

# METRIC SURVEY OF PINKERY POND AND ITS ENVIRONS

Exmoor Mires Project

## PROJECT REPORT

By Hazel Riley



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ENVIRONS  
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ABBREVIATIONS

EH English Heritage

EMP Exmoor Mires Project

ENPA Exmoor National Park Authority

GPS Global Positioning System

NMP National Mapping Programme

NMR National Monuments Record

OSGB36 Ordnance Survey National Grid

OSTN02 Ordnance Survey transformation parameters for conversion of WGS84 coordinates to the Ordnance Survey National Grid coordinates

RCHME Royal Commission on the Historical Monuments of England

RICS Royal Institution of Chartered Surveyors

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## ABSTRACT

Pinkery Pond is an artificial body of water, created by the construction of a massive earth and stone dam across the valley of the River Barle, by John Knight who had purchased the Exmoor Forest Estate by 1820. Knight envisaged the moorlands of the Royal Forest as a productive estate, centred around his new mansion house in Simonsbath, with reclaimed moorland producing corn and fine livestock. The pond has been previously interpreted as providing water for irrigation, for recreational or for industrial purposes. This survey, carried out in advance of mire restoration by the Exmoor Mires Project, has recorded areas of peat extraction; stone quarries; leats, a massive earth and stone dam and trial trenches and pits associated with mineral extraction. An alternative purpose for Pinkery Pond is suggested: a reservoir or header pond to provide water power for John Knight's original agricultural enterprises on his Exmoor Forest estate.

## INTRODUCTION

This survey of Pinkery Pond and its environs was undertaken for the Exmoor Mires Project (EMP) on behalf of the Exmoor National Park Authority (ENPA). The principal aim of the work was to carry out a walkover and metric survey of the area to identify, accurately locate, record and interpret extant archaeological features in the area which will be affected by mire restoration work, carried out by the EMP, on the Chains (ENPA 2012).

The report consists of two sections: the archaeological features and their historic landscape context are outlined and interpreted in this section. The Appendix contains the evidence base for this in the form of a Site Gazetteer which presents the detailed results of the survey work.

### Location, topography and geology

Pinkery Pond is located on the western edge of the former Royal Forest of Exmoor on the southern edge of the Chains (Fig 1). It lies at a height of c 440m OD, at the headwaters of the River Barle, within the parish of Exmoor and the ENPA (SS 723 423). Here, the broad plateaux of *Mollinia* dominated moorland of the Chains narrow

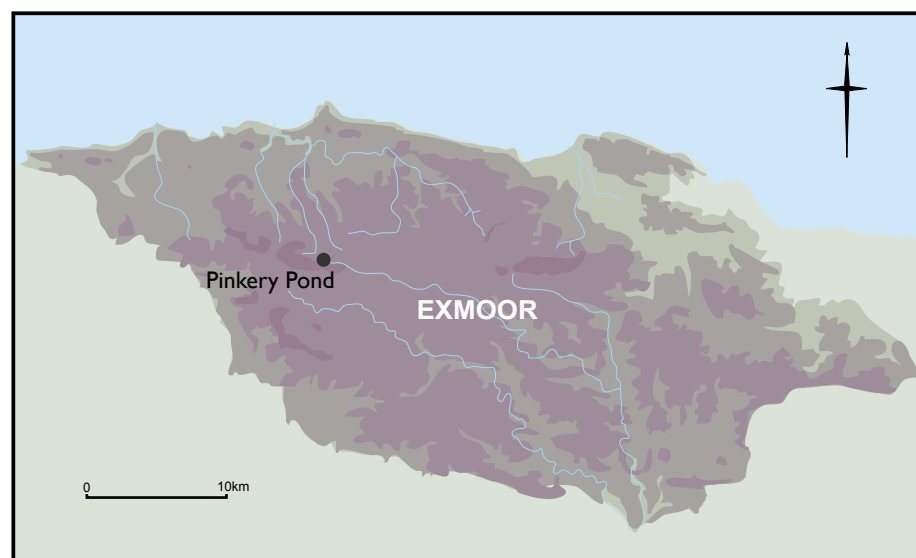


Fig 1 Location map





*Figure 2 Air photograph of the suty area (NMR 15606/18) (© Crown copyright.EH)*

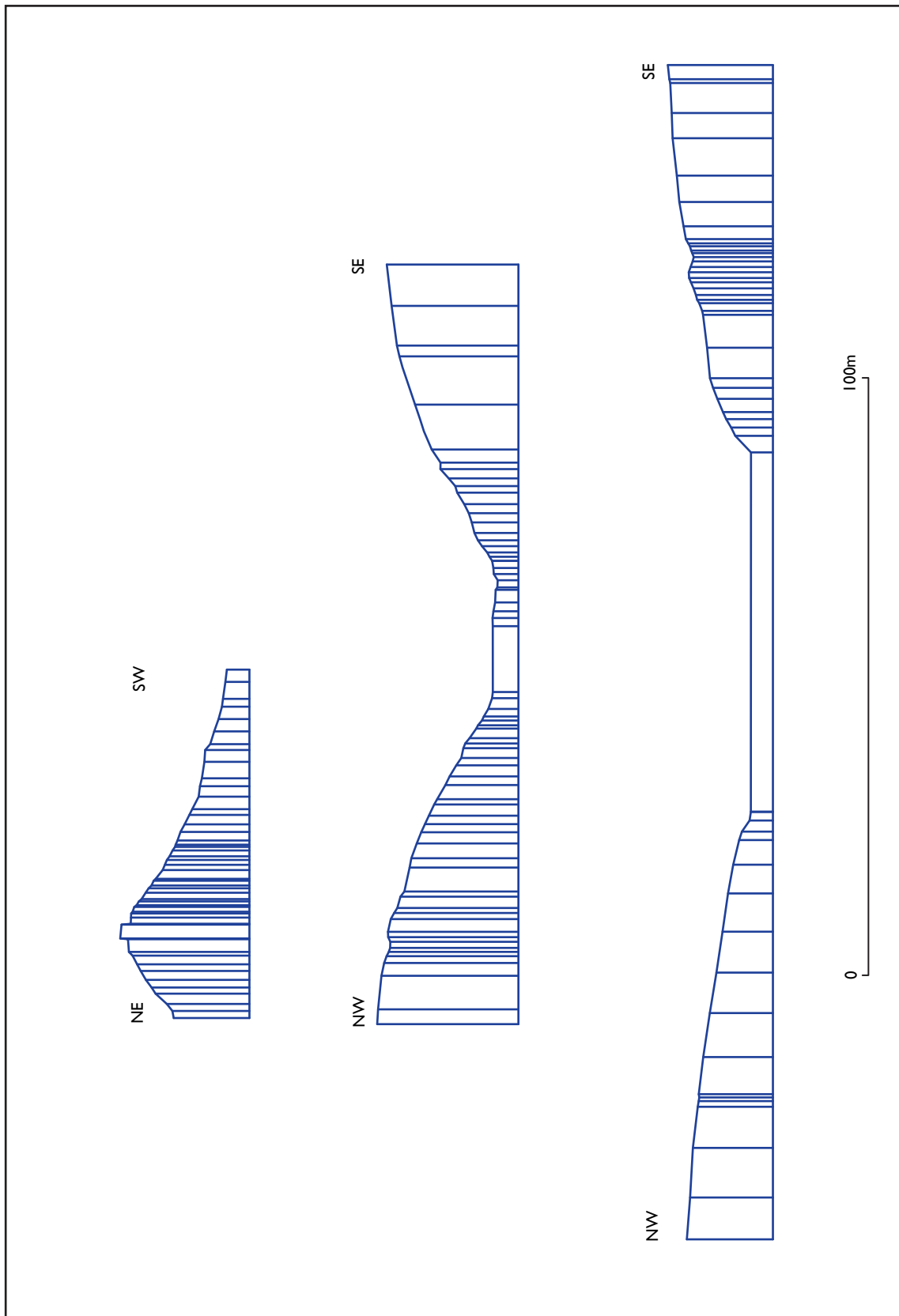


Figure 3 Profiles across the dam (top), valley (middle) and pond (bottom)

to form a ridge 300m wide: the watershed between the Barle and Lyn drainage systems. The survey area consists of three distinct landscape types. To the north of the reservoir dam, the level plateau, usually with evidence of former peat extraction, is poorly drained. Below this, the ground falls away steeply to Pinkery Pond. South of the dam the valley of the River Barle drops steeply to a narrow valley floor, presenting a very different character to that around the pond (Figs 2 and 3). The underlying geology consists of Devonian rocks – slates of the Combe Martin series ([www.bgs.ac.uk](http://www.bgs.ac.uk)).

### **Numbering of the sites**

Each archaeological feature has been given a unique number with the prefix ECH12, and these numbers are used throughout this report (numbers ECH12 101 to ECH12 131). In the gazetteer entries, where appropriate, the sites are cross-referenced with the Exmoor HER numbers and the Mire walkover survey numbers.

### **PREVIOUS WORK**

Pinkery Pond has been the topic of much speculation (below) but little detailed survey and fieldwork has been carried out in the area. The RCHME carried out archaeological fieldwork across the area in the early 1990s (Riley and Wilson-North 2001; EH NMR records) and the EH NMP project for Exmoor mapped the archaeological and historic landscape features of the whole of the National Park from air photographs (Hegarty and Toms 2009). The area was included in a walkover survey in advance of mire restoration work.

In 1969 ENPA purchased a block of land on Exmoor Forest which included Pinkery Pond and Pinkery Farm (Orwin *et al* 1997, 194). Richard McDonnell undertook a survey of the Pinkery Estate in 1996 and this included the area around Pinkery Pond. This survey recorded some of the drainage channels, the leats to the west, east and SW of the pond and the quarries to the SW and SE of Pinkery Pond and located them at 1:10 000 scale (McDonnell 1998, figs 6,7,8,9). A hydrological analysis of Pinkery Pond was carried out for the ENPA in advance of registration of the pond under the provisions of the Reservoir Act 1976 (Underwood 1997).

### **THE SURVEY**

The fieldwork was carried out during May 2012. All of the features recorded in the Exmoor HER and in the Mire walkover survey were located, photographed and recorded. Prospection for new sites was undertaken: in practice prospection was most time effective in limited areas which had not undergone peat extraction. New sites were recorded in the same way. These detailed descriptions and photographs make up the Gazetteer (Appendix). All of the extant archaeological features were surveyed at a scale of 1:1000 using survey grade differential GPS. The GPS-derived geodetic WGS84 coordinates were transformed to the Ordnance Survey National Grid (OSGB36) using the Ordnance Survey's grid transformation (OSTN02) in Leica's GPS post-processing software. Observation times were based on those recommended by the OS and the RICS in order to obtain accurate heighting information (OS 2010; RICS 2010). Profiles were surveyed W/E across Pinkery Pond, W/E across the valley below the dam and N/S across the dam (Fig 3). Figure 4 reproduces the survey plan at 1:2000 scale and shows the surveyed features with their ECH12 numbers and the location of the profile lines.



## PINKERY BEFORE PINKERY POND

### Pinkery

The name 'Pinkery' is of considerable antiquity. The Forest Books of the 18<sup>th</sup> century list, in abbreviated form, the parts of the Forest where different flocks of sheep from North Devon and West Somerset were assigned for summer grazing. Pinkery is listed as 'Penkry' or 'Pinkry' (MacDermot 1973, 399-401). The antiquity of these names within the Forest is shown by Thomas Westcote, who, writing in c 1630 of his search for stone settings on Exmoor, lists several places which are recorded in the Forest Books (Westcote 1845, 90).

Pinkery as a place within the Forest of Exmoor lies on the very western edge of the Royal Forest, bordering Challacombe Common. On the 1816 Inclosure Map Pinkery is shown as the spur of land NW of Goat Hill and SW of the Chains, between the valley of the River Barle and one of its tributary streams which begins below Chains Barrow (Fig 5; Orwin 1929, map facing p 20).

*Fig 5 1816 Inclosure map (Orwin 1929, 20)*



As Thomas Westcote notes, Exmoor Forest had 'good pastures and summering, for sheep and cattle, in quantity and quality (Westcote 1845, 89)'. Pinkery was part of this system, where large numbers of sheep and cattle from North Devon and West Somerset used the moor for summer grazing. The Forest Book of 1722 records that 537 sheep were brought onto Pinkery from Fremington, Loxhore, Shirwell and Westleigh (SW and NE of Barnstaple) (Burton 1989, 259).

### Peat extraction

In the survey area, the only evidence of the pre-Knight landscape is in the form of the remains of former peat extraction sites. These were recorded in detail (ECH12 102, 123) where they have a relationship with other archaeological or historic landscape features, otherwise their general extent can be seen on the NMP transcription (Fig 6) and on the oblique air photograph taken in 1997 (Fig 2). Peat cutting on the Forest of Exmoor is documented in the 13<sup>th</sup> century when seven men from Exford and Withypool are fined 12d each for 'making new turbaries' in the Forest (MacDermot 1973, 73; 89). Documentary evidence relating to the administration and eventual sale of the Forest shows that peat cutting continued throughout the medieval and post medieval period (MacDermot 1973, 99; 184; 286; 324), a small amount of peat was dug as late as the latter part of the 20<sup>th</sup> century.

The areas of peat extraction around Pinkery Pond are difficult to date but there are a few relationships with other features which provide an indication of their date. The peat extraction areas are cut by the drainage ditches. Most date from the reclamation

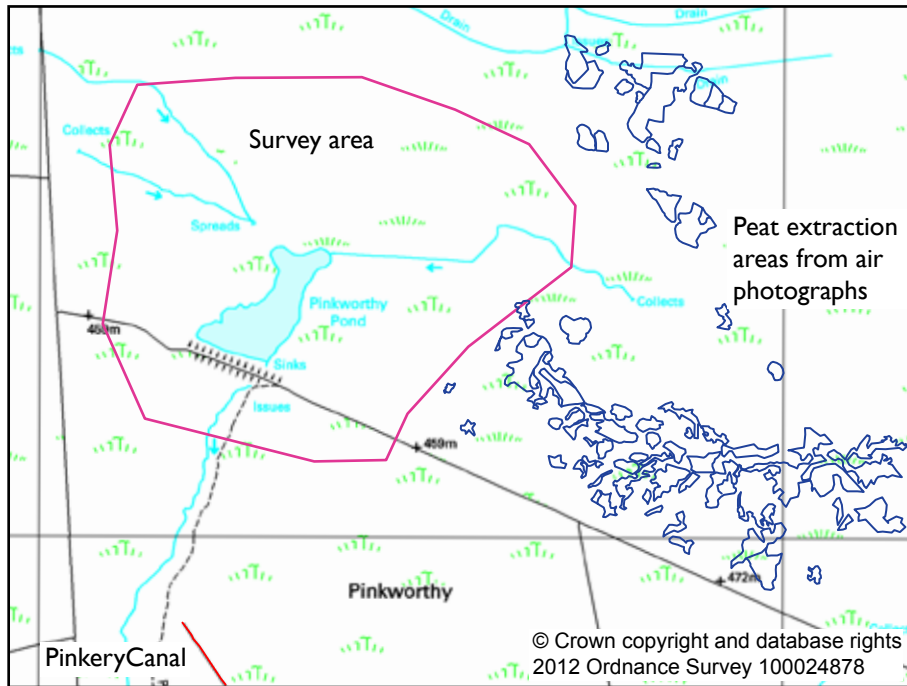


Fig 6 Areas of peat extraction around Pinkery Pond

Fig 7 (below left) Circular mound associated with peat extraction NW side Pinkery Pond



work in the 1830s and the 1840s; some of those in the Pinkery area may be those referred to in an Estate Account Book of 1836 when 8½ miles of drainage channels were dug on the Chains (Burton 1989, 72). The peat extraction areas on the west and east of the dam for Pinkery Pond are overlain by features connected with the construction of the dam and by the enclosure wall separating the Chains from the outfields of Pinkery and Driver Farms which

was constructed in the late 1840s or 1850s (Orwin 1929, 53; 73). The peat cutting around Pinkery Pond is apparently pre-19<sup>th</sup> century and may well represent a long period of exploitation of this resource on the Chains. Five small mounds on the edge of the extraction areas to the NW of Pinkery Pond are probably connected with this activity (Fig 7). They may be associated with stacking or storing the peat before it was transported off the moor.

## JOHN KNIGHT, PINKERY POND AND THE PINKERY CANAL

### John Knight

John Knight bought his share of Exmoor Forest with a purpose: to create a gentleman's country seat in the heart of some of wildest country then left in England. He saw Exmoor Forest as a country gentleman's estate, with a grand mansion house at Simonsbath, the home farm nearby at Simonsbath Barton, all surrounded by a planned landscape. Part of this landscape was to be productive agricultural land, growing corn and rearing high quality livestock. To this end he began enclosing, draining and ploughing

his newly bought moorland and constructing metalled roads across it. Farms at Cornham and Honeymead were enclosed and equipped with buildings.

In the late 18<sup>th</sup> and early 19<sup>th</sup> centuries, the large estates at Woburn, owned by the Dukes of Bedford, and at Holkham in Norfolk, owned by the Cokes, were rivals in agricultural circles. Both estates held annual public sheep shearings on their farms, where an audience of gentry and aristocracy from Britain and abroad could inspect the latest fashion in agricultural buildings on their estate farms. Both the Woburn and Holkham estates were examples of improvement on a grand scale, Woburn from an existing agrarian landscape, Holkham from unenclosed heath (Wade Martins 2002, 103-111). John Knight had made a study of the Holkham farming methods; he attended some of the fashionable Woburn sheep shearings where at Park Farm he would have seen the very latest in agricultural machinery (Orwin 1929, 10).

### **Pinkery Pond**

There are several features in the survey area which relate to Pinkery Pond and its construction and maintenance. Pinkery Pond itself is 170m N/S, 100m E/W, and is 1.11ha in extent (ECH12 130). The current water level is 437.6m OD. It was created by the construction of a massive earth and stone dam across the Barle valley (Fig 2 and 4). The dam is 6.8m high on the north side, where a drystone revetment wall, the wave wall, forms the base of the structure visible above the water (ECH12 131) (Figs 8 and 9). On the south side the earthwork is over 13m high and forms an imposing site walking up the valley from Pinkery Farm (Fig 10). Drainage channels with drystone revetment walls take water away from the sides of the dam on the NE and SW sides. As well as these small channels close to the dam, two massive leats run along virtually the whole length of the west and east sides of Pinkery Pond (ECH12 101 and 121). These were designed to take water away from the dam area and return it to the pond at the NW and NE ends. A third substantial leat took water away from the west face of the dam on the south side (ECH12 124). Several quarries around the dam provided stone for its construction (ECH12 120, 125, 126, 128) (Figs 2 and 4).



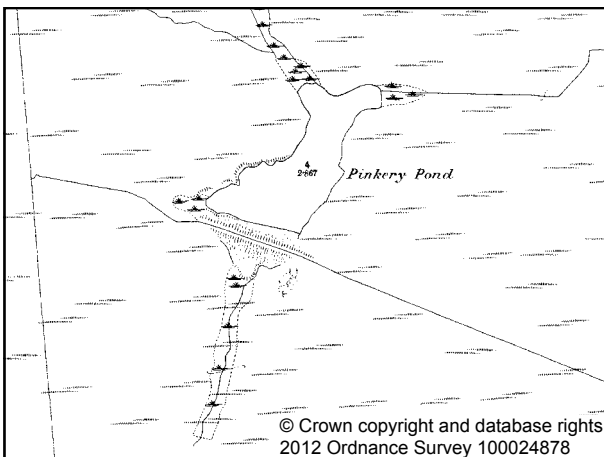
*Fig 8 The north side of the dam*





*Fig 9 (left) Revetment wall at base of dam*

*Fig 10 (below left) South side of the dam*



*Fig 11 Pinkery Pond in 1889 (OS 1st edition map)*

Fig 12 After the draining  
of Pinkery Pond in 1913  
(SANHS collection)

The current water level is maintained by a tunnel (often referred to as the 'spillway' or 'rock-cut channel') through the whole dam on its east side. This feature is shown on the 1<sup>st</sup> edition map and may be an original structure which has been modified to keep the pond at its current extent (Fig 11). In the late 19<sup>th</sup> and early 20<sup>th</sup> centuries Pinkery Pond was drained to search for the bodies of two unfortunate suicides and reports in the *North Devon Journal* give some details as to the original structure of the dam and drainage provision. Two 12" pipes were placed in the dam wall during its construction. They were blocked with wooden plugs, with chains attached, so that they could be removed to drain the



pond if required. John Knight's original plan to pull on the chains, probably with horse-power, to remove the plugs did not work once the pond had filled with water as the chains were not strong enough to withstand the water pressure. Instead, the plugs had to be forced out and this operation necessitated cleaning out the drainage tunnel. The tunnel, cut through solid rock, was measured after draining and found to be 170 feet long, 4 feet 6" high and 2 feet 4" wide. A brick culvert under the dam contained the two 12" pipes (Burton 1989, 177-178). The drainage operation of 1913 is recorded in a lantern slide in the collection of the Somerset Archaeological and Natural History Society (Fig 12). The brick culvert is clearly visible and, as well as a stout shovel, a wooden hay rake was to hand.

The depth of Pinkery Pond can be suggested by these drainage operations. The *North Devon Journal* report describes 'a black dismal gorge some 900 feet in length, 150 feet in width and 40 feet deep at its deepest part' (quoted in Burton 1989, 180).

Indications of the intended former water level of Pinkworthy Pond are provided by the drainage channels which drain water into east side of Pinkery Pond (ECH12 103). These stop above the current water level (437.6m OD) at between 440.5m and 441m OD. This corresponds to a line above the current water level, visible on photographs but not surveyable, which may well mark the former extent of Pinkery Pond (visible in Fig 7 to the right of the ranging pole). These two sources of evidence suggest that the level of the pond was intended to be c 3m above its current level and this is defined on the survey drawing by the 440m contour (Fig 4).

The documentary evidence for the history of the Exmoor Forest has been researched and published in some detail (Orwin 1929; Orwin and Sellick 1970; Orwin *et al* 1997; MacDermot 1973; Burton 1989) but there is no definite evidence for either the date of the construction of, or the purpose of, Pinkery Pond. MacDermot's *History of the Forest of Exmoor* suggests an agricultural interpretation in its revised edition: 'Although Pinkery Pond was often said to have been made to form a reserve of water power for the use of the mines, these were of a later period and it is most probable that it was intended to provide a water supply for farming' (MacDermot 1973, 437). Orwin believed that Pinkery Pond was constructed to provide irrigation water for the 'long stretch of land between Pinkery Farm and Honeymead' (1929, 32). S H Burton suggested that 'the likeliest of all explanations is that John Knight wanted to adorn his property with a large lake. Such a sheet of water would offer both aesthetic and sporting advantages: it was part of the 'improvements' – in the 18<sup>th</sup>- century sense of the term' (Burton 1969, 41).

The discovery of some letters pertaining to John Knight and mining on Exmoor Forest led to a discussion as to the possibility that Pinkery Pond was associated with proposed industrial activity (Youell 1974; Burton 1985). A substantial contour leat (below; outside the survey area) runs from c 350m south of Pinkery Pond to Little Ashcome above Simonsbath. Often referred to as the 'Pinkery Canal', this feature also has been the subject of much speculation (summarised in Barrett 2004). R F Youell, using a letter written in 1826 from John Knight to Charles Bailey, agent for the Blathwayt Estate, which asks for the lease of land for 'a rail road with inclined planes from Porlock to Exmoor Forest' (1974, 102), argues that Pinkery Pond and the leat below it was built to provide water for the inclined planes down to Simonsbath. Burton expands on this argument, adding that carriage of limestone from the coast into the heart of Knight's Exmoor's estate was an important factor in the planning of such a scheme (1985). The pond and leat have also been interpreted as linked to the construction of field gutter systems (Hegarty forthcoming).

### **Dating**

Pinkery Pond is not shown on the 1816 Inclosure Map of Exmoor Forest (Fig 5), nor is it depicted on Greenwood's 1822 map of Somerset (Greenwood 1822). The archaeological evidence shows that the dam and pond are earlier than features which date from the 1830s to the 1850s (the enclosure bank and drainage channels ECH12 129, 103). It is suggested here that the pond was complete by 1830.

### **The Pinkery Canal**

The Pinkery Canal is a substantial contour leat which can be traced as an earthwork for c 9 km across the northern side of the Barle Valley at 434m OD (Barrett 2004, plan p 14). It runs from a point 750m north of Pinkery Farm to a point 1km NW of Honeymead Farm. The leat is not physically connected to Pinkery Pond (Fig 13) but its height means that the pond could have supplied the leat with water.

### **Interpretation**

The leat passes above Pinkery Farm, Driver, Titchcombe, Duredon Farm, Barton Farm at Simonsbath and could also supply water to Cornham Farm, Cloven Rocks and



Honeymead. Pinkery Pond and its leat were built at the beginning of John Knight's Exmoor project. He anticipated the need for a reliable source of water to his estate. He may have been planning extensive systems of floating meadows or catch water meadows across his farms, but water was also an important source of power. Notwithstanding the improvements to roads and tracks that John Knight himself instigated, coal for steam power was prohibitively expensive to haul to Simonsbath for his home farm and planned estate farms: water power was needed. John Knight's system of farming on Exmoor was to be based around growing crops as well as raising livestock. He believed that much of the Forest could be used to grow corn, despite the difficulties that were posed by the high elevation with its cool climate and high elevation. The model farms of the late 18<sup>th</sup> and early 19<sup>th</sup> centuries were well equipped with a range of machinery, most importantly threshing machines, which were designed to be water powered in areas where transport of coal was expensive. For example in North Northumberland water power was favoured over horse power for driving threshing machinery on farms built during the early 19<sup>th</sup> century (Barnwell and Giles 1997, 79-81). Pinkery Pond was to be the power station for John Knight's projects.



*Fig 13 The leat in Pinkery Farm (NMR 15606/17) (© Crown copyright. EH)*

The creation of a pond or a series of ponds to provide a sufficient head of water to work farm water wheels happened elsewhere on Exmoor. At Great Bradley Farm, SE of Withypool, Bradley Pond was created by the construction of a massive earthwork dam, 200m long, 22m wide and 6m high, across a tributary stream of the River Barle to form a pond originally over 2.2ha in extent. A leat carried water for 800m to the farm water wheel at Great Bradley. At Stone Farm near Exford water was brought 2.5km along a leat to the farm water wheel (Warren 1978, 16-17).

The heart of John Knight's Exmoor estate was at Simonsbath, with its new mansion and home farm. The setting for this new house included a deer park, stocked with fallow deer. Pinkery Pond could also have been part of Knight's plan for an estate which included opportunities for fishing and wildfowling high up on the moorland. In the late

19<sup>th</sup> and early 20<sup>th</sup> centuries Pinkery Pond was well stocked with trout (Burton 1989, 177)

But by 1842 only two farm houses were built. The land was unsuitable for growing corn, despite John Knight's efforts, and financial problems meant that his grand scheme for Exmoor was never realised. It was left to Frederic Knight, John's son, to take over the estate and the pond was never used to provide water power. The leat was incorporated as a boundary into some of the new enclosures as a boundary and was not connected to the reservoir at Pinkery.

## **PINKERY FARM AND MINING ON EXMOOR FOREST**

### **Pinkery Farm**

Frederic Knight was obliged to change the way the reclamation and improvement of the Forest worked. He needed to find tenants for the Exmoor Forest farms who would be able to contribute both financially and practically to the project. During the period 1842-1850 a succession of tenants took on the farms with varying degrees of success. In 1848 Frederic employed Robert Smith as his new estate manager from a successful East Midlands farming family. Smith advertised the Exmoor tenancies in the East Midlands press:

'Several more farms of various sizes are now ready for occupation, some of which are partly cultivated, have excellent model buildings upon them, and will be let upon excellent terms to enterprising tenants. The tendency of these new soils to the growth of roots etc, is remarkable. Hence especially adapted to sheep and stock farming' (quoted in Orwin *et al* 1929, 65)

In his own account of farming on Exmoor Forest Smith wrote that 'it must be remembered that we are treating of stock-farming, and not of the harvesting or thrashing of corn, as our pursuit (Smith 1856, 355). His plan of a farmstead for a typical hill farm showed this emphasis on stock rearing, with large open stockyards at the centre of the farmstead. Water power is part of the agricultural system with an emphasis on processing feed for the livestock:

'In the arrangement of the farmstead care must be taken to so place the buildings that 'water-power' (in hilly moist country) may contribute its full share in the works to be taken in hand. To the water wheel we must look for the future economy of labour at the yard. It will perform the thrashing, chaff-cutting, grinding, root slicing and etc.; the stream may also be so arranged as to wash all the roots, cleanse all offices, collect the sewage of the establishment, and finally to convey the refuse to the adjacent meadow below the farmstead' (Smith 1856, 355).

Where detailed survey work and investigation has been carried out, the evidence for the use of water power on Frederic Knight's Exmoor farms is equivocal. For example, at Horsen it was not clear if the barn was built for the mechanised processing of crops and animal feed. There is a stream to take waste water away from the farm, but the barn has a horse engine house (a later addition), there is no evidence for a water wheel; it is suggested that water-power may have been tried and failed at Horsen at an

early date (Jones 2000, 8)

The farm houses and farm buildings were constructed by local labourers in local stone, with Welsh slate roofs. In 1929 they presented an 'unrelieved severity serving to contribute to the grimness of Exmoor at some seasons, rather than to mitigate it by their suggestion of human occupation' (Orwin 1929, 54) - a far cry from the model farm buildings John Knight visited at the beginning of the 19<sup>th</sup> century.

By 1848 Pinkery had been designated a farm of 400 acres, but had not been given any buildings or equipment (Orwin 1929, 53) and is mentioned as let to Mr Groves in 1849 (Orwin *et al* 1997, 288). It was the last farm on the Forest to be equipped: in 1859 it was finally let as a holding of 250 acres to Richard Ridd, at a rent of £62 and 10 shillings, and interest at the rate of 6¾% on the sum of £400 to be expended by the landlord on house and buildings. The enclosure bank which runs right across the dam of Pinkery Pond dates from this period when Pinkery Farm was being established. The fields for Pinkery Farm were laid out over the Pinkery Canal (Fig 13). In 1873 Pinkery came in hand, and became one of the herdings, with a flock of Cheviot sheep in the charge of a shepherd.

### **Mining**

Following the success of several iron mines on the Brendon Hills, and in need of an income to offset the considerable expenses of his agricultural enterprises, Frederic Knight began to explore the Forest for mineral deposits in the 1840s and 1850s. Most of the work was concentrated on the southern portion of the estate, with the Dowlais Iron Company at Burcombe and Hangle Cleave, and the Plymouth Iron Company at Picked stones and Exe Cleeve the Ulverston Iron Company at Deer Park (Orwin 1929, 137). This sett included a large area north of the Simonsbath to Challacombe road, which extended as far north as the Hoar Oak boundary. Burton records a trial adit in Tangs Bottom, west of Duredon Farm and finds of ironstone on a spoil heap from a cut in the same valley (1989, 143).

There are several earthworks in the survey area which probably date from the 1840s and 1850s when Frederic Knight and his estate manager, Robert Smith, were looking for minerals across the Forest. Three rectangular trenches, each with a spoil heap, lie on



*Fig 14 Prospection for mineral deposits on the west side of Pinkery Pond*

the west side of Pinkery Pond (ECH12 108, 113, 122) (Fig 14) and five small rectangular pits with spoil heaps, also on the west side of the pond, are the result of mineral prospection (ECH12 115-119).

## **PINKERY POND IN THE 20TH CENTURY**

Pinkery Pond was stocked with trout and the fishing rights were let in the early 20th century (Burton 1989, 177). Pinkery Farm continued as a working farm until 1969 when the estate was purchased by the ENPA. The farm was let to tenants and the farm house became a field studies centre. The size of Pinkery Pond - 37 000 m<sup>3</sup> - means that it is covered by the Reservoirs Act of 1975 and is subject to annual inspections by a Supervising Engineer and more comprehensive inspections by a Reservoirs Engineer every ten years. Recommendations resulting from these inspections have included repair of the wave wall. The pond is monitored weekly by ENPA staff (G Wills pcomm).

## **ACKNOWLEDGEMENTS**

Lee Bray supplied background material and access to ENPA records and photographs; Graham Wills provided access to his research on Pinkery Pond and commented on a draft of this report.

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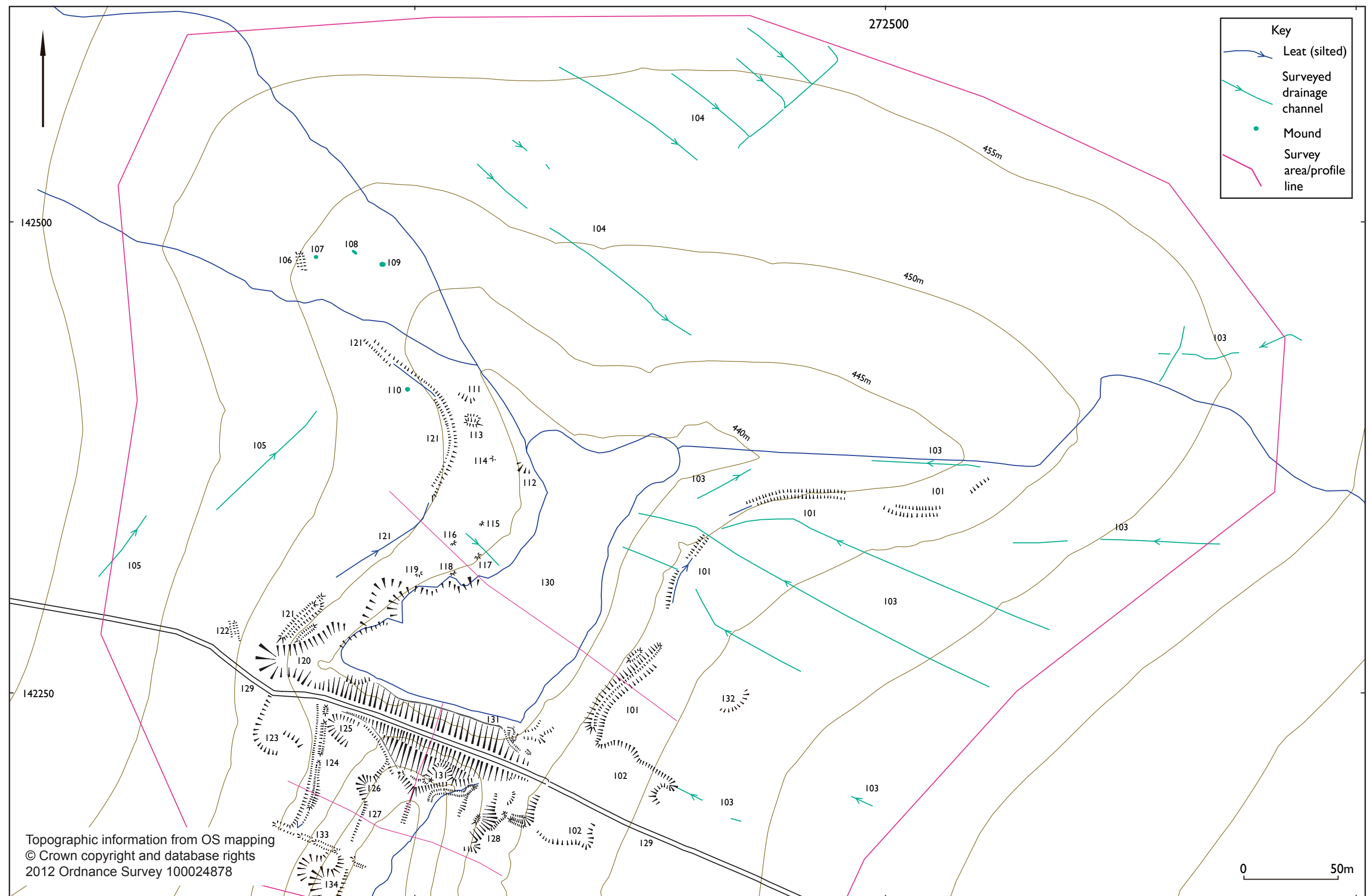


Fig 4 Metric survey of the area, reproduced at 1:2000 scale



## APPENDIX SITE GAZETTEER

ECH12 101 Location: 272344,142233 to 272555,142362 Type: LEAT Period: POST MEDIEVAL



Description and interpretation: A substantial linear earthwork lies on the east side of Pinkery Pond. It runs for some 270m between 272344,142233, at the bottom of an area of peat cutting and close to Pinkery Pond dam, and 272555,142362, where it runs into the boggy area at the NE end of Pinkery Pond. The southern portion is formed of a channel, 3m wide and 1m deep, with a bank on its west (downslope) side,

2.2m wide and 2m high. A further bank, 1.7m wide, 1.8m high and 9m long lies at the NW end. The northern part of the feature comprises a silted channel and is visible intermittently. This is a leat, designed to carry water away from the north face of the Pinkery Pond dam. The smaller, lower bank was built to help retain the channel. The leat cuts the peat cutting (ECH 102) and is cut by the drainage channels (ECH12 103). The leat dates to the early 19<sup>th</sup> century and is directly associated with the construction of Pinkery Pond. It may have been built at the same as the dam was constructed (by c 1830) to divert water away from the building work, or after it was completed if waterlogging of the dam became a problem.

References: PHOTO ECH12 101 Exmoor HER 10477

ECH12 102 Location: 272365,142208 Type: PEAT CUTTING Period: POST MEDIEVAL



Description and interpretation: An area of peat cutting lies to the SE of Pinkery Pond dam. It is 200m NW/SE, 300m NE/SW and up to 1m deep. It is cut by the leat (ECH 101) and the enclosure bank (ECH 129) runs over it, indicating a date in the post medieval period before the 19<sup>th</sup> century. Peat cutting on the Forest and Commons of Exmoor dates from at least the 13<sup>th</sup> century (McDermot 1978. 90), but these remains probably date

from the post medieval period.

References: PHOTO ECH12 102



ECH12 103 Location: 272498,142281 Type: DRAIN Period: POST MEDIEVAL

Description and interpretation: An area of drainage channels on the E side of Pinkery Pond, probably dating from the 1830s/1840s, and part of the Knights improvements on Exmoor.

References: PHOTO ECH12 103, Exmoor HER 2140; 10889



ECH12 104 Location: 272401,142567 Type: DRAIN Period: POST MEDIEVAL

Description and interpretation: An area of drainage channels on the N side of Pinkery Pond, probably dating from the 1830s/1840s, and part of the Knights improvements on Exmoor.

References: PHOTO ECH12 104, Exmoor HER 2634



ECH12 105 Location: 272229,142391 Type: DRAIN Period: POST MEDIEVAL

Description and interpretation: An area of drainage channels on the W side of Pinkery Pond, probably dating from the 1830s/1840s, and part of the Knights improvements on Exmoor.

References: PHOTO ECH12 105, Exmoor HER 2634, Mire survey 11,17,18



ECH12 106 Location: 272189,142479 Type: EXTRACTIVE PIT Period: POST MEDIEVAL



Description and interpretation: A sub-rectangular hollow, 6m long, 2m wide, 0.9m deep, with a mound on its east edge, 10m long, 3m wide, 0.5m high lies at the end of a drainage channel to the NW of Pinkery Pond. This is a small trial trench, prospecting for ironstone, and dates from the mid-19<sup>th</sup> century.  
References: PHOTO ECH12 106

ECH12 107 Location: 272197,142481 Type: MOUND Period: POST MEDIEVAL



Description and interpretation: A roughly circular peaty mound, 2.5m in diameter and 0.3m high lies to the NW of Pinkery Pond. An area of peat cutting lies to the NW and this mound may be associated with stacking or storing the peat before it was transported off the moor; it probably dates from the post medieval period.  
References: PHOTO ECH12 107

ECH12 108 Location: 272217,142484 Type: MOUND Period: POST MEDIEVAL



Description and interpretation: A sub-rectangular peaty mound, 3.2m E/W, 2m N/S and 0.5m high lies to the NW of Pinkery Pond. An area of peat cutting lies to the NW and this mound may be associated with stacking or storing the peat before it was transported off the moor; it probably dates from the post medieval period.  
References: PHOTO ECH12 108

ECH12 109 Location: 272232,142477 Type: MOUND Period: POST MEDIEVAL

Description and interpretation: A sub-rectangular peaty mound, 3m E/W, 2.6m N/S and 0.5m high lies to the NW of Pinkery Pond. An area of peat cutting lies to the NW and this mound may be associated with stacking or storing the peat before it was transported off the moor; it probably dates from the post medieval period.

References: PHOTO ECH12 109



ECH12 110 Location: 272246,142411 Type: MOUND Period: POST MEDIEVAL

Description and interpretation: A sub-circular peaty mound, 3.6m N/S, 3m E/W and 0.7m high lies to the NW of Pinkery Pond. An area of peat cutting lies to the NW and this mound may be associated with stacking or storing the peat before it was transported off the moor; it probably dates from the post medieval period.

References: PHOTO ECH12 110



ECH12 111 Location: 272279,142407 Type: STONE QUARRY Period: POST MEDIEVAL

Description and interpretation: A steep scarp 9m long and 1.5m high lies to the NW of Pinkery Pond. This is a small post medieval stone quarry.

References: PHOTO ECH12 111, Mire survey 5





ECH12 112 Location: 272308,142370 Type: STONE QUARRY Period: POST MEDIEVAL



Description and interpretation: A steep scarp 8m long and 1.5m high lies on the NW edge of Pinkery Pond. This is a small post-medieval stone quarry.

References: PHOTO ECH12 112, Mire survey 7

ECH12 113 Location: 272280,142393 Type: EXTRACTIVE PIT Period: POST MEDIEVAL



Description and interpretation: A sub-rectangular hollow, 7m long, 1.9m wide, 0.5m deep, with a mound on its south edge, 10.5m long, 1.8m wide, 1m high lies to the NW of Pinkery Pond. This is a small trial trench, prospecting for ironstone, and dates from the mid-19<sup>th</sup> century.

References: PHOTO ECH12 113, Mire survey 4

ECH12 114 Location: 272291,142374 Type: MOUND Period: POST MEDIEVAL



Description and interpretation: A sub-circular peaty mound, 3.5m N/S, 4m E/W and 0.6m high lies to the NW of Pinkery Pond. A square slot has been dug into the top. An area of peat cutting lies to the NW and this mound may be associated with stacking or storing the peat before it was transported off the moor; it probably dates from the post-medieval period.

References: PHOTO ECH12 114, Mire

survey 6

ECH12 I 15 Location: 272285, I42340 Type: EXTRACTIVE PIT Period: POST MEDIEVAL

Description and interpretation: A small rectangular hollow, 2m N/S, 1m E/W, 0.7m deep, with a sub-circular mound, 2m N/S, 1.5m E/W, 0.9m high, on the E side, lies on the NW side of Pinkery Pond. This is a small trial pit, prospecting for ironstone, and dates from the mid-19<sup>th</sup> century.

References: PHOTO ECH12 I 15, Mire survey 8



ECH12 I 16 Location: 272270, I42329 Type: EXTRACTIVE PIT Period: POST MEDIEVAL

Description and interpretation: A small rectangular hollow, 2.5m N/S, 1m E/W, 0.7m deep, with a sub-circular mound, 2.5m N/S, 1.5m E/W, 0.8m high, on the E side, lies on the NW side of Pinkery Pond. This is a small trial pit, prospecting for ironstone, and dates from the mid-19<sup>th</sup> century.

References: PHOTO ECH12 I 16, Mire survey 9



ECH12 I 17 Location: 272283, I42322 Type: EXTRACTIVE PIT Period: POST MEDIEVAL

Description and interpretation: A small rectangular hollow, 2.5m N/S, 1m E/W, 1m deep, with a sub-circular mound, 3.5m N/S, 3m E/W, 1.2m high, on the E side, lies on the NW side of Pinkery Pond. This is a small trial pit, prospecting for ironstone, and dates from the mid-19<sup>th</sup> century.

References: PHOTO ECH12 I 17, Mire survey 10



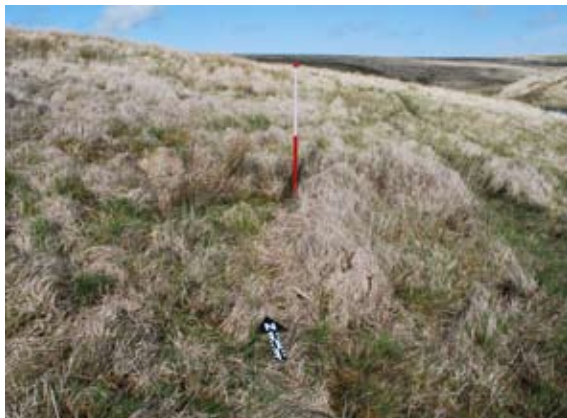
ECH12 118 Location: 272270,142314 Type: EXTRACTIVE PIT Period: POST MEDIEVAL



Description and interpretation: A small rectangular hollow, 2m N/S, 1m E/W, 0.5m deep, with a sub-circular mound, 3.5m N/S, 3m E/W, 1m high, on the E side, lies on the NW side of Pinkery Pond. This is a small trial pit, prospecting for ironstone, and dates from the mid-19<sup>th</sup> century.

References: PHOTO ECH12 118, Mire survey 15

ECH12 119 Location: 272251,142313 Type: EXTRACTIVE PIT Period: POST MEDIEVAL



Description and interpretation: A small rectangular hollow, 2 m N/S, 1m E/W, 0.6m deep, with a sub-circular mound, 2.1m N/S, 1.5m E/W, 0.8m high, on the E side, lies on the NW side of Pinkery Pond. This is a small trial pit, prospecting for ironstone, and dates from the mid-19<sup>th</sup> century.

References: PHOTO ECH12 119, Mire survey 14

ECH12 120 Location: 272185,142266 Type: STONE QUARRY Period: POST MEDIEVAL



Description and interpretation: A large sub-rectangular hollow, 35m E/W, 20m N/S, and a maximum of 5m deep, lies on the SW corner of Pinkery Pond. Smaller scarps lie on the edge of Pinkery Pond to the NE. This is a large stone quarry. It probably supplied material for the dam and dates from the early 19<sup>th</sup> century.

References: PHOTO ECH12 120, Mire survey 16

ECH12 121 Location: 272179,142280 to 272225,142437 Type: LEAT Period: POST MEDIEVAL

Description and interpretation: A linear earthwork runs for some 260m on the NW side of Pinkery Pond, from the SW corner of Pinkery Pond to a stream which flows into the NW of the pond. The SW part comprises a channel, 2.2m wide, 1m deep, with a substantial bank, 35m long, 1.5m wide, 1.3m high, on the SE (downslope) side. A second bank, 15m long, 1.2m wide, 1m high, lies below it to the SE. The northern



part of the feature comprises a silted channel and is visible intermittently. This is a leat, designed to carry water away from the north face of the Pinkery Pond dam. The smaller, lower bank was built to help retain the channel. The leat is cut by a quarry (ECH12 120). The leat dates to the early 19<sup>th</sup> century and is directly associated with the construction of Pinkery Pond. It may have been built at the same time as the dam was constructed by c 1830 to divert water away from the building work, or after it was completed if waterlogging of the dam became a problem.

References: PHOTO ECH12 121, SURVEY 3, 13



ECH12 122 Location: 272154, 142282 Type: EXTRACTIVE PIT Period: POST MEDIEVAL

Description and interpretation: A sub-rectangular hollow, 9m long, 1.8m wide, 1m deep, with a mound on its east edge, 12m long, 2m wide, 0.5m high lies at the SW corner of Pinkery Pond. This is a small trial trench, prospecting for ironstone, and dates from the mid-19<sup>th</sup> century.

References: PHOTO ECH12 122



ECH12 123 Location: 272172, 142229 Type: PEAT CUTTING Period: POST MEDIEVAL

Description and interpretation: A hollow, 25m N/S, 20m E/W, 1.5m deep, lies to the SW of Pinkery Pond. This is an area of peat cutting. The enclosure bank (ECH 129) runs over it, indicating a date in the post medieval period before the later part of the 19<sup>th</sup> century. Peat cutting on the Forest and Commons of Exmoor dates from at least the 13<sup>th</sup> century (McDermot 1978. 90), but these remains probably date from the post medieval period.

References: PHOTO ECH12 123



ECH12 124 Location: 272200,142243 to 272186,142178 Type: LEAT Period: POST MEDIEVAL



Description and interpretation: A linear earthwork runs for 65m to the SW of Pinkery Pond. It comprises a channel, 2m wide, 0.8m deep, with a bank, 1.5m wide, 0.8m high on the SE (downslope) side. This is a leat constructed to carry water away from the SE side of the dam. The leat dates to the early 19<sup>th</sup> century and is directly associated with the construction of Pinkery Pond. It may have been built at the same time as the dam was

constructed (by c 1830) to divert water away from the building work, or after it was completed if waterlogging of the dam became a problem.

References: PHOTO ECH12 124

ECH12 125 Location: 272211,142232 Type: STONE QUARRY Period: POST MEDIEVAL



Description and interpretation: A sub-rectangular hollow, 15m NW/SE, 8m NE/SW, 2m deep, lies on the west side of the south face of the dam. This is a small stone quarry, probably associated with the construction of the dam and so dating from the 1820s.

References: PHOTO ECH12 125

ECH12 126 Location: 272226,142199 Type: STONE QUARRY Period: POST MEDIEVAL



Description and interpretation: A sub-rectangular hollow, 10m NW/SE, 8m NE/SW, 3m deep, lies on the west side of the south face of the dam. This is a small stone quarry, probably associated with the construction of the dam and so dating from the 1820s.

References: PHOTO ECH12 126\_127

ECH12 127 Location: 272235,142210 to 272217,142171 Type: TRACKWAY Period: POST MEDIEVAL

Description and interpretation: A scarp 0.6m high forms the back of a level track, 1.2m wide, leading from the west side of the south face of the dam for Pinkery Pond to a small quarry (ECH12 126), providing access to the quarry. This is probably associated with the construction of the dam and so dating from the 1820s.

References: PHOTO ECH12 126\_27



ECH12 128 Location: 272296,142188 Type: STONE QUARRY Period: POST MEDIEVAL

Description and interpretation: An area of hollows and rocky scarps, 40m N/S and 25m E/W lies on the east side of the south face of the dam for Pinkery Pond. The scarps are a maximum of 2-3m deep. This is an area of stone quarrying, probably associated with the construction of the dam and so dating from the 1820s. Two small hollows with associated spoil heaps which appear to be later than the quarrying could be trial trenches for ironstone, dating from after 1856 when Schneider and Hannay leased an area which probably included Pinkery (Orwin *et al* 1997, 223).

References: PHOTO ECH12 128



ECH12 129 Location: 272085,1422288 to 272473,142130 Type: BOUNDARY BANK Period: POST MEDIEVAL

Description and interpretation: A substantial bank of earth and stone with a stone facing runs right across the dam for Pinkery Pond. The bank is 1.2m wide and 1.3m high, with a modern wire fence on its top. The bank is part of the enclosure which separates the Chains from the outfields of Pinkworthy and Driver Farms and seems to have been constructed by 1848 (Orwin *et al* 1997, 80-81).

References: PHOTO ECH12 129





ECH12 130 Location: 272300,142225 Type: RESERVOIR Period: POST MEDIEVAL



Description and interpretation: Pinkery Pond is an artificial body of water, 170m N/S, 100m E/W and 1.11ha in extent, high up on the south side of the Chains, created by the construction of a massive earth and stone dam (ECH12 131) across the headwaters of the River Barle. Pinkery Pond was created by John Knight and was probably complete by 1830. There is little known documentary evidence as to its original purpose but

several theories have been advanced: for irrigation; to provide water to power an incline for a railway; to provide water for mining activities; for sporting/recreational use (for example: McDermot 1973, Orwin *et al* 1997, 57, Youell 1974; Burton 1989, 62-66; Burton 1969, 41). It is suggested here that John Knight constructed Pinkery Pond to provide a body of water to power agricultural machinery for his new farms but this scheme was unrealised as the difficulties of arable farming on this part of Exmoor became evident.

References: PHOTO ECH12 130 Exmoor HER 7119

ECH12 131 Location: 272254,142222 Type: DAM Period: POST MEDIEVAL



Description and interpretation: A massive earthwork blocks the valley of the headwaters of the River Barle to the south of the Chains. The earthwork is 105m E/W, 54m N/S and 15.4m high on S side, 6.8m high on N side. This is the dam which forms the reservoir of Pinkery Pond. It was constructed by c 1830 by John Knight (ECH12 130). The north – reservoir – side of the dam has a stone revetment wall (the wave wall). This is a drystone wall, 72m long, 1m wide (visible) and 0.8m high. At the NE end of the dam the wall turns and becomes a revetment wall for a substantial drainage channel. A similar wall, now rather eroded lies on the other side of the channel. The channel is now used for access to the water's edge. A sluice or spillway, 37m long, 3m wide and 2.3m deep lies at the SE corner of the body of water. At present this serves to keep the level of the reservoir at just below



the base of the wave wall. An iron pipe with flanged ends lies in at the entrance to the channel. The south side of the dam has a revetment wall with a drainage channel on its west side. The foot of the dam has been dug into, probably to provide material to reinforce the east side where the spillway carries water from the reservoir into the River Barle. Here, a stone wall diverts water away from the base of the dam and into a rock cut channel.

References: PHOTO ECH12 131a-g



*ECH12 131a (opp middle) N side of dam*  
*ECH12 131b (opp bottom) revetment wall, the wave wall, on N side of dam*  
*ECH12 131c (top right) drainage channel on NE side of dam*  
*ECH12 131d (above right) the spillway*  
*ECH12 131e (right) the S side of the dam*  
*ECH12 131f (below) drainage channel on SW side of dam*  
*ECH12 131g (bottom right) the spillway on S side of dam*





ECH12 132 Location: 272417, 142244 Type: PEAT CUTTING Period: POST MEDIEVAL



Description and interpretation: A small area of peat cutting to the SE of Pinkery Pond is 16m NE/SW, 4m NW/SE and 1-1.5m deep. Like the larger area to the south (ECH12 102), this probably dates from the post medieval period.  
References: PHOTO ECH12 132

ECH12 133 Location: 272177, 142180 Type: DRAIN Period: POST MEDIEVAL



Description and interpretation: A channel, 50m long, 4-5m wide and 0.8m deep lies at the south end of the leat, ECH 124. This is a drainage channel, cut to take the water from the leat ECH12 away from the area of the dam for Pinkery Pond, and dates from c 1830. The scoops which punctuate its length could be a feature of its construction or they may relate to later prospecting for ironstone which occurred on Exmoor

Forest in the 1850s.

References: PHOTO ECH12 133

ECH12 134 Location: 272200, 142147 Type: DRAIN Period: POST MEDIEVAL



Description and interpretation: Three large sub-circular hollows cut into the hillside to the SW of Pinkery Pond are 40m NW/SE, 10-15m NE/SW and 3-4m deep. These are post medieval quarries, probably for stone for the construction of the dam for Pinkery Pond in c 1830.  
References: PHOTO ECH12 134



