forest and heath.</p> <p>The project aims to create a legacy of learning and communication skills and resources, as well as achieve greater ownership</p>		<p>footage.</p> <p>We will aim to have 10 regular volunteers and 10 more casual volunteers throughout the project.</p> <p>Display panels and visual aids.</p> <p>10 outreach events to raise awareness and engage with around 500 people.</p> <p>Launch event to attract around 500 people, press coverage and other publicity.</p> <p>Create a roaming display for 4 locations in Thetford, Brandon</p>	<p>Brecks, and increased sense of local identity and community ensuring a more secure and sustainable future for the Brecks wildlife and heritage</p> <p>New audiences reached who do not normally go out to places such as Thetford Forest and the Brecks heaths. More awareness of the Brecks wildlife and heritage amongst local residents</p> <p>Increased knowledge and understanding of</p>	<p>£14,250</p> <p>Interpretation, static and roaming displays (£5,200)</p> <p>Launch and engagement events, (£6,612)</p> <p>Volunteer recruitment, training, management and travel (£23,440)</p> <p>Education package (£2,100)</p>
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		of and pride in the area's unique natural heritage.		<p>and project area including a display and web activity. Other venues with existing suitable equipment will also be encouraged to host the display.</p> <p>Create a self guided information package for schools with 10,000 school pupils engaged with 'Wings Over The Brecks' project.</p> <p>Recorded footage packages made available for the other BNG schools engagement activities</p>	the wildlife and heritage of the forest, heaths and the Brecks amongst 10 local schools.	
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Project Aims and Objectives

This project aims to:

- give Brecks residents and visitors the chance to understand, learn about and enjoy the wildlife and heritage of the Brecks landscape and particularly key species within Thetford Forest
- develop a skilled and sustainable volunteer base by training volunteers in the necessary identification, interpretation and communication skills
- engender pride and a 'sense of place' in the Brecks for residents and visitors
- make the wildlife and heritage of the Brecks more accessible to more Brecks residents, visitors and school groups by providing virtual access opportunities via 'nest cams' and displays
- increase visits and visitor satisfaction levels in the Brecks and so encourage spend in the local economy
- develop strong and lasting partnerships amongst statutory, private and voluntary organisations to ensure sustainability.

Delivery Partner organisations:	
<i>Organisation:</i> Royal Society for the Protection of Birds Charlotte Lowry charlotte.lowry@rspb.org.uk Norfolk Wildlife Trust John Milton Johnm@norfolkwildlifetrust.org.uk	<i>Role:</i> Partner Organisation RSPB lead on this project (volunteers & events & displays) at Thetford Forest Partner Organisation NWT lead on this project. Staff member responsible for Weeting Heath

Project Need

Wildlife in the Brecks can be well hidden and often secretive. The work of the Brecks Partnership and community consultations have shown that many local residents know little about the variety and rarity of the wildlife on their doorstep. Equally the stories and history of the Brecks are little told. This project aims to open the door to some of this amazing



wildlife and heritage for people to enjoy and understand and feel inspired to take an active part in conserving it. Currently, the opportunity to view birds at their nest sites and see their behaviour is very limited, even for experienced birdwatchers. The 'nest cams', events and talks will give everyone access to the secret life of key Brecks' species and raise awareness of their importance and the need to conserve their habitats. With interpretation of the footage by trained volunteers, alongside events and talks, the project will inspire other people to volunteer to do their part in conserving this unique landscape. To survive and thrive in a sustainable way the landscape needs local people to understand, enjoy and support their local wildlife and heritage.

Consultation during preparation of the Round One Application, through workshops and questionnaires, identified the need for this project. Provision of increased interpretation of wildlife and more events related to the natural heritage such as walks or wildlife watching were a high priority.

The need for the project is also evident from a pilot project undertaken by the RSPB, trialling community engagement events and activities for local residents in the Brecks in the spring and summer of 2012 and 2013. These were well attended and 1,000 people were engaged with. Feedback via questionnaires showed that little was known about the Brecks landscape and that people wanted to attend more events and find out more about the Brecks.

This project benefits BNG as it aims to connect people with their landscape. It will show local people, school groups and visitors the distinctive wildlife and heritage of the Brecks, fostering a sense of pride in the area. It will undertake outreach work in urban centres through a roaming display in Thetford and Brandon for local people who may experience physical, social or economic barriers to accessing the area's natural environment. It will also encourage local people to take ownership of their landscape by volunteering and participating in conserving its wildlife and heritage. There is a strong emphasis in this project on skills development for volunteers, not only specialist wildlife and interpretation skills, but also confidence building and communication skills. A better understood and well-connected landscape for local residents and visitors is vital.

This project fits into the wider context of community engagement work in the Brecks carried out by the project partners, English Heritage, District Councils, Butterfly Conservation, Plantlife, Natural England and BTO at various sites around the Brecks. It also fits into the aims of the Brecks Biodiversity Delivery Group and Brecks People, Wildlife and Heritage Group.



Detailed Project Description

This three-year project will connect the local community, school groups, and visitors to the Brecks with some of the distinctive birds of the area through nest cameras, events and activities in Thetford Forest and at Weeting Heath, and displays in Thetford and Brandon. In order to enthuse local residents and visitors and increase their understanding and enjoyment of Brecks' wildlife and natural heritage, the project will offer different learning and participation opportunities, and engender pride and a sense of place in the Brecks.

The project partners will:

- Design and implement an integrated programme of community engagement events and activities at High Lodge and Weeting Heath Visitor Centres. The event programme will be delivered through a range of media, including interpreting live footage from the nest cameras and guided walks at Thetford Forest and Weeting Heath, talks in local parishes and towns, and a display in different locations in Thetford and Brandon. The live footage will be viewed by around 130,000 people and the events programme will engage with around 500 people over the lifetime of the project;
- Recruit, train and manage a team of volunteers, who will be involved in nest location, interpreting footage from the nest cameras, and communicating with the general public. Training will cover wildlife identification and recording skills, and communication and interpretation skills, and will ensure volunteers are empowered to continue community engagement activities in year 3 and beyond the project lifespan;
- Design and produce display panels and visual aids showing the wildlife and heritage of the Forest and heaths, for use at High Lodge and Weeting Heath Visitor Centres and in Thetford and Brandon;
- Design and produce online resources, including a link from partners' websites to the main BNG website;
- Design and produce a 'self-guided' information package for visiting groups from Brecks schools to the Visitor Centres, engaging with around 10,000 schoolchildren;
- Promote community engagement and awareness by publicising events and activities through relevant existing social media, local press, the production of project-relevant printed material, and an opening event in year 2 of the project;
- Ensure the legacy and sustainability of the project through communication resources such as the 'self-guided' package, volunteer training and support, and strong and lasting partnerships in the Brecks.



At the outset of the project, the three partners – the Forestry Commission (FC), the RSPB and the Norfolk Wildlife Trust (NWT) – will convene a board to oversee and deliver the project. Each partner will lead on different elements, bringing a range of skills and resources, with the core commitment being to work together for the benefit and success of the project. The FC will lead the project, set up and maintain nest cameras and other equipment, and lead on the design and production of the 'self-guided' information package; the RSPB will lead on training and managing the volunteers, events and displays; and the NWT will lead on Weeting Heath. All partners will produce online resources.

The project will be delivered as follows:

Spring/Summer 2014

The nests of key bird species (e.g. goshawks, stone-curlews, hobbies, woodlarks) will be located with the help of experienced local volunteers. Equipment will be set up to record the images from the nest and to relay these live images back to High Lodge and Weeting Heath centres. This will be a trial stage to test out the equipment and get it up and running. Forestry Commission staff will carry out the technical set-up of the equipment. Experienced volunteers and partnership staff will locate suitable nest sites. Volunteers will train, manage and support them to interpret the nest camera information. The project will plan and deliver events and talks and undertake community liaison work.

The partners will design and produce the display material that will be used at High Lodge (RSPB/FC) and Weeting Heath (NWT) and the roaming display for town centre locations (Thetford and Brandon). FC will develop a 'self-guided' package for visiting school groups to the Visitor Centres. Partners will develop online resources on their respective websites. We will purchase a roaming computer and monitor to enable us to move a display showing recorded images to different locations in Thetford and Brandon. The BNG web page will include recorded footage of the nests and links to partner websites for further information and activities.

Winter 2014/15

The displays and recorded images will be displayed throughout the project area. The core team of volunteers will cover the interpretive role. The events program will continue.



February 2015

Partner staff will plan a programme of volunteer recruitment and training and a programme of walks and talks for the spring and summer season, which will build on the work done in the previous year. A programme of volunteer recruitment will be organised to build on the core of volunteers recruited in summer 2014. Experienced volunteers will be involved in training new volunteers.

Spring 2015

New nest locations will be located by volunteers and partner staff with the cameras set-up deployed. Live images will then be relayed back to High Lodge and Weeting Heath Visitor Centres.

An opening event will be organised and held at High Lodge. It will include guest speakers, talks, walks and other activities to interpret the landscape, and raise awareness about the project, and also equip people to take action for wildlife at home.

2015-2017

New nest locations will be located by volunteers and partner staff with the camera set-up deployed. Live images will then be relayed back to High Lodge and Weeting Heath Visitor Centres. Recorded images will be used for the roaming display in urban locations. A full volunteer programme will be up and running, with a comprehensive training programme in place. A well-targeted events programme will be delivered by a sustainable, trained core of volunteers developed by the project.

Outputs and Outcomes		
Activity	Outputs	Outcomes
Nest cameras set up to film nesting birds, with several species filmed in each year to extend the active season. Live footage streamed to High Lodge and Weeting Heath Visitor Centres and shown on screen.	Three cameras set up to film different bird species over the nesting season. Footage displayed on monitor at Visitor Centres. 130,000 people will view the images.	Increased awareness of wildlife in the Brecks, focussing on forest and heathland birds, amongst visitors to High Lodge and Weeting Heath Visitor Centres.
Recruit, train and manage around 20 volunteers	20 volunteers recruited,	Increased participation of local people in the



over the three-year project.	trained and managed to cover busy periods at High Lodge to talk to members of the public about the wildlife and interpret the nesting bird footage. We will aim to have 10 regular volunteers and 10 more casual volunteers throughout the project.	conservation work of the Brecks, and increased sense of local identity and community. Local support ensures a more secure and sustainable future for the Brecks wildlife and heritage.
Display material designed and produced for High Lodge and Weeting Heath Visitor Centres to show the wildlife and heritage of the forest and heaths, with information about the surrounding Brecks landscape.	Display panels and visual aids.	Increased knowledge and understanding of the wildlife and heritage of the forest, heaths and the Brecks amongst residents and visitors, and greater emotional connection to heritage.
Plan and deliver a program of 10 events and talks, reaching out to the community and raising awareness of the project.	Engage with around 500 people.	Increased knowledge and understanding of the wildlife and heritage of the forest, heaths and the Brecks among residents and visitors, and greater emotional connection to heritage.
Opening event at High Lodge Forest Centre to raise awareness of new facilities at both visitor centres and events programme.	Attract around 500 people, press coverage and other publicity.	Raise awareness of the wildlife and heritage of the forest and wider Brecks, recruit volunteers and attendees for future events.
Design and produce a roaming display for locations in Thetford and Brandon and the	Four locations in Thetford, Brandon and	New audiences reached who do not normally go out to places such as Thetford Forest and



project area, where the recorded footage from the nest cameras can be viewed on the website.	project area will have a display and show web activity, and other venues with existing suitable equipment will be encouraged to display.	the Brecks heaths. More awareness of the Brecks wildlife and heritage amongst local residents.
Create a 'self-guided' information package for visiting school groups to the Visitor Centres.	10,000 school pupils engaged with 'Wings Over The Brecks' project.	Increased knowledge and understanding of the wildlife and heritage of the forest, heaths and the Brecks amongst visiting school groups.
Recorded footage used in 10 Brecks schools that Suffolk Wildlife Trust and Norfolk Wildlife Trust will be working with as part of the overall BNG project, and incorporate this within the teacher training element of the schools project.	1,200 school pupils engaged with 'Wings Over The Brecks' project.	Increased knowledge and understanding of the wildlife and heritage of the forest, heaths and the Brecks amongst 10 local schools.

Location

Thetford Forest, High Lodge Forest Centre TL81138516
Weeting Heath Visitor Centre TL75798803

Landowner

The Forestry Commission	Contact details; Santon Downham, Brandon
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	Suffolk IP19 8EY
Norfolk Wildlife Trust	Bewick House 22 Thorpe Road Norwich NR1 1RY

Audiences

The project aims to engage mainly with Brecks residents but also visitors to the area. Brecks Partnership work, consultation and RSPB event feedback have shown that there is a need for Brecks residents to understand and enjoy further their landscape and the wildlife and heritage it holds. Enthusiasing residents and inviting them to actively participate as volunteers will engender a sense of local identity and pride in their wildlife heritage, leading to a sustainable way forward for conservation of the landscape. The project will target families as these are frequent visitors to High Lodge, but also audiences likely to volunteer and participate in conservation related work. School groups will also be engaged through the development of 'self-guided' packages. The project will also aim to reach people who do not normally go to the countryside by basing outreach displays in the town centres of Thetford and Brandon and in the wider project area, and targeting talks to different groups and the general public.

The project will provide tailored displays, interpretive material, walks and talks to engage our target audiences. The Thetford and Brandon locations will be carefully picked to enable us to reach our harder to reach target audiences.

The project will help extend the perceived limited local engagement with the landscape. It will put information about the natural history of Thetford Forest and the Brecks heaths into the public domain and show how the management of the forest and heaths conserves the Brecks wildlife. It will provide learning and participation opportunities for the local community.

With appropriately designed material and well trained volunteers the project will aim to meet target audiences, which as above include existing, new and wider audiences.



The Project will make use of partners in the BNG Scheme to help it reach audiences currently under-represented, including Keystone Development Trust; Moving Thetford Forward; Moving Brandon Forward and others.

Display material and events will be designed to show the history of the forest and heaths, some of the distinctive bird species who live there, and how these fit into the Brecks landscape. Local communities will be encouraged to play a role in conserving local natural heritage through volunteering opportunities, the on-site events programme, and outreach activities in urban centres, and visitors to the Brecks will be engaged through both off-site and on-site activities.

The Project will make use of partners in the BNG Scheme to help it reach audiences currently under-represented, particularly those who experience physical, social or economic barriers to accessing local natural heritage. It will facilitate off-site engagement with heritage through roaming displays in Thetford and Brandon town centres, and online resources. Events and activities at Thetford Forest and Weeting Heath will take into account and address different access needs, e.g. through walks of varying lengths and a variety of interpretative materials, available on site and online. Both Thetford Forest and Weeting Heath have disabled access facilities. The language of the project will not be specialised nor exclusive.

The project partners already have a very successful record of engaging with communities and involving volunteers in projects. The RSPB pilot community engagement project has meant we have a small core of volunteers to work with and we have researched our target audience. Harder to reach audiences in town centres, where we are trying to reach people who don't normally engage with the countryside, will be more challenging. However existing relationships within the local community and work with BNG partners, such as Keystone Development Trust, to develop new relationships to engage these harder to reach audiences will be worked upon.

Volunteers

A range of volunteering opportunities will be offered to the local community, enabling individuals to contribute to and feel greater ownership of their local wildlife heritage. Specialist volunteers will help locate nests at the beginning of the bird breeding season. People engagement volunteers will be trained to interpret live footage and deliver events (recordings in inactive periods) to the public and to give information about the species on the nest cameras and the wildlife and heritage of the Brecks in general at the two visitor centre sites.



Volunteers will be involved so that they have opportunities to learn a wide range of natural heritage-related skills. They are a much-valued resource, able to deliver beyond the constraints of staff capacity and hours. A subset of volunteers will have some pre-existing skills in wildlife identification needed for the project's success.

Volunteers will be recruited through publicity in the press and media; through links to other voluntary groups and organisations in Norfolk and Suffolk; through the BNG website; through the Forestry Commission, RSPB and NWT websites and newsletters; at High Lodge and Weeting Heath Visitor Centres. Volunteers will be recruited, trained and managed for the duration of the project according to partner procedures and best practice, and in consultation with the overall BNG Volunteer Coordinator. All three organisations have extensive experience of working with volunteers.

Forestry Commission, RSPB and Norfolk Wildlife Trust have appropriate insurance for volunteers.

Legacy - Securing lasting benefits

It is intended that the nest cameras and associated facilities become a permanent interpretation facility at High Lodge and Weeting Heath Visitor Centres, and will be maintained by FC and NWT.

A core team of trained volunteers will continue to be involved after the HLF-funded project ends. They will engage and recruit future volunteers. Trained volunteers will continue to engage with the public and provide interpretation and suitable nest locations.

There will be a wider group of people who appreciate their local natural heritage and a larger number of volunteers who have a greater sense of pride in and ownership of their local area, and an active role to play in sustaining their local environment.

Over time it is intended that the footage would also be used at other attractions and available alongside other online resources and the 'self-guided' information package on partner websites, reaching more and wider audiences. The web pages will ensure that the project's outcomes remain in the public domain.

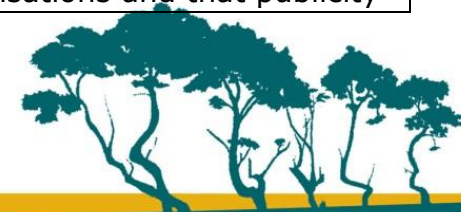


The Forestry Commission will maintain and deploy the equipment each season using expertise gained at other similar facilities in the UK. Partner staff will continue to recruit and manage volunteers. Partner webpages will be maintained and regularly updated.

Conditions & Consents

Wildlife and Countryside Act Schedule 1 disturbance & photography licences required from Natural England.

Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Organisational : A lack of those with the skills needed to deliver the project	Low	High	Plan project in detail and include contingency measures. Ensure all participants are conversant with its aims and objectives. Set milestones of achievement and regularly monitor and evaluate progress. Have systems in place to give early warning of potential problems.
Social : lack of voluntary participation	Low	High	Ensure that the project's volunteering opportunities are widely publicised in local communities; the media and among partnership organisations and that publicity



Environmental: the birds fail to nest.	Low	High	<p>reaches groups traditionally disengaged. Ensure that volunteers are supported, trained, motivated managed and valued by all partners and staff. Regularly monitor and evaluate volunteer participation. Have systems in place to give early warning of potential problems.</p> <p>Will have alternative nest sites and species available, making use of local specialist knowledge. Use failure as an opportunity to educate the public as to the hazards for breeding birds and their vulnerability. Have emergency plans in place and, if possible, systems to provide early warning of potential problems. Will be able to use recorded footage after first year.</p> <p>Make sure that project costs are detailed and cover all</p>
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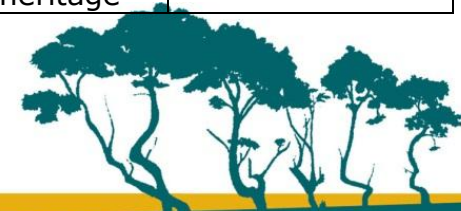


Financial : Budget for the project exceeded	Low	High	contingencies and that they are agreed by all parties. Identify possible alternative sources of funding and a procedure that gives early warning of potential problems.
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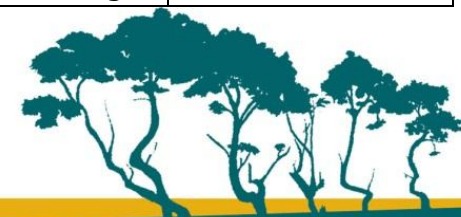


C5 – Brecks heritage Trail

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
C5: Brecks Heritage Trail	Breckland Society	<p>This project will create a series of 10 heritage trails across the Norfolk and Suffolk Brecks for walkers, cyclists and horse riders.</p> <p>Collectively the trails will feature over 40 sites identified for their historical and natural heritage interest.</p> <p>The trails will use existing rights of way, including bridleways and cycle paths, to provide 'on the ground' circular routes of differing lengths and each based on a specific heritage theme.</p> <p>The trails will also promote</p>	Local communities, volunteers, interest groups and visitors	<p>Flint Heritage Trail</p> <p>Warrens Heritage Trail</p> <p>Brecks Heritage Rivers Trail</p> <p>Churches Heritage Trail</p> <p>Wildlife Heritage Trail</p> <p>Prehistoric Heritage Trail</p> <p>Great Estates Heritage Trail</p>	<p>One heritage trail centred on Brandon.</p> <p>One heritage trail centred on Thetford Warren Lodge and Downham Warren.</p> <p>One heritage trail centred on the Little Ouse Valley.</p> <p>One heritage trail centred on Icklingham.</p> <p>One heritage</p>	<p>Project total £69,453</p> <p>HLF: £49,353 (71%)</p> <p>In-kind: £12,600 (18%)</p> <p>Volunteer: £7,500 (11%)</p> <p>Volunteer led project design research and delivery (£10,100)</p> <p>60 Way-mark posts and signs/discs (£10,500)</p>



		<p>other places to visit. Each trail will have an associated leaflet (both hard copy and web-based) explaining access and points of interest; in addition, each parish hosting a trail will have an interpretation panel outlining relevant history, wildlife and other information, with local communities contributing to the research and content of the panels.</p>		<p>Heathland Heritage Trail</p> <p>Architecture Heritage Trail</p> <p>Forest Heritage Trail</p> <p>Interpretation Panels</p> <p>One interpretation panel for each community/parish featuring in the ten trails</p> <p>Each waymarker post, existing and new, badged with the heritage trails logo</p> <p>60 way-marker posts to</p>	<p>trail centred on Lakenheath Warren.</p> <p>One heritage trail centred on Weeting.</p> <p>One heritage trail centred on Lynford.</p> <p>One heritage trail centred on Cranwich.</p> <p>One heritage trail centred on Croxton.</p> <p>One heritage trail centred on High Lodge Forest Centre.</p> <p>Improved understanding of Brecks Heritage</p>	<p>25 interpretation panels design and manufacture (£31,250)</p> <p>Produce leaflet and web design (£7603)</p> <p>Legacy maintenance (£10,000)</p>
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				supplement existing posts. Leaflets and on- line guidance/ interpretation	features. Engagement with Parishes to create the trails Improved access to the heritage of the Brecks	
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Project Aims/Objectives

- To create a series of heritage trails across the Brecks, of differing lengths and with each trail designed specifically to highlight a particular theme or aspect of the area's heritage
- To improve accessibility on foot, by bike and on horseback to the heritage landscapes of the Brecks at a community level and for residents and visitors alike
- To engage local communities in the research and interpretation of their local history.
- To engage with schools and young people to help them learn more about their local environment and cultural history
- To encourage visits and hence spend in the local economy
- To promote healthy living and enhanced well-being through providing waymarked trails and improved physical access

Delivery Partner organisations:	
<i>Organisation:</i> Parish councils Local schools and colleges Private landowners UEA	<i>Role:</i> Partner Partner Partner Partner



Forestry Commission	Landowner/Partner
Suffolk Archaeological Service	Advisory
Norfolk County Council HER	Advisory
SCC	Advisory
NCC	Advisory
NWT	Advisory
SWT	Advisory
NE	Advisory

Project Need

Public access to the rich diversity of the natural and man-made landscape heritage of the Brecks remains under-developed and unstructured. The project trails will provide a coherent and joined-up access network that will raise awareness of the significance of the Brecks' archaeology, natural history, industrial heritage, architecture and social history. The trails will also promote healthy exercise and well-being, as well as help stimulate the local economy through increased visitor numbers. They will also facilitate enhanced understanding, knowledge and enjoyment of the Brecks' unique landscape.

Detailed Project Description

This is seen as the project that will connect many of the key strands and components in *Breaking New Ground*.

It will create a series of ten 'heritage trail nodes' in different landscapes across the Norfolk and Suffolk Brecks for walkers, cyclists and horse riders.

Generally, the 'nodes' will be circular routes of varying length and each will have a particular theme linked to an aspect of the historic landscape and its wildlife.

The trails will use existing rights of way, so obviating the need to create and maintain new footpaths.

The trails will promote other sites across the Brecks which link to the theme of each node and to other projects/components in *Breaking New Ground*.



The trails will identify over 40 sites for their historical importance, from the Neolithic flint mines at Grimes Graves, through Bronze Age barrows, medieval commercial rabbit warrens and the Brandon gunflint industry to the 18th century country estates and houses, 19th century gardens and the 20th century military use of the area and the establishment of Thetford Forest. They will also include sites selected for their outstanding landscape, wildlife and ecological interest.

The trails will be developed with the participation of local community groups, parishes, schools and history and wildlife societies. They will include partnership working with a variety of stakeholders, including landowners, the Forestry Commission, Natural England, English Heritage, County Archaeology Units, County and District Councils, the Norfolk and Suffolk Wildlife Trusts, the heritage and tourism providers and voluntary organisations and Friends of Thetford Forest.

The Heritage Trails will be developed in conjunction with UEA's 'Landscape Revolution Project' and therefore involve local communities in developing their routes and providing content and images.

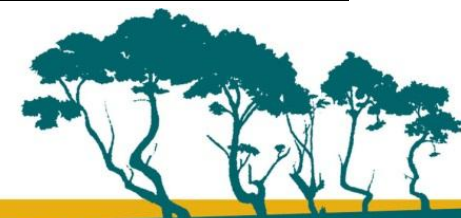
In particular, they will involve parishes along their routes so that those communities learn about their own immediate environment and about their connections with the wider Brecks, its natural and built heritage, landscape features and documented history. The Heritage Trails will take into account and respect the constraints of the European designated sites and other designated wildlife and heritage sites.

Each trail will be identified by a new 'Brecks heritage trail' logo/symbol, attached to existing waymarker posts and to a limited number of new posts. The logo will be designed by students from local schools and colleges.

Information on each trail will be available as both a leaflet and a downloadable PDF as well as on new interpretation panels in each parish.



Outputs and Outcomes		
Activity	Outputs	Outcomes
Flint Heritage Trail	One heritage trail centred on Brandon.	Raised awareness of the importance of flint in the Brecks in its built and military heritage
Warrens Heritage Trail	One heritage trail centred on Thetford Warren Lodge and Downham Warren.	Raised awareness of the importance of warrening in the development of the landscape
Brecks Heritage Rivers Trail	One heritage trail centred on the Little Ouse Valley.	Raised awareness of the importance of river valleys in the Brecks
Churches Heritage Trail	One heritage trail centred on Icklingham.	Raised awareness of the importance of church architecture, craftsmanship and associated social history
Wildlife Heritage Trail	One heritage trail centred on Lakenheath Warren.	Raised awareness of the importance of the unique wildlife of the Brecks.
Prehistoric Heritage Trail	One heritage trail centred on Weeting.	Raised awareness of the importance of the prehistoric archaeology of the Brecks.
Great Estates Heritage Trail	One heritage trail centred on Lynford.	Raised awareness of the importance of the role of the great estates in the landscape of the Brecks.
Heathland Heritage Trail	One heritage trail centred on Cranwich.	Raised awareness of the importance of heathland habitats in the Brecks
Architecture Heritage Trail	One heritage trail centred	Raised awareness of the importance of



	on Croxton.	vernacular building styles and materials.
Forest Heritage Trail	One heritage trail centred on High Lodge Forest Centre.	Raised awareness of the importance of forestry and forest management in the landscape.
Interpretation Panels	One interpretation panel for each community/parish featuring in the ten trails and in the UEA 'Landscape Revolution Project'.	Raised awareness of the natural and built heritage of the Brecks for both residents and visitors.
Livery	Each waymarker post, existing and new, badged with the heritage trails logo	Easy identification of heritage routes
Waymarker Posts	60 waymarker posts to supplement existing posts.	Clear indication of routes to follow.

Location

Across the BNG LP area.

Landowner

N/A as all trails will use existing rights of way

Audiences

The project aims to engage with all audience types as it is important that everyone is given the opportunity to enjoy, understand and participate in the Brecks' heritage.



The Breckland Society recognises that the Brecks has a range of social and economic issues that reflect the disparate spread of its population. The immigrant communities and the socially and economically disadvantaged groups in the urban centres of Brandon and Thetford have different issues to those in the isolated rural communities but nevertheless all live in this landscape.

The project will provide a range of opportunities which will encompass practical work 'on the ground' as well as documentary research

The project will help extend the perceived limited local engagement with the landscape. It will put information about the natural and built heritage into the public domain and show how the landscape of the Brecks reflects human interaction with natural resources over millennia.

It will provide a range of opportunities for participation so that it has the widest possible appeal.

The Project will make use of partners in the BNG Scheme to help it reach audiences currently under-represented, including Keystone Development Trust; Moving Thetford Forward; Moving Brandon Forward and others. It will draw on the experience of the Norfolk and Suffolk Wildlife Trusts, both of whom have had recent projects reaching the communities of the Brecks.

The Breckland Society's two major research projects on the vernacular architecture and the warrens of the Brecks involved over 80 volunteers, including students; community pay-backers and the disabled. The flint-working test pit survey in the spring and summer of 2011 attracted 92 volunteers. This network of volunteers and Society members is distributed across the whole area, including in the parishes proposed for inclusion in the project, where they will act as coordinators and participants.

Volunteers

The project will include volunteers at every stage, from development to delivery. Breckland Society Committee Members (6) are involved in the planning of the project and will oversee its delivery. The Society's members and volunteers will be invited to add ideas and comments at every stage, and will be crucial in terms of the project legacy, as they will be responsible for condition checking and maintenance of the paths, waymarker posts and interpretation panels in subsequent years.



Volunteers will be involved so that they have opportunities to learn a wide range of heritage-related skills.

They will be recruited through the Society's newsletter and at Society events; through publicity in the press and media; through links to other voluntary groups and organisations in Norfolk and Suffolk; through the BNG website. The volunteers will be managed by the Breckland Society Committee.

The Breckland Society has insurance for its activities

Legacy - Securing lasting benefits

The Society will make provision for activities and projects to continue; for participants to pass on their knowledge and skills and involve new people; to foster and maintain a close and mutually supportive working relationship with partner organisations. In particular, teams of volunteers will continue to monitor the trails and their infrastructure in the years beyond the project.

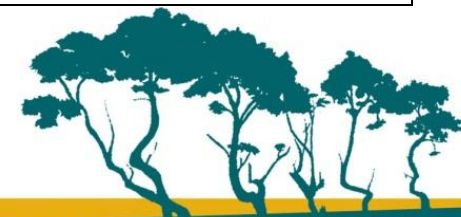
All the trails will be on existing public rights of way, where legal responsibilities over upkeep are already in place; therefore, parishes and landowners will be responsible for long-term maintenance and management, with the relevant local authority responsible for enforcement. Project volunteers will continue to monitor the condition of the trails, waymarker posts and interpretation panels during and beyond the life of the project.

Conditions & Consents

N/A



Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Organisational : A lack of those with the skills needed to deliver the project	Low	High	Ensure that there is a network of support from which to draw. Plan project rigorously and include contingency measures. Ensure providers fully understand target aims and objectives. Set milestones of achievement and regularly monitor and evaluate progress. Have systems in place to give early warning of potential problems.
Social A lack of voluntary participation	Low	High	Ensure that there is widespread publicity about volunteering opportunities and benefits in local communities and in the media and among partnership organisations and that it reaches groups traditionally disengaged. Ensure that good relationships are nurtured with the media. Ensure that volunteers are supported, trained, motivated managed and valued by all partners and staff. Regularly monitor and evaluate volunteer participation. Have systems in place to give early warning of potential problems.
Financial : Budget for the project exceeded	Low	High	Ensure that project costs and arrangements are in place, fully comprehensive, endorsed and signed by all necessary parties. Ensure that contingency is

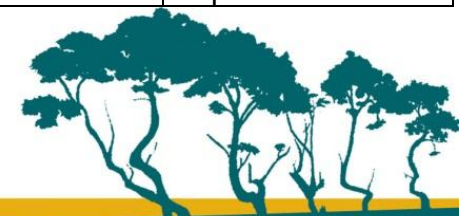


			included and is realistic. Identify any alternative sources of funding. Have systems in place to give early warning of potential problems.
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C6 - LiDAR

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
C6: Revealing the Landscape - LiDAR	Forestry Commission	<p>In recent years Light Detection And Ranging (LiDAR) has become an established method of assessing heritage at a landscape scale as it can pierce the canopy of the Forest Plantations and reveal hitherto unrecorded features in the landscape</p> <p>Thetford Forest is considered to have had a relatively benign effect on the extant features imposed on the landscape by previous land uses, but experience with ground-based surveys show it can be difficult to identify them.</p> <p>This project will provide a</p>	Heritage and landscape professionals, interest groups	<p>Acquisition of LiDAR data for 150KM² of Brecks plantation</p> <p>Interpretation of data and image enhancement</p> <p>Training workshop for landscape and heritage professionals</p> <p>Web published LiDAR data resource</p>		<p>Project total £59,272 HLF: £49,312 (83%) In-kind: £9,960 (17%) Volunteer: £0</p> <p>Professional Services (£7372)</p> <p>RAW data acquisition (£15,000)</p> <p>Construct LiDAR data terrain models (£20,000)</p> <p>Review and production of</p>



		<p>new resource for the Brecks that will enhance knowledge and appreciation of archaeological features at a landscape scale, and aid with their future conservation management.</p> <p>Its results will contribute to an understanding of the Brecks landscape as a whole, enabling professional archaeologists to prioritise protection of features and helping landowners to understand the importance of managing some sites. It will also enhance and focus volunteer ground-based survey work, providing the opportunity to learn to interpret LiDAR images.</p>				<p>LiDAR representations for Heritage projects (£7,650)</p> <p>Training workshops (£1,000)</p> <p>Online publishing and data management (£4,750)</p> <p>Legacy database maintenance (£3,500)</p>
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Project Aims/Objectives

The aim for this project is to create a fundamental resource for heritage understanding and protection in the Brecks. This resource will become as significant in our interpretation of the landscape as the first edition OS survey.

The project will generate vivid images of the landform beneath Thetford Forest, giving our first glimpse of the full extent of surviving heritage features in their landscape context.



Thetford Forest is open to public access providing a unique opportunity for volunteers to survey the features on the ground.

An important element of this project is to train professional archaeologists and volunteers how to interpret the images, so they can be widely used in other projects.

The images produced will be a permanent resource for studies of the landscape beyond the lifetime of this HLF project.

This project links to all of the Breaking New Ground projects that include an element of landscape interpretation, such as Flint in the Brecks; the Internal Archaeology & Lodge Sites of the Warrens; Sheep in the Brecks; Military History of the Brecks, the Aerial Photos project and A Tale of Two Valleys.

Delivery Partner organisations:	
Organisation: Suffolk and Norfolk County Council	Role: Archaeological support

Project Need

As LiDAR data can be used to create vivid images of a hidden world it will be a useful tool to engage general interest at the start Breaking New Ground.

This key project will become a tool for many other projects in the bid.

Thetford Forest is a rich source of evidence from thousands of years of previous land use – the forest protects earthworks from the damage by farming and development which has irradiated them from much of the wider landscape. Thetford Forest is in public ownership so can offer volunteers opportunities to improve their computer and field survey skills through projects that use the LiDAR data to investigate the extent and survival of features.

LiDAR gives us the opportunity to “see through” the tree canopy at a landscape scale. It will provide a detailed relief of ground features for field investigation and interpretation – contributing to enhanced knowledge and appreciation of the extent and survival of earthworks throughout the forest.



Detailed Project Description

Lidar is highly applicable as a remote sensing technique because it is able to penetrate woodland more than other forms of remote sensing or ground survey.

A LiDAR survey is needed because it will provide a new resource for the Brecks that will enhance knowledge and appreciation of archaeological features at a landscape scale, and aid with their future conservation management. Its results will contribute to an understanding of the Brecks landscape as a whole, enabling professional archaeologists to prioritise protection of features and helping landowners to understand the importance of managing some sites. But it will also enhance and focus volunteer ground-based survey work, providing the opportunity to learn to interpret LiDAR images.

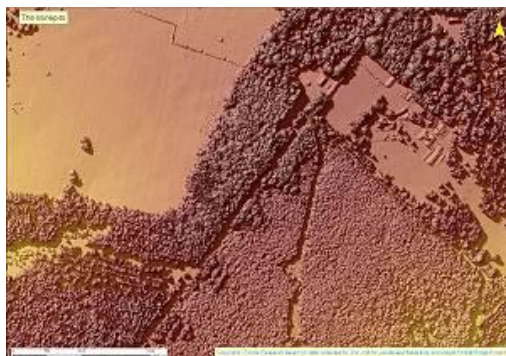
The survey area is designed to efficiently cover forest land in the Breaking New Ground project area. Thetford Forest is considered to have had a relatively benign effect on the extant features imposed on the landscape by previous land uses, but experience with ground-based surveys show it can be difficult to locate them.

LiDAR (light detection and ranging) involves flying over a landscape and sending down laser pulses – the time taken for a laser pulse to be reflected back builds up a picture of the relative height of the land and vegetation below. In recent years LiDAR has become an established method of assessing heritage at a landscape scale as it can show changes in land height of only a few centimetres and reveal features in the landscape that can be too subtle to be easily determined on the ground. Interpretation of these and previously known features is improved as they are seen to a fuller extent and in association with other archaeological or landscape features.

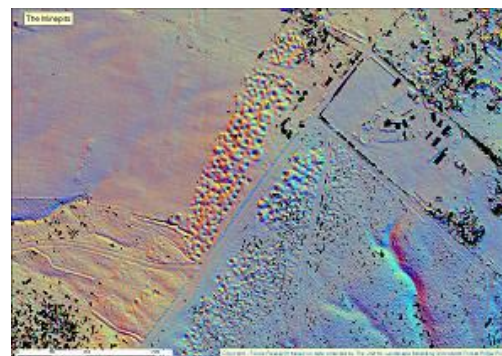
The raw data will be purchased from a suitable contractor. The data will then be enhanced to optimise visualisation for interpretation of features within woodland – this highly specialised and critical element of the work requires input from specialists with experience of working with LiDAR data in similar projects to reliably interpret heritage features beneath a forest canopy.



An example from a similar project undertaken by Forest Research (from the Weald Forest Ridge project in 2010) shows the outcome of a properly enhanced dataset to reveal extant features below a woodland canopy

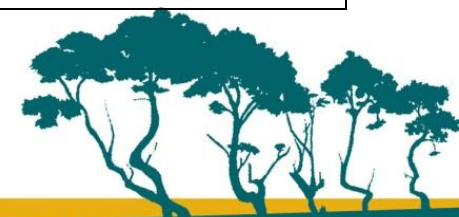


Aerial photo



LiDAR

<i>Outputs and Outcomes</i>		
Activity	Outputs	Outcomes
LiDAR data capture flight	LiDAR raw data	LiDAR raw data available to project group to interpret
LiDAR post-survey interpretation	LiDAR data showing ground releif	LiDAR GIS layers available to project group for initial interogation Lidar derived images available to all for field interpretation
LiDAR training workshop	One day training for professional archaeologists and volunteers	Attendees undertanding the potential applications for the LiDAR data, and how to interpret images.



Location

The focus is on Forestry Commission land within the Breaking New Ground project area.

This is the critical area to capture as it is a unique opportunity to reveal what is beneath the tree canopy and benefit from the Forestry Commission open access policy for volunteers to undertake field survey projects.

It would be desirable to also obtain LiDAR images for the whole of the Breaking New Ground project area if additional funding could be allocated to this project, but the LiDAR data will be complimented by aerial photography research undertaken by the Brecks from Above Project which will be most effective over more open landscapes, and the military training areas where consent to have the LiDAR data captured has not been confirmed.

Landowner

Forestry Commission

Audiences

Appropriately interpreted, LiDAR can be used for all audience types from professional archaeologists, to student researchers, to archive volunteers to field survey volunteers to the public. The project will provide LiDAR images and user-appropriate training/coaching.

The project will reveal the extent and survival of earthworks protected within the forest – an aspect that is not normally noticed. The project will allow a landscape-scale visualisation of the Brecks.

The project will help archaeologists and landowners protect and explain the features to other users of Thetford Forest.

LiDAR derived images can be presented in engaging and exciting ways, including Augmented Reality, which is easily understood without a depth of knowledge of the landscape. These images are excellent tools to help heritage projects reach a universal audience and can be used to equal effect to illustrate newspaper articles, tourist information literature and



professional journal articles. They would be an eye-catching addition to the images used to promote the Brecks in eg Thetford Town Centre.

The Project will make use of partners in the BNG Scheme to help it reach audiences currently under-represented, including Keystone Development Trust; Moving Thetford Forward; Moving Brandon Forward and others. It will promote the project and recruit volunteers at High Lodge Forest Centre, the main visitor hub for Thetford Forest.

LiDAR data and their derived images can help interpret the landscape to residents and visitors – encouraging them to appreciate the elements of Breckland’s landscape history which Thetford Forest has protected from farming and development.

The images generated by the project are accessible to anyone with sight, and could be converted into 3D models to interpret the landscape to the sightless. The project will work with others in the Landscape Partnership to access as many different audiences as possible.

The Forestry Commission helps train and work with with herigate volunteers from Breckland Society, Friends of Thetford Forest and Society for the Protection of Ancient Buildings. Thetford Forest has are ongoing community volunteer activities organised in association with Norfolk County Council, Suffolk County Council, English Heritage.

Thetford Forest attracts a range of local, regional and national visitors who benefit from the open access to enjoy sport, nature, picnics etc. The vivid images generated by this project will become a tool to engage these visitors in the history of the Brecks.

Volunteers

This project includes a training workshop for volunteers and professional archaeologists. Workshop attendees will learn how to interpret LiDAR images and identify potentially interesting features, and see how other reference material (maps, aerial photos ect) can be used to focus ground truthing effort. The workshop will explain the type of features that will be visible on the images but are created by forest management (eg stump rows).



It is not appropriate to involve volunteers in the development, delivery, management and monitoring of a LiDAR survey – this relies on the professional skills of specialists to turn raw flight data over a forest canopy into meaningful images depicting the forest floor.

The volunteer input will come with the ground truthing of the data – which will happen through other projects in the bid.

Working through other projects, volunteers contribute fresh ideas and knowledge of their survey sites.

Volunteers will be recruited by other projects – LiDAR will provide a useful recruitment tool to these projects with easily accessible images.

Legacy - Securing lasting benefits

The LiDAR derived images will be available for interrogation and interpretation beyond the life of the HLF scheme

Conditions & Consents

Contract tender documents detail all relevant aspects

Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Survey is weather dependant and can only occur during the winter months on days when the weather is fine but with no lying snow.	Low	High	Ensure contracts are in place early to provide a large window of opportunity for data capture

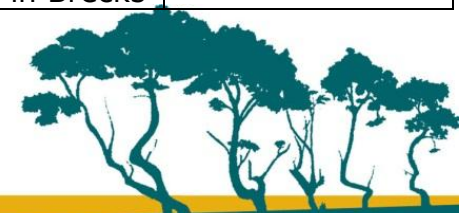


Data capture relies upon access to airspace over survey area and there are several military airbases in the area.	Low	High	Ensure contractors are aware of possible restrictions and liaise with all parties to book airspace – this is not a problem but needs to be built into contract specification.
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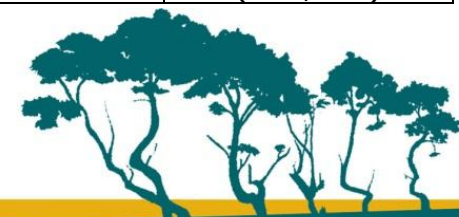


C7 – Brecks Digital Access

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
C7: Digital Access to the Brecks	Brecks Partnership	<p>This project will provide the public facing gateway to the BNG LPS and the rich variety of engagement opportunities, access improvements and information resulting from the delivery projects and beyond</p> <p>The creation of a Smartphone application will enable users to access information throughout the Area, regardless of signal and will provide a resource to link the diverse range of on-line information provision coming from the individual delivery projects</p>	Local communities, visitors, schools, interest groups, landscape and heritage professionals	<p>BNG Web content</p> <p>Access to all the delivery projects' on-line information resources and databases as well as walks, Heritage trails, schools interactive material; A virtual tour through time; gallery of images; social media links and volunteer/user blogs</p>	<p>Creation of a central point to access information about the landscape and heritage of the BNG LPs area</p> <p>Promotion of volunteer opportunities</p> <p>Promotion of Schools information and education packs</p> <p>Engagement of local communities and visitors in Brecks</p>	<p>Project total £45,800 HLF: £45,800 (100%) In-kind: £0 Volunteer: £0:</p> <p>BNG Website (design, set-up, database management system & reporting, social media channels, dynamic mapping, responsive mobile and tablet) (£9,550)</p>



				<p>BNG Smartphone Application</p> <p>Access trails App</p> <p>Heritage Trails App</p> <p>Links to partner websites</p> <p>Links to other Brecks resources</p>	<p>activities</p> <p>Improved awareness of the importance of the Brecks heritage and biodiversity</p> <p>Access to research material and data for landscape studies</p>	<p>BNG Hub 'App' (£4,000)</p> <p>Augmented reality App licence (£2,250)</p> <p>Thetford Warren Lodge Interpretation App (£8,500)</p> <p>Heritage Trail App (£4,250)</p> <p>50 QR code links to content (£3750)</p> <p>Tablet magazine app (£3,000)</p> <p>Design, sourcing and creation (£10,500)</p>
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Project Aims/Objectives

This project aims to provide the main web site and on-line facilities for the BNGLPS with a host of interconnected applications to promote the scheme, provide project details and information, enable event and volunteer booking and links to other Brecks related resources. In addition it will make this information available across all common platforms including PCs, Tablets and Smart Phones and utilise their additional functionality by creating 'Apps' to allow for interpretation and guides to be available as content that isn't reliant on mobile or Wi-Fi signals. The inclusion of image galleries, 'Blogging' and Social Media capabilities will enable continuous interaction with audiences, feedback and promotion opportunities

Project Need

The audit work carried out by R4C identified a need for a joined up approach to the provision of technological access to the Brecks. Currently the on-line information resource for the area is very disjointed and this project will provide the over-arching 'one-stop' digital hub for all the BNG outputs and a vehicle to link information resources.

Utilisation of the latest IT and web-based technology will attract new audiences and enable existing audiences to engage with the BNGLPS and the Brecks information resources more effectively.

Detailed Project Description

1. CMS

The content management system will sit at the centre of the digital platform and will provide feeds and pushes of data to and from both the website and the Apps. The CMS will facilitate all functionality required by the system for the following;

- CMS content – images and text
- Events management and listings
- Event Booking
- Online conferencing
- Registration and Validation



- CRM
- Data Capture
- Feeds
- Geographic positioning
- Upload and digital storage of -documents, audio, video and imagery
- Creation of Microsites
- Social Media Integration
- Blog
- App feeds

To support the need for good editorial content, it will be vital to maintain a rich website environment, where information can be quickly updated through a user friendly Content Management System, (CMS). The choice of Content Management System behind the website will provide the opportunity for scale-ability. The system will also provide the potential for on-going development.

The CMS will support uploading of new content (video, text, images, PDF's) and the management of SEO (Search Engine Optimisation). Pages and navigation must all be managed through the CMS.

The system will be very easy to use with a WYSIWYG editor, so users can see the pages in their format prior to publishing.

The system will support features such as save, publish at a later date, and set permissions for specific editors. The system has a completely secure access permission system.

The system will include push systems to and from mobile devices for updates and acquisition of just in time data. Also the management and export of information to support mail shot campaigns and the management of social media with the integration of feeds from all social media sites and to support the syndicating of data out to other social networks. Access to



hidden content in the form of lead-ins will be easily managed through the CMS and will enable the website administrator to link through to pages in the site which may be published but hidden from the navigation. The system will allow permissions based access, so Project Delivery Partners will be designated specific parts of the site to administer so that project information can be easily updated and maintained. The system can also restrict permissions for users, for example some users may only have editor access but will not be able to publish.

Where user generated content is being pushed to the website/Apps, it will be important to control publication via a moderator's feature. This can be both web based and mobile compliant.

2. Database

The digital platform will require a robust database to support the intake of data feeds where appropriate and the storing of data in respect of Trails, Events, Digital Conferences, Businesses and Destinations.

3. Web, Mobile and App Portal

The web portal will be developed to work on PCs, mobile and through a Hub App. This is a key requirement of the development of the digital platform. The design should be developed to provide access to the same content in all three environments.

The following is a description of the inclusions within the digital hub, in particular the web portal. Similar design and functionality will be provided through mobile and through the hub App.

Web Home page

The home page should provide a dynamic first view with all parts clearly available to the user. As the main emphasis of the website is to engage and inform and sign post, the home page should present a lively and relevant environment with feeds, responses, reviews etc., all visible on the home page.

The use of lead-ins, calls to action and feeds will feature dominantly on the home page, in order to get across the breadth of the information (yet remain uncluttered) - for example a feed with latest events, links to Apps and a click through to the main section.



Searches

Searching for content will need to be easily accessible. The method of searching will enable a user to see what is available and then narrow down the search. The search will provide filtered searching as well as key word search.

Searches by Geography

The digital hub will have a robust geographic engine to highlight where the projects are sited. Users will be able to search through the menu as described above but also see views on a map, which identifies project type and location.

The Google API will allow the integration of pinpoints within the CMS, which can be easily positioned using map coordinates or postcode. The map can be presented to the user with a filter so that the pinpoints on the map can be filtered according to type. This type of mapping will be very useful to sign post visitors projects, adding businesses to trails and highlighting additional points of interest within trail apps.

Search Results

Search results should provide the digital user with a page which is informative and which represents the project being promoted

The search results page should provide a general knowledge base about the project, i.e.

- Type
- Location
- Mission statement
- Outputs
- Digital assets

The results page template should be designed to feature any specific activity which has been created within the digital platform which relates to the project, for example a Twitter Feed, Review.

NB There is also the opportunity to broaden out the presentation of the project into a micro site, which would provide a deeper level of content. The mobile site and App would include links to the responsive micro-site web pages



Discussion and Reviews

The digital platform will provide the facility for discussions or editorial team to post up reviews. This may take the form of a blog for each project plus the ability to upload journals / educational materials with an online discussion capability.

Blog

A Blog will be integrated into the CMS back end. The blog will also feature a tag cloud to enable users to quickly access articles based on popularity as well as date of posting.

What's on listing

A calendar of events including imagery, date, time and category of event will be available through the CMS with each project controlling their own content. The 'What's On' module on has the capability to directly connect businesses / organisations and display the links through the web portal and the Apps. This tool is especially useful to promote contributors to the project and /or sponsors or relevant local businesses.

News

News articles would be shown in date order on the web and by GPS location through the App

Feeds

The website will offer feeds to users. Feeds will be in the form of RSS (XML). Users will be able to select the type of data they require. For example an events feed, a latest article feed.

Links to social media networks

The website will feature all tools to support social media links. Each page and search result will feature an 'add me' plug in so that users can quickly share from the site.

Feeds from Twitter will be encouraged and each project listed in the portal will have the facility to feature their own Twitter feed from their result page.



The system will feature a gallery where video and images which have been located on YouTube and Flickr, for example, can be added to the website.

Micro-sites

The digital platform can provide the opportunity for projects that are affiliated to the site to create their own microsites. This would be a great benefit to projects who don't have their own website, or who want to use this facility to market special events.

The micro site would be developed with a common template but with the facility to customise with logo, choice of colour, images and text and first and second level navigation. It will be possible to point specific URLs to the microsites.

4. Hub, Trail and Interpretation App

The Hub, Trail and Interpretation Apps will deliver specific functionality over and above that which is available in the mobile compliant web based portal.

The App will have deep content functionality which is saved within the App, therefore compensating for lack of Wi-Fi or 3G coverage.

Hub App Content

The 'Hub' app will be a 'listing of content' for all Apps created from within the platform, with additional content provided from the CMS.

The user will be able to download one App and then load in content from the multiple apps published e.g. The Heritage Trail App, Thetford Warren Lodge App etc

A search function will be available to access content 'nearby me' or by type e,g trail.

What's on, news and 'to do' content will also be available. The app will also be able to take content from the magazine tablet app.



Heritage Trail App

The heritage Trail Project will have a bespoke branded App which is also featured within the Hub App.

The content will be delivered in 'trail format' starting from waypoint one (point of interest) through to the final point of interest.

Each waypoint can have the following content included

- Text description
- Header image
- Image Gallery
- Directions
- Slide show with audio talk over
- Video
- Audio
- Online Map and Off Line Map

The App has the capability to share through Facebook and Twitter, share a postcard by taking a photo from within the App and emailing to a recipient. Additional information is catered for including about, car parking, transport and who to contact details.

Thetford Warren Lodge Interpretation App

An interpretation App template will be created for Thetford warren Lodge which will have a similar format to the trail app, however without the need for online and offline mapping. An audio tour with integrated slide show is often the most appropriate medium for this type of App with the visitor encouraged to explore the destination e.g Thetford Warren Lodge by listening to the audio tour while at the same time watching the slide show.

App Interaction

The Apps use the in-built functionality of the smart phone including



- QR code scanning
 - Delivers 'hidden content
 - Provide competition questions / answers
 - Use for check-in promotions
- GPS
 - Locate unique content only available through the App when the user is positioned at a specific location
 - Nearby me – find nearest waypoints, activities, competitions
- Camera
 - Use to scan QR codes
 - Capture image and send as an email postcard or a facebook postcard
 - Use camera for augmented reality (AR)
- Competitions
 - Provide question and answer forms
 - Link to Facebook to enter competitions
 - Use image sharing via social media as competition entry
 - Use GPS located questions to encourage wider use of geographic areas, ensuring the visitor experiences all that the Brecks has to offer

Augmented Reality (AR)

Users will be able to use their in-built camera from within the App to release truly interactive experiences.

Every image, object and even place can have its own AR experience. This can be as simple as a video and a link to a web page or as complex as lifelike 3D animation.

The experience can be shared with friends or include yourself in the photograph with characters from the past or real live creatures like dinosaurs!



Bring printed content to life including journals, posters and leaflets. The visitor can simply download the Brecks Hub App and point their phone camera at a leaflet and a video or document automatically appears on their screen.

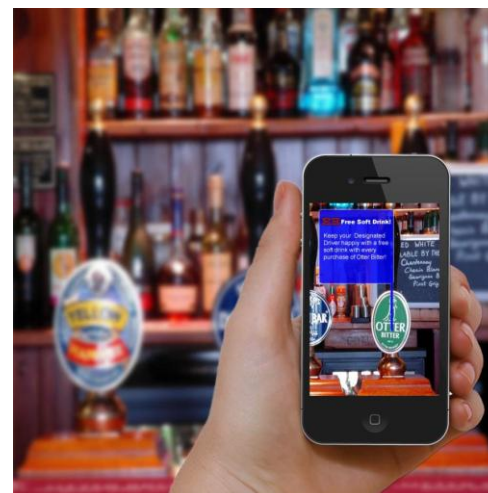
Let the visitor quickly and easily find content they are looking for while out in the Brecks landscape. See wildlife, history and 3D animation by simply viewing the vista through the Brecks App. We use the leading Augmented Reality developer platforms from Aurasma and Wikitude.

Map Overlay and Object recognition

Street / Location overlay



Object recognition overlay



5. Tablet Magazine App

Creation of a PDF edition based Tablet App Framework which can launch as a stand-alone app or be available through iOS newsstand.



Existing digital content pages are uploaded through the CMS in PDF format, which are then converted into digital images. Areas within the image can then be created into 'hotspots' providing the ability to link to additional hidden content e.g. journals and video.

The App can be downloaded and previewed through the cloud based CMS website, before submitting directly to the App Store.

Users can be given free access or time based subscription pricing can be included.

Content can be searched and shared through social media. Content can be read instantly or can be downloaded so the reader can enjoy your magazine off line.

Readers can also switch between single and double page mode, enjoy multiple zoom levels and view archived editions through the app.

6. Analytics and SEO

Google analytics will be utilised for monitoring the web site performance.

Consumer data will be also captured the through the digital conference booking system, in App competitions and newsletter sign ups. If promotional vouchers from destinations or local businesses are included in the App, this will also capture consumer data. By utilising social media linked competitions a significant amount of consumer data can be harvested from these platforms

A reporting suite for use of the App and the digital conference platform will be provided.

Customer Data will be stored and retrieved via the system according to criteria. The output will be a conforming .csv file for use within a third party component such as Mail Chimp.



The development will include the design creation of an email template, which will be embedded within Mail Chimp.

Audiences

All BNGLPS Audiences will benefit from this project

Volunteers

This project will not directly engage volunteers although volunteers will be feeding interpretative information in from other projects

Legacy - Securing lasting benefits

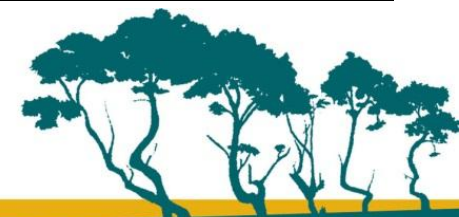
The web-site and supporting 'Apps' will be hosted by the BNGLPS project for the delivery period and the BNGLPS team will ensure that a suitable host organisation is identified during this time.

There is the option for the system to be developed in future to provide a facility for Businesses to be linked to projects e.g. trail app. In addition for future revenue opportunities the platform could allow businesses to include reward vouchers and digital loyalty cards. Businesses would be able to upload text, images etc. to the system. Subject to consent, it may be decided that this can become an added value, paid for inclusion to contribute to the long-term maintenance of the on-line facility.

Conditions & Consents

Appropriate licences and copyrights will be obtained as part of the development and delivery of this project

Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Cost over-run on project	LOW	MED	All works to be set out on a

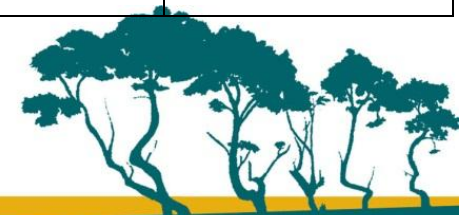


			fixed price basis
Excessive staff input required to maintain the web-site	MED	LOW	Project Partners will be able to manage and maintain individual project pages
No long-term host can be found for the site	LOW	HIGH	In the event of no host being found the information will be transferred to the 'OneSuffolk' website where it can still be accessed, but may lose a degree of functionality until alternative hosting can be achieved.



C8 – Brecks From Above

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
C8: Brecks from Above		This project is designed to promote greater understanding of and engagement with the Brecks' landscape through Aerial Photography and the important role it plays in reading the historic landscape. It also seeks to make the outputs of Aerial Photography - both photographic collections and through new interpretive mapping based on the photographs and other remote sensed data, widely accessible and well promoted. It seeks to encourage engagement with these extensive resources via the training and outreach programme and to train	Local communities, interest groups, volunteers, Landscape managers	<p>5 Library talks and Air Photo display reaching 250 people</p> <p>GIS Air photo mapping programme recording archaeological sites over 75km²</p> <p>Historic photo digitisation project with Air volunteer placement</p>	<p>Greater awareness of Air Photo resources, potential uses, and overall contribution to the known heritage of the BNG LPS area</p> <p>Enhancing public knowledge of their local area.</p> <p>Improved baseline, locational and archaeological data as an important resource for</p>	<p>Project total: £43,667 HLF: £31,137 (71.5%) In-kind: £7,330 (17%) Volunteer: £200 (0.5%) Cash £5,000 (11%)</p> <p>Digitisation of images (£3,301)</p> <p>Training & outreach events (£2,639)</p> <p>Web and online material</p>



		volunteers to participate by submitting their own online records.		Day school for 10 Volunteers in identification with on-line training resources and follow-up support for wider engagement 3 Aerial Archaeology Training events for 10 delegates	study and management of Brecks landscape. Creation of new access to little known/under utilised resource. Enhanced skills for group of people. Quality submissions to the County records.	(£3,250) Air photo mapping & interpretation (£26,874) Specialist software, liaison and HER costs (£7,603)
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Project Aims/Objectives

- To promote greater understanding of and engagement with the historic Breckland landscape and archaeology, and in particular the important role played by Aerial photography, through the delivery of an outreach and training programme on Aerial Archaeology in the Brecks.
- To work alongside the LiDAR project to improve knowledge and increase understanding of the Brecks' Landscape and Archaeology by undertaking aerial photographic assessment, mapping and interpretation for key areas covering 75 sq km of Breckland landscape identified through the Landscape Character Assessment (LCA) and within the Breckland New Ground (BNG) scheme area.



- To broaden knowledge of and engagement with Brecks' heritage resources by making 1000 historic Aerial Photos of sites in the BNG scheme area available digitally.
- To provide opportunities to participate in identification, interpretation and recording activities by training volunteers to identify potential archaeological sites from Air Photos, including Google Earth Images, and to submit their own online records.

Delivery Partner organisations:	
<i>Organisation:</i>	<i>Role:</i>
<i>SCC Archaeology Service</i>	<i>Supplying SCC HER data, APs and interpretation advice.</i>
<i>English Heritage Aerial Survey Team</i>	<i>AP interpretation advice</i>
<i>English Heritage Archive (EHA)</i>	<i>Supplying aerial photographs of the project area held within the EHA (TBC)</i>
<i>Cambridge University Collection of Aerial Photography (CUCAP)</i>	<i>Supplying aerial photographs of the project area held within CUCAP (TBC).</i>
<i>Forestry Commission</i>	<i>Supply of LiDAR data.</i>

Project Need

We are proposing different strands of work to address the need for good quality baseline archaeological data for research, heritage management and heritage tourism. We are seeking to address the issue of access and availability to a key research resource and seeking to improve public knowledge and engagement with aerial photography and its role in reading and understanding their local landscape.



Whilst the rich archaeological potential of the Brecks area has been noted, there is at present a lack of good landscape scale data to inform management decisions.

The key threat to the heritage assets of the area is ignorance of the presence, location and significance of archaeological remains, in particular within large areas of heath and plantation, where earthworks survive but are difficult to locate on the ground. A major priority for the area in terms of local heritage protection is therefore to enhance baseline knowledge of heritage assets within forestry and heathland areas. Recent aerial photograph assessment of prehistoric earthworks surviving at Sturston within the area of STANTA, which was undertaken for the Norfolk Monuments Management Project (NHES), has highlighted the need for accurate mapping of sites in these open, but often scrub-covered and inaccessible landscapes, in order to facilitate their management.

The benefits of aerial photograph mapping data have been highlighted by the BNG 'The Ground Disturbance and Historic Environment Opportunity Map Project', with it being seen as a prerequisite to obtaining accurate and reliable information for monument management in these sorts of landscapes. Ground disturbance relating to forestry practices and heathland restoration (which can include tree felling, scrub and heather clearance, turf and litter stripping, deep ploughing and rotoation) are a significant heritage protection concern within Breckland and accurate locational mapping data is seen as key to undertaking such tasks in a beneficial way to the historic environment.

In recent years Norfolk Historic Environment Service (NHES) has been consulted on a number of heath restoration projects; where available aerial photograph derived data has formed an integral part of the desk-based assessment undertaken in response. It has also been used to prepare responses and to devise strategies for minimising the impact of restoration methods on the historic environment. It is used in a similar way when NHES is contacted by the Forestry Commission for advice in advance of forestry operations. This is why the undertaking of mapping of aerial photographs and remote sensing data is particularly important for projects such as the 'The Ground Disturbance and Historic Environment Opportunity Map Project'.



Detailed Project Description

Training

The project will deliver a 3 part training course on Aerial Photography and Aerial Archaeology and the techniques used by specialist Air Photo interpreters. It will provide an introduction to major collections both nationally and locally. The course will provide those attending a chance to get hands-on experience of spotting archaeological sites from Air photos. The course is likely to appeal to those with some current interest in history and/or archaeology but who would like to learn more.

The project will deliver 5 talks at libraries and educational establishments in and around the BNG delivery area. These will cover the history of aerial archaeology locally, the process of mapping archaeological sites from air photos and looking at results from the local area.

In addition, the specialist AP interpreters will provide training to 10 amateur archaeological 'site spotters'. The training will take place primarily at a dayschool with follow up support available. An on-line form will also be designed so potential sites could be submitted to Norfolk and Suffolk Environment Records. Detailed web guidance will be produced on how to identify and interpret a site from Air photos to allow others who did not attend the dayschool to participate and provide a training legacy.

Digitisation

The Historic Environment Service holds a large and immensely valuable collection of historic Air Photos. Access is currently by appointment only. The collection includes around 1000 of the BNG scheme area which includes Grimes Graves, historic parklands and the growth of Thetford. These will be digitised and made freely available via the Heritage Explorer website (www.heritage.norfolk.gov.uk) so that they can be accessed by all. Feedback and comment on the images will be encouraged.



Grimes Graves © Norfolk County Council



As part of the digitisation project, Norfolk HES will host a volunteer work placement to allow someone to gain experience of working on a digitisation project. This would include selecting and preparing images, indexing, through to linking and publishing online. Full training and supervision would be provided by HES staff.

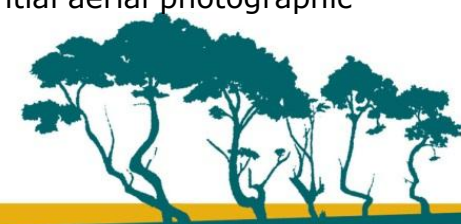
Mapping

The project will undertake assessment of all available aerial photographs and remote sensed data (including the proposed Brecks LiDAR survey results) for key areas within the Brecks Landscape Character Assessment (LCA) and the BGN project area. These will include representative samples of the varied and complex Brecks historic landscape and are tailored to feed into the other proposed BNG projects with a research element. All archaeological sites (Neolithic to Cold War in date) visible on the aerial photographs, remote sensing and LiDAR data will be recorded in the form of a digital map and an archaeological description and interpretation to be entered onto the Norfolk and Suffolk HERs. These datasets will be publically available at the HER offices and online via <http://www.heritage.norfolk.gov.uk/> and <http://www.heritagegateway.org.uk/Gateway/> and will be released for inclusion within other BNG projects as they become available during Years 1 (2014/15) and 2 (2015/16).

The mapping and interpretative records created will increase knowledge and access to information about the historic environment within the BNG project area.

The project will involve looking at all available aerial photographs, held in national and local archives which span 50+ years of photography, including vertical photographs taken for non-archaeological purposes and specialist archaeological oblique photograph collections. Other airborne remote-sensed data will be reviewed such as lidar (laser scanning), including that created by the BNG LiDAR survey, and online photo mosaics such as Google Earth.

Additional standard sources will also be used, for example, historic mapping, HER and EHA monument records, published and unpublished excavation results and archaeological syntheses. All archaeological sites and landscapes will be analysed with potential dates ranging from the Neolithic period to the Cold War. The scope will include recording buried sites, usually visible as cropmarks, features seen as earthworks and stoneworks, and some structures and buildings. It will follow a standard mapping and recording system, which include reference to all of the original sources. The archaeological site descriptions and mapping will be referenced to the source aerial photographs to inform any re-evaluation of sites, for example for management, development and/or research purposes. The project will assess a substantial aerial photographic

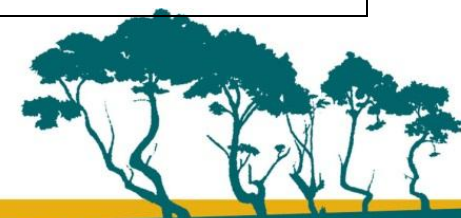


resource, usually held within separate and disparate archives, and requiring considerable specialist archaeological knowledge to interpret, and produce thematic mapping and synthesis that will allow others access to this information.

The digital archaeological maps will be created from aerial photographs rectified and georeferenced using Ordnance Survey 1:2,500 mapping (1:10,000 scale for earlier projects). Standard layers will be used to record the form of the archaeological remains, such as bank or ditch. The condition (cropmark, earthwork etc) and archaeological interpretation of the features, both of which may change, will be recorded in the associated NHER and SHER databases. The archaeological interpretations will be based on evidence from aerial photographs, remote sensing data and any contextual or supplementary sources. This provides mapping and descriptions to a level of accuracy adequate for heritage management and strategic planning.

There is much potential for the information gained through the aerial photographic and remote sensing assessment to be investigated by volunteer groups such as the Breckland Society and Friends of Thetford Forest to assess the condition and current status of features recorded from aerial photographs.

<i>Outputs and Outcomes</i>		
Activity	Outputs	Outcomes
Library talks and Air Photo display	5 library talks for an estimated 50 attendees at each.	. Greater awareness of AP resources, potential uses,
Aerial Archaeology Training Programme	3 linked day schools for 10 delegates.	Enhanced knowledge of their local area. Enhanced skills, awareness of AP resources, knowledge of local landscape.
Mapping Programme	GIS compatible digital map of archaeological sites 1000 historic Air Photos of the Brecks made available digitally.	Improved baseline, locational and archaeological data. Important resource for study and management of Brecks landscape.



Digitisation project with volunteer placement	Work placement	New access to little known/under utilised resource.
Volunteer identification training	Day school and follow up support for 10 people.	Enhanced skills for group of people.
	Online resources created for others to use.	Quality submissions to the County records.

Location

Project to be undertaken from Norfolk Historic Environment Service offices and in public libraries and educational establishments in and around the BNG scheme area.

Norfolk Historic Environment Service, Union House, Gressenhall, Dereham, Norfolk, NR20 4DR

Audiences

This project is likely to appeal to those with some interest in heritage who are looking to enhance their knowledge/research skills. It is also likely to interest those involved in managing the landscape. However, publishing all data/images and guidance on-line via well established websites will allow widest possible audience.

It will provide a chance to enhance knowledge/research skills and turn general interest into engagement. It will also provide brand new resources for those involved in management and or interested in investigating the area.

Online access to new collections and results of the Air Photo mapping exercise will enable people to search their local area geographically via the Heritage Explorer website.



Opportunities for training and volunteering will be promoted through existing networks and through social media channels which tend to reach new audiences

All activity will be designed for those with no prior knowledge. Included is activity for potential home-based researchers

As well as training offered the project will create new mapped and interpreted areas which can potentially be investigated on the ground. Also by promotion of 'hard to access' heritage resources

NHES has an established Community Engagement team as well as a Countryside team/Rural Archaeologist with regular links with organisations in the Brecks area. All discussions with potential users on our proposals have been very positive.

Volunteers

Digitisation project to include volunteer work placement with training. The volunteer(s) would be trained in cataloguing, selecting images, preparing material for digitisation along with dealing with digital material for publication on the web.

The project proposes to train 10 volunteers in identifying and submitting sites using online aerial photo resources. The detailed web guidance and online submission form created will provide a continuing resource beyond the term of the project.

The project will offer work experience that recognises the increasing role of digitisation in heritage.

The Historic Environment Service has considerable experience in working with volunteers. Volunteers/work placements will be recruited and managed in conjunction with our Community Engagement team.

Volunteers and work placements will be covered by Norfolk's County Council's insurance.



Legacy - Securing lasting benefits

The incorporation of all material (training, historic photos, archaeological mapping) in the NHER and SHER databases (published online) ensures the results would form a lasting resource available to future researchers, both amateur and professional.

The availability of archaeological mapping data for areas of forestry and likely heathland restoration in Breckland would inform and support the heritage management work of NHES, SCC Archaeological Service, English Heritage and a wide range of non-heritage bodies (including Natural England, the Forestry Commission and the Wildlife Trusts).

The project results will be maintained as part of the NHER and SHER digital databases and record centres, which have strict systems in place to ensure the long-term security of the data and associated records.

Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Availability of Aps for loan, LiDAR data.	Low	Low	Using Photos at EH Swindon would be alternative. Loan arrangement will be agreed at earliest possible stage. The LiDAR data would be beneficial at an early stage but results could be incorporated later.
Lack of volunteers/course participants.	Low	Low	Unlikely. Will be well advertised through established channels and through Community Engagement team. The targets numbers are sensible.
Mapping project overruns	Low	Low	AP Mapping exercise scheduled for early in the

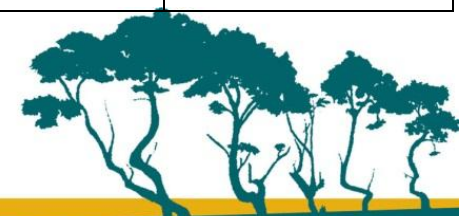


Loss of skilled personnel	Low	Medium	<p>delivery phase will minimise effect of any overrun. Data will be released as project progresses to allow others to utilise.</p> <p>The AP interpretation team in Norfolk has up to 3 skilled and fully trained personnel who are able to work on this project.</p>
IT – capacity to host new material.	Low	Low	<p>Recent investment in upgrading this should minimise likelihood of issues.</p>



C9 – Connecting the Landscape with its Archives

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
C9: Connecting the Landscape with its Archives	Ancient House Museum	<p>We will produce two exhibitions displaying artefacts, archive material, photographs and graphic panels to outline aspects of the story of the distinctive Breckland landscape and its people.</p> <p>We will also use a selection of the words and pictures from the exhibition to make four 'pop-up' panels which can be used at various events during the Breaking New Ground delivery phase as an outreach resource.</p> <p>An electronic version will be made available in the Norfolk Record Office's online</p>	Local communities, interest groups, schools, visitors	<p>Exhibition provided at the Norfolk Record Office and also online</p> <p>Exhibition provided at the Ancient House Museum</p> <p>Roaming exhibition panels</p>	<p>Visitors given access to archives and collections not normally on public display</p> <p>Improved knowledge and enthusiasm for Brecks Heritage</p> <p>Long term availability of Brecks Heritage information and promotion of the area's heritage</p>	<p>Project total £41,950 HLF: £9,500 (22.5%) In-kind: £30,450 (73%) Volunteer: £0 Cash: £2,000 (4.5%)</p> <p>Professional Services (£1,950)</p> <p>exhibition planning, research, installation, community</p>



		exhibition gallery for long-term reference and access				engagement, youth engagement (£12,450) Travel and Marketing (£2,500) Venue hire (£17,500) Exhibition Production at Norfolk Record Office (£6,000) Exhibition Production at Ancient House Museum (£1,550)
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Project Aims/Objectives

To introduce new audiences to collections and archives which illustrate the distinctive story of the Brecks and exemplify ways in which objects and documents contribute to understanding of landscape and its history and can also inform its present and future management.



Delivery Partner organisations:	
<p><i>Organisation:</i></p> <p>1 Norfolk Museum and Archaeology Service (Norfolk County Council)</p> <p>2 Norfolk Record Office (Norfolk County Council)</p> <p>3 Friends of Thetford Museum</p> <p>4 The Thetford Treasures (Museum volunteer organisation)</p>	<p><i>Role:</i></p> <p><i>Curatorial responsibility and Project Management</i></p> <p><i>Curatorial responsibility and Project Management</i></p> <p><i>Support for talks for adults, opening events</i></p> <p><i>Delivery of formal and informal learning programmes working with the Learning Officer</i></p>

Project Need

The project provides a secure and accessible way for local people to see heritage collections (museum artefacts and archive material) not normally on display and which illustrate the distinctive story of the Brecks.

Detailed Project Description

The Proposed exhibition at Ancient House will comprise wall mounted displays of framed works and graphic panels, display of artefacts in 5 high spec display cases, use of an interactive unit to provide a hands-on experience and to cater for different learning styles.





Visitors at the Changing Displays / Exhibitions Room at Thetford's Ancient House Museum

There is also scope for use of the Museum's street-facing shop window for displaying the result of community engagement projects. We also have experience of delivering youth engagement projects resulting in films and other outputs which can in turn be displayed as part of an exhibition.

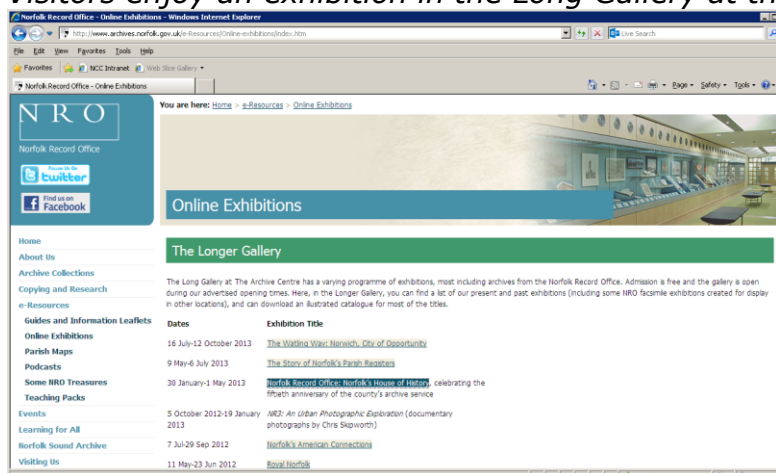
At the Norfolk Record Office, at The Archive Centre, Norwich, exhibitions are shown in a 20-metre long showcase to BS 5454 (now PD 5454), the British Standard for the Storage and Exhibition of Archival Materials. Conservation work, mounting and preparation is carried out by the NRO's team of conservators, who also install all exhibitions and monitor the temperature and relative humidity in the display case. Most of the content of NRO exhibitions is also made freely accessible online on the NRO's website, and programmes of talks and children's activities are normally arranged to complement the exhibitions.

The Norfolk Record Office has exceptionally large holdings, which are Designated in the entirety, and attracts around 30,000 visits a year.





Visitors enjoy an exhibition in the Long Gallery at the Norfolk Record Office, Norwich



'The Longer Gallery', home of online versions of Norfolk Record Office exhibitions





The Flint Alphabet on display at Ancient House, Thetford



The Museum has collections relating to the geology and natural history of the Brecks, and traditional occupations such as flint knapping and rabbit warrening. An example is the display of the Flint Alphabet made by Brandon flintknapper, Bill Basham. Volunteer demonstrating rabbit pie making in the warrener's kitchen at Ancient House.

The room next to the exhibitions room at the Ancient House features a kitchen set at a date of 1901 when we know the House was occupied by the Newton family; Mr Newton was a rabbit warrener. The exhibition has scope to link up with the display of Mrs Newton's kitchen complete with rabbit pie in the making and figure of Mr Newton with his rabbit digging staffs and traps. The Museum attracts about 9,000 – 10,000 visitors per annum, mainly from Thetford and local area.

Outputs and Outcomes		
Activity	Outputs	Outcomes
Providing new exhibitions about the Brecks	1 exhibition provided at the Norfolk Record Office and also	Visitors given access to archives and collections not normally on public display



	<p>online</p> <p>1 exhibition provided at the Ancient House Museum</p> <p>Mobile exhibition for use at BNG events and at other suitable venues throughout the area</p>	Improved knowledge and enthusiasm for Brecks Heritage
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Location

Ancient House, White Hart Street, Thetford, Norfolk IP24 1AA
Norfolk Record Office, The Archive Centre, Martineau Lane, Norwich, Norfolk NR1 2DQ

Audiences

The project aims to engage with the general public, families, adults, schoolchildren, under 5s, after-school clubs, local community groups, etc

An engaging exhibition with a variety of learning styles, text carefully edited to provide accessible prose, illustrations and 3 d displays, well marketed to the local population with a lively associated events programme.

The project will provide access to collections, information and illustrations that explore the distinctive nature of the local heritage in a variety of ways intended to provide a variety of points of interest.

We will use marketing both paid leaflets, door to door delivery and through local papers, magazines, website, and social media to reach a variety of audiences. The Museum offers free admission during the winter months (October to March) and there is a modest admissions charge in the summer months. The schools project will give free access to the museum's learning sessions.



The project will enable the museum to link with a variety of community groups engaged with Breaking New Ground and allow new contacts and working relationships to be built, for example people engaged with nature conservation.

The Ancient House acts as a central point in Thetford at the Heart of the Brecks and there is potential for the Museum to be a focus for areas such as volunteer research and passing on of knowledge to local audiences.

The outreach exhibition will allow some of the stories to be taken out into the streets and other community venues to help 'break the ice' with reluctant members of the public and potentially encourage them to go further and deeper into their local heritage.

The Museum works with a variety of different audiences both in the museum and through outreach programmes. For example there are museum groups and activities aimed at under 5s and their families, for children, for teenagers, for adults and for older people. One particular challenge for the Museum is working with members of the migrant worker populations and this project offers scope for working alongside other agencies to encourage use of the museum by people underrepresented in this way.

Volunteers

At the Ancient House there are about 12 or so active volunteers, mostly involved with delivery of formal and informal learning sessions and also with work on the collections. Volunteers work under the supervision of paid members of staff.

Recruitment, training and management of volunteers is in accordance with the county council's and the museum's volunteer policy.

Legacy - Securing lasting benefits

Research and Development of the exhibition will inform delivery of learning sessions at the Museum; PDFs of the exhibition graphic panels will be available for use after the exhibition, possibly as a virtual exhibition on the museum's website

Maintenance of the exhibition during the run of the show at Ancient House will be by the Museum technician

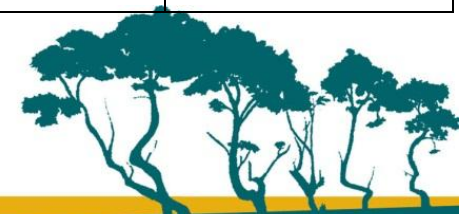


Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Staff and volunteer illness	low	medium	Pacing of activity through year, good line management, pool of people in team to cover.



C10 – Journal of Brecks Studies

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
C10: journal of Brecks Studies	Breckland Society	The Journal of Breckland Studies will be an illustrated technical journal containing articles and information about the Brecks, with a view to finding funding for the establishment of an ongoing journal of Brecks studies to be released annually	Interest Groups, Landscape and Heritage Professionals, local communities, volunteers	Establishment of Brecks Journal editorial group 500 copies of the Brecks Journal Web pages and downloadable on-line resource	A record of the Partnership's achievements and an overview of the Brecks Heritage and biodiversity A regular review of technical reports and information on Brecks heritage and Landscape matters. Increased awareness of scientific issues and findings relating to the Brecks	Project total £8573 HLF: £7773 (91%) In-kind: £800 (9%) Volunteer: £0 Professional Services, copywriting and editing (£3,400) Design (£1,200) Printing (500 copies) (£3223) Distribution (£750)



					A continuing technical resource for schools and landscape / heritage professionals	
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Project Aims/Objectives

- To promote the natural and manmade heritage of the Brecks through an illustrated publication covering a wide range of subjects related to the projects undertaken within Breaking New Ground.
- To connect people with the Brecks landscape and its history and promote greater enjoyment, understanding and engagement with the area, as well as improved awareness of the issues it faces.
- To provide a scholarly but accessible written presentation of the Brecks heritage, complementing the community- and volunteer-led projects undertaken as part of Breaking New Ground and thereby reinforcing the scheme's wider impact and legacy.
- To encourage visits and hence spend in the local economy through promotion of the area's history, heritage, wildlife and other attractions
- To engender pride and a 'sense of place' in the Brecks for residents and visitors alike

Delivery Partner organisations:	
<i>Organisation:</i> Any of the organisations involved in BNG could contribute.	<i>Role:</i>

Project Need

There is a need to provide a coordinated and accessible professional record of the Brecks' rich heritage and diversity and to place and promote BNG's achievements within that context.



Detailed Project Description

The Journal of Breckland Studies will be an illustrated report containing eight articles about different aspects of the Brecks history and heritage (including archaeology, architecture, ecology and social history), related to the projects undertaken as part of the Heritage Landscape Partnership. Researched and written by leading experts on the area and its heritage, as well as by those responsible for delivering LP projects, the contents of the journal will stand as a collective record of the Brecks' diverse heritage and of the partnership's achievements. The journal will help reinforce the legacy dimension of *Breaking New Ground*.

Outputs and Outcomes		
Activity	Outputs	Outcomes
Production of <i>Journal of Breckland Studies</i>	A 64pp illustrated report, which will also be made available online in PDF format.	A record of the partnership's achievements and an overview of the Brecks' rich heritage and diversity.

Audiences

The project aims to engage with all audience types as it is important that everyone is given the opportunity to enjoy, understand and participate in the Brecks' heritage.

The project will help extend the perceived limited local engagement with the landscape and its history. It will put information into the public domain and show how the landscape of the Brecks reflects human interaction with natural resources over millennia.

It will provide a range of opportunities for learning about the landscape of the Brecks and reach adults, students and re-trainers in both formal and informal learning.

The Project will make use of partners in the BNG Scheme to help it reach audiences currently under-represented, including Keystone Development Trust; Moving Thetford Forward; Moving Brandon Forward and others. It will draw on the experience of the Norfolk and Suffolk Wildlife Trusts, both of whom have had recent projects reaching the communities of the Brecks, as well as the University of East Anglia.



The Breckland Society's two major research projects on the vernacular architecture and the warrens of the Brecks involved over 80 volunteers, including students; community pay-backers and the disabled. The flint-working test pit survey in the spring and summer of 2011 attracted 92 volunteers. In addition, the Society has a series of talks and field visits throughout the year, open to both members and non-members and extensively advertised.

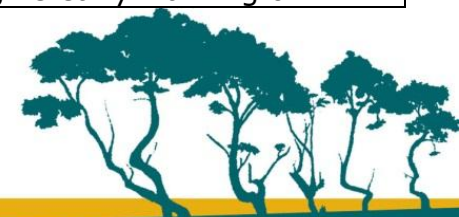
Volunteers

Breckland Society Committee Members (6) are involved in the planning of the project and will oversee its delivery.

Legacy - Securing lasting benefits

The Journal will help ensure that the BNG outcomes are placed within the wider Brecks context and continue to remain in the public domain. A Journal Steering Group will be created, comprising landscape and heritage professionals and volunteers, who will oversee the production of the journal and continue to operate after BNG is finished, seeking funding for future editions. This will help ensure that further editions of the journal appear in future. The Society will also make provision for activities and projects related to the journal to continue; for participants to pass on their knowledge and skills and involve new people; to foster and maintain a close and mutually supportive working relationship with partner organisations.

Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Organisational : A lack of those with the skills needed to deliver the project	Low	High	Ensure that there is a network of support from which to draw. Plan project rigorously and include contingency measures. Ensure providers fully understand target aims and objectives. Set milestones of achievement and regularly monitor and evaluate progress. Have systems in place to give early warning of

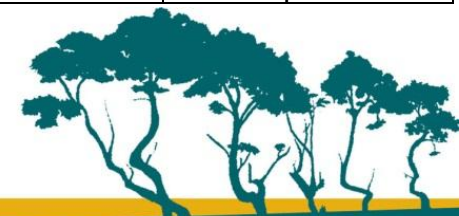


Social A lack of participation	Low	High	potential problems. Ensure that there is widespread publicity about the project in the media and among partnership organisations. Regularly monitor and evaluate r participation. Have systems in place to give early warning of potential problems.
Environmental: the landscape of the Brecks is inaccessible because of an outbreak of plant or animal disease, fire, flood or other natural or man-made disaster.	Low	Medium	Ensure that there are components of the project that can be delivered off-site; plan for an extension of time and flexibility of the timetable. Maintain close communication with all partners and stakeholders. Seek national, district or local governmental guidance as appropriate. Have emergency plans in place and, if possible, systems to provide early warning of potential problems.
Financial : Budget for the project exceeded	Low	High	Ensure that project costs and arrangements are in place, fully comprehensive, endorsed and signed by all necessary parties. Ensure that contingency is included and is realistic. Identify any alternative sources of funding. Have systems in place to give early warning of potential problems.



C11 – Beastly Brecks

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
C11: Beastly Brecks	Forest Heath District Council	<p>The project will commission a new piece of interactive educational theatre from a professional theatre company highlighting, in an accessible and humorous way, the key stories about the 'Brecks' heritage and landscape</p> <p>This touring play with music will be reflecting and supporting the National Curriculum for Science and will also focus strongly on the history of the area.</p> <p>The project will be targeted at Primary schools KS2. The activity will also compliment and supplement science</p>	Schools Key Stage 2, Local Communities, Visitors	<p>A new educational 25 min piece of drama.</p> <p>Schools tour in BNG LPS area</p> <p>Performance at the Forest Fun Day 2015</p> <p>Performance at the Enchanted Forest 2016</p> <p>Legacy of 'Part 2 for schools' to develop from 2017 onwards</p>	<p>Engagement with Schools (1,000 children)</p> <p>Engagement with local communities and general public (600 audience)</p> <p>Increased knowledge of Brecks linked to Science Curriculum</p> <p>Increased knowledge linked to Science Curriculum</p> <p>Supporting the</p>	<p>Project total (£24,850) HLF: £20,630 (83%) In-kind: £1,720 (7%) Volunteer: £1,250 (5%) Cash: £1,250 (5%)</p> <p>Commissioning and creation of 'Beastly Brecks' (£5,220)</p> <p>Performances (£9,230)</p> <p>Props and</p>



		teaching practices and delivery of local history study. The play will also be suitable for performance at other BNG events and celebrations.		On-line Educational resources	delivery of Science for KS2 Wider audience linked to local heritage On-going involvement by schools with legacy element 'Beastly Brecks Part 2' Schools resource pack and on-line resources and work sheets	equipment (£6,100) Schools packs, teaching resources and marketing (£3,050) Development of stage 2 elements (£1,250)
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Project Aims/Objectives

The aim of the project is to inspire, educate and entertain both children, teachers and families alike with the story of the 'Brecks' through performance art, reaching new audiences

Delivery Partner organisations:	
Organisation: 1.TBC - Possible theatre companies that might be interested in the commission include: Theatre Royal	Role: 1. Write and deliver the activity, tour to schools and other venues and events e.g The Family Forest Fun and The Enchanted



Bury St Edmunds, The Keepers Daughter . Common Ground. 2.Schools in Suffolk and Norfolk	Forest 2. Consultation and promotion
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Project Need

The purpose of the project is to bring alive in an interesting, imaginative and creative way the amazing details of the landscape of The Brecks in which these children live in. Many children will know that the East of England is one of the driest parts of Britain, but may not know that the landscape of forest, open heath land and agricultural land, is home to many unique or distinctive birds, plants and animals. The project will also introduce a notion of sense of place and the way the landscape has been uniquely shaped and how man and nature has adapted.

This project is targeted at Key Stage 2 children and supports the County Council 'Raising the Bar' educational initiative which currently sees Suffolk schools 148th in the league table of 150 local authorities for Key Stage 2.

It will benefit the BNG by bringing new audiences to the Brecks, encouraging children and their families to go out and discover and enjoy the landscape they live in, and join in with some of the project activities. Families will also be able to enjoy the piece as part of the Family Forest Fun and the end of the project celebration event The Enchanted Forest.

This project also supports the Stronger Communities corporate policy for West Suffolk. (Forest Heath and St. Edmundsbury)

Some areas of Suffolk, and within the projects parameters, have been identified as disadvantaged and suffering from rural and social isolation and deprivation. This initiative together with all the other projects will enable the community to learn and actively engage with activity.



Detailed Project Description

The Play

The play will be a 25 minute educational interactive drama performance for Key Stage 2 pupils 7-11 years, based upon the Horrible Histories format that has facts and information about the Brecks Landscape, Wildlife, History and People.

This will be both an informative and learning experience for the children that will bring the 'Brecks' alive in a creative and engaging way.

The performance will be highly visible in creation and the play will highlight the use of different settings in narrative; images will be used to tell the story with the use of language to create atmosphere and suspense.

It is anticipated that there would be an overall introduction to the 'Brecks' explaining the reasons why this area is so unique and special. This would be followed by focussing on specific elements of the 'Brecks' that will emerge from the consultation with teachers and linking to other elements of the BNG overall project prior to the piece being written.

Whilst the details of the project are yet to be decided an example of an outline could be:-

For Pupils

Introduction to the Brecks area: - Children will be given a context of where they live introducing the main elements of the area including key sites, iconic landscapes such as the twisted pines, characteristic historic past trades such as flint knapping and warrenning.

Definitions of living things, vertebrates, invertebrates, arthropods, habitats, flower structure, people, history and places

The 5 conditions which define living things and help to classify animals in a simple way involving vertebrates, invertebrates and arthropods with local examples of animals and species



- The meaning of a habitat and how different animals have different habitats suited to their needs. This is particularly relevant to the 'Brecks' with the varying landscapes within the area
- The basic structure of a flower is shown and plant growth is examined with particular emphasis on the necessity for light, water and the function of the roots, which is very significant within the area.
- Characterisation of local historic trades people such as a Brandon flintknapper and a Thetford warrener
- Introduction to ancient civilisations and people such as the Lakenheath Warrior and his horse.

For Teachers

There should be pre and post show activities and discussions with the children to reinforce the elements of the play. There will also be associated educational resources for teachers and pupils to support the learning. It will also link in with other educational activities already proposed such as the Breaking New Ground in the School Grounds and Brecks uncovered.

For science and local history teachers the show will reinforce teaching plans. The play will be solidly based on the National Curriculum for and will also make you laugh.



General Public

The piece will be written in a way that will make the show an entertaining and informative piece of out door theatre for families during the Family Forest Fun and Enchanted Forest events.

Legacy for schools

As part of this project the author of the piece 'Beastly Brecks' will also be commissioned to part write the next episode. This will be especially devised for the children themselves, after some research, to fill in crucial pieces of specific information and other narrative. This second piece will then be ready for performance by the children for their classmates. This can be used in future years as a lasting educational resource for the school.



Outputs and Outcomes		
Activity	Outputs	Outcomes
Commissioning a new play	An educational 25 min piece of drama.	Creating an accessible piece of educational theatre for KS2
Schools tour in Brecks area	Year 1 2015 minimum 12 schools 600 children Year 2 2016 minimum 8 schools 400 children	Increased knowledge of Brecks linked to Science Curriculum Increased knowledge linked to Science Curriculum



Forest Fun Day 2015	200 audience	Wider audience linked to local heritage
Enchanted Forest 2016	400 audience	Wider audience linked to local heritage
Part 2 Beastly Brecks 2017 onwards	Delivered by schools	Part of the annual delivery in school
Educational resources	I pack per school and access to online resources and work sheets	Supporting the delivery of Science for KS2

Location

Primary Schools In Brandon, Mildenhall and Thetford and the north area of St Eds. Other schools in Norfil TBC
Brandon County Park, High Lodge.

Landowner

Suffolk and Norfolk Schools

Suffolk County Council for Brandon Country Park

Audiences

Primarily the project would want to engage with schools at KS2 7-11 years to introduce them to both the science and the historical wonder of the 'Brecks' and add a sense of place and background to where they live. Through running the show at the public events will be targeting family audiences some of whom have low engagement with activities and the arts.



The project will have both educational and entertainment qualities. The schools tour will support the science curriculum and the public performance will make the facts about the 'Brecks' very accessible and memorable.

People will learn about their heritage through interesting facts and stories in an interactive and creative way. It is hoped they will identify with some of the stories and the characters and that this will encourage them to find out more about where they live and the history of their communities.

This is initially a schools tour with a project that is both contemporary and unique for the area. A wider audience at the two new public events will be able to access this project in a larger celebration that will compliment and contextualise the other activities taking place on the day.

The project will work with a range of partners, like the Childrens Centre, to help us identify children and families who might find these public events both fun and benficial.

The performance will include references to local museums and heritage centres where schools and families can access more detailed information and displays. For example Brandon Heritage Centre for flint knapping and Mildenhall Museum with their Fens and Brecks display and the famous Lakenheath Warrior. This will help build audiences for these local attractions and encourage families to return for holiday activities and events.

This project will be very interactive, accesssible and enjoyable for the audience. The audience will be put at ease and the content will be age and intellectually appropriate for schools but layered sufficiently for an adult audience to also enjoy while watching it with their children.

Both Forest Heath and St Edmundsbury have a track record of developing creative projects with schools and delivering activities in parks and open spaces.

Good relationships with schools and also a clear explanation of how the project can contribute to the school community and curriculum should be fostered to enable a positive outcome for the project.



Volunteers

Volunteers will be able to engage with the original project by contributing to the research of the play and help with the second stage of the project – where the children write the next episode, by helping them research, script writing, making props, designing programmes and making costumes.

Volunteers will also be required when the second stage of the play is performed at venues other than schools, such as village fetes by setting up the stage and managing the performance.

Volunteers will be an integral part of the evaluation process.

Volunteers will be able to learn more about their heritage through working on this project as it is a very accessible and inclusive process. It also involves developing craft and costume skills – which for parents are very useful and transferable skills to have. It may encourage volunteers to continue their interest in local museums and heritage centres thereby building capacity in the community.

Volunteers for the second stage may be recruited via PTA's in schools but also from existing community groups. Volunteers in schools will be subject to DBS registration and comply with child protection policies and good practice. It is anticipated that schools will take the lead in this part of the management.

It is not anticipated that volunteers will have any associated costs. Any volunteers in schools will be covered by the schools insurance including public liability. The professional theatre company will be expected to operate under its own insurance.

Legacy - Securing lasting benefits

The schools will have copyright permission from the author to perform part two of 'Beastly Brecks' for as long as it supports the delivery of the Science National Curriculum and local history studies. It could also just be performed as a stand alone piece as part of the school activity.



Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Schools fail to engage	Low	Low	Ensure good preparitry work and engagement with schools
Poor quality performance	Low	Low	Commission from only a well established professional theatre company Ensure the work is based on the current
Poor feedback from schools to content	Low	Low	National Curriculum after consultation
Budget overspend	Low	Med	Agreement with commissioned company that the budget is set with no revisions available.



C12 – Upon This Rock

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
C12: Upon This Rock	Norfolk Geodiversity Partnership	<p>Upon this rock will introduce participants to the wealth of geological features present in Brecks churches and church yards.</p> <p>This day school event will take the form of an introductory presentation followed by a field trip. The event will be primarily aimed at Parishes involved in the BNG scheme and interested individuals, and will be led by a local geological specialist and two regional specialists.</p>	Local Communities, interest groups, volunteers, landscape and heritage professionals	<p>Geology Day school for 30 participants including;</p> <p>Introductory presentation on Brecks geology</p> <p>Field Trip to 5 church sites in the BNG LPs area.</p>	<p>Improved understanding of the range of materials of geological origin; their advantages and limitations</p> <p>An increased awareness of and ability to identify geological building and gravestone materials in the field</p>	<p>Project total £2,719 HLF: £1,469 (54%) In-kind: £1,250 (46%) Volunteer: £0</p> <p>Event preparation and promotion (£1,250)</p> <p>Event delivery Venue Hire, Refreshments (£1,469)</p>



Project Aims/Objectives

Church building stones in the Brecks are a sample of locally available geological materials, whether indigenous flint, chalk clunch, far-travelled 'erratic' rocks brought to the area during the Ice Age, or local brickearth. This Day School will communicate the geological heritage dimension present in churches and church yards in the area to BNG project participants, also to local people and visitors. It will support related BNG projects.

Project Need

There is a very low level of general awareness of the contribution that geodiversity makes to the built heritage of the Brecks, and it is poorly represented in many of the specialist books on the area.

Delivery partners in other BNG projects will need information about the nature and sources of building materials of geological origin as part of their work.

Detailed Project Description

The project will consist of a morning presentation followed by a field trip to investigate five church sites in the BNG project area. The purpose will be to acquire a theoretical understanding of the range of building and gravestone materials of geological origin used in Brecks churches, their advantages and limitations, and to gain practical experience of identifying them in the field.

1) Introductory presentation (1½ hours) by three geological specialists based at Santon Downham Schoolroom, supported by audio visuals and paper hand-outs, covering:

- Geological background – the geological history of the Brecks; introducing the three basic lithologies: igneous, metamorphic and sedimentary.
- Church building materials in the Brecks: resources of bedrock and superficial origin; lime mortar; brickearth; history of usage; their geographical distributions in the Brecks and further afield.
- Gravestone materials; history of usage; the geography of their sources in the UK and further afield.



2) Field trip

- Guided visit in the company of three geological specialists to encounter five church sites in the project area in a convoy of cars, looking at the range of geological building materials and gravestones used at each.

Outputs and Outcomes		
Activity	Outputs	Outcomes
Introductory presentation	30 people introduced to the geology represented in Brecks churches and in gravestones.	Improved understanding of the range of materials of geological origin; their advantages and limitations.
Field trip	30 people introduced to five church sites	Learning to identify geological building and gravestone materials in the field

Location

The introductory presentation will be given at Santon Downham Schoolroom, near Brandon, Suffolk – TL817877.

Thereafter, the field trip will visit five locations in the Brecks area

Landowner

All sites to be visited are on publicly accessible church property. Arrangements will be made with churches prior to the visits.

Audiences

'Upon This Rock' Day School aimed at anyone with an interest in geology or the built heritage.



The Day School will provide a mix of interpretive approaches, including audiovisual presentation and outdoor interpretation.

The Day School will be a mixture of specialist presentation and experiential encounter. It will promote learning about the geological material used in churches and graveyards in the Brecks by providing an opportunity for participants to discover new information and also a forum for related questioning and discussion. The field trip will provide an opportunity for participants to develop and practice identification skills.

The Day School will develop and improve engagement with heritage for local people through publicising opportunities to be involved in other BNG initiatives, notably 'Flint in the Brecks' and 'Brecks Vernacular Materials & Craft Skills Training', 'Care & Maintenance of Historic Buildings'. For visitors, the Day school will contribute to raising awareness of native and imported geologically-sourced building materials within built heritage in general.

There are several potential barriers to participation in the Day School.

- Language. The Brecks has a substantial immigrant population of circa 10,000 Portuguese and East European economic migrants whose first language is not English⁵. Publicity materials by the BNG delivery team will be written in Portuguese and at least one other language such as Polish. If such people enrol, it will be possible to provide translation facilities for them through META community translation services (Thetford-based).
- Impaired mobility. It will be possible to accommodate the needs of participants with impaired mobility in the morning presentation at the Schoolroom. However, depending on the sites chosen, it may not be possible fully to do so on the field trip, as some of the church yard sites will include rough terrain, although they will have access paths, and at least one (St Cuthbert's, Thetford) has paved surroundings. This will be explained as part of advance publicity, and such people invited to identify themselves at enrolment. If people with impaired mobility enrol on the course it will be possible to adjust the itinerary accordingly.
- Impaired hearing. It will be possible to accommodate the needs of any participants with impaired hearing in the presentation at the Schoolroom by providing a microphone and speaker system. Participants will be asked at enrolment whether they have any particular hearing difficulties.

⁵ Schneider, C and Holman, D (2005): *A profile of migrant workers in the Breckland area*; Anglia Polytechnic University



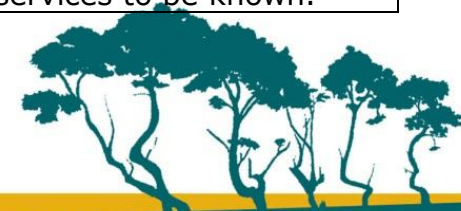
- Financial. The Day School will be free at the point of delivery.
- Intellectual. The information will be communicated in a way that presumes no previous knowledge of the subject matter.
- Numbers. Infrastructural limitations (room hire and coach transport) will impose a practical upper limit on number of participants. The Santon Downham Schoolroom and a 53-seater coach will be sufficient to cover expected numbers.

The Day School is likely to have established 'buy-in' because many participants are likely to be involved in other aspects of the BNG programme (through volunteering work, for example), and are likely to be generally motivated to discover more about the historic environment. Effective and attractive publicity is the only way that waverers or less motivated people can be encouraged to enrol.

Volunteers

The Day School will not involve volunteer input.

Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
No participants enrol	Low	High	Good publicity and promotion.
Inclement weather	Medium	Medium	Carry out risk assessment. Advise participants to bring appropriate outdoor costume.
Personal injury on field trip e.g. tripping, puncture wounds	Low	Medium to High	Carry out risk assessment. Participants to be covered by public liability insurance. First Aid box to be available at event, and details of local NHS services to be known.

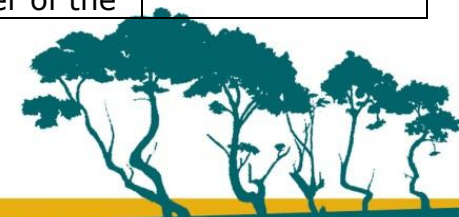


Medical emergency e.g. heart attack	Low	High	Carry out risk assessment. Participants to notify medical problems at enrolment. Contractor to know details of local medical and emergency services.
Biohazards	Low	Low	Carry out risk assessment. Participants warned of potential hazards such as lyme disease.



C13 – Brecks Vernacular Materials & Craft Skills

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
C13: Brecks Vernacular Materials & Craft Skills	Breaking New Ground Delivery Team, Jack Rolfe	<p>This project aims to promote, and raise awareness of Brecks heritage building skills and crafts to the public, and to create an opportunity for professionals to showcase their skills and crafts.</p> <p>Through an Heritage Skills open day/event at Elveden the public will be able to learn more about and try their hand at heritage building crafts and professionals will have an opportunity to network with other professionals.</p>	Local communities, interest groups, owners of listed/heritage buildings, volunteers, heritage construction professionals	<p>1 Brecks Heritage Crafts event/open day promoting Heritage building skills reaching 250 people</p> <p>On-the-day skills training tasters and have-a-go opportunities</p> <p>Promotion of BNG skills training opportunities</p>	<p>Promotion of heritage building skills</p> <p>Increased networking between heritage construction and restoration professionals</p> <p>An increased sense of the importance of Brecks Vernacular architecture to the landscape character of the</p>	<p>Project total £15,000 HLF: £10,000 (67%) In-kind: ££5,000 (33%) Volunteer: £0</p> <p>Event hire, marquees, materials and staffing (£10,000)</p> <p>Promotion and marketing (£5,000)</p>



		The event will also promote Heritage Skills training opportunities including BNG skills training and volunteer events with the aim of becoming an annual event			area	
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Delivery Partner organisations:	
<i>Organisation:</i> Jack Rolfe (Stone Mason)	<i>Role:</i> Event co-ordination

Project Need

The BNGLPS development surveys established a need for the promotion of heritage building skills to create greater awareness of Brecks specific heritage building skills, connect owners and managers of heritage buildings with the skills resources for appropriate management and provide opportunities for public engagement and learning.

Detailed Project Description

This project will deliver a Heritage skills event to promote heritage building skills and improve awareness of Brecks vernacular architecture and it's importance to the Brecks landscape heritage

The event will take place at Elveden Estate at least 15 local heritage skills craftsmen will provide demonstrations of a range of crafts including blacksmithing, pargetting, masonry restoration and conservation, timber frame restoration, flint knapping, clunch and cob building techniques, wattle and daub and thatching as well as other heritage skills including green woodworking.



The event will be promoted to the public and BNG participants and will also be used to promote follow-on skills training workshops and volunteer opportunities

The Heritage Skills Craftsmen/women and BNGLPS project delivery partners will also provide public engagement and have-a-go opportunities in addition to more formal exhibitions and displays relating to the heritage and biodiversity of the Brecks (i.e. Connecting the Brecks with its Archives, Wings over the Brecks bird nesting display).

Conservation Skills training organisations including West Suffolk College and Orchard Barn Environmental Education CIC will also provide displays and engagement opportunities

Additional opportunities will be identified during the lead-up to the event

Location

Elveden Estate

Landowner

Elveden Estates

Audiences

Local communities, interest groups, owners of listed/heritage buildings, volunteers, heritage construction professionals. A MINIMUM of 250 people will be expected to attend

Legacy - Securing lasting benefits

This project will raise awareness of the importance of vernacular architecture to the distinctive character of the Brecks and will promote the skills necessary for the continued conservation of built heritage assets into the future. By providing an opportunity for local craftsmen/women to come together to demonstrate their skills to the public

The event and specific demonstrations will be recorded and a 'built heritage skills' information pages added to the BNGLPS website to provide a long-term source of information for the public and owners/managers of built heritage assets



Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Lack of engagement from heritage skills craftsmen/women	LOW	HIGH	In the event of insufficient commitment for the proposed date, this event would have to be postponed and another suitable date sought.
Bad weather on the day of the event	MED	MED	The event budget is sufficient to ensure that the event is housed in marquees. The location on the estate will be appropriate to enable participants and visitors to attend safely
Lack of attendance	LOW	MED	The project will be well promoted in the media, through the BNGLPS website and social media and through Partner websites.
Venue no longer able to host the event	LOW	LOW	The event is not Ireliant on the location and could be hosted at Brandon Country Park if required



C14 – Flint in the Brecks

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
C14: Flint in the Brecks	Breckland society	This volunteer led project will research and record the history and distribution of flint mines in the Brecks and the uses of flint as a building material, especially for ecclesiastical, public buildings and vernacular buildings, through a community-led thematic research project. It will also provide improved access and interpretation at a former flint mine and provide training in flint-related skills, including for buildings.	Local communities, interest groups, volunteers	<p>Volunteer led research into the distribution of flint mines and production of an illustrated report, web-pages and information leaflet</p> <p>3 Workshops training 23 volunteers in heritage skills: (archive training day at NRO; fieldwork training day; training day in oral history</p>	<p>Community and volunteer engagement in Brecks Heritage research</p> <p>Increased information in the public domain and an increased awareness of sites connected to flint mining and the gunflint industry.</p> <p>Creation of an improved skills base for local heritage research</p>	<p>Project total: £21,845 HLF: £8,795 (40%) In-kind: £2,600 (12%) Volunteer: £10,450 (48%)</p> <p>Volunteer led research and fieldwork (£12,600)</p> <p>Production of report, leaflet and web text (£4,220)</p> <p>Interpretation panel (£1,250)</p>



				<p>interviewing</p> <p>Production of an Interpretation panel at Lingheath gunflint mining site within Thetford Forest with volunteer research and input.</p> <p>2 workshops training 12 participants in traditional flint building skills: one on knapping, one on flint as a building material</p> <p>Site conservation work at the Lingheath</p>	<p>and investigation.</p> <p>Residents and visitors more aware of the flint-mining heritage of the Brecks</p> <p>Preservation of traditional skills in flint-work for buildings.</p> <p>Conservation of a gunflint mining site for access and interpretation.</p>	<p>Training events (£2,250)</p> <p>Oral History interviews (£475)</p> <p>Archiving (£650)</p> <p>Equipment (£400)</p>
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Project Aims/Objectives

Aims :

- As flint was the main traditional building material in the Brecks and the gunflint industry was historically a major source of employment and revenue for the area, this project aims to explain, enhance, conserve and promote the impact of flint in terms of the natural and historic landscape, its archaeology, built heritage, social history and geodiversity.
- It aims to identify and explain the skills and crafts associated with the use of flint in the Brecks, from construction and architecture to knapping and flint-making for the arms industry.
- It aims to facilitate improved understanding of the surviving flint heritage of the Brecks and of its local and regional significance.
- It aims to provide training and promote those skills necessary to record, manage and enhance this aspect of the Brecks heritage and especially the building skills needed to continue using flint as a vernacular material.
- It aims to engage with schools and young people to raise awareness of this aspect of the Brecks' heritage and the need to conserve it.
- By promoting the flint buildings and related heritage of the Brecks to both residents and visitors, the project aims to encourage visits and hence spend in the local economy

Objectives:

- To connect people with the history of flint and promote greater understanding of its social, cultural and economic importance in the Brecks.
- To facilitate their involvement with opportunities for participation, learning and training in researching the history of flint and its application as a practical material.
- To make a difference to the landscape 'on the ground' through a contribution to the conservation of the flint-built heritage and by providing enhanced public access to a former flint-mining site.



Delivery Partner organisations:	
<i>Organisation:</i> Forestry Commission Suffolk Archaeological Service Norfolk County Council HER Society for the Protection of Ancient Buildings (SPAB)	<i>Role:</i> Landowner Advisory Advisory Advisory/Trainer

Project Need

No systematic survey of flint-mining has ever been carried out in the Brecks. With flint a key characteristic, almost a defining feature, of the Brecks landscape, its nature, distribution and chronological development needs to be established and evidence of the flint-mining activity, as part of the heritage of the landscape, can only be conserved if it is recorded. There is also a current lack of knowledge of how flint is best applied as a building material, and how it should be maintained and conserved.

Detailed Project Description

This project will research and record the distribution of flint mines in the Brecks and the uses of flint as a building material, especially for ecclesiastical, public buildings and vernacular buildings, through a community-led thematic research project.

- It will carry out archival research to complement fieldwork designed to identify flint-mining sites.
- It will conserve the flint-mining site at Lingheath and present it as an example of an historic flint mine.
- It will hold two workshops in traditional flint-working skills.
- It will compile an illustrated report and dedicated webpages.

Training and capacity building within local community and history groups to undertake historic and documentary research and archaeological fieldwork will be delivered and will result in improved understanding and information base relating to flint industry, which will contribute to informed management and awareness of the archaeology.

It will be delivered by the Breckland Society. The Society's Committee will lead and supervise the project.



Outputs and Outcomes		
Activity	Outputs	Outcomes
Research into the distribution of flint mines in the Brecks	Illustrated Report 32pp Dedicated Webpages Illustrated Leaflet	Information in the public domain Awareness of sites connected to flint mining and the gunflint industry.
3 Workshops in heritage skills training: (archive training day at NRO; fieldwork training day; training day in oral history interviewing)	23 volunteers trained in archaeological and archival skills	Improved skills base for local heritage research and investigation.
Production of an Interpretation panel at Lingheath gunflint mining site within Thetford Forest with volunteer research and input.	1 new interpretation panel placed by Breckland Society working with the Forestry Commission.	Residents and visitors more aware of the flint-mining heritage of the Brecks.
2 workshops in training in traditional flint building skills: one on knapping, one on flint as a building material	12 participants with basic flintworking skills.	12 people with basic skills in flintwork for buildings.
Conservation work for clearance/presentation at the Lingheath gunflint-mining site.	One gunflint-mining site conserved	Conservation of a gunflint mining site.

Location

Across the BNG LP area

Landowner

Forestry Commission



Audiences

The project aims to engage with all audience types as it is important that everyone is given the opportunity to enjoy, understand and participate in the Brecks' heritage. The Breckland Society recognises that the Brecks has a range of social and economic issues that reflect the disparate spread of its population. The immigrant communities and the socially and economically disadvantaged groups in the urban centres of Brandon and Thetford have different issues to those in the isolated rural communities but nevertheless all live in this landscape. The project will offer opportunities for everyone to become involved.

The project will provide a range of opportunities which will encompass practical work 'on the ground' as well as documentary research and it will offer training in heritage skills tailored to meet audience needs.

The project will help address the perceived limited local engagement with the flint-related heritage and landscape. It will put information about flint-mining and the gunflint industry into the public domain and through the presentation of a former flint mine demonstrate how the landscape of the Brecks reflects human interaction with natural resources over millennia.

It will provide a range of opportunities for participation so that it has the widest possible appeal, from undertaking fieldwork to research in record offices and museums. It will provide training in both archaeological and archival research and related heritage skills and practical training in building in flint. It will seek to involve schools and provide opportunities for their involvement. It will therefore reach adults, students and re-trainers, families and children through both formal and informal learning.

The project will make use of partners in the BNG Scheme to help it reach audiences currently under-represented, including Keystone Development Trust; Moving Thetford Forward; Moving Brandon Forward and others. It will draw on the experience of the Norfolk and Suffolk Wildlife Trusts, both of whom have had recent projects reaching the communities of the Brecks.

A range of volunteering opportunities will be provided and the project will focus on local communities learning about their own landscape through participation, understanding and enjoyment of it.



The project will make use of partners in the BNG Scheme to help it reach audiences currently under-represented. It will ensure that the language of the project is not specialised or exclusive.

The Breckland Society's two major research projects on the vernacular architecture and the warrens of the Brecks involved over 80 volunteers, including students; community pay-backers and the disabled. The flint-working test pit survey in the spring and summer of 2011 attracted 92 volunteers. In addition, the Society has a series of talks and field visits throughout the year, open to both members and non-members and extensively advertised.

Volunteers

The project will include volunteers at every stage, from development to delivery. Breckland Society Committee Members (6) are involved in the planning of the project and will oversee its delivery. Members will be invited to add ideas and comments at every stage.

At delivery, 20 volunteers will spend up to 8 days each on fieldworking and archival research, plus 3 volunteers at 5 days each on oral history.

Volunteers will be involved so that they have opportunities to learn a wide range of heritage-related skills.

They will be recruited through the Society's newsletter and at Society events; through publicity in the press and media; through links to other voluntary groups and organisations in Norfolk and Suffolk; through the BNG website. Training is outlined in Section 11 above. The volunteers will be managed by the Breckland Society Committee and the consultant appointed by the Society. The Breckland Society has insurance for its activities

Legacy - Securing lasting benefits

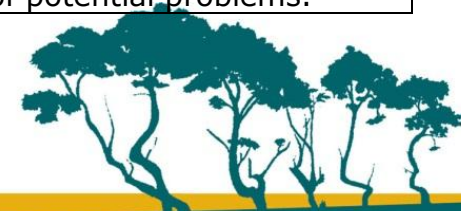
The illustrated report, webpages and leaflet will ensure that the project's outcomes remain in the public domain. The Society will make provision for activities and projects to continue; for participants to pass on their knowledge and skills and involve new people; to foster and maintain a close and mutually supportive working relationship with partner organisations.



To ensure a lasting legacy for BNG, all data from this project will be sent to the Norfolk and Suffolk Historic Environment Record and to the Norfolk Heritage Explorer Website.

The Lingheath flint-mining site will be maintained by volunteers working within Thetford Forest.

Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Organisational : A lack of those with the skills needed to deliver the project	Low	High	Ensure that there is a network of support from which to draw. Plan project rigorously and include contingency measures. Ensure providers fully understand target aims and objectives. Set milestones of achievement and regularly monitor and evaluate progress. Have systems in place to give early warning of potential problems.
Social A lack of voluntary participation	Low	High	Ensure that there is widespread publicity about volunteering opportunities and benefits in local communities and in the media and among partnership organisations and that it reaches groups traditionally disengaged. Ensure that good relationships are nurtured with the media. Ensure that volunteers are supported, trained, motivated managed and valued by all partners and staff. Regularly monitor and evaluate volunteer participation. Have systems in place to give early warning of potential problems.



Financial : Budget for the project exceeded	Low	High	Ensure that project costs and arrangements are in place, fully comprehensive, endorsed and signed by all necessary parties. Ensure that contingency is included and is realistic. Identify any alternative sources of funding. Have systems in place to give early warning of potential problems.
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C15 – Brecks Warrens and Lodges

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
C15: Brecks Warrens and Lodges	Breckland Society	<p>This project will investigate a selection of warren sites, determine the extent and condition of surviving internal archaeological features and compile a standardised record for each.</p> <p>This will be complemented by archival research and produce a more complete picture of the structure of the warrens and how they functioned.</p>	Local communities, interest groups, volunteers	<p>Volunteer led research into the internal archaeology of the warrens and the lodge sites.</p> <p>An illustrated Report, dedicated Web-pages and an illustrated Leaflet</p> <p>3 workshops training 20 volunteers in field walking, earthworks archaeology and archival skills</p> <p>Production of an Interpretation panel at an</p>	<p>Community and volunteer engagement in Brecks Heritage research</p> <p>Increased information in the public domain and an increased awareness of Warren banks in the landscape</p> <p>Creation of an improved skills base for local heritage research and investigation.</p> <p>Residents and visitors more aware of the warrening heritage</p>	<p>Project total £19,695</p> <p>HLF: £7,095 (36%)</p> <p>In-kind: £2,600 (13%)</p> <p>Volunteer: £10,000 (51%)</p> <p>Volunteer led research and fieldwork (£12,600)</p> <p>Production of report, leaflet and web text (£4,245)</p> <p>Interpretation panel (£1,250)</p> <p>Training events (£1,600)</p>



				<p>exposed section of a warren bank within Thetford Forest with volunteer research and input.</p> <p>Site conservation work at a warren bank site.</p> <p>Archive of fieldwork results and associated images.</p>	<p>of the Brecks.</p> <p>One section of warren bank conserved and interpreted leading to improved understanding and awareness of warren bank features in the landscape</p>	
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Project Aims/Objectives

Using a combination of archival research and fieldwork, this project aims to;

- identify the internal features of selected medieval warrens in the Brecks, including the sites of their lodges
- explain the different types of internal feature (eg banks, ditches and sweepages) and their purpose, and place them in the wider context of warrening in the Brecks
- extend understanding of how warrening functioned as a rural industry and had an impact on the cultural history of the area
- provide training and promote those skills necessary to record, manage and enhance this valuable component in the Brecks landscape
- engage with schools and young people to explain the importance of warrening in the history of the area. Through an interpretation panel at a key site the project aims to enhance understanding and access to the warrening heritage



Delivery Partner organisations:	
<i>Organisation:</i> Forestry Commission Suffolk Archaeological Service Norfolk County Council HER	<i>Role:</i> Landowner Advisory Advisory

Project Need

Although the sites of 26 Breckland warrens are known and their perimeter banks mapped and recorded, no systematic survey of the internal earthwork archaeology of the warrens has been undertaken. The area's warrening archaeology is of international significance and yet remains inadequately researched and understood. This project seeks to redress this, and is aimed at recording warren archaeology more fully so that our understanding of how warrens functioned is improved and they can be more effectively protected and conserved.

Detailed Project Description

Through a combination of fieldwork and new archival research this project will investigate a selection of warrening sites, determine the extent, character and condition of surviving internal archaeological features, including those that are potentially lodge-related, and compile a standardised record for each site. This information will be matched with existing archival evidence, thereby helping build a more complete understanding of how the warrens were structured and managed. This data will be added to the appropriate historic environment records. In addition, examples of warren banks will be cleared and conserved. Volunteers will be trained in archaeological surveying and recording techniques as well as in archival research.

This project will be delivered by the Breckland Society. The Society's Committee will lead and supervise the project.

Outputs and Outcomes		
Activity	Outputs	Outcomes
Research into the internal archaeology of the	Illustrated Report 32pp	Information in the public domain



warrens and the lodge sites.	Dedicated Webpages Illustrated Leaflet	Awareness of sites connected to the warrening industry.
3 training workshops (Archive training day at NRO and fieldwalking training day and earthworks training day)	20 volunteers trained in archaeological and archival skills	Improved skills base for local heritage research and investigation.
Production of an Interpretation panel at an exposed section of a warren bank within Thetford Forest with volunteer research and input.	1 new interpretation panel placed by Breckland Society working with the Forestry Commission.	Residents and visitors more aware of the warrening heritage of the Brecks.
Conservation work for clearance/presentation at a warren bank site.	One section of warren bank conserved	Conservation of a warren bank.
Archive of fieldwork results and associated images.	One Archive	Information in the public domain. Awareness of sites connected to the warrening industry

Location

Selected sites within the BNG LP area.

Landowner

Forestry Commission

Audiences

The project aims to engage with all audience types as it is important that everyone is given the opportunity to enjoy, understand and participate in the Brecks' heritage.



The Breckland Society recognises that the Brecks has a range of social and economic issues that reflect the disparate spread of its population. The immigrant communities and the socially and economically disadvantaged groups in the urban centres of Brandon and Thetford have different issues to those in the isolated rural communities but nevertheless all live in this landscape.

The project will provide a range of opportunities which will encompass practical work 'on the ground' as well as documentary research and it will offer training in heritage skills tailored to meet audience needs.

The project will help extend the perceived limited local engagement with the landscape. It will put information about warrening into the public domain and show how the landscape of the Brecks reflects human interaction with natural resources over millennia.

It will provide a range of opportunities for participation so that it has the widest possible appeal, from undertaking fieldwork to research in record offices and museums. It will provide training in both archaeological and archival research and related heritage skills. It will seek to involve schools and provide opportunities for their involvement. It will therefore reach adults, students and re-trainers and children in both formal and informal learning

The Project will make use of partners in the BNG Scheme to help it reach audiences currently under-represented, including Keystone Development Trust; Moving Thetford Forward; Moving Brandon Forward and others. It will draw on the experience of the Norfolk and Suffolk Wildlife Trusts, both of whom have had recent projects reaching the communities of the Brecks.

A range of volunteering opportunities will be provided and the project will focus on local communities learning about their own landscape through participation and enjoyment of it.

The Project will make use of partners in the BNG Scheme to help it reach audiences currently under-represented. It will ensure that the language of the project is not specialised or exclusive.

The Breckland Society's two major research projects on the vernacular architecture and the warrens of the Brecks involved over 80 volunteers, including students; community pay-backers and the disabled. The flint-working test pit survey in the



spring and summer of 2011 attracted 92 volunteers. In addition, the Society has a series of talks and field visits throughout the year, open to both members and non-members and extensively advertised.

Volunteers

The project will include volunteers at every stage, from development to delivery. Breckland Society Committee Members (6) are involved in the planning of the project and will oversee its delivery. Members will be invited to add ideas and comments at every stage.

At delivery, 20 volunteers will spend up to 8 days each on fieldwork and archival research.

Volunteers will be involved so that they have opportunities to learn a wide range of heritage-related skills. They will be recruited through the Society's newsletter and at Society events; through publicity in the press and media; through links to other voluntary groups and organisations in Norfolk and Suffolk; through the BNG website. Training is outlined in Section 11 above. The volunteers will be managed by the Breckland Society Committee. The Breckland Society has insurance for its activities.

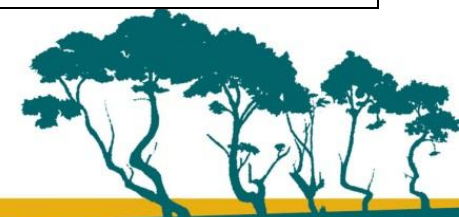
Legacy - Securing lasting benefits

The illustrated report, webpages and leaflet will ensure that the project's outcomes remain in the public domain. The Society will make provision for activities and projects to continue; for participants to pass on their knowledge and skills and involve new people; to foster and maintain a close and mutually supportive working relationship with partner organisations.

To ensure a lasting legacy for BNG, all data from this project will be sent to the Norfolk and Suffolk Historic Environment Record and to the Norfolk Heritage Explorer Website.



Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Organisational : A lack of those with the skills needed to deliver the project	Low	High	Ensure that there is a network of support from which to draw. Plan project rigorously and include contingency measures. Ensure providers fully understand target aims and objectives. Set milestones of achievement and regularly monitor and evaluate progress. Have systems in place to give early warning of potential problems.
Social A lack of voluntary participation	Low	High	Ensure that there is widespread publicity about volunteering opportunities and benefits in local communities and in the media and among partnership organisations and that it reaches groups traditionally disengaged. Ensure that good relationships are nurtured with the media. Ensure that volunteers are supported, trained, motivated managed and valued by all partners and staff. Regularly monitor and evaluate volunteer participation. Have systems in place to give early warning of potential problems.



Financial : Budget for the project exceeded	Low	High	Ensure that project costs and arrangements are in place, fully comprehensive, endorsed and signed by all necessary parties. Ensure that contingency is included and is realistic. Identify any alternative sources of funding. Have systems in place to give early warning of potential problems.
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C16 – Sheep in the Brecks

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
C16: Sheep in the Brecks	Breckland Society	This project will research and record the historic presence and role of sheep in the landscape of the Brecks, documenting and investigating the various aspects of this heritage and also promoting the use of sheep as a habitat management tool.	Local communities, interest groups, volunteers, Landowners and Land managers	<p>Volunteer led research into the role of sheep in the Brecks and production of an illustrated Report, dedicated Web-pages and an illustrated Leaflet</p> <p>3 Heritage skills events training 15 volunteers trained in archaeological fieldwork, oral history research and archival</p>	<p>Community and volunteer engagement in Brecks Heritage research</p> <p>Increased information in the public domain and an increased awareness of Warren banks in the landscape leading to an improved skills base for local heritage research and investigation.</p>	<p>Project total: £13,784 HLF: £7434 (54%) In-kind: £2,600 (19%) Volunteer: £3,750 (27%)</p> <p>Volunteer led research and fieldwork (£6,350)</p> <p>Production of report, leaflet and web text (£3,884)</p> <p>Training events and workshops</p>



				<p>skills</p> <p>"Grazing Practitioners' Day" for 15 professionals working in grass heath management across the Brecks.</p> <p>3 traditional skills workshops training 12 people in; (1) sheep husbandry (2) making sheep hurdles and crooks (3) shepherding skills</p>	<p>Land management professionals involved in sharing experiences and formulating grazing regimes for sensitive landscapes in the Brecks leading to improved understanding and enhanced connectivity among those responsible for management in the area.</p> <p>Residents and visitors more aware of the importance of sheep in the Brecks.</p>	<p>(£2,500)</p> <p>Archival work (£650)</p> <p>Equipment (£400)</p>
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Project Aims/Objectives

Aims :

This project aims to;

- document, explain, enhance, conserve and promote the role of sheep and shepherding in the natural and historic landscape of the Brecks, including with regard to related archaeology, built heritage and geodiversity
- It aims to identify and explain the skills and crafts associated with traditional shepherding in the Brecks
- It aims to facilitate improved understanding of the role sheep can play in habitat creation and management
- It aims to provide training that promotes those skills necessary to record, manage and enhance this important aspect of the Brecks history and landscape
- It aims to engage with schools and young people to raise awareness of this aspect of the Brecks' heritage and the need to value and conserve it
- by promoting the history and heritage of sheep farming in the Brecks to both residents and visitors, the project also aims to encourage visits and hence spend in the local economy

Objectives:

- To connect people with the history of sheep and shepherding in the Brecks and promote greater understanding of the crucial role played by sheep in the area's history and land management
- To provide people with opportunities for participation, learning and training in various aspects of the sheep-farming heritage
- To make a difference to the landscape 'on the ground' through documentation of this heritage and developing enhanced awareness of the value of sheep in habitat management and the implications for ecology and biodiversity.

Delivery Partner organisations:	
<i>Organisation:</i> Elveden Estate Forestry Commission RSPB	<i>Role:</i> Landowner and Participant Partner Landowner Participant partner



Norfolk Wildlife Trust Suffolk Archaeological Service Norfolk County Council HER	Participant partner Advisory Advisory
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Project Need

Sheep have been central to the historic development of the Brecks landscape and yet their crucial role is scarcely known and appreciated by the public and has not hitherto been effectively documented. Many of the traditional aspects of this traditional form of land management have disappeared in the past half century. So that the present-day heaths can be managed most effectively, there is a need for knowledge of past grazing regimes and flock densities. With shepherding as a traditional local occupation, there is a need to pass on its skills and its customs as part of the heritage of the landscape. There is also a need for increased awareness and understanding on the part of professionals working in grass heath management about grazing regimes and habitat management involving sheep and other animals.

Detailed Project Description

This project will research and record the historic presence and role of sheep in the landscape of the Brecks. It will include sheep breeds (Norfolk Horn) and the wool and meat and their markets; shepherds and sheep husbandry; shepherds clothing and crooks; shepherds huts and hurdles; the language and terminology associated with sheep farming; the fold course system; droveways and enclosures and the sharing of the warren lands with the rabbits, especially in the medieval period when monastic institutions owned the warrens, the rabbits and the sheep flocks. It will involve oral history and archaeological and archival research and practical skills associated with the management of sheep as well as the identification of shepherd huts. Workshops on shepherding crafts will be held to foster traditional skills, and a grazing practitioners' day will be aimed at sharing experience on contemporary habitat management involving sheep. An illustrated report, leaflet and dedicated web pages will also be produced, as well as a visual and oral history archive. Volunteers will be trained in oral history, archaeological and surveying fieldwork and archival research skills, as well as in associated crafts. The project will be delivered by the Breckland Society. The Society's Committee will lead and supervise the project.



Outputs and Outcomes		
Activity	Outputs	Outcomes
Research into the role of sheep in the landscape of the Brecks	Illustrated Report 32pp Dedicated Webpages Illustrated Leaflet	Information in the public domain Awareness of sites connected to sheep in the Brecks.
Workshops in heritage skills training (archive training day at NRO; fieldwork training day; training day in oral history interviewing)	15 volunteers trained in archaeological and archival skills	Improved skills base for local heritage research and investigation.
"Grazing Practitioners' Day" for professionals working in grass heath management across the Brecks, in association with NWT/RSPB and linking with Breaking New Burrows project.	15 professionals involved in sharing experiences and formulating grazing regimes for sensitive landscapes in the Brecks..	Improved understanding and enhanced connectivity among those responsible for managing some of the most significant habitats in the area.
Training in traditional skills associated with (1) sheep husbandry : (2) making sheep hurdles and crooks; (3) shepherding skills.	3 workshops for up to 12 participants in each.	36 people trained in basic skills associated with sheep husbandry in the Brecks.

Location

Across the BNG LP area

Landowner

Elveden Estate and Forestry Commission



Audiences

The project aims to engage with all audience types as it is important that everyone is given the opportunity to enjoy, understand and participate in the Brecks' heritage. The Breckland Society recognises that the Brecks has a range of social and economic issues that reflect the disparate spread of its population. The immigrant communities and the socially and economically disadvantaged groups in the urban centres of Brandon and Thetford have different issues to those in the isolated rural communities but nevertheless all live in this landscape. The project will offer opportunities for everyone to become involved.

The project will provide a range of opportunities which will encompass practical work 'on the ground' as well as documentary research and it will offer training in heritage skills tailored to meet audience needs.

The project will help extend the perceived limited local engagement with the landscape. It will put information about sheep and the shepherding heritage into the public domain and show how the landscape of the Brecks reflects human interaction with natural resources over millennia.

It will provide a range of opportunities for participation so that it has the widest possible appeal, from undertaking fieldwork to research in record offices and museums. It will provide training in both archaeological and archival research and related heritage skills and practical training in building in flint. It will seek to involve schools and provide opportunities for their involvement. It will therefore reach adults, students and re-trainers, families and children through both formal and informal learning.

The project will make use of partners in the BNG Scheme to help it reach audiences currently under-represented, including Keystone Development Trust; Moving Thetford Forward; Moving Brandon Forward and others. It will draw on the experience of the Norfolk and Suffolk Wildlife Trusts, both of whom have had recent projects reaching the communities of the Brecks.

A range of volunteering opportunities will be provided and the project will focus on local communities learning about their own landscape through participation, understanding and enjoyment of it.



The project will make use of partners in the BNG Scheme to help it reach audiences currently under-represented. It will ensure that the language of the project is not specialised or exclusive.

The Breckland Society's two major research projects on the vernacular architecture and the warrens of the Brecks involved over 80 volunteers, including students; community pay-backers and the disabled. The flint-working test pit survey in the spring and summer of 2011 attracted 92 volunteers. In addition, the Society has a series of talks and field visits throughout the year, open to both members and non-members and extensively advertised.

Volunteers

The project will include volunteers at every stage, from development to delivery. Breckland Society Committee Members (6) are involved in the planning of the project and will oversee its delivery. Members will be invited to add ideas and comments at every stage.

At delivery, 20 volunteers will spend up to 8 days each on field-working and archival research, plus 3 volunteers at 5 days each on oral history.

Volunteers will be involved so that they have opportunities to learn a wide range of heritage-related skills.

They will be recruited through the Society's newsletter and at Society events; through publicity in the press and media; through links to other voluntary groups and organisations in Norfolk and Suffolk; through the BNG website. Training is outlined in Section 11 above. The volunteers will be managed by the Breckland Society Committee and the consultant appointed by the Society. The Breckland Society has insurance for its activities.

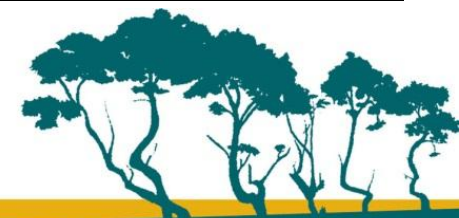
Legacy - Securing lasting benefits

The illustrated report, webpages and leaflet will ensure that the project's outcomes remain in the public domain. The Society will make provision for activities and projects to continue; for participants to pass on their knowledge and skills and involve new people; to foster and maintain a close and mutually supportive working relationship with partner organisations.



To ensure a lasting legacy for BNG, all data from this project will be sent to the Norfolk and Suffolk Historic Environment Record and to the Norfolk Heritage Explorer Website

Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Organisational : A lack of those with the skills needed to deliver the project	Low	High	Ensure that there is a network of support from which to draw. Plan project rigorously and include contingency measures. Ensure providers fully understand target aims and objectives. Set milestones of achievement and regularly monitor and evaluate progress. Have systems in place to give early warning of potential problems.
Social A lack of voluntary participation	Low	High	Ensure that there is widespread publicity about volunteering opportunities and benefits in local communities and in the media and among partnership organisations and that it reaches groups traditionally disengaged. Ensure that good relationships are nurtured with the media. Ensure that volunteers are supported, trained, motivated managed and valued by all partners and staff. Regularly monitor and evaluate volunteer participation. Have systems in place to give early warning of potential problems.



Financial : Budget for the project exceeded	Low	High	Ensure that project costs and arrangements are in place, fully comprehensive, endorsed and signed by all necessary parties. Ensure that contingency is included and is realistic. Identify any alternative sources of funding. Have systems in place to give early warning of potential problems.
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C17 – Brecks Military History

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
C17: Brecks Military History	Breckland Society	The project will identify and record the military history of the Brecks and its key sites from 1900 to 1949.	Local communities, interest groups, volunteers	<p>Volunteer led research into the Military history of the Brecks 1900 - 1949 and production of an illustrated Report, dedicated Web-pages and an illustrated Leaflet</p> <p>2 workshops training 12 volunteers in oral history interviewing</p> <p>1 fieldwork day</p>	<p>Community and volunteer engagement in Brecks Heritage research</p> <p>An increase in information in the public domain</p> <p>Improved knowledge of sites connected to military history.</p> <p>Improved skills base for local history research, oral history</p>	<p>Project total: £15,784 HLF: £6,184 (39%) In-kind: £2,600 (16.5%) Volunteer: £7,000 (44.5%)</p> <p>Volunteer led research and fieldwork (£9,600)</p> <p>Production of report, leaflet and web text (£3884)</p> <p>Training events (£1,250)</p>



				<p>training 12 volunteers in military archaeology</p> <p>Archive of research and fieldwork results, and oral history interviews (including ex- and current military personnel and local people)</p>	<p>recording and military archaeology</p> <p>Increased public awareness of the important role of the military in shaping the landscape of the Brecks and role of foreign service personnel</p>	<p>Archival work (£650)</p> <p>Equipment (£400)</p>
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Project Aims/Objectives

Aims :

Military History in the Brecks aims to;

- enhance, conserve and promote the natural and historic landscape, its archaeology and its built heritage and demonstrates their connectivity
- improve accessibility to this aspect of the Brecks heritage by overcoming physical, social, cultural and intellectual barriers. This will enable everyone to understand, enjoy and value this special area and to engage with its future
- develop a skilled and sustainable volunteer base through training and volunteering opportunities
- provide training and promotes those skills necessary to record, manage and enhance the Brecks landscape and heritage
- engage with schools and young people to create active future custodians of the landscape



By promoting the military history of the Brecks to both residents and visitors, it aims to encourage visits and hence spend in the local economy. It also aims to engender pride and a 'sense of place' for both residents and visitors.

Its Objectives are to:

Connect people with the landscape and promote greater understanding and ownership of the area and the issues it faces.

Facilitate their involvement with opportunities for participation, learning and training

Make a difference to the landscape 'on the ground' through conservation of the flint built heritage

Develop partnerships with both professional and voluntary organisations to widen the reach of the Breckland Society and its contribution to the BNG Scheme.

Delivery Partner organisations:	
Organisation:	Role:
Forestry Commission	Landowner
Suffolk Archaeological Service	Advisory
Norfolk County Council HER	Advisory
Ministry of Defence	Participant Partner

Project Need

The military history of the Brecks has never been systematically assessed and recorded, despite a wealth of disparate archival material. Nor have some of the most significant remnants of military camps been properly investigated. There is also a need to record the memories of those who remember the effects of the Second World War on the landscape of the Brecks and also to record the memories of those whose families came to the area as refugees (e.g. the Polish Community in Brandon dates from the 1940s).



Detailed Project Description

This project will explore and investigate the military history of the Brecks from 1900 through to the First and Second World War training and trialling areas, army camps and airfields, including the STANTA Battle Area. It will research a wide range of documentary sources, including oral history interviews, and will work with the Ministry of Defence to catalogue an archive of historical material relating to STANTA. Volunteers from organisations with an interest in military history will be involved in the project, including the USAF personnel from RAF Mildenhall and Lakenheath. Special attention will be made to the contribution made by foreign military personnel and research conducted into the social and economic results of a military presence in the Brecks landscape through the centuries. On-the-ground fieldwork will be also carried out in conjunction with the Norfolk Wildlife Trust at a former military site (East Wretham Heath). An illustrated report and leaflet will be produced, as well as a comprehensive visual and oral history archive.

It will be delivered by the Breckland Society. The Society's Committee will lead and supervise the project.

Outputs and Outcomes		
Activity	Outputs	Outcomes
Research into the military history of the Brecks	Illustrated Report 32pp Dedicated Webpages Illustrated Leaflet	Information in the public domain Awareness of sites connected to military history.
2 training workshops Archive training day (at NRO) Training day in oral history interviewing 1 fieldwork training day in military archaeology (at NWT East Wretham Heath)	25 volunteers trained in archaeological and archival skills 12 volunteers trained in archaeological and fieldwork skills	Improved skills base for local heritage research and investigation Improved skills base for local heritage research and investigation
Archive of research and fieldwork results, and oral history (including interviews with ex- and current military	One Archive	Residents and visitors more aware of the military heritage of the Brecks.



personnel/local people)		
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Location

Across the BNG LP area.

Landowner

Forestry Commission ,Ministry of Defence and Norfolk Wildlife Trust

Audiences

The project aims to engage with all audience types as it is important that everyone is given the opportunity to enjoy, understand and participate in the Brecks' heritage. The Breckland Society recognises that the Brecks has a range of social and economic issues that reflect the disparate spread of its population. The immigrant communities and the socially and economically disadvantaged groups in the urban centres of Brandon and Thetford have different issues to those in the isolated rural communities but nevertheless all live in this landscape.

The project will provide a range of opportunities which will encompass practical work 'on the ground' as well as documentary research and it will offer training in heritage skills tailored to meet audience needs.

The project will help address the perceived limited local engagement with the landscape and its history. It will put information about the area's military heritage into the public domain and show how the landscape of the Brecks reflects human interaction with natural resources over millennia.

It will provide a range of opportunities for participation so that it has the widest possible appeal, from undertaking fieldwork to research in record offices and museums. It will provide training in both archaeological and archival research and related heritage skills. It will seek to involve schools and provide opportunities for their involvement. It will therefore reach adults, students and re-trainers, as well as children in both formal and informal learning.



The Project will make use of partners in the BNG Scheme to help it reach audiences currently under-represented, including Keystone Development Trust; Moving Thetford Forward; Moving Brandon Forward and others. It will draw on the experience of the Norfolk and Suffolk Wildlife Trusts, both of whom have had recent projects reaching the communities of the Brecks.

A range of volunteering opportunities will be provided and the project will focus on local communities learning about their own landscape through participation and enjoyment of it.

The Project will make use of partners in the BNG Scheme to help it reach audiences currently under-represented. It will ensure that the language of the project is not specialised or exclusive.

The Breckland Society's two major research projects on the vernacular architecture and the warrens of the Brecks involved over 80 volunteers, including students; community pay-backers and the disabled. The flint-working test pit survey in the spring and summer of 2011 attracted 92 volunteers. In addition, the Society has a series of talks and field visits throughout the year, open to both members and non-members and extensively advertised.

Volunteers

The project will include volunteers at every stage, from development to delivery. Breckland Society Committee Members (6) are involved in the planning of the project and will oversee its delivery. Members will be invited to add ideas and comments at every stage. At delivery, 20 volunteers will spend up to 5 days each on archaeological and archival research, plus 5 volunteers at 8 days each on oral history.

Volunteers will be involved so that they have opportunities to learn a wide range of heritage-related skills.

They will be recruited through the Society's newsletter and at Society events; through publicity in the press and media; through links to other voluntary groups and organisations in Norfolk and Suffolk; through the BNG website. Training is outlined in Section 11 above. The volunteers will be managed by the Breckland Society

The Breckland Society has insurance for its activities



Legacy - Securing lasting benefits

Success will be evaluated by how well the project has met its aims and objectives.

Simple evaluation forms will record each activity from inception to completion. Other means of measuring success (interviews and social media) will be used too and partners and stakeholders involved as much as project participants. Each activity will be measured using the SMART analysis : specific (what, why, who, where and which); measurable (how many; how much; what gained); attainable (how it was accomplished); relevant (worthwhile; right time; fit with other) and time-bound (when; completed as planned). A record of the project will be created by the Breckland Society Committee and housed on the Society's website and on the BNG website.

Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Organisational : A lack of those with the skills needed to deliver the project	Low	High	Ensure that there is a network of support from which to draw. Plan project rigorously and include contingency measures.. Ensure providers fully understand target aims and objectives. Set milestones of achievement and regularly monitor and evaluate progress. Have systems in place to give early warning of potential problems.
Social A lack of voluntary participation	Low	High	Ensure that there is widespread publicity about volunteering opportunities and benefits in local communities and in the media and among partnership

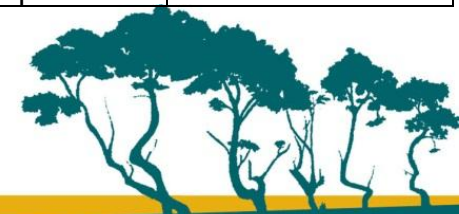


Financial : Budget for the project exceeded	Low	High	<p>organisations and that it reaches groups traditionally disengaged. Ensure that good relationships are nurtured with the media. Ensure that volunteers are supported, trained, motivated managed and valued by all partners and staff. Regularly monitor and evaluate volunteer participation. Have systems in place to give early warning of potential problems.</p> <p>Ensure that project costs and arrangements are in place, fully comprehensive, endorsed and signed by all necessary parties. Ensure that contingency is included and is realistic. Identify any alternative sources of funding. Have systems in place to give early warning of potential problems.</p>
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C18 – Creatively Interpreting the Brecks

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
C18: Creatively Interpreting the Brecks	Iceni Botanical Artists	This project will teach participants botanic and landscape painting skills. It will enable them to look at and interpret the Brecks Landscape in a new way, and by exhibiting the best works, increase awareness of Brecks Heritage in new audiences	Local communities, interest groups	240 participants in s series of 12 day schools; Celebratory exhibition of works and on-line art gallery	Introduction to or development of drawing and painting skills in water-colour painting and landscape appreciation Raised awareness of the distinctive visual landscape as defined by the plants, insects and fungi of the Brecks area, and their rarity Enhanced enjoyment of leisure pursuits	Project total £8675 HLF: £6425 (74%) In-kind: £1050 (12%) Volunteer: £0 Cash: £1,200 (14%) Equipment (£600) Promotion (£900) Venue hire (£1,500) Exhibition



					by the general public when exploring the area.	expenses (£1,650) Artists and professional services (£4,025)
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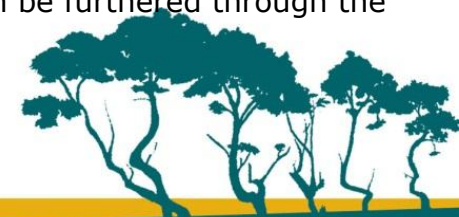
Project Aims/Objectives

- To raise awareness of the distinctive visual landscape as defined by the plants, insects and fungi of the Breckland area, and the rarity value of many of these.
- To enhance the enjoyment of leisure pursuits by the general public when exploring the area.
- To introduce and/or develop landscape appreciation, drawing and painting skills in water-colour through practical workshops

Delivery Partner organisations:	
<i>Organisation:</i> Forestry Commission Breckland Society Brandon Country Park	<i>Role:</i> Conservation Officer (Neil Armour-Chelu Expert Wildflower sites) Wild flower locations & collections Fungi expert & specimen collector (tbc)

Project Need

- One third of the UK's Biodiversity Action Plan species are found in the Brecks and there is an opportunity to raise awareness of the rich biodiversity of the area.
- There is a need for a visual record through botanical illustrations of the plant species and insects found in the Brecks, especially those which are rare and endangered. (For example, the recording of these species enhances the work being undertaken by Plantlife on the restoration of Breckland heathland sites to support self-sustaining populations of endangered Breckland plants on Knettishall Heath.)
- The current nationwide resurgence of interest in botanical painting and the skills involved can be furthered through the



art workshops.

- By engaging directly with the public through interpretive art the BNG scheme is broadening its appeal through botany and art skills.
- "Painting a Pine Line" workshop is a natural correlation with BNG "Pine Lines and Pine Connections" project.
- Involvement with the local community in discovering the wild flowers, insects and fungi within Breckland helps to ensure their survival and preservation through careful identification of species and understanding of their specific needs.

Detailed Project Description

- 4 free workshops per year using supplied material (art and fresh specimens) to be offered over a period of 3 years, totaling 12. Held on Saturdays.
- Subject areas for 1st year to be repeated in years 2 and 3.
- To be advertised throughout the East Anglian region with special emphasis on local communities to appeal to an adult audience comprising tourists and local residents with places per workshop available for those with some physical limitations. Publicity to be covered by posters, flyers, free listings in newspapers, art groups, websites, disability groups. Application forms for places listed on Eventbrite website, "Breaking New Ground" website and publicity and telephone contact.
- 20 places made available per workshop, with 2 tutors and 1 expert for each.
- 12 workshops will involve 249 people (240 attendees, 5 tutors and 4 specialists).
- All workshops to be offered at Santon Downham Village Hall with advanced booking necessary and a £5 registration fee. This income will ensure attendance and help offset the cost of the hire of the Hall.
- Workshops will be run to coincide with the natural flowering season of the plants and fungi.
- Fresh specimens will be provided for Workshops 1,2 & 4 and photographs for no.3.
- **NB** Wild flower specimens will be those most commonly found occurring locally from large sustainable populations, eg. broom, linaria, campion. etc. and not collected from any sites of low or sensitive populations, or rare and endangered species.
- W/shop hours: 9.30am - 4.00
9.30 - 10.30 Specialist illustrated talk by expert
10.30 - 12.00 Drawing session 12.00 - 1.00 Lunch (not provided)



1.00 - 4.00 Painting session – Review

Workshop 1 in early May: "Painting a Wild Flower in Watercolour" Tutors: Christine Grey Wilson & Isobel Bartholomew

- Illustrated talk on Breckland area by Neal Armour-Chelu identifying locations of significance followed by drawing and painting sessions

Workshop 2 in early July: "Painting Insects and Wild Flowers in Watercolour" Tutors: Robert Dyke & Isobel Bartholomew

- Illustrated talk by Robert Dyke on the Moths and insects of Breckland & their dependant plants followed by drawing & painting sessions.

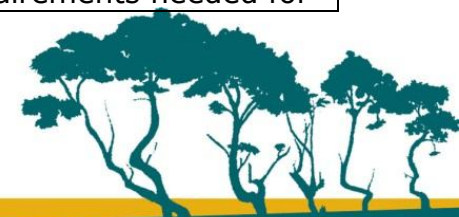
Workshop 3 in September; "Painting a Pine Line in watercolour"

- Tutors: Sheila O'Brien & Isobel Bartholomew
- Illustrated talk on the history of Pine lines followed by drawing and painting sessions, working from photographs.

Workshop 4 in November: "Painting Fungi in Watercolour"

- Tutors: Reinhild Raistrick & Isobel Bartholomew
- Illustrated talk on the Fungi of Breckland followed by drawing and painting sessions.
- An exhibition of work produced in year 3 in association with end of project celebratory event. The 4 best paintings from each workshop totaling 48 will be mounted, covered and displayed on boards and table easels provided on loan by IBA. Further mini touring exhibitions to be held around Breckland at Nature Reserves and Visitor Centers, eg. Brandon Country Park, Green Britain Center, Weeting Heath Nature Reserve, High Lodge Visitors Center, & Lackford Lakes throughout 2017

Outputs and Outcomes		
Activity	Outputs	Outcomes
Specialist talks on 4 specific areas, wildflowers, landscape, insects	Identification of specific Breckland sites & the plants, insects and fungi therein	Individual visits to local reserves etc. improving local knowledge and understanding of requirements needed for



& fungi		conserving & preserving floral, insect and fungal heritage
Drawing & painting in watercolour	80 persons per year x 3 yrs learning or developing drawing & water colour skills	Enrichment of leisure activities based on local knowledge
Art sessions	Production of possible 80 paintings per year x 3 yrs.	Exhibition of selected work in yr. 3

Location

All Workshops to take place in Santon Downham Village Hall on Saturdays

Landowner

Sylvia East (contact for wild flower collection on land surrounding Hall)

Christine Grey-Wilson (from garden)

Rob Dyke (from garden)

Brandon Country Park "Fungal Foray" collection

Audiences

Adult general public including those with some physical disabilities.

To offer skills (ie botanical art) to a wide range of people with no previous or limited experience

Practical sessions in drawing and painting using fresh specimens, developing practical skills and enhancing self-esteem through talks given by experts in their field.

The project will contact physical disability groups & liaising with appropriate councils who represent those with English as a second language.



The project will widely advertising through newspapers, websites, libraries, art groups, Adult Education Colleges, Nature reserves, UEA, John Innes Foundation, Sainsbury Centre, area events listing and magazines.

The application form for a place on a workshop will contain basic requirement questions together with an opportunity for those with limited language proficiency to gain further information. When approaching specific groups representing those with physical disabilities and learning limitations, the necessary requirements will be fully discussed so that they are confident that participants can enjoy the day to the full.

Volunteers

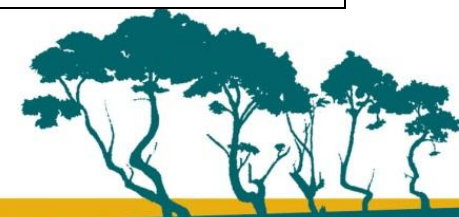
Volunteers will be engaged to set up the project exhibition featuring the best work by workshop attendees, and further displays within the Brecks area will be delivered on a voluntary basis.

Legacy - Securing lasting benefits

- The project aims to introduce the public to the Brecks by delivering in depth knowledge of the plants & fungi found there.
- Encourages visits to local reserves thus enriching leisure activities.
- Benefits to the population through passed on art appreciation skills which last a lifetime.
- Development of personal skills of plant identification and observational powers.
- Encouragement of the need to be aware of the impact on plants and insects that can come about through climate change, and agricultural practices and the value of protecting current populations of already endangered species so that the heritage of Breckland can be enjoyed by future generations.

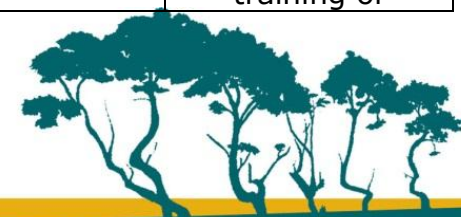


Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Low interest by public	Low	Low	Monitoring of bookings Deadlines set for reservations Re-advertise + new locations Replacement to be found from IBA members
Tutors unavailable (eg ill health)	Low	Low	Replacement to be found
Expert unavailable	Low	Low	Replacement to be found
S.D.Village Hall unavailable	Low	Med	Alternative location eg. Green Britain Centre, Swaffham
Seasonal availability of - Flowers	Med	Low	Specimens sought further afield
Fungi	Med	Low	Specimens sought further afield; resort to photos
Incorrect expectations of course	Low	Low	Clear wording of adverts describing day's activities
Attendee numbers lower than expected thus reducing Registration Fee contributions	Low	Low	Close monitoring of Yr. 1 with added advert campaign

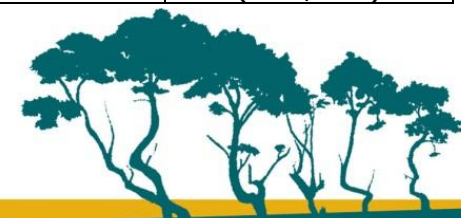


C19 – Landscape Revolution

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
C19: Landscape Revolution	University of East Anglia	For each parish within the BNG LPS area the project will bring together volunteers from the local community who are interested in the historic environment. We will train and support these volunteers to carry out a detailed survey of cartographic and other documentary sources to establish past land use, vegetation and landownership to create an extensive GIS dataset and mapping alongside an on-line resource to enable continued community led research into local landscape history	Local communities, interest groups, volunteers	<p>Involvement of 50 volunteers from Parishes in the BNG LPS area in the study of the landscape/ environmental history of their own areas.</p> <p>GIS mapping, written research on landscape history in the BNG LPS area.</p> <p>Provision of an on-line toolkit for communities to engage in</p>	<p>Increased understanding of the relationship between land management and the appearance and ecology of Breckland</p> <p>Increased awareness of these relationships, and a developed sense of 'ownership' of the local environment by communities.</p> <p>Enhanced participation and</p>	<p>Project total: £137,478 HLF: £47,310 (34%) In-kind: £29,668 (22%) Volunteer: £60,500 (44%)</p> <p>Professional services (£29,668)</p> <p>Web pages and on-line resources (£4,286)</p> <p>Recruitment, development of training materials and training of</p>



				<p>landscape history research</p> <p>Lectures and day schools on the Landscape history of the Brecks delivered to at least 200 members of the public.</p> <p>Online materials recording results of research undertaken by volunteers; photographs taken by volunteers of modern landscape and archival material; web pages.</p>	<p>understanding of landscape history throughout the study area, and the wider Breckland area.</p> <p>Increased local knowledge of the landscape history of the Brecks.</p>	<p>volunteers (£16,217)</p> <p>Creation of historic environment Toolkit (£3,730)</p> <p>Day schools (£3,486)</p> <p>Volunteer support (£14,916)</p> <p>Research expenses (£1,650)</p> <p>GIS Mapping (£3,025)</p> <p>Volunteer led Field work, research production on online resources (£60,500)</p>
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Project Aims/Objectives

This project will raise awareness of the dramatic transformation of the Brecks' landscape which took place from around 1700 onwards. During this period the combined impact of heathland enclosure, tree planting and the growth of landed estates led a widespread reconfiguration of the landscape, changing the balance of heathland, farmland, parkland and forestry.

Project Need

Breckland's 'natural' heritage, and its historic landscape, are often seen as separate areas of study but neither can be understood in isolation from the other. The message that the Brecks distinctive flora and fauna have been shaped by human management practices throughout history needs to be widely disseminated, both to local landowners (institutional and individual) and to the wider community. By actively involving local people in research into the Brecks past this project will help preserve and record its landscape heritage into the future. The relationship between man and the natural environment lies at the core of Breaking New Ground, and our project relates closely to a number of other proposed projects within the scheme.

Detailed Project Description

The Brecks rich natural history, as much as its cultural landscapes, has been shaped by centuries of human exploitation, yet we know little in detail about the precise impacts of past management practices. The project would aim to:

- Discover more about the management and character of heaths and arable land in the period during and after the 'agricultural revolution', about the intensity of grazing by sheep and rabbits on heaths, and the extent to which these were exploited as a source of fuel, and about the nature of arable land in this period, especially the extent of outfield 'brecks'.
- Assess how these 'traditional' landscapes were modified in the later eighteenth and nineteenth centuries by heathland reclamation, new methods of farming, and the widespread establishment of parks and plantations.
- Ascertain how these new kinds of environment, as well as surviving areas of heath and warren, were in turn transformed by agricultural depression in the period after c.1880, paying particular attention to the abandonment of arable land, the reduction in the intensity with which heaths were exploited, and the expansion of Forestry Commission plantations



Some of these themes will complement other projects which have been developed for the Landscape Partnership, including those on the history of Thetford Forest, the management and restoration of the pine lines and those by the Brecks Society on sheep farming and warrening in the Brecks. We envisage that the research, training and engagement proposed here will complement and enhance the work done on other projects.

At the core of the project is the idea that local communities should not be regarded as a passive audience for research, but should instead be engaged as active participants in it. To this end, we would hold a series of training sessions, field schools and workshops in the region, encouraging groups and individuals to research the landscape history of their own particular areas/parishes, under supervision from members of the project team. The information uncovered would be used to produce:

- Digital content for the Breaking New Ground website, including maps based on GIS mapping and other resources for exploring the historic environment of the Brecks.
- A series of courses, day schools and events to celebrate the results of the project and share this within the wider community.
- A short publication, co-produced with the volunteers, describing the findings of the project in an accessible form.
- A historic environment toolkit which would enable local communities within the wider Breckland area to research the landscape history of their community.

A more general and less quantifiable outcome, however, would be the increased awareness of, and sense of 'ownership' of, the local landscape which results from active involvement in research of this kind.

<i>Outputs and Outcomes</i>		
Activity	Outputs	Outcomes
Involvement of volunteers from local communities in the study of the landscape/ environmental history of their own areas.	GIS mapping, written research on landscape history.	Increased understanding of the relationship between land management and the appearance and ecology of Breckland.



Creation of historic environment toolkit with input from volunteers.	Provision of digital toolkit for communities within wider Breckland area.	Increased awareness of these relationships, and a developed sense of 'ownership' of the local environment by communities.
Training for volunteers involved in the project – research skills on reading the landscape, including fieldwork and archival documents.	Training provided to at least 50 volunteers across study area (who will then be in a position to train other volunteers).	Enhanced participation and understanding of landscape history throughout the study area, and the wider Breckland area.
Courses and day schools on the landscape history of Breckland.	Courses and day schools delivered to at least 200 members of the public.	Improved knowledge and experience of landscape history and research skills.
		Increased local knowledge of the landscape history of the Brecks.

Location

This project will embrace the whole study area, on a parish basis.

Audiences

The project will aim to engage with a wide range of audiences, ranging from landowners (both institutional and individual) and conservation groups, to local people with little prior interest in landscape history/environmental history.



The project will engage local landowners, conservation groups and communities with the long-term impact of particular land management practices on landscape and environment. In this area, more than most, understanding the past is the key to safeguarding the future.

As emphasised earlier, the project will view local people as active participants in research, not as passive receivers of its results. The project will provide direction and training, and a specific 'toolkit' which will enable the fruits of local research to be integrated with a wider regional picture.

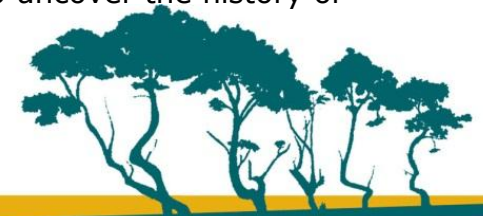
The project will work in association with established local groups such as the Breckland Society but in addition are keen to contact new audiences through liaison, in particular, with the Norfolk Rural Community Council and other stakeholders within the Partnership.

The project will significantly improve engagement with local heritage with local communities – many elements of the Breckland landscape which are considered to be 'normal' and perhaps not particularly special, such as marl pits, are in fact representative of its long and complex history. As well as celebrating the well-known distinctive features of the landscape, such as the pine lines, this project will also highlight the lesser known, and perhaps lesser appreciated features of the historic landscape.

The recruitment of volunteers will be handled in a sensitive and approachable fashion by emphasising the accessibility of historical research and landscape history, and the support on offer by the University of East Anglia and other partners. All training materials will be provided in digital and paper format, as will the historic environment toolkit. Transport will be provided, or travel costs refunded, for all training events and meetings. The volunteers will work as a group, rather than individually, encouraging joint-working and creating a support network of like-minded people, alongside support from the University.

Volunteers

Volunteers lie at the core of this project. A team of volunteers will be recruited who will receive high-quality training in landscape history from University academics, and who will undertake research and fieldwork to help uncover the history of



the Breckland landscape. They will be actively involved in the development and testing of a historic environment toolkit which will enable other members of the community throughout Breckland to undertake similar research in landscape history. They will also be encouraged to share their findings, by uploading information onto the project website, and by participating in events and day schools to share their results.

Active involvement in research engenders a sense of 'ownership' of the landscape and its history in a way that no manner of passive acceptance of information is able to do.

Volunteers will be recruited from within the study area, by targeting existing groups such as the Breckland Society, but also by using the local press, the established communication network of the Partnership and digital media. A series of drop-in events will be held for interested people and groups, followed by a series of training events throughout the course of the project. The volunteers will be in regular contact with each other, as a group, and with the project team, with regular meetings and sessions throughout the life of the project.

The project costs include the training of volunteers, and expenses. Previous experience has demonstrated that funding travel and research costs are vital to maintain volunteer interest and engagement throughout the course of a long project.

The volunteers will be covered by the insurance of the University of East Anglia.

Legacy - Securing lasting benefits

The historic environment toolkit will leave a significant legacy. Not only can this be used by communities within the study area during and beyond the life of the project, it can also be used by communities within the wider Brecks area, or outside the Brecks. It will be available freely online to any user interested in researching landscape history in their community.

The GIS mapping and other results produced as part of the research element of the project will be shared online, but can also be used by landowners, local authorities and parish councils beyond the life of the project to inform decisions about management and heritage.

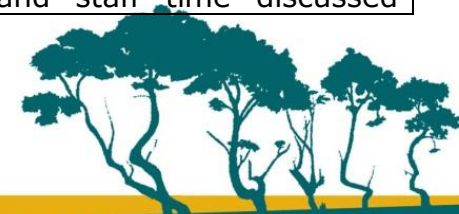


The long-term availability of the toolkit and other resources will be via the University of East Anglia, alongside the online presence of the Partnership. The GIS mapping and other results can be made freely available using the ADS hosting service, and can be held by the University of East Anglia.

Conditions & Consents

N/A

Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Change of staff at the University of East Anglia.	Low	Low	If there are any changes of staff at the University of East Anglia, then another member of the School of History will take their place, and receive appropriate support from the other members of the team.
Lack of volunteer recruitment.	Low	Medium	We will plan our recruitment of volunteers carefully to avoid this – in our experience, such projects tend to over-recruit, rather than under-recruit. We will develop a strategy for recruitment of volunteers early in the project, and stay responsive to developments.
Over-recruitment of volunteers	Medium	Medium	The costs and staff time discussed

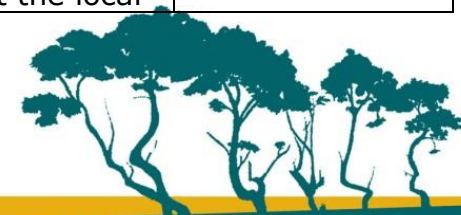


			<p>above relate to a group of around 50 volunteers. Should we recruit more than that, the experience of the volunteer group may be diluted. Should this happen, we will plan to train doctoral students from the University of East Anglia as volunteer managers in order to manage a higher number of volunteers more effectively. This will, in turn, enhance their own professional development.</p>
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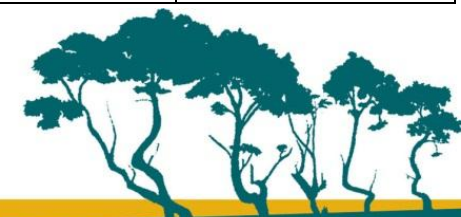


D1 – Discovering the Archaeological Landscapes of the Brecks Training Programme

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
D1: Discovering the Archaeological Landscape of the Brecks Training Programme	Suffolk County Council	<p>The project aims to increase community engagement in the project area and train volunteers in archaeological techniques to support and equip them with the necessary skills required to link into other BNG projects, and support participants to plan and carry out other community-based archaeological projects.</p> <p>Volunteers who have undertaken this training will then be encouraged and supported to undertake researches of their own, and their work will culminate in a one-day</p>	Volunteers, local communities, interest groups,	<p>Introductory event for 50 project participants</p> <p>12 Training events for 20 participants at each event across yr 1 and yr 2 on subjects including Field-walking, test pitting, finds identification, air photo interpretation and using archaeological archives</p>	<p>Increased awareness of the archaeology of the Brecks.</p> <p>Body of local people trained with archaeology skills</p> <p>Communities supported to undertake local, community based archaeological projects</p> <p>Increased pool of knowledge about the local</p>	<p>Project total £75,520 HLF: £38,020 (50%) In-kind: £10,500 (14%) Volunteer: £27,000 (36%)</p> <p>Professional Services (£10,500)</p> <p>Introductory event (£2,020)</p> <p>Training events £11,220</p>



		conference celebrating community archaeology in the Brecks.		<p>18 follow-up events to support community led Archaeological projects</p> <p>Field walking and Archival research training for Project B2</p> <p>Closing conference for 100 delegated</p> <p>Newsletter for participants and interested parties</p> <p>Social media provision and web-based information</p>	<p>heritage</p> <p>On-going community heritage research</p> <p>A wider understanding of the historic assets of the project area</p>	<p>C8 Training events</p> <p>Closing conference (£3,120)</p> <p>Volunteer and Community led projects (£34,020)</p> <p>Social Media, publicity, newsletters (£11,490)</p> <p>Evaluation (£3,150)</p>
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Project Aims/Objectives

- To increase local communities' knowledge and understanding of their archeological heritage.
- To provide volunteers with the skills and experience necessary to investigate and record their archaeological heritage.
- To provide a suite of web-based and hard-copy resources for those interested in investigating the archaeological heritage of the Brecks.
- To support a continuing programme of community archaeology in the Brecks.
- To host a one-day conference celebrating community archaeology in the Brecks.

Delivery Partner organisations:	
Organisation: Norfolk Record Office Suffolk Record Office	Role: Delivery of training session Delivery of training session

Project Need

Archaeologists now recognise that the Brecks contains an internationally important archaeological landscape. This importance is due partly to the very limited levels of development it has witnessed, with large parts of the landscape under Forestry Commission or Ministry of Defence stewardship. However, the prehistory of the area, although evidently of importance, is actually poorly understood and there are few opportunities for public engagement apart from the visitor experience at Grimes Graves Neolithic flint-mining site.

'Breaking New Ground' will therefore assemble a team of landscape investigators and give them full training in order to undertake field walking, test-pitting and limited excavation. This team will then be available to monitor the effects of any operations that disturb the ground; gather data that is useful for management decisions and which will extend the academic understanding of the area's prehistory (and of course history – any investigations would record everything, regardless of date!) and disseminate this through the website; the exhibition and by giving presentations. They will also be trained in the analysis and interpretation of artefacts and the preparation of archaeological reports with the aim that eventually the team will become self-sufficient as possible. Their work will establish a rolling, long-term project that will steadily increase its coverage and understanding of the Brecks.



The need for this project is the demand for a landscape approach to the monitoring and research of the Brecks' heritage with a team of trained volunteers who can readily respond to ground-cleared sites (especially within Thetford Forest) before re-planting occurs and help and support the professional archaeologists in their work.

Detailed Project Description

This project offers members of local archaeological groups and societies, as well as other interested individuals, the opportunity to gain knowledge, skills and confidence in carrying out their own archaeological research and fieldwork. The project will introduce participants to a wide range of historical and archaeological resources, including both primary and secondary sources, and will teach them how to access the information they require from these sources. A series of practical workshops will provide volunteers with training in a range of archaeological techniques and research skills to enable them to carry out their own projects with confidence.

It also connects to and compliments the outputs of Landscape Revolution; Flint in the Brecks; the Internal Archaeology of the Warrens; the Heritage Trail, the Brecks Ground Disturbance Experimental Management Project and the Brecks Wildlife Sites Project.

This project offers members of local archaeological groups and societies, as well as other interested individuals, the opportunity to gain knowledge, skills and confidence in carrying out their own archaeological research and fieldwork. The project will introduce participants to a wide range of historical and archaeological resources, including both primary and secondary sources, and will teach them how to access the information they require from these sources. A series of practical workshops will provide volunteers with training in a range of archaeological techniques and research skills to enable them to carry out their own projects with confidence.

Introductory Event

The event will introduce the project and outline the training programme across the two counties and call for volunteers. A discussion with the participants could highlight local sites for activities. The project could then be tailored to the areas where volunteers come forward. Areas could include Thetford, Weeting and Mundford. The event is aiming to attract 50 people.



Training Events

Twelve training events will be held across the project area during the course of the project. Six of these will be held in the first year of the project and six will be held in the second year. The first year's events will be run as three mirrored pairs of training days and will include fieldwalking, test-pitting and historic building recording. The second year's training events will also comprise three mirrored pairs and will include finds identification, air photo interpretation and using archaeological archives. The events are aiming to attract 20 participants per event.

Closing Conference

The event will celebrate the success of the project and identify what has been found and be an opportunity to thank volunteers. The event is aiming to attract 100 people.

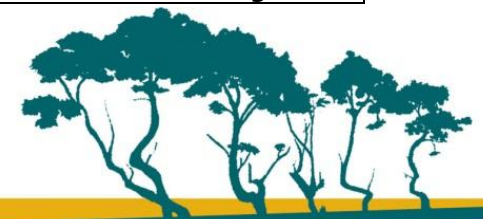
Follow Up Visits

Following the training events continued support will be provided to local communities to carry out similar projects in their area. It would be anticipated that three follow-up visits will be undertaken for each of the training events.

Social Media and Publicity

Throughout the project there will be regular newsletters sent out to interested parties. The newsletters where possible will be sent via email and made available on the BNG website. A number will also be printed to be disseminated to libraries and local communities where email is not available. Events will be promoted by social media, the Norfolk Heritage Explorer website, the Suffolk County Council website and the Breaking New Ground website.

Outputs and Outcomes		
Activity	Outputs	Outcomes
<i>Introductory Event</i>	<i>50 volunteers to be introduced to the archaeology of the Brecks and given an overview of the training to be offered.</i>	<i>Body of local people with increased awareness of the archaeology of the Brecks.</i>
<i>Training Event 1a: Training volunteers</i>	<i>20 volunteers gain skills in</i>	<i>Body of local people trained in archaeological</i>



<i>in archaeological testpitting (Norfolk: Thetford)</i>	<i>archaeological test-piting</i>	<i>test-piting</i>
<i>Training Event 1b: Training volunteers in archaeological testpitting (Suffolk: West Stow)</i>	<i>20 volunteers gain skills in archaeological test-piting</i>	<i>Body of local people trained in archaeological test-piting</i>
<i>Training Event 2a: Training volunteers in archaeological fieldwalking (Norfolk: Thetford)</i>	<i>20 volunteers gain skills in archaeological fieldwalking</i>	<i>Body of local people trained in archaeological fieldwalking</i>
<i>Training Event 2b: Training volunteers in archaeological fieldwalking (Suffolk: West Stow)</i>	<i>20 volunteers gain skills in archaeological fieldwalking</i>	<i>Body of local people trained in archaeological fieldwalking</i>
<i>Training Event 3a: Training volunteers in historic building recording (Norfolk: Thetford)</i>	<i>20 volunteers gain skills in historic building recording</i>	<i>Body of local people trained in historic building recording</i>
<i>Training Event 3b: Training volunteers in historic building recording (Suffolk: West Stow)</i>	<i>20 volunteers gain skills in historic building recording</i>	<i>Body of local people trained in historic building recording</i>
<i>Training Event 4a: Training volunteers in archaeological finds identification (Norfolk: Thetford)</i>	<i>20 volunteers gain skills in archaeological finds identification</i>	<i>Body of local people trained in archaeological finds identification</i>
<i>Training Event 4b: Training volunteers in archaeological finds identification (Suffolk: West Stow)</i>	<i>20 volunteers gain skills in archaeological finds identification</i>	<i>Body of local people trained in archaeological finds identification</i>
<i>Training Event 5a: Training volunteers in the use of archives (Norfolk: Thetford)</i>	<i>20 volunteers gain skills in the use of archives</i>	<i>Body of local people trained in the use of archives</i>
<i>Training Event 5b: Training volunteers in the use of archives (Suffolk: West</i>	<i>20 volunteers gain skills in the use of archives</i>	<i>Body of local people trained in the use of archives</i>



<i>Stow)</i>		
<i>Training Event 6a: Training volunteers in air photo interpretation (Norfolk: Thetford)</i>	<i>20 volunteers gain skills in air photo interpretation</i>	<i>Body of local people trained in air photo interpretation</i>
<i>Training Event 6b: Training volunteers in air photo interpretation (Suffolk: West Stow)</i>	<i>20 volunteers gain skills in air photo interpretation</i>	<i>Body of local people trained in air photo interpretation</i>
<i>18 planned follow-up visits by NCC and SCC staff to support community led events</i>	<i>Volunteers continue to receive advice and support following the training sessions</i>	<i>Body of local people confident to carry out their own community led projects Wider understanding of the Historic Assets of the project area</i>
<i>Production of regular newsletters</i>	<i>Volunteers and people interested in the project able to read about progress</i>	<i>Body of local people kept upto date with the project. Wider understanding of the Historic Assets of the project area</i>
<i>Community-led archaeological research projects in the project area</i>	<i>180+ volunteers working in the project area</i>	<i>Body of local people working on archaeological activities in the project area Wider understanding of the Historic Assets of the project area</i>
<i>Closing Conference (West Stow)</i>	<i>100 participants share experiences of community archaeology in the project area</i>	<i>Body of local people with raised awareness of their archaeological heritage and how to go about studying it.</i>

Location

Locations of all events to be confirmed, although it is anticipated that events will be held at a variety of venues throughout the BNGLPS area.



Landowner

TBC as required

Audiences

These events are open to all, but it is expected that the main audience is residents of the project area who wish to find out more about the historic environment and archaeology of their local area, but who do not yet know how to go about this and who want to learn more.

This project will provide a focal point for those who wish to find out more about their immediate historic environment and how to go about studying it. The project will provide access to resources and specialists that would not necessarily be available otherwise, and make these available via a number of media.

This project will give individuals the skills, experience, guidance and training necessary for them to be able to undertake a range of different types of archaeological fieldwork and investigation.

Existing audiences will be reached via wider project publicity, and more specifically archaeological outlets, it is hoped that new and wider audiences will be brought in via the publicity surrounding the wider project. The project will also use the web, social media and print media, including a project newsletter, to reach these wider audiences.

Again, a lead will be taken from the wider needs of the project and events will be held locally to encourage participation.

Engagement will be developed by enabling individuals to have a greater understanding of their historic environment and by opening up the possibility of them undertaking additional fieldwork and research of their own with advice and guidance from established heritage professionals.



By advertising the sessions as widely as possible and by emphasising that no previous experience is necessary, it is hoped that individuals and groups who would perhaps usually be reticent will be encouraged to come forward and participate.

There is a general level of interest which people across Norfolk and Suffolk exhibit. There are several groups and individuals within the project area with whom both NCC and SCC have existing relationships, and these might be useful for making initial inroads into the area.

Brecks-based voluntary groups came together to carry out test pit surveying in the area around Grimes Graves to determine the extent of Neolithic flint-mining. Training was provided by English Heritage and Suffolk County Council's Archaeological Unit with the help of the Forestry Commission. As a result of all these projects, there is a database of 92 volunteers keen to be involved in future projects which will further knowledge and understanding of the Brecks 'landscape.

Volunteers

Each of the sessions will be aimed at volunteer participants, who will in turn be encouraged to use the skills developed in these sessions to undertake further works of their own, initially with support. It is envisaged that the final celebratory conference will be largely coordinated and delivered by those who have become involved through the training events.

The underlying ethos for this part of the project is community participation and engagement. Heritage professionals do not have the spare capacity to undertake detailed archaeological investigations or monitoring of particular areas, and it is hoped that the body of volunteers recruited through this work will be able to undertake work of this kind within the project area.

Volunteers will be recruited via wider project advertising and the initial introductory event, as well as through following up on contacts already collected in earlier projects. Volunteers will be trained during the course of the specific training events. They will then be encouraged to develop their own interests and activities, drawing on the knowledge and guidance of historic environment professionals as required.

Volunteers engaged in NCC / SCC activities under supervision are covered by their respective policies. Volunteers undertaking further fieldwork will be doing so at their own risk, unless other insurance options are put in place.



Legacy - Securing lasting benefits

The project will result in a body of archaeological aware volunteers who will be capable of undertaking archaeological fieldwork and monitoring projects during and beyond the lifespan of the project. It is hoped that one or more local groups might form as a part of this process and that they too will continue to study the historic environment of the study area beyond the end of the project.

Longer term, both NCC and SCC have a commitment to and provision for community engagement and are therefore able to continue to offer support to those volunteers who have come up through the project.

Conditions & Consents

Usual SCC and NCC policies will apply to all events under NCC/SCC control.

Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Lack of volunteers	Med	Med	Publicise the project as widely as possible. Continue to recruit volunteers throughout the project.
Access limitations	Low	High	Speak to landowners at an early stage and have an alternative location, if necessary
Timescales - Project over runs.	Med	High	Flexibility built in to enable events to be run within the project's timescale
Organisational - A lack of those with the skills needed to deliver all the	Low	Med	Ensure that there is a network of supportive partnerships and contacts

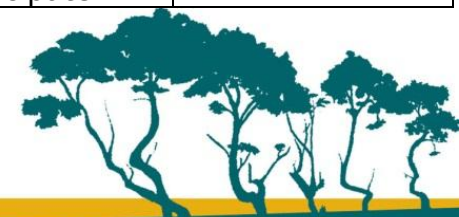


components of the project			so that there is a wide skills base from which to draw. Have systems in place to give early warning of potential problems.
Environmental - the landscape of the Brecks is inaccessible because of an outbreak of plant or animal disease, fire, flood or other natural or man-made disaster.	Low	Med	Events are planned around towns and villages. Have alternative sites in mind in case of potential problems. There is flexibility within the project to run activities at a later date, if necessary



D2 – Caring for the Built Heritage of the Brecks

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
D2: Caring for the Built Heritage of the Brecks	Orchard Barn Environmental Education CIC	This project will deliver a series of 12 free-to-attend 1-day workshops at local community venues in the Breaking New Ground catchment area to help people living in or associated with heritage properties to understand the importance of maintaining and repairing their local built heritage and provide them with the self confidence and motivation to get engaged in this process.	Local communities, owners of heritage buildings / assets, volunteers, interest groups	12 six hour workshops – (360+ participants) covering; - theory and practice of flint walling - traditional brick laying - lime mortar and rendering - earth rendering - working with cob and clay lump - damp proofing your home - introduction to timber frame repairs	Heritage building skills training for participants Increased motivation and self-confidence and a change in attitude to the care and repair of heritage buildings and assets Raised awareness of heritage skills training activities and promote opportunities to participate in	Project total: Project total (£17,940) HLF: £16,140 (90%) In-kind: £0 Volunteer: £0 Cash: £1,800 (10%) Professional services per session including materials (£11,940) Venue hire & promotion (£6,000)



				<ul style="list-style-type: none"> - timber framing techniques - coppicing and use of coppice materials - wattle and daub - beaten earth flooring - green woodworking <p>Including practical demonstrations, Q & A with professionals, networking opportunities, links to other BNG project opportunities.</p>	<p>heritage volunteer projects</p> <p>Sign-posting for other heritage activities within the project.</p>	
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Project Aims/Objectives

The aim of this project is to provide learning opportunities to understand how to properly manage and maintain the built heritage of the Brecks. Owners of listed buildings and other built heritage assets will be encouraged to participate in courses designed to increase awareness and understanding as well as provide opportunities for hand-on learning.



Project Need

The Brecks has very distinctive vernacular architecture which is the result of its unusual history and geology. Pressures from modern housing needs and large scale development threaten to swamp those elements that contribute to the area's built heritage. Modern building techniques and efficiency have resulted in a loss of skills within the building trade that are needed to conserve and restore built heritage assets as well as reflect those elements that make the area so special in new housing contraction. Many older buildings have suffered as a result of the use modern maintenance techniques and there are fewer opportunities for builders and owners of built heritage assets to learn the traditional skills.

Detailed Project Description

This project will deliver a series of 12 free-to-attend 1-day workshops at local community venues in the Breaking New Ground catchment area to help people living in or associated with heritage properties to understand the importance of maintaining and repairing their local built heritage and provide them with the self-confidence and motivation to get engaged in this process. The workshops will also raise awareness of heritage skills training activities and promote opportunities to participate in heritage volunteer projects that will be made available through other strands of the Breaking New Ground Project. The Care & Repair workshops will be a key sign-posting activity for other heritage activities within the project. The workshops will be delivered by Orchard Barn environmental education (OBee); a Suffolk based Community Interest Company (CIC) which has extensive experience of providing practically-orientated training in a wide range of heritage skills.

Workshop Format

The workshops will be held in local community venues within the Breaking New Ground project catchment area. Each workshop will be expected to support an average of 50 participants. People attending the 1-day workshops will receive the following:

- Attendance at a 6 hour duration workshop at a local community venue
- A series of presentations and talks by two heritage experts that will be tailored according to 12 heritage theme areas which are all important conservation skills for the local area;



- theory and practice of flint walling
- traditional brick laying
- lime mortar and rendering
- earth rendering
- working with cob and clay lump
- damp proofing your home
- introduction to timber frame repairs
- timber framing techniques
- coppicing and use of coppice materials
- wattle and daub
- beaten earth flooring
- green woodworking
- Practical demonstrations for that workshop heritage theme area
- An opportunity to ask questions and get advice from heritage experts
- An opportunity to meet other local people who share a similar interest in local heritage
- Receive details of heritage skills training and specific volunteering project opportunities to be delivered through other strands of the Breaking New Ground project over the coming 6-12 months.

Project Benefits

This project will provide the following benefits for the Breaking New Ground project:

- It will enable up to 600 people in the local catchment area to get an introduction to a range of practical heritage skills that are relevant to the Breckland area. Participants will achieve a basic level of learning that will stimulate interest and create an appetite to find out more, and will encourage them to try their own hand.



- It will increase motivation and self-confidence of local people to get involved with conservation of their local built heritage. This will help to change attitudes to the care and repair of older and listed buildings in the area and over time will contribute to improving the quality of the local built heritage in the Breckland area.
- It will raise awareness of specific heritage training and volunteering opportunities being provided elsewhere on the Breaking New Ground project and encourage participation by local people.
- By timing the workshops for the autumn/winter period it will act as a feeder for Breaking New Ground practical projects being held each spring and summer.
- Provide detailed participant feedback from the workshop, for example identifying specific demand for follow-up training and volunteering activities and providing a means to pre-register people to support other heritage volunteering opportunities.



D3- Heritage Skills Work Placements

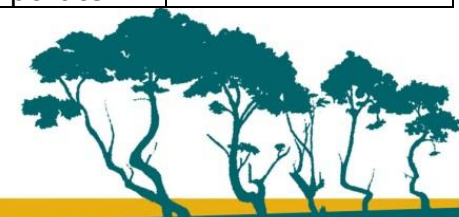
Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
D3: Heritage Skills work placements	BNG team (Norfolk Historic Environment Service, Suffolk Archaeological Service, RSPB,	This project will co-ordinate the placement of students with Partner organisations and seek additional opportunities throughout the BNG project delivery period	Local students, Local heritage and landscape management organisations and interest groups	12 work placement opportunities with Landscape heritage and biodiversity organisations	<p>Improving understanding and knowledge about the heritage and its importance</p> <p>Young people helped towards a career</p> <p>Young people helping to care for their heritage</p>	Project total £8,400 HLF: £8,400 (100%) In-kind: £0 Volunteer £0:
						Placement induction and training (£6,000) Placement expenses (£2,400)

These placements will be provided by BNG deliverypartners alongside deliveryof the BNGLPS



D4 – Geological Landscapes-the Brecks for Land Managers

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
D4: Geological Landscapes – the Brecks for Land Managers	Norfolk Geodiversity Partnership	This project will enable land managers and their advisers to read and understand the basic elements of geodiversity on their land, and in doing so enable them to value and appropriately to conserve such features	Landowners, land managers, interest groups	<p>Day school for 20 participants;</p> <p>Presentation on geodiversity and management land management issues</p> <p>Discussion forum with Q&A session</p> <p>Field visits to four sites</p>	<p>Improved understanding of the physical environment and its conservation as the background for management decisions.</p> <p>Improved awareness of how to conserve and enhance geodiversity features as part of routine land management</p> <p>Examples of ways to incorporate</p>	<p>Project total (£3,623) HLF: £1,561 (36%) In-kind: £2062 (64%) Volunteer: £0</p> <p>Professional services / Day school delivery (£2062)</p> <p>Event costs (£1,561)</p>



					benefits for geodiversity into management decisions.	
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Project Aims/Objectives

The geodiversity of the Brecks is easily overlooked. The area has subtle contours, its slow rivers occupy shallow valleys, its rocks and soils are variations of chalk and sand; our attention tends to dwell instead on its extraordinary wildlife and cultural history. However the character of the area's landscape is dependent on its distinctive but poorly understood Earth heritage. The guardians of this heritage and their advisers are the people whose daily business shapes the Brecks.

This Workshop / Day School will enable land managers, advisers and ecological consultants to read and understand the basic elements of geodiversity on their land, and in doing so enable them to value and appropriately to conserve such features. It will take the form of introductory presentations and workshop discussions followed by field visits to examples of land management benefiting geodiversity.

Delivery Partner organisations:	
Organisation:	Role:
<i>Breaking New Ground Delivery Team</i>	<i>Supplying project delivery framework, including:</i> <ul style="list-style-type: none"> ▪ <i>Event publicity.</i> ▪ <i>Enrollment facilities.</i>
<i>Forest Enterprise</i>	<i>Owner & manager of Lynford Swell Pit, Lynford Hall Pit and Frost's Common field trip sites</i>
<i>Frimstone Ltd</i>	<i>Manager of Feltwell Lodge Quarry field trip site</i>
<i>Farm Conservation Ltd</i>	<i>Information about linkages between agri-environment schemes and geodiversity</i>
<i>Natural England</i>	<i>Information about national policy context.</i>



Norfolk Wildlife Trust	Management of Cranberry Rough SSSI field trip site.
Suffolk Wildlife Trust	Management of Wangford Warren SSSI and Knettishall Heath nature reserve field trip sites

Project Need

Together, biodiversity and geodiversity make up the natural world. Nature conservation has been defined as *'the protection, preservation, management or enhancement and the improvement of understanding and appreciation of flora, fauna and geological and geomorphological features'*⁶.

The Brecks is one of the most distinctive natural areas of Britain, and public interest and conservation action have centred on the area's unique wildlife, habitat and cultural history. Geodiversity, however, is often considered to be an incidental factor to this value, although the Norfolk Geodiversity Audit has identified no less than 95 sites and features of interest in the area, many of them finite in nature. There is a low level of general awareness of the contribution that geodiversity makes to this unique area. This means that the people charged with managing it on a daily basis and their advisers often do not fully value nor understand all dimensions of the Brecks' natural heritage, and are not able to identify key elements of geodiversity in their work, and hence conserve it.

Education and training in types of farming compatible with the environment is one of the objectives of EU agri-environment regulations⁷. The Brecks National Character Area Profile has identified *'Maintaining and improving access to the important geological exposures, rivers and the Neolithic flint mine at Grime's Graves, and providing resources for the management of geodiversity (for example, through conservation and enhancement schemes, or agri-environment schemes)'* as one of the management opportunities identified for the Brecks environment⁸.

The Workshop / Day School will show how decisions about managing the land can taken in a way that respects the contribution of geodiversity to nature in the Brecks, and how it can be integrated with other aspects of land management,

⁶ Glossary of *'Planning for Biodiversity and Geological Conservation - A Guide to Good Practice'* (ODPM, 2006)

⁷ Appleby, M: *'Management incentives for integrating agriculture in the environment'*; in: Davy, AJ (ed): *'Breckland: Looking to the Future'* (Brecks Initiative, 1995)

⁸ *'National Character Area Profile 85: The Brecks'* (Natural England, 2013); page 22.



such as biodiversity in agri-environment schemes, historic environment enhancements or environmental impact assessments.

Because it deals with land management, this Workshop / Day School will enhance many other programmes of 'Breaking New Ground'. For example, it may contribute a fresh dimension to conservation work on the ground, notably 'Conserving the Brecks Wildlife Sites' and 'The Pingo Project'.

Detailed Project Description

The project is a Workshop / Day School introducing land managers and their advisers to the Earth heritage aspect of the Brecks environment. It is planned as a means of consciousness raising and information exchange, to meet the needs identified in section 9 above.

1) Introductory presentation and discussion (2¼ hours maximum) based at Santon Downham Schoolroom, supported by audiovisuals (using PPT presentations via digital projector if required) and paper hand-outs, covering:

- Brecks geodiversity – a brief history of the physical landscape; timescales; linkages with biodiversity and historic environment. Delivered by Tim Holt-Wilson. (½ hr)
- Conserving geodiversity – key issues and approaches in the Brecks landscape; the planning background; key sites in the landscape: SSSIs and Local Sites; geoconservation in Norfolk and Suffolk. Delivered by Tim Holt-Wilson, with input from a landscape officer from Natural England (¾ hr)
- Case study from Essex or Herts, delivered by Dr Peter Allen. (¼ hour).
- Presentation on geodiversity in agri-environment schemes by Sarah Cunningham, Farm Conservation Ltd. (¼ hour)
- Feedback / Show & Tell discussion session by participants, about geodiversity on their land, and its conservation and enhancement, whether carried out intentionally or not. (½ hour)

2) Field visits

- Guided visit to four geodiversity sites in a hired coach, discussing management issues for geodiversity with input from land managers at each. These have been chosen for their value in illustrating land management which benefits geodiversity. This is the current draft list.



Sites & features (in visit order)		Interest	OS grid reference
1. Wangford Warren		Landform conservation issues	TL775844
<u>then either</u>			
2. Feltwell Quarry	Lodge	Geological conservation issues	TL740924
<u>or</u>			
Lynford Lakes		Site interpretation issues	TL820946
3. Lynford, Swell Pit		Geological conservation issues	TL827907
<u>then either</u>			
4. Hockham Common	Frost's	Landform conservation issues	TL946933
<u>or</u>			
Thompson Common		Landform conservation issues	TL938965



Lynford Lakes. An example of multi-faceted site interpretation, bringing together the site's stories of wildlife, geology, archaeology and industrial history. It is managed by Forest Enterprise as a public amenity area. What are the issues, challenges and opportunities of managing a disused mineral extraction site?



Outputs and Outcomes		
Activity	Outputs	Outcomes
Introductory presentation	20 land managers & advisers introduced to Brecks geodiversity and its management issues	Improved understanding of the physical environment and its conservation as the background for management decisions.
Discussion session	20 land managers & advisers discuss geodiversity features and potential conservation & enhancement on their land	Improved awareness of how to conserve and enhance geodiversity features as part of routine land management
Field visits	20 land managers & advisers introduced to examples of management issues at four sites	Examples of ways to incorporate benefits for geodiversity into management decisions.

Location

The introductory presentation will be given at Santon Downham Schoolroom, near Brandon, Suffolk – TL817877. There will be field visits to four locations in the BNGLPS area.



Landowner

Forest Enterprise and Norfolk Wildlife Trust

Audiences

The 'Geological Landscapes – the Brecks for Land Managers' Workshop aims to engage a wide range of land owners, managers, advisers and ecological consultants in the Brecks, particularly major ones such as the Forestry Commission, Elveden Estate, the Crown Estate, the Wildlife Trusts and government agencies such as Natural England. It will be open to anyone interested in developing landscape management practices which integrate geodiversity with biodiversity and the historic environment. This audience has been chosen because there is a perceived need to develop a more integrated approach to managing the natural environment of the Brecks. In turn, this will mean that conservation and interpretation of natural heritage can be enhanced, which will feed into other BNG programmes.

The Workshop will provide a mix of communication approaches, including audiovisual presentation, outdoor encounter and opportunities for discussion and exchange of information.

The Workshop will be a mixture of specialist presentation and experiential encounter in the field. It will promote learning about the Earth heritage of the Brecks by providing an opportunity for participants to discover new information and also a forum for related questioning and discussion. The field trip will provide an opportunity for encountering elements of Earth heritage and examples of management practices within the working landscape.

The Workshop will be open to all, so it will engage with under-represented audiences through effective publicity carried out by the BNG delivery team.

The Workshop will develop and improve engagement with heritage by raising awareness of geodiversity and its links with biodiversity and the historic environment in practical landscape management work by land owners and managers, and thus indirectly contributing to the realisation of other BNG initiatives, notably:



- the interpretive aspects of physical access provision;
- conserving wildlife sites and pingo ponds;
- archaeological components in the research and survey work planned.

There are several potential barriers to participation in the Workshop.

- Impaired mobility. It will be possible to accommodate the needs of participants with impaired mobility in the morning presentation at the Schoolroom. However, it will not be possible to do so on the field trip, as the four sites are reached by walking over rough terrain.
- Impaired hearing. It will be possible to accommodate the needs of any participants with impaired hearing in the presentation at the Schoolroom by providing a microphone and speaker system through the BNG contingency budget. Participants will be asked in advance whether they have such difficulties.
- Financial. The Workshop / Day School will be free at the point of delivery.
- Intellectual. The information will be communicated in a way that presumes no previous knowledge of the subject matter.

The Workshop is likely to have established 'buy-in' because many participants are likely to already be involved in delivering other aspects of the BNG programme (through permitting access to their land, for example, or running BNG events). Effective / attractive publicity is the only way that people not hitherto engaged can be encouraged to enrol. Publicity can be personally targetted through emails e.g. to members of CIWEEM.

Volunteers

The Workshop / Day School will not involve direct volunteering input.

Legacy - Securing lasting benefits

The benefits of the project can be extended beyond this day event via the advisory work of Farm Conservation Ltd and other agencies such as Natural England. To facilitate this, the Norfolk Geodiversity Partnership (NGP) will use experience gained on the day to produce an advisory manual for land owners and managers which will be made available in Web format and also in paper format (if funding can be found to print it). This will be publicised through the 15 NGP partners and Farm Conservation Ltd.



Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
No participants enrol	Low	High	Good publicity via BNG delivery team.
Inclement weather	Medium	Medium	Carry out risk assessment. Advise participants to bring appropriate outdoor costume.
Personal injury on field trip e.g. tripping, puncture wounds.	Low	Medium to High	Carry out risk assessment. Participants to be covered by public liability insurance. First Aid box to be available at event, and details of local NHS services to be known by contractor
Medical emergency e.g. heart attack	Low	High	Carry out risk assessment. Participants to notify medical problems at enrolment. Contractor to know details of local emergency services.
Biohazards	Low	Low	Carry out risk assessment. Participants warned of potential hazards such as lyme disease.



D5 – Communicating the Ice Age Brecks

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
D5: Communicating the Ice Age Brecks	Norfolk Geodiversity Partnership	The geodiversity of the Brecks underpins many of the area's rich heritage of landscape, biodiversity and cultural features. This sequence of three Day Schools will communicate the Ice Age heritage of the area (its landforms, geology, Palaeolithic archaeology, fossil biodiversity) to BNG project participants, also to local people and visitors	Landscape and biodiversity professionals, interest groups,	90 participants in 3 annual Day School events , comprising introductory presentations followed by field trips to explore the Ice Age heritage in the Brecks.	Improved understanding of the evolution of the physical environment as the context for life in the Brecks (linkages between geodiversity, landscape, biodiversity and cultural history). Increased awareness of geo-sites in their landscape context.	Project total £4,804 HLF: £3,554 (74%) In-kind: £1,250 (26%) Volunteer: £0 Day school preparation and administration (£1,850) Event delivery including venue hire and professional services (£2,954)



Project Aims/Objectives

The geodiversity of the Brecks underpins many of the area's rich heritage of landscape, biodiversity and cultural features. This sequence of 3 Day Schools will communicate the Ice Age heritage of the area (its landforms, geology, Palaeolithic archaeology, fossil biodiversity) to BNG project participants, also to local people and visitors.

Delivery Partner organisations:	
<i>Organisation:</i>	<i>Role:</i>
Geological Society of Norfolk	Will supply specialist for delivery of introductory presentation; also event management support.
Department of Geography, University of Cambridge	Will supply specialist for delivery of introductory presentation

Project Need

There is a very low level of general awareness of the contribution that geodiversity makes to the environment of the Brecks, and it is poorly represented in many of the specialist books on the area. Few people know that several Brecks sites with evidence of Palaeolithic human settlement are nationally important. However, it is impossible truly to understand the physical landscape of the Brecks, its biodiversity and culture without understanding something of its Ice Age story. It has determined the physical aspects of the landscape and set the scene for what we see today: the shape of the land and its component landforms, the nature and distribution of the soils and rock types, the patterns of its river valleys, the availability of its groundwater.

This Day School will introduce participants to a fascinating story of hundreds of thousands of years of environmental change in the Brecks, including the story of early ancestral human settlement. It will thereby open up a new dimension of understanding, and thus contribute to an appreciation of the role of the physical landscape, its sediments, soils, landforms and topography in contributing to the biodiversity and history of the Brecks.



Detailed Project Description

1) Introductory presentation (1½ hours) based at Santon Downham Schoolroom, supported by audiovisuals and paper hand-outs, covering:

- Landscape archives – timescales; geology and landforms as evidence of environmental change over the last 500,000 years in the Brecks;
- Changing habitats and species – fossil plants and animals as evidence of changing wildlife in the Brecks;
- Presenting key sites for understanding the Brecks, including the story of Palaeolithic human settlement and the contribution of the Earth heritage dimension to local landscape character and biodiversity.

2) Field trip

- Guided visit to encounter four publicly accessible sites in the project area in a hired coach, explaining evidence for Ice Age geodiversity and its links with archaeology and biodiversity; supported by another geological specialist.
- The provisional site visit programme over the three years is as follows:

Year 1 – south/west area

Site	Interest	NGR
Icklingham Ramparts Field	Geology, Hominids	TL790716
West Stow Beeches Pit	Geology, Hominids	TL798719
Lynford Lakes	Geology, Hominids	TL820946
Weeting Grimes' Graves	Periglacial	TL815898

Year 2 – centre/west area

Site	Interest	NGR
Lynford Lakes	Geology, Hominids	TL820946
Weeting Botany Bay	Geology, Hominids	TL812895
Brickpit		
Weeting Grimes' Graves	Periglacial	TL815898
Thetford Redhill Pits	Geology, Hominids	TL851842



Year 3 – centre/east area

Site	Interest	NGR
Thompson Common	Periglacial	TL938965
Croxton Devil's Punchbowl	Karst, Hydrology	TL878891
Thetford Redhill Pits	Geology, Hominids	TL851842
Thetford Barnhamcross Common	Periglacial	TL863814

Outputs and Outcomes		
Activity	Outputs	Outcomes
Introductory presentation	30 people introduced to the evidence for the changing landscape and wildlife of the Brecks over the last 500,000 years	Improved understanding of the evolution of the physical environment as the context for life in the Brecks (linkages between geodiversity, landscape, biodiversity and cultural history).
Field trip	30 people introduced to four key Ice Age sites in the field	Experiencing geo-sites in their landscape context.

Location

The introductory presentation will be given at Santon Downham Schoolroom, near Brandon, Suffolk – TL817877. Thereafter, the field trip will visit four locations in the Brecks BNG area.



Landowner

Name	Contact details
Details of landowners whose land is likely to be visited on the field trips:-	
Croxtan Devil's Punchbowl. Managed by Forest Enterprise	Richard Brooke, Planning & Environment Manager, Forest Enterprise, Santon Downham, Brandon, Suffolk IP27 0TJ; richard.brooke@forestry.gsi.gov.uk ; 01842-816 018
Lynford Lakes. Managed by Forest Enterprise	As above
Thetford Redhill Pits. Managed by Forest Enterprise	As above
Weeting Botany Bay Brickpit. Managed by Forest Enterprise	As above
West Stow Beeches Pit. Managed by Forest Enterprise.	As above
Icklingham Ramparts Field. Managed by John Browning.	Messrs J & M.G Browning, Weatherill Farm, Icklingham, Bury St Edmunds, IP28 6PP; 01284-728 839
Thetford Barnhamcross Common. Managed by Thetford Town Council.	The Town Clerk, Thetford Town Council, King's House, Thetford IP24 2AP; 01842-754 247; mail@thetfordtowncouncil.gov.uk
Thompson Common. Managed by Norfolk Wildlife Trust.	Darrell Stevens, Breckland Officer, darrells@norfolkwildlifetrust.org.uk ; 07747 - 844 118
Weeting Grimes' Graves. Managed by English Heritage.	William Fletcher, East of England Office, 24 Brooklands Avenue, Cambridge CB2 8BU. 01223 582 700; eastofengland@english-heritage.org.uk



Audiences

'Communicating the Ice Age Brecks' Day School aims to engage primarily with people already engaged in BNG projects. This is because they are already motivated and interested in Brecks heritage, and they stand to gain most from it and may be able to use insights gained in their volunteering work. However the Day School may also appeal to local people not yet engaged with BNG as well as visitors to the area. It may also appeal to wildlife enthusiasts because geodiversity is a key factor underpinning the varied habitats of the Brecks.

The Day School will provide a mix of interpretive approaches, including audiovisual presentation and outdoor interpretation.

The Day School will be a mixture of specialist presentation and experiential encounter. It will promote learning about the Earth heritage of the Brecks by providing an opportunity for participants to discover new information and also a forum for related questioning and discussion. The field trip will provide an opportunity for theoretical understanding to be informed by encountering elements of Earth heritage within the landscape.

The Day School will reach existing, new and wider audiences through effective publicity carried out by the BNG delivery team.

The Day School will engage with under-represented audiences through effective publicity carried out by the BNG delivery team.

The Day School will develop and improve engagement with heritage for local people through publicising opportunities to be involved in other BNG initiatives, notably the volunteering (e.g. 'Training in Discovering the Archaeological Landscape of the Brecks' in the 'On Solid Ground' strand). For visitors, it will contribute to raising awareness of Earth heritage within the natural world and the need for its conservation, which is something they can take home with them, potentially to benefit their locality.

There are several potential barriers to participation in the Day School.



- Language. The Brecks has a substantial immigrant population of circa 10,000 Portuguese and East European economic migrants whose first language is not English⁹. Publicity materials by the BNG delivery team will be written in Portuguese and at least one other language such as Polish. If such people enrol, it will be possible to provide translation facilities for them through META community translation services (Thetford-based).
- Impaired mobility. It will be possible to accommodate the needs of participants with impaired mobility in the morning presentation at the Schoolroom. However, it will not be possible to do so on the field trip, as the four sites are reached by walking over rough terrain. This will be explained as part of advance publicity, and such people invited to identify themselves at enrolment. If people with impaired mobility enrol on the course it will be possible to adjust the itinerary accordingly. It is noted that some pingo ponds are visible as part of an 'Access for All' pathway at Thompson Common.
- Impaired hearing. It will be possible to accommodate the needs of any participants with impaired hearing in the presentation at the Schoolroom by providing a microphone and speaker system through the BNG contingency budget. Participants will be asked at enrolment whether they have any particular hearing difficulties.
- Financial. The Day School will be free at the point of delivery.
- Intellectual. The information will be communicated in a way that presumes no previous knowledge of the subject matter.
- Numbers. Infrastructural limitations (room hire and coach transport) will impose a practical upper limit on number of participants. The Santon Downham Schoolroom and a 53-seater coach will be sufficient to cover expected numbers.

The Day School is likely to have established 'buy-in' because many participants are likely to be involved in other aspects of the BNG programme (through volunteering work, for example), and are likely to be generally motivated to discover more about their natural heritage. Effective and attractive publicity is the only way that waverers or less motivated people can be encouraged to enrol.

Volunteers

The Day School will not involve volunteer input.

⁹ Schneider, C and Holman, D (2005): *A profile of migrant workers in the Breckland area*; Anglia Polytechnic University

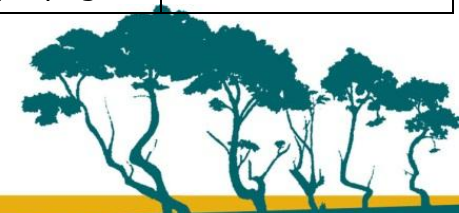


Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
No participants enrol	Low	High	Good publicity via BNG delivery team.
Inclement weather	Medium	Medium	Carry out risk assessment. Advise participants to bring appropriate outdoor costume.
Personal injury on field trip e.g. tripping, puncture wounds	Low	Medium to High	Carry out risk assessment. Participants to be covered by public liability insurance. First Aid box to be available at event, and details of local NHS services to be known.
Medical emergency e.g. heart attack	Low	High	Carry out risk assessment. Participants to notify medical problems at enrolment. Contractor to know details of local medical and emergency services.
Biohazards	Low	Low	Carry out risk assessment. Participants warned of potential hazards such as lyme disease.



D6 – Breaking New Ground in the School Ground

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
D6: Breaking New Ground in the School Grounds	The Green Light Trust	<p>The project aims to increase opportunities for outdoor learning by bringing some of the features of the Brecks into the grounds of schools within the project area.</p> <p>Five tree nurseries, 5 areas of Brecks heath/acid grassland (using the soil inversion technique), 2 'pingo'-style ponds and 5 butterfly & bee gardens will be set up within school grounds. Students will collect seeds from local woodlands, grow tree seedlings and share the young seedlings with other schools within their cluster and with local community tree-planting projects. Emphasis will be on the</p>	Schools, community groups	<p>Creation of Pine tree nurseries in school grounds including;</p> <p>5 tree nurseries</p> <p>5 seed collection events</p> <p>2 Teacher training events</p> <p>1 Level 1 Forest Schools teacher training event for 15 participants</p> <p>Creation of characteristic Brecks Habitats in school grounds including;</p> <p>5 areas of</p>	<p>Increasing the biodiversity of school grounds within the Brecks</p> <p>The supply of tree seedlings (with an emphasis on Scots Pines) that can be used in school grounds and community tree-planting projects and in the restoration and creation of Pine Lines.</p> <p>Improved knowledge of how to propagate</p>	<p>Project total: £46,000</p> <p>HLF: £34,475 (75%)</p> <p>In-kind: £4275 (9%)</p> <p>Volunteer: £7250 (16%)</p> <p>Cash: £0</p> <p>Construction of tree nurseries, ponds, Brecks heath, and butterfly gardens (£19,200)</p> <p>Tree seed collection sessions (£2,500)</p>



		<p>propagation of Scots Pine trees so that they can be used to restore Pine Lines along field boundaries as part of the Pine Line Project.</p> <p>The distinctive character of the Brecks landscape will be celebrated in artist-led 'tree-dressing' workshops with pupils and the local community. In addition, there will a tree seed propagation 'twilight' workshop for teachers.</p>		<p>heath/acid grassland, 2 pingo-style ponds 5 bee and butterfly beds 5 pine lines</p> <p>5 Outdoor learning events in school grounds</p> <p>5 art workshops and tree dressing ceremonies in schools</p> <p>5 art workshops and tree dressing ceremonies in local communities associated with the schools</p>	<p>trees from seeds and cuttings.</p> <p>An increased awareness of the value of trees amongst school students.</p> <p>Improved knowledge of the wildlife to be seen within school grounds.</p> <p>Improved awareness and appreciation of the importance of trees within the Brecks.</p>	<p>Curriculum linked educational activities (£11750)</p> <p>Teacher training sessions and Forest School training (£4,775)</p> <p>Community art workshops, tree dressing events, publicity (£6,500)</p> <p>Volunteer expenses and travel costs (£1,275)</p>
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Project Aims/Objectives

- To bring school students into contact with the nature of the Brecks through the creation of habitats and growing areas within school grounds. This will create opportunities for outdoor learning, raise attainment levels and increase well-being.
- To increase the biodiversity of school grounds within the Brecks.
- To teach school students how to propagate trees from seeds and cuttings.
- To grow trees from locally-collected seeds and cuttings that can be used both within school grounds and the communities that they serve. There will be an emphasis on propagating Scots Pine trees that can be used to create and restore Pine Lines.
- To celebrate the importance of trees within the landscape of the Brecks through Tree Dressing.

Delivery Partner organisations:	
<i>Organisation:</i>	<i>Role:</i>
<i>Norfolk Wildlife Trust</i>	<i>Organising the seed collection sessions</i>
<i>Easton College</i>	<i>Running the 'Twilight training sessions on tree propagation</i>
<i>Norfolk County Council Children's Services Arts in Education Officer</i>	<i>Advising on finding suitable artists for Tree Dressing activities</i>
<i>Norfolk County Council Children's Services Environmental and Outdoor Learning Team</i>	<i>Running activities for school students which will link the recording of wildlife in the school grounds with the raising of achievement.</i>
<i>The Conservation Volunteers</i>	<i>Constructing school tree nurseries and helping to maintain the new areas of heathland/brecks grassland in the early stages of their establishment.</i>



Project Need

The experience of BNLPS partners over the past twenty years has shown there to be a real need for schools to make better use of their grounds for learning and recreation. Research shown how little contact many children have with nature, even in rural areas. The school grounds offer one of the best opportunities to address this 'nature deficit disorder' in a safe, accessible setting. School grounds also offer great opportunities for biodiversity gain, representing as they do a significant area of land which is in public ownership and has regular management, but which all too often is given over entirely to playing field grass.

Breaking New Ground in the School Grounds will compliment other projects that form part of Breaking New Ground. It will add value to the Pine Lines project by providing a supply of young Scots Pine seedlings that have been grown from local seed by the children from the communities that will benefit from them. The Tree Dressing element of the project will also provide an opportunity for the local community to celebrate the importance of the pine tree to the local landscape.

The project fits in well with the 'Brecks Wildlife Recorders of Tomorrow' project. Once the new habitats have been created within the school grounds, activities will be organised that encourage students to study and record the wildlife that can be seen there. This will be done in a way that will contribute to the raising of pupil achievement in numeracy or literacy.

The other project that compliments 'Breaking New Ground in the School Grounds' particularly well is 'Brecks Uncovered'. Some of the school students who go out to visit local landscape sites through this project will be able to recreate some of the distinctive landscape features that they've seen within their own school grounds.

Detailed Project Description

There is now widespread recognition of the importance of outdoor learning and contact with nature to the mental and physical well-being of young people. It is also well established that many young people spend very little time outside within a natural setting. Schools do take children out to such sites on field trips, but, due to the cost, health and safety issues and time constraints, this is inevitably quite an infrequent occurrence. The only place where all young people have the opportunity to spend time in a natural environment on a frequent and regular basis is within the school grounds at breaktimes and when lessons are conducted outdoors. If we want young people to be introduced to the typical plants and wildlife of the Brecks landscape, the best way to do this is to bring the brecks into the school grounds.



There has been a marked increase in the popularity of growing projects within schools during the past few years, inspired by projects such as the government's 'Growing Schools' initiative, the 'Food for Life' partnership and the Royal Horticultural Society's 'Campaign for School Gardens'. This has met a need within the curriculum and has been recognised by Ofsted as being an example of good practice. The emphasis has tended to be on the growing of vegetables and fruit, but the production of young trees would be equally valuable in terms of education and have direct link to the landscape in which the students live. The young trees that would be produced would be of great value for planting within the grounds of the school, of other schools within the cluster, by community tree-planting projects or by the Pine Lines Project to restore or create new Pine Lines within the Brecks landscape.

Trees, and Scots Pine trees in particular, are of enormous significance to the Brecks landscape. In order to encourage people within the Brecks to value the fantastic, distinctive landscape in which they live, the project would include events to celebrate trees through tree dressing events. This is an old tradition which was revived about twenty years ago with the support of the Environmental Arts charity 'Common Ground'. It involves people decorating trees by hanging small artworks that they have created from the branches.

In order to deliver the project, schools within the Project Area will be contacted via Cluster meetings and contacts provided by Breaking New Ground partner organisations. Five core schools will be selected on the basis of their capacity to engage in the project and to maintain the new habitats and tree nurseries on an on-going basis. A geographical spread within the Project Area will be sought. If the five core schools with the tree nurseries do not want to also have all of the Brecks habitat features on offer created within their grounds, other schools in the area will be sought who are willing to enhance their grounds with new Brecks habitats.

The school tree nurseries will be created in accordance with the three that were piloted by Norfolk CC during 2012-13. The three schools in the pilot were selected to vary in size and location – one very small rural primary school, one medium sized suburban junior school and one large Junior school within a large market town. The lessons learned from the pilot will be applied to the Breaking New Ground project.



The process for creating the tree nursery would begin with an initial meeting to identify the best site for the nursery (and for any other Brecks habitats to be created within the grounds), and a simple plan would be drawn up. Landscape contractors would create the beds and put up any rabbit-proof fencing required, with pupils involved in some of the digging. It is anticipated that The Conservation Volunteers might be able to carry out this work, therefore involving more members of the community in the project. There would be a field trip to a local wood for seed collection and other tree-related activities. Teachers and teaching assistants from the five schools with tree nurseries would attend two Twilight training sessions. One would be on tree propagation from seed and the other on growing trees from cuttings and grafting. It would be at a venue close to or within the Brecks – possibly one of the schools involved. Some Scots Pine saplings would be provided as initial stock for the tree nurseries, so that the schools can grow them on for use before the ones that they have grown from seed are big enough to plant out.



Pupils from White Woman Lane Junior School, Sprowston, collecting seed at Catton Park in a session led by Norfolk Wildlife Trust.

Once young trees are starting to be propagated and grown on by the school tree nurseries, they would be offered to other schools within that school cluster for their own tree-planting projects within their school grounds. They would also be available to be used by community tree-planting projects and for the Breaking New Ground project to restore Pine Lines and plant new ones.

The creation of the Brecks habitats would form the second phase of the project. In order to create areas of heathland/brecks grassland, the 'soil inversion' technique would be used. This was carried out successfully (on a larger scale) at a playing field at the Open Academy in Norwich in 2012 in order to extend Mousehold Heath. A digger removes the topsoil from the area where the heath is to be created and makes a topsoil pile. It then excavates the sub-soil and makes a second pile. The



topsoil is then spread out in the excavated area and the subsoil spread on top of it to form the new surface layer. This is then 'seeded' with brashings taken from another heath. This will be sourced through the Norfolk Biodiversity Partnership's heathland Topic Group. The area requires more intense maintenance in the early stages of establishment in order to remove emergent vegetation that is not part of the heathland/breckland grass species assemblage. This will be carried out, in part, by the school pupils, but the experience of the Open Academy project suggests that this will need to be supplemented by help from landscape contractors. It is anticipated that The Conservation Volunteers might also be able to participate in this aspect of the project.



Teachers from the Pilot Study schools at one of the tree Propagation Twilight Training sessions.

The low water table and free-draining nature of the soils mean that pond liners will need to be used in the creation of the 'pingo'-style ponds. Their form will be characteristic of pingos, however, so they will appear the same as a feature within the landscape and will function in a similar way as a wildlife habitat. The sites for the ponds will be carefully selected to be in a low-lying area within the grounds with good perceived surveillance and to be close to a water source. The saucer-shaped ponds will be about 5.5m in diameter, will be excavated by a digger and be lined with a butyl pond liner (on a sand layer). The liners will be covered by sifted sub-soil and sand on a 'Terram'- type geotextile. They will have a timber dipping platform around one section of the pond and will be within an area separated from the rest of the school field by a chestnut paling fence of 1.2m tall with a native mixed hedge planted around it.





Soil inversion being carried out at the Open Academy Field, Mousehold, Norwich



The new acid grassland/heathland area in the first season after the soil inversion was carried out.

The bee and butterfly gardens will be planted with both native wildflowers and ornamental herbaceous perennials and shrubs that attract bees and butterflies and which thrive on sandy brecks soils. Seating will be included in order to encourage the young people at the school to spend time sitting quietly and enjoying the sights, sounds and fragrances of the bee and butterfly beds.

The tree-dressing events will be led by artists who are experienced at working with schools and community groups. Two workshops will be held for each tree-dressing – one within the school and one in a local village hall for other members of the community. This will involve the creation of small artworks, which will be hung from a tree in order to 'dress' it. The tree-dressing ceremony itself will be a celebration of the tree and of the importance of trees to the landscape and the people of the Brecks over the years. It is intended to carry out a tree-dressing event in each of the communities where there will be a school tree nursery.



Outputs and Outcomes		
Activity	Outputs	Outcomes
Creating characteristic Brecks habitats and features to encourage biodiversity within school grounds.	5 areas of heath/acid grassland 2 pingo-style ponds 5 bee and butterfly beds 5 pine lines	Increasing the biodiversity of school grounds within the Brecks
Create tree nurseries within school grounds.	5 tree nurseries 5 seed collection sessions 2 Twilight training sessions for teachers and teaching assistants	The supply of tree seedlings (with an emphasis on Scots Pines) that can be used in school grounds and community tree-planting projects and in the restoration and creation of Pine Lines within the Breaking New Ground project area. Improved knowledge of how to propagate trees from seeds and cuttings. An increased awareness of the value of trees amongst school students.
Outdoor learning activities within the school grounds to increase levels of student attainment (in areas tailored to the needs of the individual schools) while encouraging closer study of the wildlife to be seen there.	5 outdoor learning sessions in the school grounds.	Improved levels of academic attainment in school students. Improved knowledge of the wildlife to be seen within school grounds.
Tree dressing – workshops to create artworks to hang in trees and	5 art workshops and tree-dressing ceremonies within school.	Improved awareness and appreciation of the importance of



ceremonies in which the trees are decorated.	5 art workshops and tree-dressing ceremonies with the local communities associated with the the schools	trees within the Brecks.
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Location

The schools which will participate in the scheme have yet to be decided. All will be within the 'Breaking New Ground' project area. There are nineteen schools within the area – fifteen Primary schools, two Secondary and two Independent. They are:

Drake Infant and Nursery School, Thetford,
 Bishop's CEVA Primary School, Thetford,
 Redcastle Family School, Thetford,
 Raleigh Infant School and Nursery, Thetford
 Admirals Academy, Thetford,
 Diamond Academy, Thetford,
 Queensway Infant School and Nursery, Thetford
 Norwich Road School, Thetford,
 Thetford Academy,
 Thetford Grammar School
 Weeting VC Primary School,
 Mundford VC Primary School
 Glade Community Primary School, Brandon
 Forest Academy, Brandon
 Breckland County Middle School, Brandon,
 IES UK Breckland Free School, Brandon
 Elvedon C of E Primary Academy
 Barnham C of E VC Primary School
 Culford School

The schools that will participate in the Project will be recruited from those on the above list.



Landowner

Yet to be identified (but likely to be either Norfolk County Council or Suffolk County Council in most cases).

Audiences

The main audience that this project will engage with are school students. The beneficial effects of encouraging greater engagement with the natural environment amongst young people in terms of health and well-being are widely and increasingly recognised. Norfolk County Council's Environment Section is very experienced at working with this audience.

The project will also engage with other members of the local community through Tree Dressing activities. This aims to forge links between the school tree nursery initiative and the wider community where it is intended that many of the new trees will be planted. The project is keen to involve as many people as possible in the celebration of trees and their importance to the landscape of the Brecks.

The project will increase the understanding of young people about the way in which trees can be grown from seeds and from hardwood cuttings. It will also provide opportunities for greater contact with, and study of, the natural environment.

The tree dressing activities will help people from both the school and the wider community to achieve a greater awareness of the value of trees to the Brecks landscape by celebrating their importance through art and ceremony.

Through schools, the project will reach all the young people between certain ages within a local community. It is anticipated that their involvement will engage the interest of their families and neighbours who will become involved in the community tree-dressing events, thus reaching into the heart of the local community.

The main audiences for this project are local communities. One outcome will be trees decorated with artworks created through the school and community workshops. These may well prove to be a draw for visitors.

In organising which pupils will be involved in the seed collection activities, the participating schools will be asked to take account of the barriers that exist that may prevent some of their pupils having been involved in heritage-based activities in



the past. The same is true of the wildlife recording activities linked to increasing academic attainment (although it should be possible to involve a higher proportion of the school's pupils in these activities).

While there has been limited contact with schools in the 'Breaking New Ground' project area so far, similar activities have been done with other Norfolk schools with great success. One possible challenge might be finding schools within the project area that are willing to get involved. To address this, we are going to work closely with sympathetic contacts in schools within the Brecks (e.g. the Headteacher of Thetford Grammar School and the Community Engagement Officer at Wayland High School) and make use of the school cluster system to make contact with eligible schools.

Volunteers

It is intended that the construction work on the new school tree nurseries, and possibly also some of the habitat creation work, will be carried out by The Conservation Volunteers. The day-to-day organisation of the project will be undertaken by graduates on work placements, working in a voluntary capacity to gain valuable experience of working for a large organisation like Norfolk County Council.

As well as having the right skills and experience for work involving the creation of tree nurseries and habitats within school grounds, the involvement of conservation volunteers would increase the engagement in the project of members of the public.

Legacy - Securing lasting benefits

The tree nurseries and the Brecks features that will be created within school grounds will continue to be there after the HLF-funded scheme has finished. The tree nurseries will carry on producing young trees that can be used by schools and community groups for tree-planting projects.

The long-term management of the features to be created will be taken on by the schools in which they are situated with continued support from the Green Light Trust. They will be encouraged to include them, where possible, within their grounds maintenance contracts, which will offer some certainty that maintenance will be carried out into the future. Monitoring will be carried out by the schools themselves as part of their grounds maintenance procedures.



Conditions & Consents

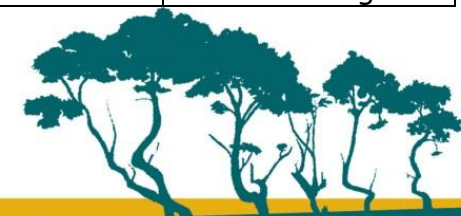
Schools would give their own consent to works being carried out within their grounds. Seed collection would require the consent of the owner of the woodland, which would be requested when needed. Risk assessments for all activities involving school pupils would be carried out by the school's staff. Any risk assessments for the community tree dressing workshops will be carried out by the artist who is commissioned to lead them. Insurance will be covered by the policy of the venue where the workshop was carried out.

Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Not being able to recruit Graduate Placement volunteers to provide day-to-day management of the project	Low	High	Use the usual channels (i.e Norfolk County Council's Human Resources Department) to promote the opportunity.
Not being able to find schools who are willing to participate in the project	Low	High	Work through local contacts and the school cluster structure to promote the scheme to schools in the project area.
Not being able to generate enough interest in local communities to run the community tree-dressing workshops.	Low	Medium	Work through local contacts associated with the schools that are involved to engage other community organisations.



D7 – Brecks Uncovered

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
D7: Brecks Uncovered	Norfolk wildlife Trust Suffolk Wildlife Trust	This project will work with primary schools in the project area over 3 years reaching every child in the school and developing learning about their local natural environment, the biodiversity and heritage. Training teachers to understand and gain knowledge about the Brecks, leaving a legacy at the schools for future generations.	Schools (Students, Teachers and Governors)	Engage with 10 primary schools to deliver an innovative programme of learning about the Brecks to 2,000 school children living locally 10 Guided Brecks field trips for schools Train 25 teachers and 10 Governors Programme supported by 30 volunteer days	Delivering an innovative programme of learning on the Brecks to 2000 school children living locally Training and enthusing at least 25 teachers and 10 Governors to use their local Breckland natural environment to support the school curriculum and inspire children to learn through their local landscape	Project total £16,500 HLF: £12,750 (71%) In-kind: £2,250 (21%) Volunteer: £1,500 (8%) Project development and Schools engagement (£4,250) Project delivery and teaching (£7,750) Travel (£2,500) Teaching



				and professional support from SWT and NWT	Inspire outdoor learning in the Brecks Enable local schools to visit Brecks heritage sites	materials (£2,000)
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Project Aims/Objectives

To introduce young people living in the Brecks to the wonder and beauty of their local landscape and its rich wildlife habitats through outdoor hands-on activities, to gain knowledge and learning about the importance of the biodiversity and heritage of the area.

Delivery Partner organisations:	
Organisation: Norfolk Wildlife Trust	Role: Partner

Project Need

Research has established a need for developing teachers' expertise in environmental education and conservation to achieve a successful experience for the young people they teach in encountering and connecting with the local Brecks landscape.

There is also wide recognition that young people today have fewer opportunities to learn about and discover nature, spending more time playing indoors and having fewer opportunities to explore their local environment than previous generations. This project helps to address this nationally recognised issue of young people's disconnection from nature.



Detailed Project Description

Year 1

- To work with 10 primary schools – 5 in core area and 5 in wider Brecks area in the first year offering a day on Breckland activities in their school grounds or local wild area, introducing children to the wonder and beauty of their local natural habitat and landscape through outdoor hands-on activities, to gain knowledge about the importance of the biodiversity and heritage of the area. Depending on the size of the school the project will aim to work with each child, but if it is a very large school it will work with KS2 and on our return work with the other children.
- To offer teacher training at each school as a twilight session to give confidence and encourage teachers to continue using the outdoor Breckland environment to cover aspects of their curriculum

Year 2

- To work with same 10 primary schools and/or include any private schools on a developed programme exploring biodiversity, history, geology, archaeology and culture at a Wildlife Trust reserve or centre in the Brecks and offer a twilight session for teachers.

Year 3

- To revisit all primary schools in the designated area and continue developing learning in their local wild place. Activities will encourage discussion, ownership, celebration and help teachers develop ideas to take forward on their own. The project will help teachers build links to other sources of help, expertise and learning opportunities within the Brecks community such as signposting to local groups to continue working with.

Outcomes

- Delivering an innovative programme of learning on the Brecks to 2000 school children living locally
- Training and enthusing at least 25 teachers and 10 Governors to use their local Breckland natural environment to support the school curriculum and inspire children to learn through their local landscape



Outputs and Outcomes		
Activity	Outputs	Outcomes
Hands on activity sessions	To give 2000 children a Breckland experience	Learning, care and understanding of the Brecks More young people inspired by the natural world
Teacher training 'twilight' sessions	To provide training to a minimum of ten teachers and governors	More teachers with confidence, knowledge and enthusiasm to use outdoor learning in the local landscape as a teaching tool to inspire children.

Location

School grounds or local Brecks sites. SWT Knettishall Heath, NWT Weeting Heath, NWT Thompson Common nature reserves.

Landowner

Forest Heath, SWT or NWT

Audiences

Children, teachers and governors, families. Reaching children passes on to all family generations and the learning grow.

SWT and NWT are experts in delivering exciting, innovative activities which engage and empower young people who will be the custodians of the future. This project addresses the need to engage more young people with learning and discovery outdoors in active, participatory ways which are fun, engaging and inspirational.

Delivering hands-on memorable experiences ensuring that learning opportunities include visual, auditory, kinaesthetic learning techniques which reach all pupils. The project will enable young people to directly experience and engage with the Brecks environment and through the involvement of experienced well informed Wildlife Trust education staff will inspire learning about wildlife, environment and how the interaction of nature and people has created the landscape we experience today.



Schools by their nature are inclusive and by working with schools we will reach wide audiences of young people from all socio-economic groups. Schools are at the heart of wider communities and through reaching children the project will also impact friends and families of all the children in the area and wider communities.

The programme will be flexible and adapted to suit all needs. Schools are inclusive and by working through schools we will engage with wide audiences including those usually under represented and hard to reach audiences.

We will be encouraging participation in their local Brecks environment and showing ways to encounter, enjoy and experience landscape and wildlife for both teachers and children.

Programmes will be developed and delivered that ensure learners from all backgrounds and all abilities will be engaged.

Schools appreciate and encourage the involvement of experts with specialist knowledge to work with their children. Both Suffolk and Norfolk Wildlife Trusts have good relations and a long track record of working with their County education services and because of this will get 'buy-in' from local schools. Providing activities which are free to schools will encourage participation.

Volunteers

The project will train volunteers to take part in the delivery of the project along side Wildlife Trust staff – both SWT and NWT have experience of involving and training volunteers to support education delivery.

Using the skills of volunteers in specific tasks will enhance the work of SWT and make it easier to deliver – the presence of volunteer support enable larger groups to be worked with effectively.

The project will run recruiting and training sessions alongside the work SWT do with volunteers in the area already using sites at SWT Knettishall and at Redgrave to host. Both NWT and SWT have volunteer policies and follow best practice guidelines on the recruitment, training and managing of volunteers. Both organisations currently involve large numbers of volunteers (in excess of 1,000 individual volunteers) and have an excellent track record of volunteer recruitment and training across Norfolk and Suffolk.



Legacy - Securing lasting benefits

The learning will leave a legacy to all children and the teacher training will sustain it.

Both NWT and SWT will continue to offer education activities to schools in the area on a paid basis in line with current activity across Norfolk and Suffolk.

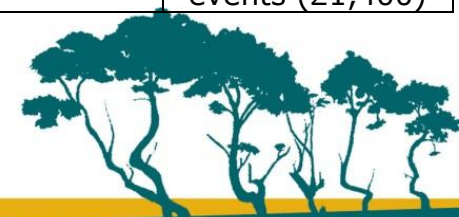
Risks

N/A

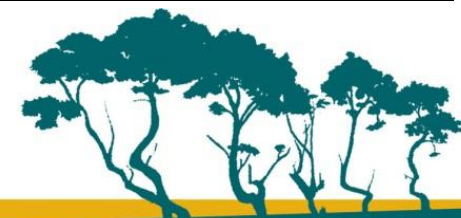


D8 – Barnham Cross Common: Skills for the future

Reference	Delivery Lead (and Partners)	Summary	Audience	Outputs	Outcomes	Cost (Including contingency and inflation)
D8: Barnham Cross Common: Skills for the future	Plantlife	This project will work with individuals, schools and groups within the vicinity of Barnham Cross Common, Thetford to engage people with onsite conservation management work and provide them with a range of knowledge and skills in conservation identification and management.	Local communities, volunteers	<p>20 half day workshops for schools</p> <p>1 teacher training day</p> <p>1 community/family wildlife monitoring event</p> <p>9 group activity events for photography and botanical art</p> <p>Web based project pages and social media / blogs</p>	<p>Greater understanding of the importance of the Breckland landscape, ecological importance and management requirements.</p> <p>Increase in conservation and monitoring skills within school children</p> <p>Raising awareness of the local heritage and the conservation management</p>	<p>Project total £8525 HLF: £6725 (79%) In-kind: £1,800 (21%) Volunteer: £0</p> <p>Professional services and promotion (£1,400)</p> <p>School workshops (£2625)</p> <p>Teacher training day (£400)</p> <p>Community events (£1,400)</p>



					<p>techniques within the Brecks.</p> <p>Increased interest and awareness through the development of identification and monitoring skills</p> <p>More local people involved in the recording their local heritage.</p> <p>Introduction to photography and art.</p> <p>More people aware of the conservation works.</p> <p>A show case for</p>	<p>Art/photographic workshops (£2,700)</p>
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					<p>the monitoring work, artwork and photography undertaken by the community and schools.</p> <p>Increased interest in the use of social media to access conservation information and interpretation</p>	
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Project Aims/Objectives

To engage with and support individuals, communities and organisations living within the Thetford urban fringe Barnham Cross area to develop their own personal portfolios of Barnham Cross Common by a varied programme of activities and events.

Objectives:

- To engage the communities and organisations living within the Barnham Cross area with the conservation management on the site
- To develop the monitoring and conservation skills of the local community and schools in the area
- To create a photographic/art gallery of the conservation development of Barnham Cross Common



Project Need

Thetford is the main centre of population within the BNG area and Branham Cross Common is located directly on the outskirts of Thetford, accessible and well used by the population of Thetford.

As identified by the BNG development phase there is a need within Thetford and the Brecks to re-engage local communities in the landscape, build skills within the community, increase access to learning and increase community participation.

Plantlife has been successful in achieving funding for large scale management operation on the site of Barnham Cross Common which should extend the area of rare Breckland grass-heath onsite and see the re-establishment of several Breckland plant specialities. However the funding did not include an outreach element and through an effective outreach programme the BNGLPS can connect people with the conservation work at Barnham Cross Common and in doing so help achieve the vision of connecting:

- the people of the Brecks to their landscape
- volunteers with professionals
- Present day biodiversity with understanding of historic

Detailed Project Description

Barnham Cross Common is a well-used area of open space located on the outskirts of Thetford in Norfolk. It contains remnants of the rare habitat "Breckland grass heath" and used to contain 13 Breckland plant "specialities" but that number has now been reduced to 1. Plantlife will be undertaking a conservation management programme onsite but want to combine this with an outreach project. The site is immediately accessible to the residents of Thetford by foot, bicycle and car and is also within 2km of 5 schools.

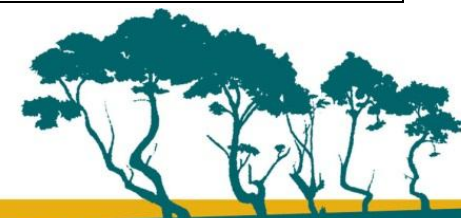
The main activities will be:

1. Setting up an adopt a plot scheme with online resources and database for primary schools and secondary schools to include – a habitat assessment overview; butterfly counts; minibeast surveys; plot performance surveys – delivered through workshops for schools (20 half day workshops), teacher training (1 day) as well as promotion of self-led resources



2. Delivery of five community/family monitoring events which will provide information about the Breckland heritage, grassland management, plant identification and site monitoring in a family friendly and accessible manner.
3. Delivery of art on Barnham Cross – group activities for photography and botanical art 3 per year for 3 years to create a gallery of the progress and wonders.
4. Creation of the Barnham Cross Common gallery and make it accessible online via social media.

Outputs and Outcomes		
Activity	Outputs	Outcomes
Workshops for schools covering habitat assessment, mini beast surveys and plot performance surveys.	20 half day workshops 1 day teacher training	Greater understanding of the importance of the Breckland landscape, ecological importance and management requirements. Increase in conservation and monitoring skills within school children
Delivery of community/family monitoring event		Raising awareness of the local heritage and the conservation management techniques within the Brecks. Increased interest and awareness through the development of identification and monitoring skills.
Group activities for photography and botanical art Development of a web-based gallery.	9 workshops over the 3 years A gallery of the conservation progress on site to be displayed via a blog and/or facebook page.	More local people involved in the recording their local heritage. Introduction to photography and art. More people aware of the conservation



		<p>works.</p> <p>A show case for the monitoring work, artwork and photography undertaken by the community and schools.</p> <p>Increased interest in the use of social media to access conservation information and interpretation.</p>
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Location

Barnham Cross Common

Landowner

Thetford Town Council

Audiences

The project hopes to reach the residents and users of Barnham Cross Common as we hope to encourage a long term interest and engagement with the site. By focusing on people that already access the site or can easily access the site on a regular basis The projects hopes to provide;

- Opportunity for the local community to continually use the identification, monitoring, artwork skills that they might have gained during the course of the project.
- Opportunity to access experts in plant identification and conservation.
- Opportunity to access a range of toolkits which will allow them to record changes onsite in a systematic way.
- Opportunity to view all information and artwork/photography via an online gallery.

The conservation operations to be undertaken all relate to previous management practices and the unique heritage of the Brecks. Therefore the heritage of the Brecks will be an integral part of understanding the management operations and will



be explained in all the activities including the school workshops, community family/events and the photographic/botanical activities.

The development of a gallery using social media also has the potential to reach an audience wider than that normally expected to use the site.

The local community will be engaged via the school workshops, family activities and the art/photography activities. The family and art/photography activities will be open to all therefore visitors will be welcome and the activities will be advertised in the various “what’s on” and events pages available online. We hope that the online gallery will also attract visitors to the site.

It is understood that Thetford has a large Portuguese and Eastern European population who may not have an immediate understanding of the specifics of heritage within the British context however many of these communities have a strong connection and understanding of rural and agricultural heritage therefore one of the aims of the project will be to create links and enhance understanding of rural heritage between different European communities.

The project already has a strong link with the local volunteer group “the Friends of Barnham Cross Common”. There has been some conflict onsite with the travelling community but the project will work with the Council and liaison officers to engage with all communities that might use the site.

Legacy - Securing lasting benefits

The teacher training day and the provision of self led resources will allow the schools to continue to deliver workshops without the direct input of the project.

Those engaged with the project will gain enhanced skills in monitoring, conservation work, art, photography which can be taken with the participants into the future.



The only component of the project which requires long term maintenance is the gallery, the cost and input should be minimal and will be maintained by Plantlife in the short term with the intention of handing over to the Barnham Cross Management Committee or another interested group.

Conditions & Consents

No consents required

Risks			
<i>Risk and Impact</i>	<i>Likelihood (Low/Med/High)</i>	<i>Severity (Low/Med/High)</i>	<i>Actions</i>
Failure to recruit schools	Low	Med	<p>The use of local contractors with local knowledge should assist with the recruitment of schools.</p> <p>Plantlife have wide experience of working with schools and can deliver exciting programmes which also deliver the national curriculum therefore making the workshops attractive to schools.</p> <p>Plantlife will ensure there is flexibility within the time table to allow for "bad weather" days. The proximity of the site to the schools should also allow for flexibility.</p> <p>Plantlife have a pool of freelancers in the area.</p>
Weather causing delay	Med	Med	
Illness of freelancer	Low	Low	





