The
INTERNAL ARCHAEOLOGY
of the
BRECKLAND WARRENS

A Report by The Breckland Society
Dr William Stukeley had travelled through the Brecks earlier that century and in his *Itinerarium Curiosum* of 1724 wrote of “An ocean of sand, scarce a tree to be seen for miles or a house, except a warrener's here and there.”
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2017
Contents

Introduction ................................................................. 4

1. Context and Background ............................................. 7

2. Warren Banks and Enclosures ..................................... 10

3. Sites of the Warren Lodges ........................................ 24

4. The Social History of the Warrens and Warreners ............ 29

Appendix: Reed Fen Lodge, a 'new' lodge site .................... 35

Bibliography and credits ................................................ 39

There is none who deeme their houses well-seated who have nott to the same belonging a commonwalth of coneys, nor can he be deemed a good housekeeper that hath nott a plenty of these at all times to furnish his table.

R Reyce, A Breviary of Suffolk (1618)
Introduction

*A large portion of this arid country is full of rabbits, of which the numbers astonished me.*
François de la Rochefoucauld, *A Frenchman in England* (1784)

The Breckland Society was set up in 2003 to encourage interest and research into the natural, built and social heritage of the East Anglian Brecks. It is a membership organisation working to help protect the area and offering a range of activities to those who wish to see its special qualities preserved and enhanced. The Society is one of the lead partners in *Breaking New Ground* (see below), under which grant funding of £7095 was made available for the Internal Archaeology of the Warrens project.

In March 2014 the Heritage Lottery Fund (HLF) confirmed the award of nearly £1.5 million to the *Breaking New Ground* Landscape Partnership, enabling a £2.2 million scheme to start delivering a range of heritage and landscape projects in the heart of the Norfolk & Suffolk Brecks over a period of three years.

The scheme is hosted by Suffolk County Council at Brandon Country Park and is supported by Norfolk County Council, St Edmundsbury Borough Council and Forest Heath District Council, as well as a variety of other local and national organisations. With a wide range of partners involved in the scheme, *Breaking New Ground* will deliver more than 40 projects across four programme areas:

a) Conserving or restoring built and natural features

b) Increasing community participation

c) Increasing access and learning

d) Increasing training opportunities

Whilst *Breaking New Ground* is required by the HLF to deliver its projects within an agreed core area (231km² focused around the Brecks market towns of Thetford and Brandon), most of the projects are relevant to the wider Brecks. They have been specifically devised to ensure that their benefits, and opportunities for participation and training will be available to everyone across the full 1,029km² of the Norfolk and Suffolk Brecks, and beyond.
The Internal Archaeology of the Breckland Warrens project

The warrens of the Brecks are one of the most important elements in the area’s landscape history and also played a significant economic role over several centuries. Whilst the various warren sites are known and their perimeter banks mapped and recorded (see the Society’s previous project and 2010 report, The Warrens of Breckland), no systematic survey of the internal earthwork archaeology of each warren had been undertaken until the current project. Equally, the warren lodge sites of all but three of the Brecks warrens were known and recorded but no systematic survey of each had been carried out until now.

The Internal Archaeology of the Breckland Warrens project had several individual but linked components. Eleven warren sites were investigated to determine the extent and condition of surviving internal archaeological features and a standardised record compiled for each site. This information was matched with existing and new archival evidence to explain the significance of the archaeology in terms of understanding warrening management practices, with data added to the appropriate historic environment records and to the Breckland Society’s online Warrening Archive. In addition, an example of a surviving warren bank was cleared and conserved, and fieldwalking undertaken at lodge sites to seek evidence of the extent of these structures and the nature of their building materials.
To enable them to carry out the work effectively, the volunteers were trained in archaeological surveying and recording techniques, as well as in archival research. Following publicity on the websites of the Breckland Society and Breaking New Ground, a training session was held from 10am to 3pm on 22 November 2014 at Oak Lodge, High Lodge Centre for 25 would-be participants. It was delivered by David Robertson and Claire Bradshaw of the Norfolk Historic Environment Service; Rachel Riley, Conservation and Heritage Officer for Thetford Forest; and Anne Mason, Project Manager. It covered the Forestry Commission’s protection of archaeology; an introduction to recording the warren banks; and the background history of warrening. The afternoon session was devoted to fieldwork training to map the internal banks and the sites of the lodges, using Downham High Warren as an example.

On 16 January 2015, 15 volunteers attended a training event at the Archive Centre, Norfolk Record Office. They were shown how to access and use the NROCAT online catalogue; how to access documents in the searchroom and handle them appropriately; given a tour of the storage and required storage environment; and then taken to the conservation department, where demonstrations of the conservation of medieval account roles and an 18th-century book were given.

Those volunteers who then ‘signed up’ for the project undertook to research the following warrens for archaeological and archival evidence of internal banks and lodge sites: Beachamwell; Brandon; Broomhill/Weeting; Downham High Warren; Elveden; Mildenhall; Santon; Santon Downham; Thetford; Wangford and Wordwell.

In addition, site investigation and archival research was carried out into Reed Fen Lodge, a potential new lodge site (see Appendix).

Abbreviations

CUL   Cambridge University Library
KLBA  King’s Lynn Borough Archives
NRO  Norfolk Record Office
PRO  Public Record Office
WSROB West Suffolk Record Office (Bury St. Edmunds)
1. Context and Background

The practice of warrenning was introduced to Britain by the Normans, with rabbits farmed first of all on islands and coastal sites. There are records from Lundy, the Scilly Isles and the Isle of Wight from 1146, and by the 1280s warrens had also been established in Breckland. Here the climate is the closest in Britain to that of the rabbits' native Mediterranean, with warm, dry summers and low rainfall in winter. The warrens were mostly established on the higher, dry pastureland of parishes whose settlements clustered on the fen-edge or along the rivers and were concentrated where the greatest depth of blown sand overlaid the chalk, this land being too marginal for consistent arable farming. Classic warren country was the area north from Barton Mills to Brandon and then east to Thetford, a landscape which was "once very barren soyle nevertheless very good for brede of coneys."1

The right of owning a warren was a manorial privilege and rabbits had the same exclusive protection as, for example, the pigeons in the lord's dovecote. They were high-status luxury items for the upper classes, much prized for their meat and fur, and this status was only revoked when the Ground Game Act was passed in 1884. The term 'rabbet' applied to the young animals; adults were known as 'coneys', and 'coniger' or 'coneygarth' was a small enclosure in which they were kept for household use. The Breckland warrens were run as commercial enterprises, owned by the church (usually in the form of the great medieval monasteries) or by powerful landowners such as the Duchy of Lancaster. The rabbits were a source of fresh meat in winter, but also provided a profitable income when sold on the open market, both for their fur as well as their meat

After the Dissolution of the Monasteries (1536–41), those warrens owned by the ecclesiastical authorities passed to lay landowners and warreners tended not to be employed directly, instead renting or leasing a warren on an annual basis. New warrens were established, and by the eighteenth century there were 26 warrens in Breckland, sustaining an industry that included two fur-processing factories at Brandon and short-lived premises in both Thetford and Swaffham. The annual cull on many of the warrens ran to over 20,000 animals, with the meat being sent to London and to the Cambridge colleges, as well as to markets locally. The fur was despatched to Luton, for use in the hat industry, as well as to Europe and as far afield as South America.

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1 Lease for Brandon Warren, 1563 (WSROB, HD1538/146)
The eighteenth and nineteenth centuries were also a time of revolution in agriculture and it was the zeal for ‘improvement’ that began to change the warrens. Attempts were made to establish reliable and more productive arable farming through marling, the spreading of chalk or clay on sandy soil to boost its body and water-retaining qualities. Scots Pine shelter belts were planted to help reduce the soil-eroding impact of windblow, and stands of timber were established on land taken out of rabbit farming. With farming still difficult and often yielding a poor return, many of Breckland’s great estates turned to game-shooting as a more lucrative source of income, with many landowners planting extensive areas of game cover on the former warrens.

An example of this development appears in a letter written on the order of Lord Bradford, 30 Oct 1805: “Having made good the deficiencies at the Contract Plantation in Weeting Field I have therefore on the otherside made out the A/C thereof as the final payment now becomes due… I have put in upwards of 20,000 young Firs this autumn & as the weather has been so very suitable & the season for planting altogether now so very favourable, there is no doubt of their well doing provided they are carefully protected from the rabbits and hares. There wants immediately a day or two work of two men to go round the fence, mend up the parts of the furze capping at the bank & also the paling which it would be very right to have done immediately & I would be greatly obliged to you not to let it be delayed on any acct as the rabbits etc. will begin upon the recently transplanted trees directly, if they are not stooped out.”

1 Letter from John Griffin to Crow (NRO, MS13739)
Public perceptions of the rabbit also changed. With the passing of the Ground Game Act in 1880, the animals lost their exclusive and protected status and there was less reason to confine them to warrens. After the First World War, many Breckland estates went bankrupt because of the slump in agriculture and the death duties they owed, and it was during this period that the Forestry Commission began to buy up land and plant the trees necessary to replenish the nation’s depleted timber stocks. Fashions were also changing. Hats became less popular, so the requirement for rabbit fur from hat-makers declined accordingly, and rabbit meat was no longer in such demand.

However, rabbits did not disappear from the landscape. Huge numbers had been killed for sport in the late Victorian and Edwardian weekend shooting parties of the big estates, and when the Forestry Commission took over, they still had to employ 36 warreners to try and keep rabbit numbers down and protect the millions of young trees being planted. It was only the lethal impact of myxomatosis in the 1950s that radically reduced rabbit numbers, which still fluctuate according to the prevalence of this and other contagions such as RVHD (rabbit viral haemorrhagic disease). However, rabbits remain common and widespread across the Brecks today.
2. Warren Banks and Enclosures

The Society's previous Warrens of Breckland project (2008–10) assessed the distribution, construction and layout of the external (perimeter) banks of the warrens, the first time such a systematic survey had been undertaken. The project identified the perimeters of all but four of the warrens; it mapped and recorded the dimensions and condition of the banks, from very low mounds less than half a metre high to over two metres in some cases and a width from slightly less than a metre to over ten metres. Where two warrens were adjacent, each had its own bank with the space between the banks used as a trackway and known as a border – such as the double parallel banks between Lakenheath and Wangford Warrens; between Santon Warren and Broomhill/Weeting Warren; and between Sturston and Stanford Warrens.

Once warren banks had been constructed, they had to be maintained and kept in good repair. Archival sources include references to the work and money required, as below:

Beachamwell’s 1780 lease for Warren Farm records the requirement that “until the fifth of July proceeding the expiration of the lease keep all the banks and fences which may be made in and around the warren in thorough good repair and keep as far as possible all the rabbits within the warren and prevent their burrowing on other lands.” (NRO, MC1784/2 828X9)

When Lord Petre and George Tasburgh exchanged some land in 1791, the former agreed to “keep in proper repair a proper pale against rabbits on the whole of the line which is the boundary between Bodney Warren lands and those of Petre lying in Stanford, Buckenham, Bodney and Stanton.” (NRO, 1774 NCC (Petre) Box 8)

In 1803, £4 was paid to Robert Smith & Co for repairing the banks on Broomhill/Weeting Warren. (NRO, MS13807)

The 1807 Enclosure Act for Brandon stipulated that there should be no digging of turves “except for the purpose of repairing, supporting and mending the banks, walls and fences adjoining or belonging to Brandon Warren.” (WSROB, HD1964/2)

At Snarehill, men were paid for banking and for carting furze (gorse) in 1848 and 1849. (CUL, Box 124/2 MSS Dpt)
Although the fieldwork conducted for the Warrens of Breckland project noted the presence of internal banks on some warrens, their investigation was beyond that project’s remit. The current project has since identified two types of internal warren banks: first, banked enclosures which were probably used for growing foodstuffs for the rabbits and other enclosures for segregating the breeding does; and second, linear banks created for trapping the rabbits.

Banked Enclosures on the Warrens

Warreners aimed to breed as many rabbits as possible and to produce rabbit meat and fur of the highest possible quality, so internal enclosures on some of the warrens might have provided additional feed for the rabbits during prolonged bad weather and during the winter months.

On Lakenheath Warren, a Terrier of 1649 required the warrener to “support and relieve the said coney in the time of winter with hay and all other necessary feedings.”¹ The “necessary feedings” included Sow Thistles, Dandelions, Groundsel and Parsley. Four rectangular earthwork enclosures, each of 11 acres, bounded by low banks no more than 0.75 metres high and with traces of ridge and furrow, noted in 1975, may have been for growing these crops.²

Sturston Warren has a series of low banks marking small rectangular enclosures. A reference to a “Paled Close” is included in an 1820 lease, which states that 30 acres of the warren could be ploughed and used for arable at any one time.³

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¹ Munday, History of Eriswell (WSROB, HD098/1)
² See Crompton & Taylor
³ NRO, WLS/XXIX/1-22 and WLS/XXX/1-4
Other Functions for Banks on the Warrens
Clarke recorded how “There are probably hundreds of miles of earthen boundary banks in the district. Some of those on the heathland are 6 or 8 feet in height. In some instances they mark parochial or hundred boundaries; of the remainder some perhaps marked the lines of trackways disused a thousand years ago; and others are the boundaries of the ancient common fields.”

Some of the perimeter warren banks also delineate parish boundaries. Sections of the perimeter banks of Brandon, Broomhill/Weeting, Santon, Thetford and Wangford Warrens have this dual-purpose function.

Sheep also grazed the warrens and were another source of income from this marginal land. Sheep and rabbits are mutually exclusive feeders, sheep preferring the grey lichens and mosses avoided by the rabbits. On Thetford Warren, there is a series of up to five parallel banks and attached to them are two rectangular enclosures (TL 84418619, one in Norfolk and one in Suffolk) adjacent to a droveway. It is possible that these were stock enclosures associated with the movement of sheep along the drove.

The Cadogan Estate Map of 1791 for the Santon Downham Estate shows plantations established on Downham High Warren and enclosed by banks. Such low banks can only be traced on the ground with difficulty, as they are less visible than the generally higher and wider warren banks.

Historic maps of several Breckland warrens (see below) name ‘the clapper’, an area separated from the rest of a warren by an internal bank and set aside as a nursery for the pregnant does. The earliest written reference to the use of the word ‘clapper’ comes from the 1275 poem by Guillaume de Lorris Roman de la Rose: “conies .... that comen out of her claperes.”

Randle Cotgrave’s A Dictionarie of the French and English Tongues of 1611 lists clapier as French for a “clapper of conies ... whereinto they retire themselves; or a court walled about and full of nests or boards, or stones for the conies.” The term appears regularly in records of warrens, as well as in place names across the Brecks, and project volunteers found archival evidence as follows:

In the land use records of 1706 for Beachamwell, the “Clappcroft” is listed as 40 acres and 3 roods (St Mary’s Beachamwell, NRO, DN/TER13/1) and as on the “north side of the warren” (NRO DN/TER 13/1).

On Brandon Warren, in the south-east corner where it meets Downham High Warren, is an area named “the clapper”. (Suffolk SMR STN 040 and BRD 105)

The enclosure on Elveden Warren, with a bank 1.5 m high and shown on the tithe map as “Elveden Upper Warren” may be another such breeding area. (WSROB, T37/1.2)

1 Clarke, p.22
An indenture made at Langford in 1476 between Richard Methwold and John Wright/William Nele (of Methwold Hythe) provided for a lease for five years from the Feast of Candlemas of “the conyger at the downe and Claper Hill and from thence unto Musden Lyng to Shakerswaye.” (NRO, PTR i/123/12)

A 1580 map of Methwold Warren names the north-east corner of the warren as Northwold Clapper; on a 1699 map and Enclosure Map of 1806 it appears as Clapper Piece. (NRO, MC 556/1)

On Mildenhall Warren, the area in the north-east corner could also be a clapper as it corresponds in layout and location to that on Methwold Warren. (WSROB, E18/410/1)

Setting aside an area for the breeding does was an integral part of the management of the warren. It enabled the warrener to better protect the young rabbits from predators – the does commonly nursing their offspring only once per day and for just a few minutes – as well as monitoring the condition of the does and giving them extra feed if required. Keeping the bucks apart prevented the does from being almost perpetually pregnant, as they become fertile again just four days after giving birth. Because rabbit gestation is only 28–31 days, a doe could have her next litter before her first is weaned, weakening both her and her kittens.

Having an area in which to segregate the rabbits could have another function, that of selective breeding. The fur of the most abundant rabbit, the common grey, was used for warmth, and that of the silver-grey and black rabbits for fashion. In fact, there was a strict hierarchy related to the rank held and the colour of rabbit fur worn, with black rabbit fur the highest. Methwold Warren specialised in black rabbits, as evidenced on the 1580 parchment map of this warren which clearly depicts black rabbits in residence.¹ The 1650 lease for Black Rabbit Warren at East Wretham may be recording the establishment of a new colony of these rabbits.² In the 1840s, silver-grey rabbits were imported from Lincolnshire to be bred on Thetford Warren.

Archival and archaeological evidence to date confirms that six of the warrens researched had clapper areas and that these were all located adjacent to perimeter banks. It is probable that, with more investigation and time, other warrens will be shown to have had clappers as part of the management of the rabbits.

**Trapping Banks**

A warrener would hire seasonal labour to help trap the rabbits, between October and February, when their fur was at its thickest and their meat the sweetest. Ferrets, nets, lurcher dogs and terriers were used; the ferrets were released into specific burrows to drive the rabbits to the surface and into the nets. Purse nets were placed over individual holes and long nets would be extended to cover an entire area, with the lurchers driving the rabbits rather as sheepdogs do sheep.

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¹ NRO, T/C 1/10a
² NRO, NAS 5/1/20/165
Rabbits were also caught in tip traps: pits about two metres deep, lined with flints and with a swivel cover on top, camouflaged with hay. The rabbits would go to feed and then fall into the pit below as the cover gave way. Although Clarke notes that these ‘tip traps’ were used on Thetford Warren,¹ no archaeological evidence has been identified to date. However, a particular feature of the Breckland warrens is a series of parallel banks which ‘funnel in’ to create narrow-necked areas. These occur on eight of the warrens researched for this project.

Banks were used to help trap rabbits and the term ‘trapping banks’ occurs on five maps of warrens, such as Mildenhall’s Enclosure Map of 1812.² How the banks were actually used in the trapping process remains largely conjectural, although some archival evidence may be relevant. Clarke mentions “several huge earthen banks – some thirty feet wide – said to be ‘trapping banks for the rabbits’” near ‘The Gallop’ on the boundary between Icklingham and West Stow.³

A detailed and valuable explanation of how rabbits were trapped on the Elveden Estate was given by Tom Turner in his book Memories of a Gamekeeper. He describes one method of trapping the rabbits that involved the creation of a special bank: “A low bank, say 2 feet high, was made as long as thought necessary. This was made of grass sods put one on top of the other, gaps about 15 inches wide being left at not less than 50 yard intervals to make runs through the bank. These gaps were covered with pieces of wood, leaving a hole large enough for a hare or a rabbit to pass through. Then more sods were placed on top of the wood to bring the gaps level with the rest of the bank. After the rabbits had been using the holes for some time and had become thoroughly accustomed to them, traps were set in the holes, the traps always facing the way the rabbits would be coming from. For some nights a lot of rabbits would be taken in this manner, but as soon as the numbers began to fall off, the traps would be removed and the whole thing repeated on fresh ground.”⁴ A reference in a late nineteenth-century book written by a warrener at Wortley Hall Park in Yorkshire also appears to explain the making of trapping banks, or mounds: “whether the rabbits are to be raised for sport or for the market, the earth-mounds … must be laid out with some degree of order … to make the catching up of the rabbits in large numbers easy and convenient … artificial mounds must be thrown up in parallel lines about 100 yards apart. These are easily and quickly made, and will cost about 9d per cubic yard to throw up.”⁵

A valuable firsthand account of how rabbits were trapped was found by volunteers working on the Society’s Flint in the Brecks project in 2015. Frank Norgate, a keen amateur archaeologist and naturalist, recorded one technique in his diary: “10th February 1882. Saw Diggerson ferreting rabbits in a sandy bank covered with snow. He used a long net on sticks on each side of the bank and about 5 feet away from it, also a purse net or 2 over the rabbit holes and the usual long handled spade, and dogs...”⁶

¹ Clarke, pp.143–44
² WSROB, E/F/071/1/83
³ Clarke, p. 111
⁴ Turner, p. 196
⁵ Simpson, pp. 81–85
⁶ NRO, MC 175/12–13, 698X2
Medieval archival evidence of how rabbits were trapped is more elusive. The Brandon Account Rolls record that in 1281 Henry Pie had to supply six coney nets a year for use on Brandon Warren, whilst in 1379–80 there is a reference to the purchase of “a net called a hay 30 fathoms long, with cords for the same, for catching coneys, 6s 8d.” In 1386–87, 6d was spent on six coney nets, and in 1389, six Baltic boards (pine planks) were bought for making seven traps in the warren, at a cost of 2s 6d.¹

Archival research helped guide the project volunteers towards the identification of potential trapping banks on the ground. With ‘trapping banks’ named on the 1835 map of Lakenheath Warren in the northwest corner of the warren,² and on the 1807 Enclosure Map for Mildenhall in the northeast corner,³ locating and surveying these features provided volunteers with the experience and knowledge needed to seek out such banks on other warrens.

¹ PRO, SC63504/23–26
² WROB, E5/18/11
³ WROB, E5/410/1
Breckland Warrens Surveyed for Internal Archaeology 2015–16
**Project Work on the Warrens**

Fieldwork and archival work carried out by Anne Mason has revealed that there are 13 Breckland warrens where sections of multiple banks run parallel to each other, adjacent to the perimeter bank and with two banks ‘funnelling in’ before separating as parallel banks again. This project was able to research 11 of these warrens for evidence of trapping banks, with access and time being the limiting factors. The results were used to compile the maps reproduced in this section, showing surviving banks (marked in green). Lodge sites are ranked with a red circle. Additional warrens with the possibility of trapping banks are: Black Rabbit; East Wretham; Eriswell; Gooderstone; Stanton and Sturston.

**Beachamwell**

TM766075

Earliest known date: 1275

Surveyed by Sue Pennell and Kathy Gay

The western boundary of the warren has surviving earthwork banks comprising a single bank with some sections having between two and three parallel banks. The western/inner bank is 15m to the west of the central bank, 6–10m wide and up to 0.3m high. The banks seem to be a continuation of the banks visible from TF7881607734 and may correspond to the gorse belt marked on the 1842 Motteux estate map of Beachamwell Warren (NRO, MC 2506/2). The southern boundary bank runs from grid reference TF7887907617, but the two spurs – perhaps the start of the double bank – are difficult to interpret. The southern spur may be part of the bank that is visible close to Ride 105 at TF7867807460.

**Brandon**

TL798837

Earliest known date: 1252

Surveyed by Michael Willett and Carol Palfreyman

The remains of at least two banks survive, but are partly destroyed by an existing forest ride at the north-west end (TL786844). There is a sharp twist to the banks at TL771842, but then they become less distinct.
Broomhill/Weeting
TL 796877
Earliest known date: 1413
Surveyed by Tim Bridge

Perimeter banks are visible in the north-east corner, on the short western boundary and along the southern boundary, but no multiple banks were found.
**Downham High**

TL809849  
Earliest known date: 1440  
Surveyed by Bob and Rachel Greef, Alan Spidy and Anne Mason

The boundary bank on the western side has three other banks running parallel to it for approximately 500 metres, with a possible fifth bank at TL803835. The two westernmost banks meet in a curved funnel shape at TL802843 before diverging again and running parallel. The two innermost banks follow the same ‘funnelling in’ pattern (see photo on p.15). The bank systems are complex in their layout, merging together and then splitting apart; some curve round towards each other and then are discontinued. Rather than simply being four parallel banks throughout, two banks can merge and four become three and, at another location, three banks can merge and become two.

These banks are clearly significant in terms of the management of the rabbits by the warreners. Though their layout is undoubtedly linked to their practical use, we can only speculate as to exactly how they were used, as no ‘working manual’ has yet been found. They are probably the best examples in the Brecks of such a complex arrangement of internal banks.

**Elveden**

TL795822  
Earliest known date: 1618  
Surveyed by Anne Mason

Double banks were recorded on the northern boundary of the warren (perimeter banks survive along the western and northern boundaries and are marked by a line of gorse along the eastern boundary). At TL940820 one of three parallel banks joins the middle one to make a funnel. At TL791817 there are four banks, but their subsequent line and layout were difficult to discern in the dense covering of bracken. **Please note that there is no public access to this land and special permission was granted to the project to survey and record any warren-related features.**
MILDENHALL
TL740755
Earliest known date: 1323
Surveyed by Anne Mason and Alan Spidy

Trapping banks are marked on the 1807 Enclosure Map (WSROB E18/410/1) in the north-east corner and there are at least three banks visible on the ground. The vegetation was too dense on two site visits to carry out a detailed investigation, which needs to be undertaken after a severe frost.

SANTON
TL826890
Earliest known date: 1413
Surveyed by Diane Jackman

On the western perimeter are two banks which run parallel to each other for about 100m and then meet in the characteristic ‘V’ of the funnelling-in noted on other warrens.

SANTON DOWNHAM
TL865835
Earliest known date: 1778
Surveyed by Liz Taylor

There is a complex series of parallel banks, which may be trapping banks at the northern end where two banks meet in an inverted ‘V’ with the point of the ‘V’ facing north. In the south-east corner of the warren, there are three banks: two to the east of the forest track and one to the west. The two banks again run parallel and then join together in an inverted ‘V’, in another example of trapping banks.
Thetford
TL825890
Earliest known date: 1514
Surveyed by Frances Evershed, Alan Spidy and Anne Mason

A set of four to five parallel earthwork banks are visible on aerial photographs and form county and parish boundaries, together with a droveway. These banks run from TL84628641 to TL83808565 and have been located on the ground. Two of the banks converge and funnel in, replicating the pattern/arrangement noted on other warrens. The perimeter banks of the warren survive only in part, and mostly where they are also the parish and county boundary. However, the most striking feature of the banks
is on the western boundary where, in sections as long as 100m, the side of the bank facing into the warren has been faced with flints. This feature was also discovered on the external elevation of the perimeter bank immediately to the north of the site of Reed Fen Lodge (see Appendix One).

Thetford Warren is the only warren in the Brecks where this use of flint-facing has been found so far and its purpose is conjectural. Was it to strengthen the bank against burrowing by the rabbits? But if this were a problem, why was it only on this warren and not all the others? Was it to delineate ownership of this particular warren or to draw attention to the boundary before crossing into neighbouring Downham High Warren? The mystery deepens though, because the flint-facing is on the internal elevation of the western perimeter bank but on the northern perimeter bank, it is on the external elevation. A full archaeological survey is required to determine the extent of the flint-facing and archival research might yield information about its date and whether it was contemporary with the bank construction or added later.

**Wangford**

TL 770819

Earliest known date: 1365

Surveyed by Michael Willett and Carol Palfreyman

There are partially surviving double, triple and quadruple linear earthwork banks running north-south between TL 77908300 and TL 77678226. There was no obvious funnelling-in, but a re-visit in winter when the vegetation is at its lowest might show any such features more clearly.

**Wordwell**

TL 832763

Earliest known date: 1800

Surveyed by Frances and Andy Evershed

Four visits with extensive field-walking of the warren area as shown on the 1800 ‘Wordwell Warren’ map (WSROB, M593/1) found only the possible eastern perimeter bank and the north-east to south-west perimeter bank (6m wide) along the edge of a forestry ride.
The Context for Internal Banks

The distinctive features noted by the volunteers for these internal parallel banks are actually very similar to those associated with stock handling throughout history and even prehistory. Ancient game traps in Upper Egypt, dating from 4000–2500 BC, take the form of stone lines broken up by funnel-shaped openings, whilst in Syria are long stone lines converging in a corral or enclosure into which game was driven, trapped and killed.

Frances Pryor found examples in Bronze Age field systems in East Anglia of narrow linear features, normally less than two metres wide, and suggested that these were where individual animals belonging to different individuals, families and groups could be separated from larger herds or flocks of animals for counting, sorting, breeding, shearing or culling.1 Pryor classified these features as belonging to two categories. The first, ‘funnels’, he identified as large, flared entrances into trackways or fields with ‘crushes’ at the converging end points where animals can be concentrated. He noted that herd animals such as cattle and sheep are reluctant to enter confined spaces, so the open end of the funnel aids this process, with people and dogs driving them from behind. It is perfectly possible that this practice was applied to rabbits also. The second category, ‘races’, he identified as narrow linear features normally less than two metres wide and whereby individual animals belonging to different individuals, families and groups can be separated from larger herds or flocks of animals for counting, sorting, breeding, shearing or culling. Having ‘curved races’ might be more effective because they trick livestock into believing they are turning and they cannot see people ahead of them.

‘Races’ are generally associated with enclosures or stock pens as, once separated, the designated livestock needs to be kept apart. Medieval and post-medieval roads and droveways often have funnel-shaped entrances at the point where they enter unenclosed land and commons, in order to facilitate livestock movement. Farmers today still use funnelling systems as the most efficient way of herding and sorting animals, and although different species require different handling and management techniques (including using the minimum number of people to be cost-effective), the structures for gathering and trapping livestock appear to have changed little over time and remain fit for purpose. Comparing the archaeological evidence of the parallel internal banks on the warrens with the ‘funnels’ and ‘races’ studied elsewhere, and with the supporting archival evidence, it seems very likely that the complex systems now identified on the Breckland warrens are ‘trapping banks’.

1 Pryor, pp.103–105
3. The Sites of the Warren Lodges

The Warren Lodge is a curious building, almost on the highest part of the warren and of great antiquity.

W G Clarke, describing Thetford Warren Lodge in *In Breckland Wilds* (1925)

Each warren was run by a warrener, one of the highest-paid of manorial officials. He needed to live on-site to care for the rabbits, to trap them when most propitious, and to guard them against predators, both animal and human. Such was the value of the rabbits’ meat and skins that armed gangs of poachers raided the warrens. The lodge in which the warrener lived had therefore to serve a threefold purpose: accommodation for the warrener and family; storage for the trapping equipment and carcasses; and a look-out and defence against poachers.

Lodges required maintenance and repair, activities that account for the most frequent references to lodges in archival sources. *The Register of Thetford Priory*, transcribed by David Dymond,1 lists repairs to Bodney Lodge in 1499, 1500 and 1509; to Thetford Warren Lodge in 1514; to Santon Lodge in 1502/3 and 1505/6 of 4s 10d; and to Snarehill in 1510 and 1537. Even the gates placed where routes entered and left the warren were not forgotten. *The Register* records that Thomas Polett, smith, supplied a staple for Snarehill Gate in 1527–28 and eyes and hooks for it in 1528–29.

The Society’s Warrens of Breckland project (2008–10) identified lodge sites, undertook site visits and carried out archival research for each lodge. A summary of that research is included below, together with new information that has come to light as a result of this project.

The lodge on Beachamwell Warren is first mentioned in 1595 in the probate inventory accompanying the Will of Thomas Tooke (NRO, ANF Bale 65 MF195). An estate map of 1766 (NRO, CAT 1784/1 828X900) shows a range of buildings within a square perimeter on the site of the present-day Lodge Cottage. Bryant’s Map of Norfolk of 1826 marks ‘warrenhouse’ on the same site. An 1842 map of the warren (NRO, MC 2506/2) shows most of the access tracks leading to what appears to be a centrally located enclosure containing a building or buildings (the smaller one perhaps an outhouse) and – on the northern side – with what may well be two

1 See Dymond (1995)
enclosed areas for growing winter fodder crops for rabbits. The 1851 Census Return lists three lodges, while an estate map of 1873 shows two small buildings and one large, still called ‘Warren House’. Neither the present Warren Farm (south-east of the lodge site and nearer to Drymere) nor Lodge Farm are indicated on the estate maps. Lodge Farm was built c.1840, with Warren Farm built at a similar time and shown on a plan accompanying a terrier of 1845 for St. Mary’s Church. It is therefore probable that there was only one lodge site, but with two small cottages and one larger dwelling, at least three families could have resided there.
Brandon Warren Lodge was rebuilt in 1386 and manorial account rolls include an itemised list of materials used (WSROB, HD1538/146/HD1538/148/11). Until this project discovered otherwise, the presumption had been that there was only the one lodge site on Brandon Warren. However, archival research has revealed that The Bury and Norwich Post of 31 December 1806 made reference to poachers near Brandon being “more numerous than ever before known; scarcely a night passing without many rabbits being stolen by dogs and other means; a few nights since one of the lodges on Brandon warren was broken open, and upwards of 11 dozen of rabbits, a gun and other articles taken away.” In addition, the Suffolk Historic Environment Record lists ‘Old Warren House Yard, the possible site of an original medieval warren house, mentioned as an exchange between J R Burch and Geo Wilson (Lord of the Manor and owner of the warren), on Brandon Inclosure 1801-1810.’ (WSROB, EC 597/4/1). This site (grid reference TL77067568) later became a school and all traces of any lodge have long since disappeared.

The lodge site on Downham High Warren has been confirmed as close to where the Oak Lodge Community Building is now situated, within High Lodge Forest Centre. Retired Forestry Commission staff have confirmed that a farmstead that stood on the site was demolished in the 1970s.

Ickburgh (Langford) Lodge was the subject of a surface investigation in 2011–12 and the bricks forming the cornerstones were dated to c.1500. A lease of 1476 for the warren was found in the Norfolk Record Office (NRO, PTR 1123/12), thereby providing corroborative evidence.

Mildenhall Warren Lodge was put on the Heritage at Risk Register in 2011 because its flintwork had been damaged by harsh winter weather. Friends of Thetford Forest secured funding of £81,600 from English Heritage, the Forestry Commission and Forest Heath District Council for a new roof to protect it, modelled on a photograph of the 1930s. The Douglas fir timber used for the roof was donated by the Forestry Commission.
Santon Warren Lodge was in existence by 1499, because repairs were carried out in that year by Richard Large, carpenter to Thetford Priory (see Register of Thetford Priory, Part 1). Site visits have confirmed that sections of medieval walling remain and form part of three of the four walls of the lodge.

Santon Downham was first identified as a separate warren by Anne Mason when looking at the 1778 map of Thomas Wright’s Estate (NRO, MC662/22/793x5). This
map (see inside back cover) shows ‘Warren Lodge’ marked towards the southern tip of the warren, but extensive searches by project volunteers have found no evidence for a building in that location. The 1824 First Edition Ordnance Survey Map (Sheet 65) clearly labels Little Lodge Farm as ‘Warren House’. In the 1891 Lease, this is ‘Low Lodge Farm’ (NRO, MC114/2/1 583X4).

The ‘discovery’ of Frank Norgate’s Diary in the Norfolk Record Office during the Society’s Flint in the Brecks project (see page 14) gave a new insight into Thetford Warren Lodge. On 19th December 1885 Norgate described a walk “to Thetford Warren Lodge (or Fort) which we looked over. It seems to have formerly been a strong place as if for defence, the windows are narrow slits in very thick walls.” In the margin of his diary, he notes “Winding stone staircase very large rooms and 4 to 5 large bedsteads in one room. Warreners congregate here for preparing big bags of rabbits for market or other purposes.”

The existence of two more lodges on Thetford Warren has been confirmed by the project. The name ‘High Wrong Lodge’ was noted on a highway diversion plan of 1802 for Elveden-Brandon (WSROB, Q/SH/28) and a site visit revealed a flat platform and some building debris. The name also appears on the 1883 Edition Ordnance Survey Map. Reed Fen Lodge was also identified from the 1883 Ordnance Survey Map and an account of the surface investigation of the site is included in the Appendix.

Wordwell Warren Lodge is shown on Hodkinson’s Suffolk Map of 1783. The 1800 Estate Map shows a building marked ‘Lodge’ to the east of ‘Four Corners’ but the exact location is difficult to identify as the map is not accurately to scale and the nearby landmark of the road to Brandon which crosses the warren no longer exists. On the 1840 tithe map there is no evidence of the ‘Lodge’ and the whole area is described in the text as ‘arable’, indicating that the warren as such had ceased to function and the lodge was no longer required. Three site visits during the project failed to find any archaeological evidence for a building.

Since the publication of the Warrens of Breckland report in 2010, no new information has been found for Black Rabbit, Stanford, Sturston and Tottington Warren Lodges, all of which sites are within the STANTA Battle Area, nor for Broomhill/Weeting, Elveden, Eriswell and Wangford Warren Lodges.
4. The Social History of the Warrens and the Warrener

The social history of the rabbit in many ways is a microcosm of the social history of England, spanning as it does privilege to poverty, high to low status, and changes in fashion and food. From their inception in the 1280s, the right of owning a warren was restricted to those of manorial rank and had to be purchased from the Crown. There was a strict hierarchy with regard to rank and the colour of rabbit fur worn, while those below manorial rank were not permitted by law to eat rabbit meat nor to wear rabbit fur.

Rabbits came to be regarded as evidence of a manorial lord’s legal and social superiority. In 1381, John of Gaunt, Duke of Lancaster, had his warren at Methwold attacked during the Peasants’ Revolt and a rabbit was strung up on the gate of St Alban’s Abbey, monasteries being the owners of many of the warrens. An inquisition at Methwold in 1522 noted that “much of the Come of the said londe distroyed yerely with Conyes which be so greatly encreased.” At Freckenham in 1551 the rabbits were described as “increasing and multiplying on the common land” (Suffolk Ipswich RO HD1538/113-204) and in 1582 many were killed by the villagers, who were then fined as a punishment. Rabbit damage to crops was cited as a source of friction in Kett’s Rebellion of 1549 and the demands included “We pray that no man under the degree of [word missing] shall keep any conies upon any freehold or copyhold unless he pale them in so that it shall not be to the commons’ annoyance.” (http://www.kettsociety.org.uk/ketts-29-demands/4586375343)

Archival sources
The first warrener recorded by name in the Brecks was Ealfrido, warrener of Freckenham Warren in 1295. The Villata de Brandone Tax List of 1327 names ‘Adam le Warner’; Roger ‘le warrrener’ in 1337; John Waterman in 1363; John Phillip in 1373 and John Porter in 1389 (WSROB, FL536/11/32). At Mildenhall in 1540, Nicholas Mey includes ‘the Wareyn’ in his will (WSROB, IC500/1/36/24). In 1752, George Thompson, warrener of Weeting, left in his will his farm and warren in Broomhill, together with the stock of rabbits, to his son Thomas and the lease of the warren and Santon with the rabbits to his son George (National Archive PROB 11/798).

Robert Orage, tenant farmer of Snarehill from 1520–35, was paid for repairing the warren lodge by its owner, Thetford Priory, but as he supplied rabbits at 2 pence a couple, he was probably the warrener. (Register of Thetford Priory Pt 1 p.75)

At Beachamwell, warrener John Copper left £20 to one daughter and monies to...
other people in 1678 (NROCAT microfilm MF/RO 465/13). In 1894, a son was born to Jacob Winner, warrener, at the warren lodge; a daughter in 1901 to Robert Adcock, warrener; and in 1931 a son to warrener Charles Winner (NROCAT MC 1784/2 828X9). Photographs of warreners show that the practice of warrening continued well into the twentieth century; in addition to those illustrated here, they include a 1908 photo of warrener Jacob Winner, wearing a smock and holding hares (NROCAT BIR 49 396X9); a much-published photograph of warreners on the Elveden estate in the 1920s; and a 1940s photo of William Partridge, warrener, with his family.

Project analysis of census returns and parish records reveals the presence of warreners and their families over many decades and across the Brecks. In addition to warreners living in warren lodges, there are examples of them residing off-site. The Snarehill census returns provide proof of this situation. That for 1841 lists a George Finch, aged 21, occupation “Warrener”, as living as a “boarder in a household in Rushford”, whilst the 1851 return includes 27-year-old Alfred Coote, “Warrener”, as “lodging with John Sexton, 46, Ag. Lab. and his wife Sarah, 47, in Rushford.” Meanwhile, the 1851 census return for Thetford Warren Lodge and Reed Fen Lodge lists eight warreners in addition to those residing at the lodges (one single man at the former and one man with wife and two children at the latter), all living at various addresses in Thetford.
This is the first time that the existence of warreners living away from a particular warren and/or in a lodge but clearly working as warreners has been recorded. Further research is required to ascertain their precise status, whether as itinerant warreners, seasonal labour or employed by a particular estate.

Archival records also contain references to the work undertaken by warreners. As early as 1251, Henry Pie, warrener at Brandon, had to supply 6 coney nets a year “dimidia duodena retina ad cuniculos” (PRO SC61304/23-36). In 1389, the Brandon warrener was buying “6 Baltic boards for making 7 traps in the warren 2s 6d.” (PRO, SC61304/23–26)

A legal document of 1750 concerning a dispute on Lakenheath Warren illustrates the complexity of warrening operations: “Banking making Burrows mowing The Braks killing moles. Engines Used on the Warren in Killing the Rabbets Snaring Haying Rounding with Nets and also Digging in Rounds For Rabbets and also raising here and there a piece of earth to lay on the rains of the nets when wanted ... and also using of Dogs Guns Traps and other Engines as is Commonly Used To Take and Destroy the vermin ... and also Digging with Ferrits for Rabbets.” (NCUACS 38.6.92/C.12 Cambridge University Library)

The warrener therefore had to be something of an entrepreneur. In the earlier medieval period, 1200–1400, he was usually employed directly by the manorial lord; in the social changes following the Black Death, he became a lessee and paid a rental for the warren and benefited from the profits. At all times, he had to ensure that there was a supply of rabbits for the manorial household: “good and serviceable conies deliverable on demand to his master’s table” (from the 1628 lease for Shouldham Warren). In addition, he had to manage his warren to nurture and protect the rabbits, principally from extremes of weather and natural and human predators. This could be a precarious living. In bad years, when ‘murrain’ (the general medieval term for diseases affecting domestic animals) struck down the rabbits with unspecified illnesses, there could be a loss not a profit.

Seasonal labour was required for the autumn and winter trapping and culling work. There is documentary evidence for there being more than one lodge on at least some of the larger warrens: Brandon; Eriswell; Hilborough; Lakenheath; Mildenhall and Thetford. These additional lodges may have been for use during the trapping season, generally from November to February, rather than permanently occupied. The repair of the banks and the lodges, the making of nets, the breeding of ferrets and the training of the terrier and lurcher dogs were other sources of employment.

Account rolls list the numbers of rabbits culled in specific years. From 1380–90, for instance, 9450 rabbits were culled on Methwold Warren, making a record profit of £80. Individual warreners had contracts with London skinners and poulterers as early as the 1370s and the Cambridge colleges were also a ready market for the rabbit meat. The years 1385–6 saw 2772 conies sold for £36 16s 0d, and in 1386–87 4465

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1 NRO, HARE 27.47, 199X11
conies were taken and their sale generated £40.4s.0d for 4020 at a price of £14 "per long hundred". (PRO SC61304/23–26)

For Beachamwell Warren, the clauses contained in the leases to tenant warreners were explicit and had to be implemented. The lease of 1784 was quite clear: "And will on the 5th Day of the last year deliver up 2500 Rabbits upon the Warren as Stock for the benefit of the Landlords without payment and if more to be paid on the 26th December following for half at the former slaughter price, half at the market price of the winter slaughter, the common expenses of killing, taking and carrying such Rabbits (overplus) to Brandon to be deducted therefrom." (NROCAT MC 1784/2, 828X9).

On Snarehill Warren, towards the end of the nineteenth century there was an average annual kill of about 8600 Rabbits, producing an approximate income of about £430 per annum (1898 Sale Catalogue NMHC filed under ‘Rushford’).

The market for rabbits was more extensive than purely local, regional or even national. Rabbit products from the Brecks were exported overseas. The King’s Lynn Customs Rolls record “In the ship of Walter Hake, called Christopher of Briel, departing 27 May 1392 from John de Lakynghyth, 900 rabbit skins worth £20.” That same year – “Departing the last day of October” – was the Goodwill, whose cargo included six capes lined with rabbit fur. On 16 April 1612, the Dolphin of Lynne set sail for the Baltic ports with a variety of rabbit products on board.1

Although there was clearly a thriving medieval trade in rabbit skins, the peak of rabbit production in the Brecks was actually in the eighteenth and nineteenth centuries. In the 1750s, rabbits were taken to Newmarket in twelve dozen lots, three or four times a week. In the 1820s, 200 dozen were sent daily to London from the Breckland warrens in the autumn months, with the average annual cull on Thetford Warren in the 1880s and 1890s running at 28,880.

Not surprisingly, the privileged status of the rabbits and the high prices they could command led to poaching on an extensive scale. The Poaching Statue of 1389 made it an offence for poorer laymen and clerics to keep ferrets, dogs and nets for the purpose of hunting and gave manorial officials the right to search houses

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1 See King’s Lynn Customs Rolls (KLBA, KL/Fe3)
for incriminating evidence – as did Duchy of Lancaster officials in Thetford and Brandon in 1425. Mark Bailey highlighted the widespread nature of poaching in *A Marginal Economy? East Anglian Breckland in the Later Middle Ages* (1989), including the following references:

March 1376. Court fined John Gardiner of Langford and William Ram of Brandon for keeping dogs trained for poaching rabbits.

Brandon Warren, 1379–80. Warrener hired three men to protect him against “malefactors of the night”.

November 1399. Richard Hosteler of Brandon fined for keeping a dog which “destroyed the burrows of rabbits in the lord’s warren”.

Methwold 1421. Two men paid 3s 4d each as reward for “apprehending malefactors of the warren”.

Methwold 1426. Warrener attacked by poacher with a cudgel.

Brandon 1449. Thomas Wymere and Thomas Benyng fined 6s 8d for supplying ferrets to poachers.

Lackford Warren 1459. Warrener attacked by two poachers from Ingham.

Lackford Warren in 1516. Thomas Church of Risby fined £10 for poaching.

Poachers sometimes organised themselves into gangs, in what Bailey calls “a deliberate and conscious pooling of experience and resources. They were well organised and ruthless, used their own nets, ferrets and dogs and were armed with an impressive array of weaponry.” For instance, on 19 September 1445 an Elveden gang fought with a Thetford gang on Downham High Warren. The Thetford gang wounded three of the Elveden poachers and “carried them without licence to the town of Thetford and there unjustly imprisoned them.” In 1448, four men from Thetford, Hargham and Ashby met with an “unknown mob on Hockham warren on the night of 10 October and escaped with 600 rabbits.”

By the 1800s, penalties were even more severe with solitary confinement, hard labour, public whippings and transportation common punishments for poaching offences. At the Quarter Sessions at Bury St Edmunds in January 1805, G Cross was convicted of stealing a trap and two rabbits from Wangford Warren. He was sentenced to six months solitary confinement and hard labour and was publicly whipped at Brandon. On April 24 that same year, J Talbot was committed to Bury New Gaol, charged with “stealing one rabbit out of a trap, the property of R. Eagle, Esq., off his warren in Brandon.”

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1 Bailey (1989), pp.300–301
2 Bailey (1989), p.185
3 The Bury and Norwich Post: Or, Suffolk, Norfolk, Essex, and Cambridge Advertiser (Bury Saint Edmunds, England), Wednesday, April 24, 1805; Issue 1191. 19th Century British Library Newspapers: Part II.
The Bury and Norwich Post of 31 December 1806 recorded that “The poachers near Brandon are more numerous than ever before known; scarcely a night passing without many rabbits being stolen by dogs and other means; a few nights since one of the lodges on Brandon warren was broken open, and upwards of 11 dozen of rabbits, a gun and other articles taken away.” On 28 October 1807 the same newspaper reported how “On 22nd instant by J R Burch, Esq.: Wm Warff charged on the oath of Mr John Turner of Santon Downham, with feloniously entering his warren between one and two o’clock in the morning, setting nets thereon, and afterwards driving many rabbits therein.”

One of the most draconian punishments was meted out by magistrate Charles Sloane, Earl of Cadogan, in 1813. Robert Plum, aged 22, and Rush Lingwood, aged 18, took a single rabbit from a trap on Hockwold Warren. Plum was transported to Australia for seven years and Lingwood sentenced to two years in prison. Even straying onto a warren was a punishable offence. In 1844, William Nunn of Thetford was committed to seven days’ imprisonment for an act of trespass that included “getting over a warren bank” at Wangford (WSROB HD/1720).

Court cases continued after the passing of the Ground Game Act in 1884 had removed the exclusive and protected status of the rabbit. In February 1918, Robert Cole and Samuel Williams, both pit prop workers, were charged with stealing rabbits at Santon Downham the previous month. Cole was fined £2 and costs of 4s. Williams was fined £1, or 14 days imprisonment. By this time many Breckland estates were facing bankruptcy because of the slump in agriculture and increased taxation pressures. Traditional forms of land management, including rabbit warrening, were being challenged and the Forestry Commission tree-planting programme was dramatically changing the landscape. With demand for rabbit meat and fur falling, the centuries-old warrening heritage of the Brecks was drawing to a close.

**Conclusion**

Archaeological and historic sites are an essential and integral part of the character of the Brecks and testament to the exploitation and management of its landscape through the centuries. This is especially true of the warrening industry, spanning six hundred years and leaving as its legacy warren banks and lodge sites. This project has revealed that the banks associated with warrening extend beyond the perimeter boundary banks: volunteers have mapped internal enclosure banks, clapper areas and systems of trapping banks. The project has also verified the existence of Reed Fen Lodge on Thetford Warren and found archival evidence for not one but two lodges on Brandon Warren, as well as discovering more information about the lodges in general and the social history associated with warrening.

It is thanks to the dedicated group of volunteers that this project has succeeded in revealing the complex and sophisticated techniques used by the warreners in their management of the warrens and the rich archaeological heritage of the warrening industry that they have left behind in the landscape.
Appendix

Reed Fen Lodge, a ‘new’ lodge site

When the name ‘Reed Fen Lodge’ was noted on the first edition Ordnance Survey map, the opportunity was taken by project volunteers to investigate this new site for a possible warren lodge and also to use the investigation as a training exercise. With the permission of the Forestry Commission, a test-pitting investigation of the site was carried out by members of the Society and other volunteers on Saturday 19 September 2015, as part of the project. It was led by Claire Bradshaw, Community Archaeologist, Norfolk Historic Environment Service.

The test pits were marked out as one-metre squares using pegs and tape and each square was photographed prior to investigation. A fourth team of volunteers investigated the structure of a length of Thetford Warren boundary bank. All excavation was done using hand tools and finds were collected by hand. Metal detectors were not used. All archaeological features and deposits were recorded using pro forma sheets drafted by Suffolk County Council Archaeology Department and provided by Dr Bradshaw. Grid references were noted for the locations of the test pits and the boundary bank. Plans and sections were recorded at appropriate scale. Colour photographs were taken of the pits/bank as work progressed and of any relevant features and deposits.

Three test pits yielded a range of artefacts and building rubble, as well as evidence of brick walling. A follow-up session took place at Oak Lodge, High Lodge Forest Centre, on Saturday 3 October from 10am to 1.30pm; again led by Dr Bradshaw, who provided training in the care, cleaning and classification of the artefacts found during the site investigation on 19 September. The volunteers put this training to immediate use as they spent an hour washing and sorting the artefacts and attempting identification. The second part of the session was devoted to learning how to write the archaeological report of the site investigation. The volunteers undertook responsibility for writing up their particular part of the investigation and also for the introductory and methodology sections, with coordination of the work provided by the Project Manager. One volunteer undertook archival research into the census records to see whether Reed Fen Lodge was listed and a second volunteer researched newspaper accounts for evidence of poaching convictions.

The most significant artefacts in terms of dating were brick fragments from Test Pit 1, identified as being sixteenth to eighteenth century; nails from Test Pits 2 and 3, which were pre-1800, and stoneware from Test Pit 1, which was dated as eighteenth to nineteenth century. The bricks, tiles and masonry suggest a permanent structure,
rather than a temporary seasonal one. Metal artefacts suggest animal husbandry (rings for tethering horses, perhaps) and bones indicate the presence of small animals, possibly rabbits and probably a young dog. Fragments of pottery, some of them decorated, and a piece of writing slate (found in Test Pit 1) suggest family occupation of the site. Subsequent archival investigation of census returns between 1841 and 1911 (see page 30) has shown that families with children lived on the site throughout that period.

The volunteers were very keen to try and define the extent, and possibly the age, of the building and therefore carried out a second investigation on 13 February 2016. Staff from the Forestry Commission were present and took part in the work, but
otherwise the volunteers organised themselves, as they were considered adequately competent by the Norfolk Historic Environment Service. Five new test pits were dug and provided evidence of a solid structure of flint/brick rubble embedded in mortar, presumably the remains of a wall with a bed of compacted chalk. This was possibly part of the foundation plinth of a building. Pieces of brick and floor tile were removed from Test Pit 7A and all the building material fragments sent to the Norfolk Historic Environment Service for analysis. No pottery or metalwork was found during this second investigation.

During both investigations, blocks of dressed limestone had been found part-buried in vegetation and another block was unearthed in one of the test pits. The position of the blocks was recorded and then they were taken into safekeeping by the Forestry Commission. Measured drawings of each block have been made. Of particular interest is one stone block which is inscribed with the initials ‘H’ and the date ‘1737’. A possible source of these blocks is Thetford Priory – they would have been relatively simple to transport, as both the Priory and Reed Fen are close to the Little Ouse, which was navigable until the early 1900s.

Another possible source of these dressed stone blocks is St Helen’s Oratory, an early twelfth-century church on the Norfolk side of the Little Ouse and about half a mile from the Reed Fen Lodge site. The Archdeacon of Norwich’s visitation return of 1368 made no mention of St Helen’s, and as this was a very comprehensive survey it is likely that the church had already disappeared by this date. Excavations carried out for the Norfolk Research Committee in 1961–62 revealed part of the apsidal plan of the church and – perhaps more significantly for this report – that the chancel arch had been robbed of ashlar and the nave walls robbed to the foundations.
A particularly unusual and exciting discovery was made to the north-east of the test pits, where the outer surface of a section of the Thetford Warren boundary bank was found to be faced with flints. This feature has been found on other sections of the Thetford Warren boundary bank, but is not so far recorded elsewhere in the Brecks.

The site of Reed Fen Lodge has now also been identified on maps earlier than the 1883 OS 6-Inch Map. A building is marked, but not named, on Hodkinson’s Map of Suffolk of 1783 and on Faden’s 1797 Map of Norfolk. However, the absence of any mention of Reed Fen Lodge in the Register of Thetford Priory (which lists repairs to the main Thetford Warren Lodge and to lodges in all the other warrens owned by the Priory, including Bodney, Santon and Snarehill) suggests that the building was not medieval in origin.

The test pits dug during the investigation yielded evidence of human habitation on the site. Bricks, tiles and masonry suggest a permanent rather than a temporary seasonal structure. Metal artefacts suggest animal husbandry (rings for tethering horses perhaps) and bones indicate the presence of small animals, possibly rabbits and probably a young dog. Fragments of pottery, some of them decorated, and a piece of writing slate (found in Test Pit 1) suggest family occupation of the site, as confirmed by subsequent archival research into census returns.
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**Archives**

Both the Norfolk and Suffolk Record Offices have relevant archival records. Their websites carry details of opening times and access arrangements:

**Norfolk Record Office**
The Archive Centre
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The Breckland Society was set up in 2003 to encourage interest and research into the natural, built and social heritage of the Norfolk and Suffolk Brecks. It is a membership organisation which works to help protect the area and offers a range of activities to those who wish to see the special qualities of this unique part of England protected and enhanced.

In March 2014 the Heritage Lottery Fund (HLF) confirmed the award of nearly £1.5 million to the Breaking New Ground Landscape Partnership, enabling a £2.2 million scheme to deliver a range of heritage and landscape projects in the heart of the Norfolk and Suffolk Brecks. This report is a summary of the Breckland Society's Internal Archaeology of the Breckland Warrens project.