TINWORKING IN THE O BROOK VALLEY, DARTMOOR, DEVONSHIRE

An Archaeological Survey by the
Royal Commission on the Historical Monuments of England

Dartmoor Forest Project
June 1996

RCHM
ENGLAND

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(NMR SX 67 SE 190)

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SUMMARY

Tinworking remains in the Upper O Brook valley were surveyed by RCHME staff as part of the Dartmoor Royal Forest project during 1995. This work was supplemented in 1996 by a request from DNPA for a survey of Holne Moor, offering further opportunity for the recording of tinworking. The conjunction of both these fieldwork campaigns has allowed us, for the first time, to record the tinworking within the water catchment of a major moorland tributary in totality. This is all the more significant because the O Brook is one of Dartmoor's most diverse tinworking landscapes, containing the full suite of tinworking and processing remains.

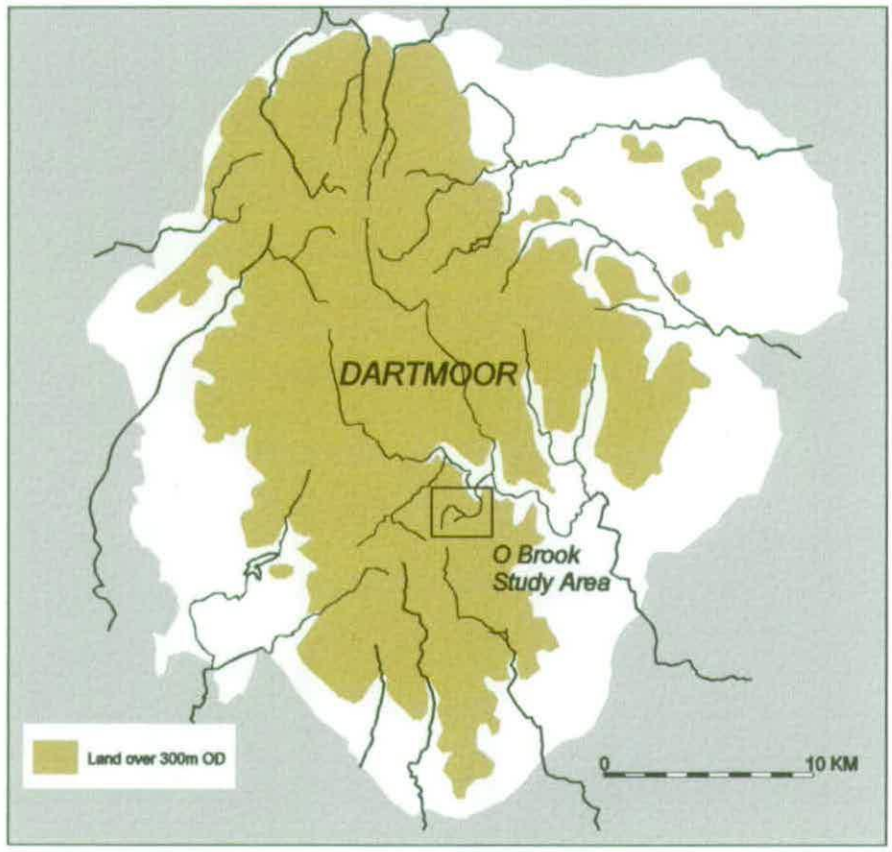

Fig 1. Location of the O Brook study area

LOCATION

The O Brook is one of the larger moorland tributaries of the River Dart, extending for approximately 4km to the south-west from its confluence with the Dart at Week Ford. The study area of this report covers the watershed of the O Brook and includes the areas marked on modern OS maps known as Skir Gut, Henroost and Hooten Wheals as well as the extensive areas of streamworking in the O Brook and Dry Lake vallies.

SUMMARY HISTORY

Pre-1800

The earliest episode of tinworking within the O Brook watershed, was undoubtedly one of streamworking, in search of the alluvial deposits, found in the valley floor of the river and its tributaries. Little documentation for this activity survives although a 'tinwork' at Dry Lake, was mentioned as early as 1240 (Somers Cocks 1970, 279), this being among the earliest references to a specific tinwork anywhere in Devon in the

surviving documentary record. Other documentary references from the mid-16th century which mention 'Scurr' [Skir Gut](Greeves 1986, 4) could be referring to the streamwork although are equally likely to be describing the large openwork at the site.

The 19th and 20th centuries

A licence for a mine called Wheal Unity, in the vicinity of Skir Gut and Henroost, was granted in 1845 with further licences being granted for tin mining in this area between 1849 and 1854 (Greeves 1986, 4). Activity is recorded again in the 1880s and by 1891 fifty men were employed at the mine (Burt et al 1984, 73). However, by 1896 the mine had again ceased work and the lease was terminated (Greeves 1986, 4). During this period the mine was usually known as Hensroost or Hexworthy Mine. The mine re-opened under new management later in 1896 and continued in service until 1919, when it finally closed. Pumping of the levels continued until 1920 when a storm destroyed the pumping wheel aqueduct and caused the collapse of the main shaft, preventing any further work underground (Richardson 1992, 33). Much of the machinery, water wheels as well as other equipment was dismantled and removed between 1927 and 1938. Most of the buildings associated with the mine were destroyed by American troops rehearsing for D-Day during WWII(Richardson 1982, 33).

The earliest plan of the 19th and 20th century features appear on the 1904 OS 25" 2nd edition map(Devon cvii.15), though the three openworks of Skir Gut, Hooten Wheals and Henroost were clearly depicted on the 1894 OS 1st edition, including an apparent shaft at the latter. Among recent published sources discussing the mine are Dines (1956) Hamilton Jenkin (1974), Greeves (1986) and Richardson (1992) although no accurate survey of the whole site has before been attempted.

SITE DESCRIPTIONS

For the purpose of this report the area has been broken down into six separate components for ease of description. These are:

1. **Skir Gut** Centred SX64257050 From the head of Skir Gut to Skir Ford
2. **The Henroost** Centred SX65107100
3. **Dry Lake** Centred SX66067050
4. **Lower Dry Lake** Centred SX66507091
5. **O Brook valley floor** Centred SX65807090
6. **Hooten Wheals** Centred SX65607070
7. **Dry Lake Dressing Floor** Centred SX66057180

1. Skir Gut

Skir Gut is located within a naturally shallow depression on the gentle, north-facing slope between Skir Hill to the east, Avon Head to the south and Ter Hill to the west. It consists of an area of streamworking, overlain by a later openwork which defines the eastern edge of the whole tinwork. The O Brook, which has had its course altered by the tinworking activity, now runs wholly within the openwork, between SX64707030, from where it issues, and SX64787085 at the northern end.

The streamwork covers an area of approximately 13ha and extend between the southern end of the site at SX74717038 and Skir Ford, SX65007130. The maximum width of the streamwork is up to 80m. A further small pocket of streamworking evidence survives on the eastern side of the openwork at SX64777038 The streamwork contains several areas of well-preserved parallel spoil dumps, each of differing orientation suggesting some phasing, or relative episodes of activity. Particularly fine examples are to be seen at SX64707010 and SX64627040. The northern portion of the streamwork has been overwhelmed by peat bog and is only accessible with difficulty.

The openwork is a particularly massive, linear gully of between 2.5 and 12m deep and 25m wide, with steeply sloping sides. At the southern extremity(centred SX64757030), several additional gullies adjoining the main element hint at slightly more complexity in the location of the lode in this area.

The major source of water for both the streamwork and openwork episodes, was the higher marshy ground to the south, which defines the divide between the sources of Dart and Avon. A series of shallow gullies centred SX64787000 conducted the water to the head of the working. Additional storm run-off from the eastern slopes of Ter Hill was collected in a large reservoir of approximately 40m long at SX74457053. The reservoir consists of a linear hollow with an earth bank or dam on the downslope side of up to 1m high, with a central sluice opening. Vestiges of a channel, used to conduct the water to the streamwork are traceable leading east from the opening. A second, much smaller reservoir is located near the top of the streamworking area at SX64697042. This has a low, crescentic bank of

less than 60cm high, with a well-defined water channel leading into the streamworking just to the north.

The areas immediately south and south-east of the main openwork also have evidence of the tin lode having been exploited by 'lodeback' works. Linear alignments of, deep, confluent pits up to 3m deep with corresponding external spoil mounds are to be seen centred at SX74666993 and SX64477010.

Clusters of smaller pits at SX64547063 and SX65107012 are scattered at various other locations around the working, most of which have a diameter of 2m or less and are up to 1m deep, are likely to be prospecting pits.

2. The Henroost

The Henroost, centred SX65107100, is a very large opencast lode tinwork, located on the northern knoll of Skir Hill. The openwork follows a south-west to north-east section of lode the evidence for which extends between SX64957091 and SX65257114. The tinwork consists of two elements, separated at SX65117105 by a causeway of unworked ground. The elements are similar in character comprising very deep gullies with sheer, rock-cut sides up to 20m wide and 15m deep. There are also several additional though smaller gullies representing less developed sections of the working and the channelling of water.

Water was supplied to the openwork via a leat, diverted from near the source of Hooten Wheals Stream, around the north-east side of Skir Hill. This was stored in two reservoirs on the south side of the tinwork. The reservoir at SX65057094 consists simply of a widening of the leat channel near its terminal, creating a linear pond of 60m long by up to 10m wide. This in turn fed a second reservoir at SX65087096. This is an extremely well-preserved crescentic example with retaining dam of up to 2m high. The sluice opening has a masonry lining surviving in situ, consisting of two substantial granite slabs of 0.9m high. Below the sluice lies a system of well-defined channels which once diverted the water to various sections of the working. They are up to 3m wide by 1.5m deep. Two additional reservoirs are located to the north of the working at SX64957095 and SX65037104. They probably utilised water diverted from the O Brook via a leat, vestiges of which survive at SX64777078 near its source, though it has been effaced over the remainder of its course. The western reservoir, consists of an acutely crescentic earthen bank or dam, of up to 1m high and approximately 20m across. A shallow channel leads from the well-defined sluice opening and may be traced north-west to a second reservoir. This comprises a slightly crescentic bank of approximately 0.8m high and 30m long with a central sluice opening. Built into the exterior of the southern wing of the bank is the remains of a small, poorly-preserved rectangular structure of indeterminate dimensions and function.

Other episodes of exploitation on this lode are represented by an alignment of lodeback pits extending south-west from the head of the openwork, following the axis of the lode, and shaftheads located within the openwork. Taylor's Shaft, sited at SX65097104 was worked during the nineteenth century(Richardson 1992,29) but is now capped, consisting today of a conical pit inside the openwork. A second shaft at SX65157109, which could be older, remains uncapped and open but is fenced off for safety reasons. Several other deep conical pits associated with this tinwork at SX65137108, SX64997099 and SX65027099 could also represent the surface remains of underground exploitation.

Power for pumping was transmitted to Taylor's Shaft from a waterwheel sited 560m to the south-east, near Hooten Wheals at SX65637088 via a system of flatrods. The surviving evidence for this is the narrow gully at SX65457093, through which the rods were conveyed. Beyond and to the north of the channel the course of the flatrods is evident as an alignment of mounds approximately 1m diameter by up to 0.5m high, representing the positions of posts which supported the flatrods over the final 320m. The position of the 'bob' pit is visible, attached to the south-east side of the shaft. A semicircle of stone walling, which is probably the remains of a structure, stands just above and to the north-east of the shaft, built into the scarp. It has a diameter of 2m, is 1m high and is likely to have been associated with the shaft working activity.

Evidence of a possible adit, likely to be associated with Taylor's Shaft is sited at the foot of the openwork at SX65257113, but consists only of a boggy hollow, leading into a wet, rush-filled channel, in the alluvium of the O Brook.

The site of what may be a second adit sited inside the openwork at SX65187112 is represented only by the course of a former tramway. The remains of the tramway consist of

two parallel stone revetments forming a channel up to 2.3m wide in the base of the openwork gully. The walls are 1m high and the overall length of this channel is 23m. The tramway terminated 15m to the east of the channel where a flat topped spoil tip has been formed by dumping material from the skips. A small stone structure is built into the southern revetment, at SX65217113, measuring 4m by 2m with an entrance opening of 0.9m. The adit itself is no longer open and may have been purposely filled in.

3. Dry Lake

Dry Lake streamwork is located on the moderately sloping northern portion of Holne Ridge. Oriented north to south it extends between the Dry Lake - O Brook confluence at SX66067100 and a point high on Holne Ridge at SX66057025; a distance of some 750m, and covering an area of 4.2 hectares. The edge of the tinwork is delineated by steep scarps of up to 4m in depth, and the interior comprises a clearly defined system of spoil mounds and water channels. Many of the mounds have neatly revetted, stone front faces, behind which random dumping of smaller material is retained. The upper, southern end of the tinwork was supplied with water via a broad channel which enters the working area at SX66127039, at the south-east extremity and utilised water stored in a well-defined linear reservoir at SX66227023. This reservoir consists of a linear hollow of approximately 25m long by 4m wide, with an earth retaining bank or dam, running approximately level along the hillside contour. The dam, at the western end, is unusually built from stone, and stands to a height of 1.5m with a sluice opening of 2m wide. To the south of the main tinwork are several small pits, most of which are likely to be trial pits, though some larger examples at SX66007020 could be evidence of undeveloped lode workings.

4. Lower Dry Lake

This streamwork follows a course approximately parallel to Dry Lake though contains no natural water supply. It extends between Horse Ford on the O Brook at SX66237120 and a point on Holne Ridge at SX66567058. The tinwork remains are among the clearest examples left by tin streaming in the area, with well-defined outer scarps and external water supplies, plus evidence of systematic working within the tinwork itself. The main supply of water was diverted from rainwater run-off sources high on Holne Ridge, where narrow channels with stony retaining banks may be seen extending to both the east and west to converge at a small reservoir at SX66637048. The reservoir has neat stone built dam and a sluice opening, with a stone cross-member still in place. Below the reservoir a single channel diverted water into the upper end of the tinwork. Other channels of up to 3m wide by 2m deep, run around the eastern exterior of the working, and conveyed water to the lower sections. One particularly large gully which extends between SX66567101 and SX66597091 is a possible undeveloped lode working. The interior of the streamwork may be divided roughly into three distinctly different sections, each demonstrating a different phase of working. The central section is particularly well-defined and consist of long serpentine spoil mounds, running obliquely across the working area. (for the survey plan of Lower Dry Lake tinwork see RCHME 1996 Holne Moor report).

5. Tinworking in the O Book Valley

The valley floor of the O Brook (centred SX65807090) has been subject to intense episodes of streamworking over its entire course, from the head of the brook at Skir Gut, to the confluence with the West Dart River at Week Ford SX 66207242. The width of the working area varies from the broad section below Skir Ford at SX65137135 which is approximately 140m wide to the thin ribbon of working to the south of Saddle Bridge at SX66517143. The limits of the working are defined by steep scarps of up to 6m deep. Although much of the valley floor is now covered by bog, some areas of clear streamworking remains are still to be seen, such as the area between Dry Lake and Hooten Wheals Stream confluences, where areas of systematic working has left numerous mounds of spoil. The area east of Skir Ford also contains clear examples of streaming remains, where parallel curvilinear spoil mounds and water channels are to be seen, though the area is now very marshy. (for the survey plan of O Brook tinworks, to the east of Horse Ford, see RCHME 1996 Holne Moor report).

6. Hooten Wheals

The area known as Hooten Wheals, centred SX65607070, has been intensively worked for tin over an extended period and contains evidence of at least three phases of extractive activity as well

as a processing works dating to the early twentieth century.

The alluvial deposits of the small O Brook tributary known as Hooten Wheals Stream have been exploited by streamworking, representing the earliest activity in this location. The outer edges of the streamwork are defined by the usual steep scarps, while the interior of the working contains linear spoil mounds and water channels. The maximum width of the tinwork is approximately 60m and it extends for the entire length of the tributary between SX65307030 and SX65907098: a distance of 900m.

A deep opencast lode working traverses the streamwork at about 90 degrees. It extends for 450m, following a roughly north to south lode between a point on the hillside at SX65657047 and the O Brook valley floor at SX65507090, interrupted only in the area of Low's Shaft (SX65077080) where no openworking has taken place. The openwork has a maximum width of 18m and is up to 4m deep. A second openwork of approximately 130m long and oriented west-east crosses the first at SX65597572, at which point a later shaft with associated spoil tip is located on the floor of the tinwork.

A series of shallow, dry leat channels in and around this sector of the complex are certainly associated with the streamwork and openwork phases. Two dry leat channels emerge from the northern scarp of Hooten Wheals Stream, at SX65487050 and SX65537056, though are clear only for approximately 100m before becoming effaced. Two further dry leat channels, which are first visible at SX65637073 have had their courses interrupted by the large, 19th century spoil heap at SX756-708-. A similar channel is visible to the north of the heaps, traversing the openwork, though is no longer visible beyond the point where the later mine leat cuts through it at SX65467097. In addition to the main leats, both the streamwork and the openwork have many associated water channels, which represent diversion of water to various parts of the workings. Notable among these the channel extending between SX65547072 and SX65547090 following a parallel course with the openwork.

Two reservoirs associated with the openwork phase survive. At SX65507080 a reservoir comprising two linear banks forming an approximate 'V' shape, supplied water to the northern section of the openwork. The feature is over 40m long and the bank is up to 0.8m in height. It has an approximately central sluice opening facing north below which shallow channels lead off into the working. Vestiges of a linear reservoir, which served the southern section of the openwork are visible at SX65647053. The dam, which has been partly destroyed by later progress of the openwork, consists of a low bank of up to 0.5m high and approximately 12m long. No definite evidence of a water supply to either reservoirs has survived.

A small lodeback work is centred SX65527043 and consists of a row of confluent pits, of on average 3m diameter, extending along an apparent NW - SE lode. Each pit has a ring of spoil around its rim.

Hooten Wheals - 19th & 20th century

Nineteenth century underground activity is represented by Low's Shaft at SX65577080 and a blocked adit near the bottom of the openwork at SX65577089. Water issues from the adit and the area immediately outside is now boggy. Two additional shafts, one particularly large example to the south of the streamwork at SX65627067 and one inside the Hooten Wheals openwork at SX65587072 are also likely to be associated with this period of working.

The main shaft was Low's which although capped, survives as a conical pit of approximately 15.5m maximum diameter. Little survives of the superstructure photographed in 1914 (Greeves 1986, 13), which shows a headframe and a timber structure above the shaft, though a masonry lined trench of 7m long by up to 1.2m wide and 1m deep, does survive adjacent to the shaft and once housed the balance bob, part of the pumping equipment. Vestiges of stone walling which once lined the exit of the tramway, on the east side of the shaft are also visible.

East of the shaft are two-finger shaped, linear spoil heaps, centred SX75607083, both approximately 55m long by 9m high. Their level tops once accommodated tramways, though no evidence of these now survives.

Running parallel with and at the foot of, the northernmost spoil heap is a straight, steep-side gully with a 'V' profile of approximately 3.5m wide by 3m deep. This channel housed the flatrods which transmitted power to the balance bob at Low's Shaft from a waterwheel sited at the foot of the hill at SX65637088. The stone-lined wheelpit which has partly collapsed, has been

fenced off for safety reasons and is currently inaccessible. It measures approximately 10m by 2m. This waterwheel also powered the Taylor's Shaft pumps and evidence of a similar flatrod channel survives between SX65507092 and SX65417095.

To the west of Low's Shaft at SX65557080 is the remains of a once substantial two-storey building, constructed in 1907 and which was photographed while still in use in 1914 (Greeves, 1986,13). It formerly housed winding gear, a blacksmith's shop, a miner's dry, offices and accommodation. It was totally destroyed by American troops training during WWII and the remains now consist only of an approximately rectangular spread of rubble. Foundations and concrete bases for winding gear are still visible and the interior measurements of the structure are 14m by 6m.

The 1907 mill complex (fig. 2) is sited on the tip of the spur at the confluence of Hooten Wheals Stream and O Brook at SX65677084, thus maximising the available water supply to the mill. A photograph of the standing building was taken in approximately 1920 (Greeves, 1986, 14). The back, west wall of the mill, consists of a stone and timber revetment though all other cover was formed from tin sheeting constructed over a timber frame, none of which survives. The dressing floor has three levels covering a total area of approximately 21m by 14.5m. The upper two levels are surfaced with concrete, and the third, at ground level contains the concrete outer kerbs of two circular buddles, both of 5.3m diameter. Two additional circular buddles, consisting now only of hollow, circular earthworks of 0.3m deep, lie on the level area to the north-east of the main dressing floor. Also in this area is a rectangular, masonry-lined pit of 6.6m by 3.5m. A steep scarp defines the edge of the dressing floor, below which several linear channels directed the tin waste on the final section of its journey onto the large tailings heap at SX65757087. This heap, although not entirely made up of tailings, contains masses of the fine, silvery sand known as tin slimes - the final waste product of tin dressing.

Water for the dressing processes was provided via a leat which conveyed water from the O Brook, near the foot of the Henroost gully at SX65317113. The leat is up to 2.5m wide with a maximum depth of 1.5m. It follows the contour to the south-east until meeting the openwork at SX65557088 where a wooden aqueduct would

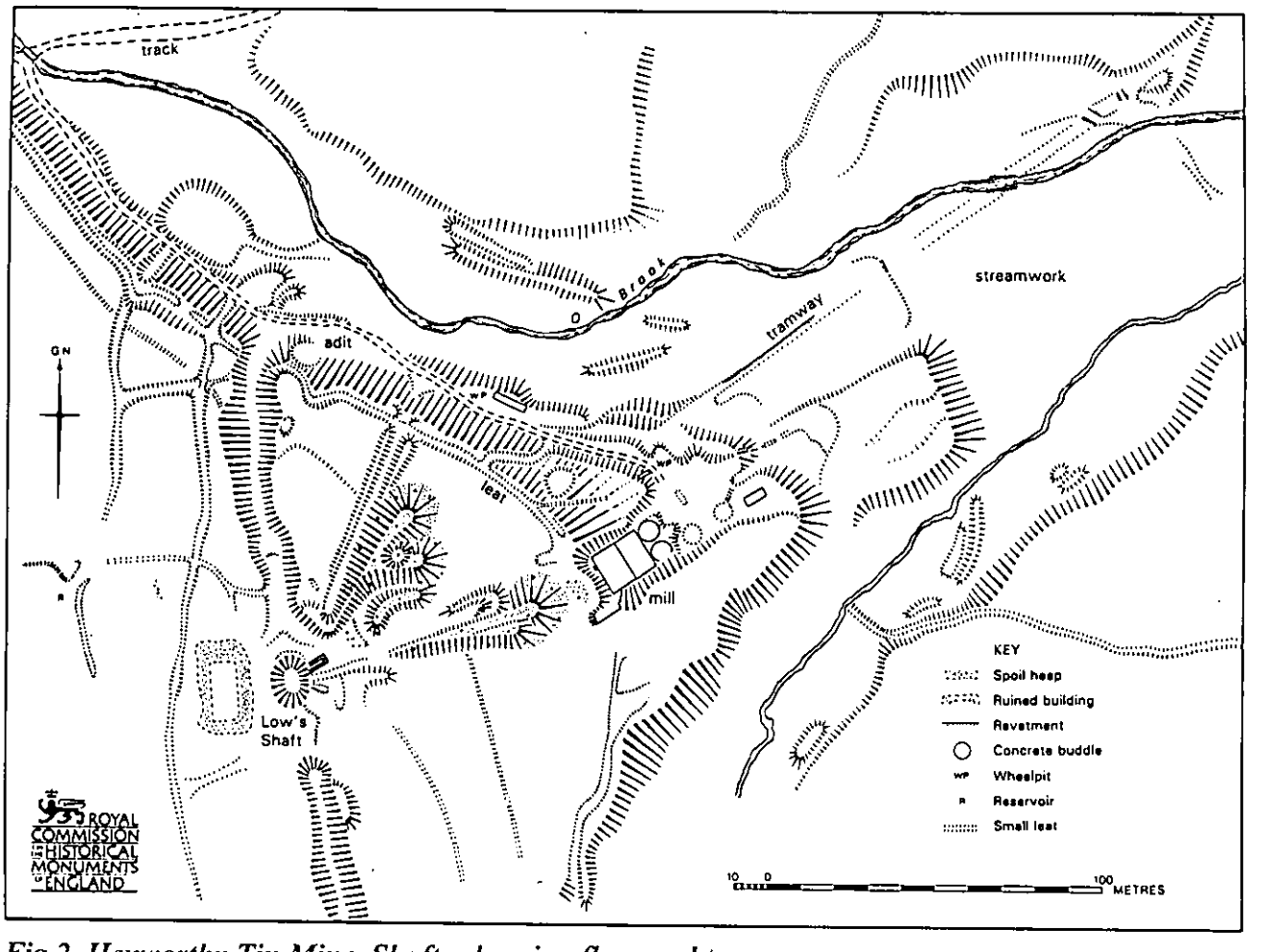

Fig 2. Hexworthy Tin Mine. Shafts, dressing floor and tramway.

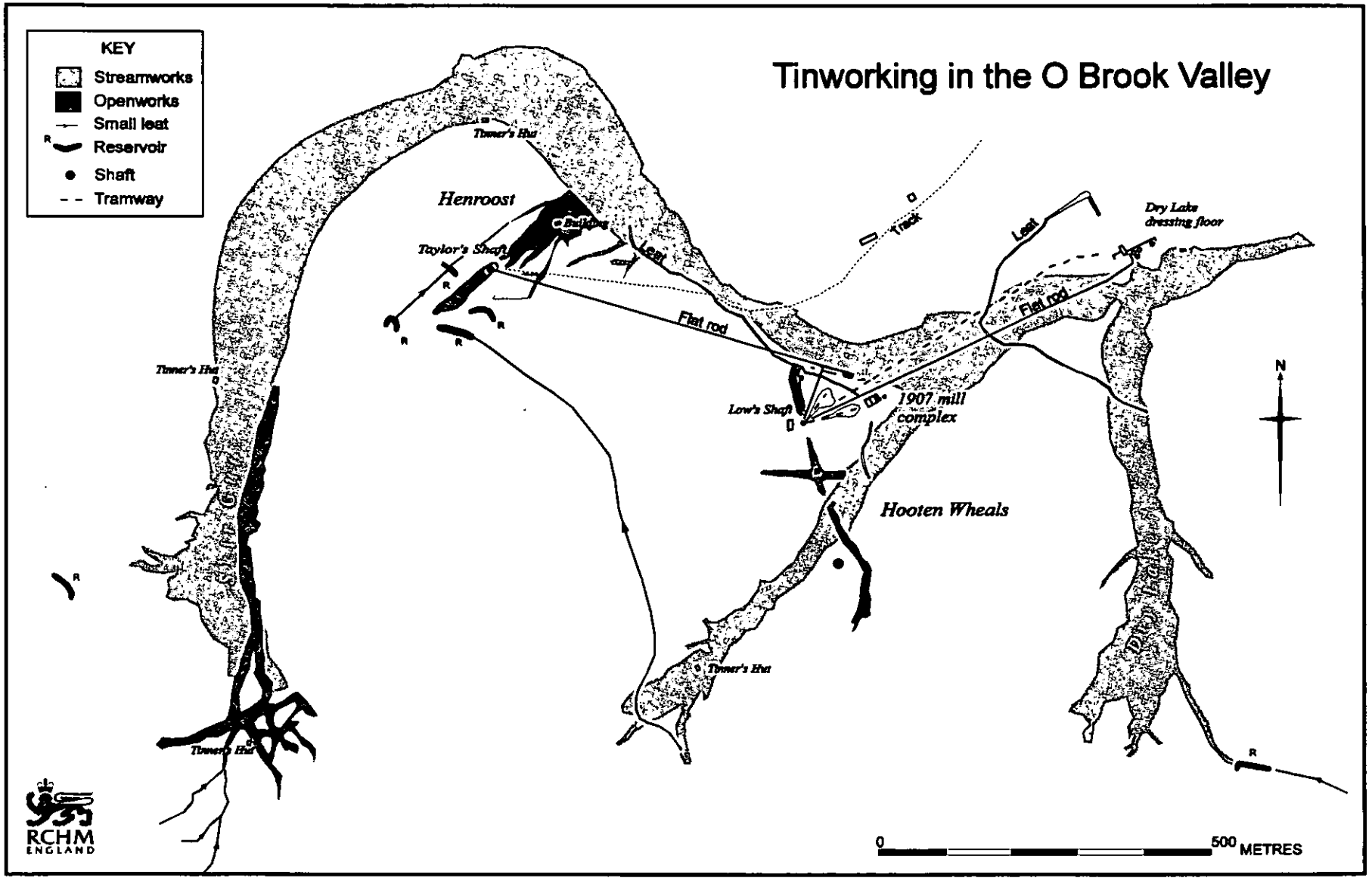

Fig. 3. Tinworking in the upper O Brook Valley. Simplified plan with interpretation based on RCHME 1:2500 survey.

have been necessary, though no trace survives. Beyond the openwork a branch channel to the pumping waterwheel is visible at SX65647086 and the leat terminates a few metres to the north-west of the dressing floor. Iron pipes, used to distribute water to the various processing areas are still visible here. A short, second leat which drew water from Hooten Wheals Stream, extends between SX65677071 and SX65667080, over a distance of approximately 100m. An opening out of the channel near the northern end may represent a storage reservoir, the flow of water being controlled by a small sluice gate, before the leat narrows again to terminate south of the dressing floor. Vestiges of a wooden sluice gate still survive in place.

Prior to 1907, all material extracted from Low's shaft was transported to the Dry Lake dressing floors at SX66057108 via a tramway. Evidence of the tramway is visible running on an almost straight course approximately north-east from a point just downslope of Low's shaft at SX65627082, to the Dry Lake dressing floors Here it splits into two branches, both terminating on embankments, the larger of which is approximately 3m high. For part of its course the tramway is visible only as contrasting vegetation or as small indentations revealing the former positions of wooden sleepers, but where it traverses the older streamwork it takes the form of a low, flat topped stony embankment of up to 5m wide with stone revetted sides in places. Two narrow water culverts at SX65817097, with stone revetted sides were constructed for the tramway to pass over the gullies of the streamwork. Also, where it crosses the O Brook at SX65777094, both sides of the river have been revetted, clearly as a means of supporting a bridge, which does not survive. A small stone-lined wheelpit at SX65676086, measuring 3.7m by 0.8m probably housed the waterwheel which provided motion for the tramway, enabling skips to be hauled up the steep section below the shaft.

7. Dry Lake Dressing Floors(fig. 3)

The late nineteenth-century tin dressing floors at Dry Lake are located near the river, on the north bank directly opposite the Dry Lake - O Brook confluence centred at SX66057108. Although the main features are well-preserved, the low lying and wet position has resulted in many of the site's smaller features being obscured by marshy vegetation and the site as a whole is now set within extremely boggy ground.

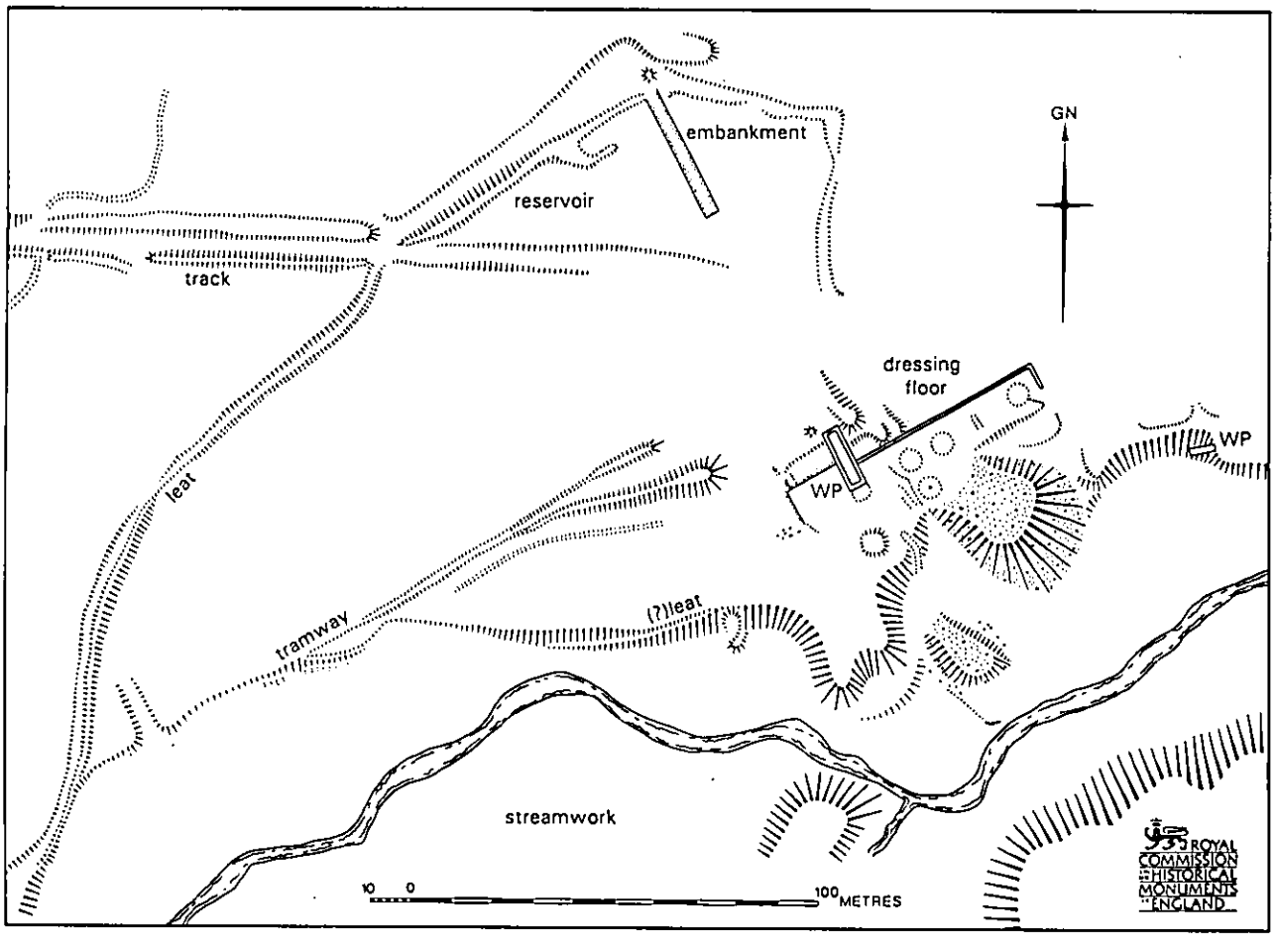

Fig. 4. Dressing floor opposite Dry Lake

The main wheelpit is among the most impressive on Dartmoor, measuring 15.5m long internally and approximately 5.2m deep. The fabric of the pit is more or less intact and in 1980 the National Park Authority shored its interior with massive timbers to prevent collapse. Extending to the north of the wheelpit is a linear stone wall surviving up to 0.5m high in places, defining the edge of the level area which was the dressing floor. Sunken earthwork outlines of four circular buddles, each of approximately 5.5m diameter, survive on the floor plus a small rectangular hollow which may represent a square buddle. On both sides of the wheelpit, hollows remain where stamping frames once stood, as depicted in the 1907 photograph (Greeves 1986,7). The Californian stamps, installed approximately 1900, which were on the west side appear to have stood in a hollow on a raised platform, with a stone revetted lower edge. Various rotten timber stumps are still visible showing the exact position of the stamp frame. Of the Cornish stamps, depicted on the east side, all that remains are iron braces, cut off at ground level.

South of the dressing floor, several large spoil heaps containing high quantities of tin slime, extend into the area of the former streamworks and, by their extent, indicate a very productive period of tin dressing at this site. The faint outline of a wheelpit, much overwhelmed by vegetation, is visible at SX66127108. Its dimensions were probably about 6m by 1.5 and it is likely to be the wheelpit mentioned by Richardson which was used to power the buddles (Richardson 1992, 280).

Water was supplied to the wheels and dressing processes via a leat which drew water from both Dry Lake and O Brook. The channel which, though dry and silted, survives in good condition, captured water from Dry Lake at SX66077082 to flow north-west along the contour, until meeting O Brook, which would further augment the supply. After crossing the river it then travels north-east for 200m before terminating in a large linear reservoir at SX65977116. The reservoir is approximately 75m long and consists of a bank or dam of 2m in height, defining the front of a wedge shaped hollow of up to 12m wide. The sluice opening, on the eastern end of the bank, released water onto a stone launder embankment, of 33m in length, which is aligned coaxially with the wheel. The embankment is exceptionally well-preserved standing to a maximum height of 2.3m. The stone cladding of the sides is almost intact and the central leat channel is still clearly defined.

Miscellaneous buildings and structures

SX64747270 A well-preserved tinners' hut sited at the top of a scarp beside the upper, southern, end of Skir Gut tinwork. All four of the turf-covered walls survive, standing to a maximum height of approximately 1m. The internal dimensions are 5.5m by 2.8m and both the long walls have central openings of approximately 0.8m wide which could be interpreted as entrances.

SX64687087 A small and poorly-preserved tinners' hut, sited at the foot of the outer western scarp of the Skir Gut tinworks. The outline of the structure is visible as low, stone wall foundations. The internal dimensions are 5m by 2m and there is no visible entrance. A central partition wall which divides the building into two sections is likely to be the result of recent interference.

SX65087130 A well-preserved tinners' hut, built into the southern outer scarp of the O Brook tin streamworks, approximately 40m east of Skir Ford. The internal dimensions are 5.8m by 3m and the walls stand to a maximum height of 1.4m. An entrance opening survives in the northern long wall.

SX65417039 A disturbed tinners' hut sited amidst streamworking remains, along the course of Hooten Wheals Stream. The rectangular structure, which is of crude construction, and utilises spoil mounds for parts of the walling, has internal dimensions of 2m by 3m, an the walls stand only to 0.8m in height. One long wall of the hut on the south-west side, has been removed, probably as a result of recent interference.

SX65667110 A ruined building standing to the north of the Hooten Wheals mine track which was formerly part of the mining complex and likely to have been built in the late nineteenth century. Greeves describes the building as the Mine Captain's house and office(Greeves 1986, 8). The building which was of two storey construction, is now a total ruin, as a result of destruction by American troops training during WW11. It has approximate dimensions of 27.5m long, including a 6m lean-to on the eastern end, by 7.2m. Openings for two doors and six windows are visible, with sills still in place. The walls were constructed from granite, with a cement facing.

SX65727117 Stone foundations are all that survive

of a structure, just north of the mine track, associated with Hooten Wheals Mine. The ground plan shows the building to have consisted of two staggered compartments, each measuring 3.1m by 7.2m. Narrow raised cross partitions, within the floor of the ruins suggest a suspended floor and that the building itself may have been a timber structure. The quantity of rubble is certainly not commensurate with a full stone structure. Concrete steps survive on the south end of the foundations. The building is standing with roof intact in Richardson's sketch of 1935 (Richardson 1992).

SX65567087 The heavily turf covered outline of a probable rectangular building, sited at the top of the steep scarp, on the east side of the Hooten Wheals openwork. The structure, which is built onto a level platform, measures 3m by 4m internally, and has a possible entrance opening on the west side. It is likely to be associated with the pre-19th century activity at the site, and probably of the openwork phase.

SX65637129 A small poorly built open-roofed shelter lies on the footings of an earlier and more substantially built structure on the crest of Down Ridge, some 400m north of Hexworthy Mine. The present structure, used to protect two young trees, measures 2.1m NW-SE by 1.9m and is constructed of loose drystone walls 0.9m high with no entrance. Below this are the well-defined footings and lower courses of a similarly sized building, which could be the Powder House mentioned by Richardson (1992).

Week Ford tin mills

Centred SX66187232 two exceptionally well-preserved tin mill structures with surviving mould stone, furnace and mortars. An adequate archaeological survey of this site has recently been published elsewhere (Newman 1993, 185-197).

CONCLUSION

The O Brook Valley is among Dartmoor's most representative areas for remains from the tin industry, containing examples of all the main types of evidence found generally on Dartmoor. The valley is all the more interesting for its documentation, which although minimal in quantity, demonstrates that tinworking was taking place here by 1240, and had ceased by 1919, a period of at least seven hundred years. The fact that photographers were able to record the 19th and 20th century activity, both before and shortly after abandonment, has contributed greatly with interpretation. Despite a period of deliberate destruction of buildings in the 1940s, much of the field evidence remains generally in a good state of preservation. The openworks of Henroost and Skir Gut are among Dartmoor's best examples of their type, and the Dry Lake streamworks demonstrates clearly the evidence for this working technique particularly well. The Dry Lake dressing floor, with its large wheelpit, leat embankment and reservoir, must be the most illustrative of its type anywhere on the high moors although parts of it are increasingly becoming disguised by vegetation.

ACKNOWLEDGEMENTS

The sites described in this report have been surveyed using AP transcription, tied into an OS National Grid framework by ground survey. The transcription was carefully checked and annotated in the field and additional detail has been added by means of GPS, EDM and graphical techniques. The AP Digicart transcription was carried out by Simon Crutchley and field survey by Philip Newman and Simon Probert. The survey archive is located at the National Monuments Record Centre, Kemble Drive, Swindon SN2 2GZ.

References

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Appendix

O Brook Tin Mines: National Monument Record Gazetteer

NMR No.	NGR(SX)	Description
SX 67 SW 301	64257050	Skir Gut openwork & streamwork
SX 67 SW 302	64747270	Tinners' Hut
SX 67 SW 303	64687087	Tinners' Hut
SX 67 SE 65	66187232	Tin Mills(Blowing houses)
SX 67 SE 173	65087130	Tinners' Hut
SX 67 SE 174	65217113	Tinners' Hut
SX 67 SE 175	65417039	Tinners' Hut
SX 67 SE 176	65667110	Ruined building
SX 67 SE 177	65727117	Ruined building
SX 67 SE 178	65567087	Tinners' Hut
SX 67 SE 179	65107100	Henroost tinworks
SX 67 SE 180	65277076	Leat
SX 67 SE 181	65607070	Hooten Wheals streamwork, openwork
SX 67 SE 182	75607083	Hooten Wheals mine(19th century)
SX 67 SE 183	65507093	Leat
SX 67 SE 184	65807096	Tramway
SX 67 SE 185	66057108	Dry Lake dressing floor
SX 67 SE 186	65837098	Leat
SX 67 SE 187	66057050	Dry Lake streamwork
SX 67 SE 188	65807090	O Brook streamwork
SX 67 SE 189	66447192	Turbine House

RCHM
ENGLAND

645 650 655 660

710 705 700

O Brook

Skir Gut

Dry Lake

Henroost

Hooten
Wheals

Dressing
Floor

GN

100 0 500 METRES

KEY

- hut circle
- cairn
- + medieval cross
- ruined structure
- WP wheelpit
- O buddle
- TH tinner's hut
- leat
- leat(too small for earthwork depiction)
- R reservoir
- spoil\streamwork
- track
- trial pits

Scanned?

LARGE IMAGE TRACKER SHEET

Box Number: 3 of 5

File Name I'm Working in the Brook Valley. Dartmoor Devonshire

Image Number 5

Prepped By: CR **Date:** 11.2.16

Number of Images 1