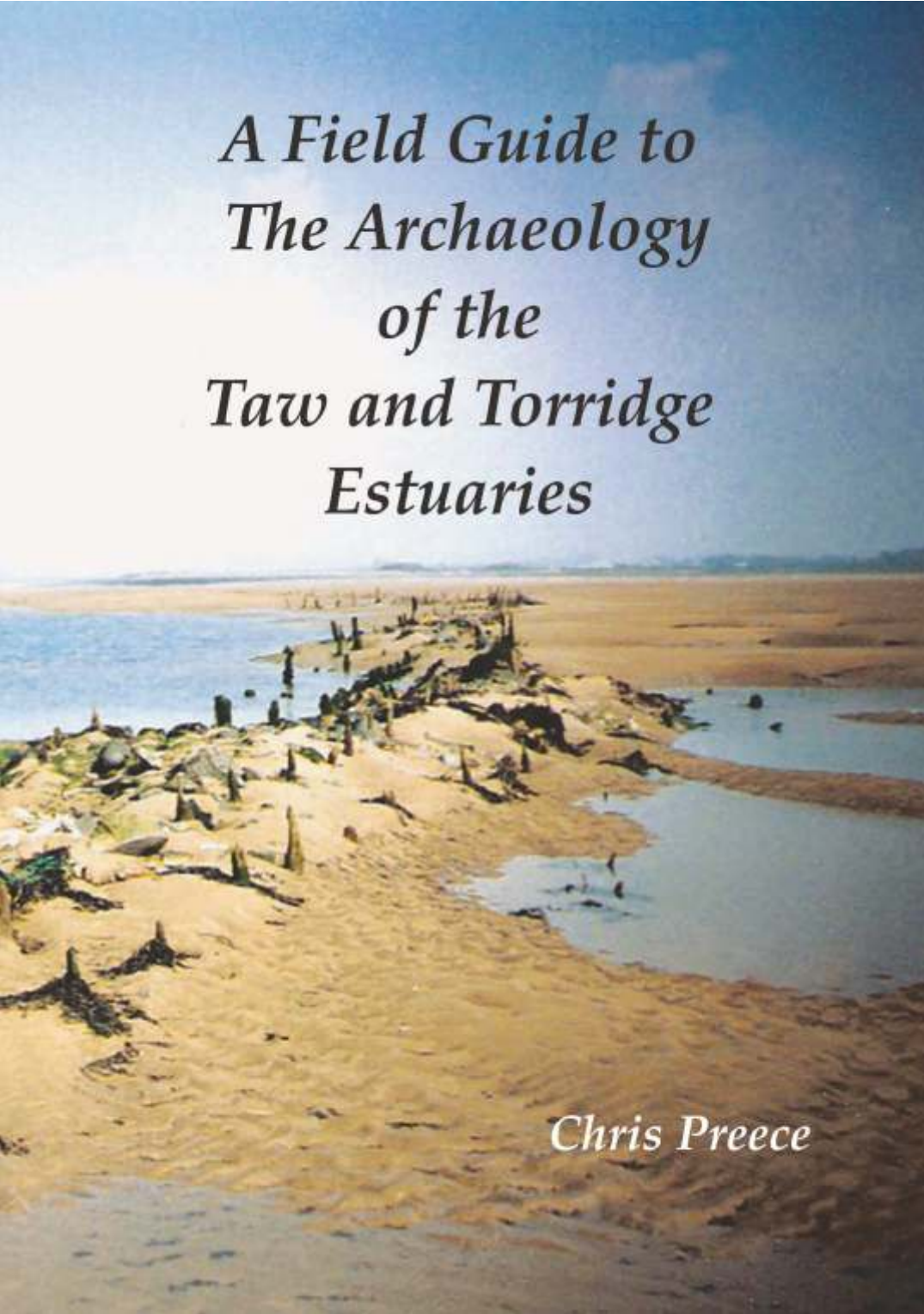
A Field Guide to The Archaeology of the Taw and Torridge Estuaries



Chris Preece

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Introduction

Man has always used the environment for his own ends and an estuary (the tidal reach of a river) is a choice place for exploitation. It is a natural resource, a haven, an entrance and an exit, a birthplace and a graveyard for ships.

In a book of this size, decisions have to be made regarding what to include and what to leave out. There is, in fact, a mass of archaeological data out there but much of it needs condensing and in some cases virtually decoding! For readers who have, or develop, an interest in a particular theme or site, there are references to detailed sources in the bibliography at the end.

Whilst an effort has been made to include all the important sites of the estuary, the detail afforded them is partly subjective and partly dictated by necessity. To list and describe all the shipwrecks on the bar at the mouth of the estuary for instance, would merit a book in itself.

The sites are, in the main, detailed chronologically, beginning with the earliest. They are also numbered so that if the reader is walking a section of the Tarka Way, for example, sites can easily be referred back to from the map (centre pages).

Geographically, this survey ranges from either side of the estuary mouth, to include the beaches of Westward Ho! and Saunton and the Burrows of Northam and Braunton. Upstream, it goes as far as Barnstaple on the Taw and Annery (Weare Giffard) on the Torridge. *It does not cover the towns of Barnstaple, Bideford and Appledore, all of which merit and have books to themselves.* In terms of date range, it spans the Mesolithic (Middle Stone Age) through to the 20th century but is less detailed regarding the latter era.

Most of the sites mentioned in the text are either accessible from footpaths (such as the Tarka Trail or the South West Coast Path), or

can be viewed (or imagined!) from them. These are marked on the map with access to the sites described and OS grid references given.

Part of this survey focuses on the intertidal zone of the Taw/Torridge estuaries - that is the foreshore between high and low water marks. Great care should be exercised when accessing these sites. They are best visited in company and at low tide - the purchase of a tide table (available from most newsagents) will be a useful accompaniment.

Finally, please remember that these are archaeological sites, so in the words of the old cliché, 'leave only footprints, take only photographs'. This author believes in the importance of sharing information with a responsible public. Some others in the profession however, will be quick to say 'I told you so' if artefacts are removed or sites damaged. Please help us preserve them for future generations.

PREHISTORIC

We begin our survey with a site of national importance which has unfortunately suffered erosion from the sea and from souvenir hunters. However, a lack of care by the authorities (there isn't even an information board to advise visitors) means the site continues to be damaged - pedal quad bikes being ridden over part of it in 2007, for example.

If you stand at the end of the concrete slipway at the south end of Westward Ho! beach (the village end) when the tide is very low, and look to the west (seawards), you may see (depending on scour patterns) three areas of peat protruding from the sand. The most seaward of these, Area 3, (also known as the 'outer peat') is of considerable significance and dates from the Middle Stone Age.

1. Westward Ho! Late Mesolithic midden **(SS429295)**

A midden is basically a rubbish tip, in this case waste comprising shells, bone etc. It has produced dates between c. 4,333 and 4,113 BC.

The threat to this important site was recognized by Dr. Jacobi, a Mesolithic specialist, and in 1983 and 1984 the Central Excavation Unit (henceforth CEU) were brought in to sure (selectively excavate) the area. They had to use windows of opportunity afforded by low tides and scouring of sand from the site (which revealed more of the area). Thus it was that they began work on February 1st in a welcoming Force 8 gale! Survey was nigh on impossible due to an inability to communicate! Fortunately conditions improved subsequently and the site was comprehensively mapped and sampled.

A number of blocks were cut through the midden and transported to the laboratory. Here, the profile (or section) of each was drawn before meticulous excavation and sieving (for plant and animal remains) took place. The environmental analysis suggested that the midden was set in damp woodland (willow, birch and ivy were identified). Animal remains recovered included slow worm, frog, roe and red deer, female auroch (wild ox) as well as fish vertebrae. There must also have been stagnant water or ponds in the vicinity,

as freshwater bivalves (shells) were found. Small amounts of charcoal enabled radiocarbon dating and a number of flint artefacts were also present. However, the major part of the midden comprised small fragments of sea shells, mostly mussels and peppery furrow shells*(Fig. 1)*. The latter are not regarded as edible today but are found on other Mesolithic sites, so presumably were eaten then.

Although the archaeologists could find no evidence of the shoreline, the abundance of sea shells suggests it can not have been too far away. They estimated that sea level was some 7 metres lower than present.

Changes in the environment are suggested by the layer below the midden and the one over it. The midden layer overlies a bluish-grey clay which has been interpreted as an estuarine sediment. Over the midden is a peat layer. The radiocarbon dates suggest this phase lasted between 500 and 800 years. Sampling from this layer produced evidence of lime, ivy, mistletoe, willow, elm, ash, hazel and oak. The abundance of the latter two species suggests this was a less waterlogged environment than previously - basically a deciduous woodland with some streams or swamp areas. Little evidence for man's activity was recovered from this layer by the CEU although E.H. Rogers had reported a group of flints from this layer in the 1940s.

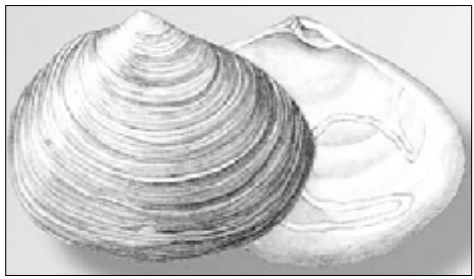


Fig1: Mussel/peppery furrow shells.

2. *Westward Ho! Neolithic site* (SS430295)

Close to and inland from the Mesolithic site, is another small exposed peat surface overlying bluish-grey clay, known as Area 2 *(Fig. 2)*. Here, two converging lines of stakes were revealed, each

stake approximately one metre apart. Two stakes were sampled and provided dates of c. 2,853 BC. The CEU were unable to establish the precise environment at this time and this, along with the spacing of the stakes, led them to favour an interpretation of a trackway rather than a fish weir (for definition see post-medieval section below). However, the existence of coastal weirs in the region, the fact that the stakes are converging and that this spacing of stakes is not uncommon in the weirs surveyed in the estuary, suggest that a weir shouldn't be ruled out.

Fig 2: Part of Neolithic site, Westward Ho!

3. Westward Ho! Romano-British site **(SS433296)**

Although this area has produced dates outside the prehistoric period (Romano-British is AD 43-410), it is included here because of its proximity to the other sites. In 1984, a large part of the 'inner peat' (Area 1) was revealed by scouring, much of it subsequently covered again. To the north of this were distinct estuarine channels cut into silts which overlie (i.e. postdate) the peat. The deposits in these channels produced bones of domestic animals (cow, sheep/goat and dog) as well as lines of stakes tentatively interpreted as the remains of a fish trap.

4. Yelland Bronze Age (?) Stone Row **(SS492328)**

Although Bronze Age stone rows are not uncommon they are rarely found in estuaries and this makes the example at Yelland significant *(Fig. 3)*.

It was discovered by the same E.H. Rogers whose finds at Westward Ho! have already been noted. The row is located some 3 metres below the high tide mark and runs east/west. This alignment always excites speculation but most archaeologists prefer the non-committal term 'ritual' to describe its function!

Its form is composed of two parallel rows of upright stones, making in effect an avenue. Although there were only 9 stones visible when it was recorded, it has been suggested that originally there were probably 16 stones in each row for a total of nearly 40 metres and that the stones were a little over 2 metres apart.

Some limited excavation took place and showed that the stones were set into (and therefore post-dated) a Mesolithic land surface. A barbed and tanged arrowhead found nearby provides speculative dating for the structure of between 1800 and 1300 BC. Certain scholars however, have suggested that some stone rows may be earlier,

Fig 3: Yelland Stone Row (courtesy of North Devon Museum Trust)

dating from the Neolithic (New Stone Age) hence the question mark in the title.

Access is problematic at present as the row is sited in a nature reserve and the Trust which manages it discourages walking along the flood-bank. The site is now far more overgrown than when the photo was taken anyhow and there is little to see.

LATER MEDIEVAL (1066 -1600)

5. Braunton Burrows Shell midden **(SS456340)**

Although this site is covered by sand, its location was revealed in the 1970s by a few surface finds of pottery sherds.

Alerted by the finds, which were identified as medieval coarse-ware (pottery used for cooking, storage etc.), a team of specialists investigated the site by excavating a small trench and by auger samples (cores extracted by drilling down into the deposit).

The information gained was surprisingly revealing. The pottery dated the site to the 11th and 12th centuries AD. The environmental samples (mainly snails) suggested a similar environment to today - marram grass and dunes. The midden itself provided a range of shells (mussels, winkles, whelks, cockles, limpets and most prominently, oysters) as well as bird and fish bones.

The archaeologists interpreted the evidence as representing probably two seasonal periods of occupation rather than a permanent site.

Visits however, are discouraged by the authorities and this site is perhaps best conjured up by looking northwards from the estuary, using a vivid imagination. The Braunton area was an interesting medieval landscape, the midden being just one of a number of sites. A good starting point for further information is Braunton Museum.

6. St Ann's chapel **(approx. SS461327)**

One of the most enigmatic sites of the estuary is St Ann's chapel. It is named and illustrated on Saxton's map of 1575 and on Speede's map of 1610 *(Fig. 4)*. On Bowen's map of 1754 it is shown close to a trackway leading to Braunton and Ilfracombe. On the other side of the estuary, the trackway appears to continue from Appledore to

Fig 4: Speede's map showing St. Ann's chapel

Bideford, suggesting a crossing point. Speede's map also shows a chapel on the Appledore side. By the time of Donn's map of 1765, however, St. Ann's chapel is shown 'in ruins'. On the Appledore side the chapel is marked 'not used'.

Risdon, whose survey of Devon was begun in 1605 and finished c. 1630, describes St Ann's chapel as "solitarily situated and very near the sea, yet doubts not drowning, so much as swallowing up of the sands, driven by drifts of the north-west winds."

Latterly it was known as 'the chapel of the sands', suggesting its ultimate fate was as Risdon predicted. If anything does remain however, it is likely to be only at foundation level. Tantalisingly, there are one or two blocks of dressed stone incongruously set in a rubble field boundary not far away, which hint at a former building in the vicinity.

As regards the origins of the church, one book suggests the dedication derived from the Celtic Annis or Anu (Carter 2000, 34). It is not unknown for pagan sites to be 'Christianised' but it is also worth noting that dedications to St Ann(e), as the mother of the Virgin Mary, occur in the Eastern church in the Early Medieval

period (410-1066). Generally, in the Western church, adoption of the cult occurs in the Later Medieval period.

Another point of interest is the fact that the chapel on the Appledore side was apparently also dedicated to St. Anne (Carter 2000, 33) as is the small, early 14th century, chantry chapel in Barnstaple.

What did the 'chapel of the sands' look like? Well, one publication confidently states it was 14' x 12' but on what authority is unclear. We can reasonably say however that it must have been in existence before 1575 and we can speculate that it was likely to have been small, possibly similar to other probable later medieval coastal examples such as Culbone church or St. Nicholas' chapel at Ilfracombe harbor. An early (1819) painting of Appledore (reproduced in Carter, 2000, 31) shows a small chapel there, probably the one shown on Donn's map. Coastal chapels or churches are thought by some to have often had a secondary function as navigational aids and those either side of the Taw/Torridge may also have served as markers for the mouth of the estuary (the location of St Ann's chapel is not far from the later lighthouse).

POST-MEDIEVAL TO MODERN (1600 TO PRESENT)

The Fish Traps - introduction

Fish traps are found all over the world and have been used from Mesolithic times to the present. There are various types, from funnel-shaped wicker baskets, to stone walls, to net and post structures. All of them work however by trapping the fish as the tide ebbs (goes out). The largest (and most brutally efficient) were the 'V' shaped 'fences' often found in estuaries and on the coast and known as fish weirs. These were frequently made of posts interwoven with brushwood. The weirs found on the Taw and Torridge are of this type and they are important for a number of reasons.

Firstly, there is documentary evidence for fishing on the Taw (quite possibly by means of a weir) as far back as Saxon times.

Secondly, due to their size, they were a navigational hazard and caused numerous disputes, many of which are recorded.

Thirdly, several of the weirs were still in use within living memory and we are fortunate to have oral history recordings that tell us how they functioned.

Fourthly, due to the involvement of the Admiralty between 1832 and 1851, we have charts detailing the locations of the weirs in existence then. All this, allied to survey by the North Devon Archaeological Society, has combined to give us one of the most comprehensive pictures of weir use in the country.

Background

In 1999, the North Devon Archaeological Society (henceforth NDAS) was alerted to the uncovering of the remains of a fish weir at Horsey Ridge, near Braunton *(Fig. 5)*. This lead to a six year project involving the survey of a number of weirs, as well as documentary and cartographic research.

Fig 5: Horsey Weir, south wing (photo by Colin Humphreys)

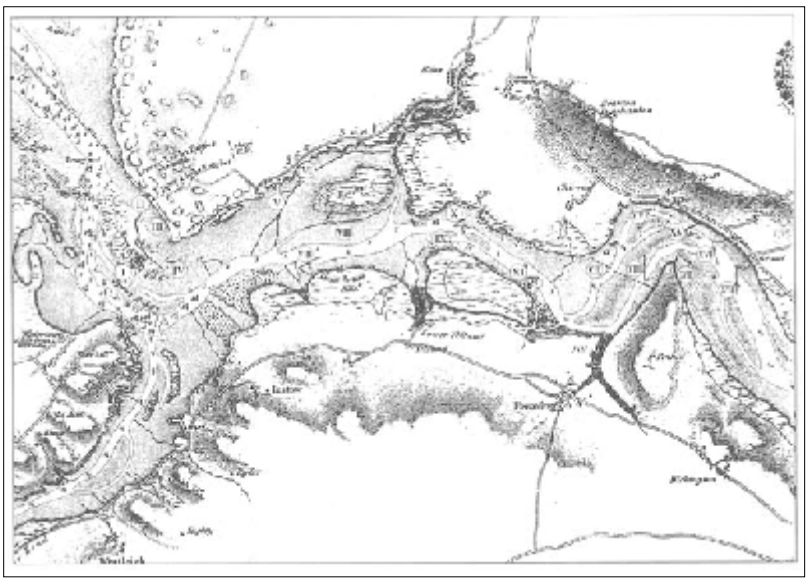
The earliest known reference to fishing on the Taw harks back to Saxon times. The charter probably dates to 857AD and details the gift of ten hides of land at Braunton to the Abbot of Glastonbury for the 'taking of fish for his house'. Although it can not be proved, a fish weir may well have been the means - Saxon fish weirs are known elsewhere in the UK, for example on the Blackwater estuary (Essex) and on the Avon estuary.

The hundred of Braunton encompassed the north bank of the Taw estuary so there are a number of possibilities for the location of the possible Saxon weir. Radiocarbon dating (despite the problems, detailed later) at some point in the future may help resolve the issue.

In 1086, Domesday records Bideford as having the most valuable salmon fishery in Devon. It also details small fisheries at Weare Giffard, Heanton and Northam.

By the late 16th century, documents clearly refer to fish weirs, with a wealth of information regarding leases, owners, locations and fees.

In the first part of the 19th century, according to a number of naval charts, there were at least 18 fish traps in the estuary. As some of these charts are literally the size of large carpets, the Denham chart of 1832 was used as a base map and weirs found on other charts were transposed to this composite chart *(Fig. 6)*.



6. Denham chart adapted by NDAS to show 18 weirs depicted between 1832 and 1851.

***7-10. The Crow Point Weirs* (7 = SS459317; 8 = SS465318)**

Documents, plans and charts suggest there were at least four weirs in this vicinity. The earliest reference to Crow dates from 1573 and by 1645 there is documentary evidence of the deeds of weirs there. Further papers suggest that at times the weirs were dismantled, rebuilt or allowed to fall into disuse. They had a variety of names, some of similar origin but differently spelt (there are at least seven variations of Charleshook, for example). Some names referred to owners or those who leased them and some names were distinctly unhelpful to researchers - 'New Weir' for instance, is described as 'ruinous and decayed' in 1661!

Thankfully, in 1851 we have the Alldridge chart *(Fig. 7)*, commissioned by the Admiralty, which shows the location of three of them:

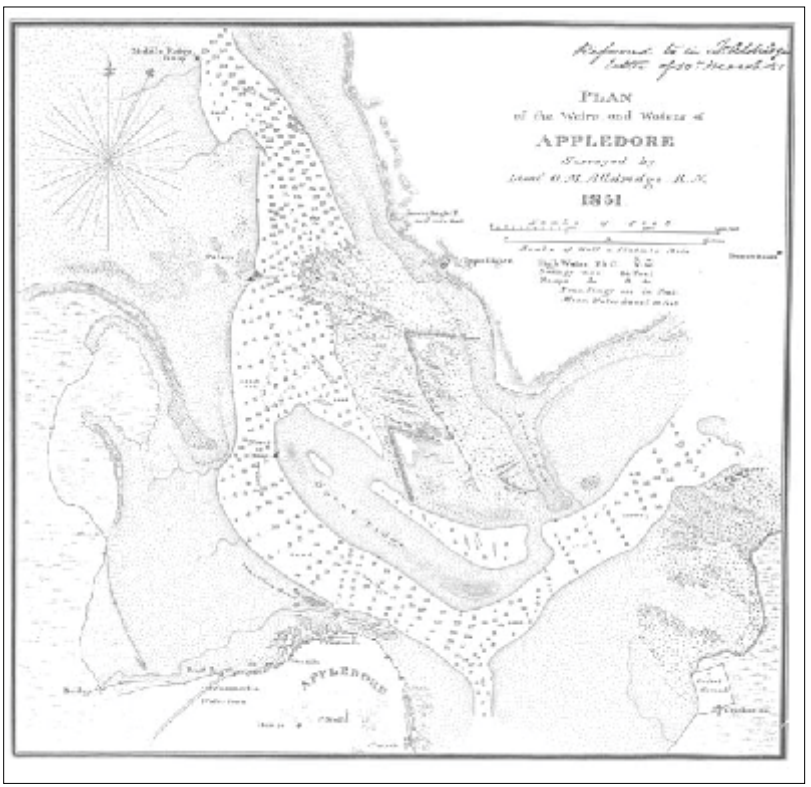


Fig 7. Alldridge chart of 1851 (courtesy of the UK Hydrographic Office).

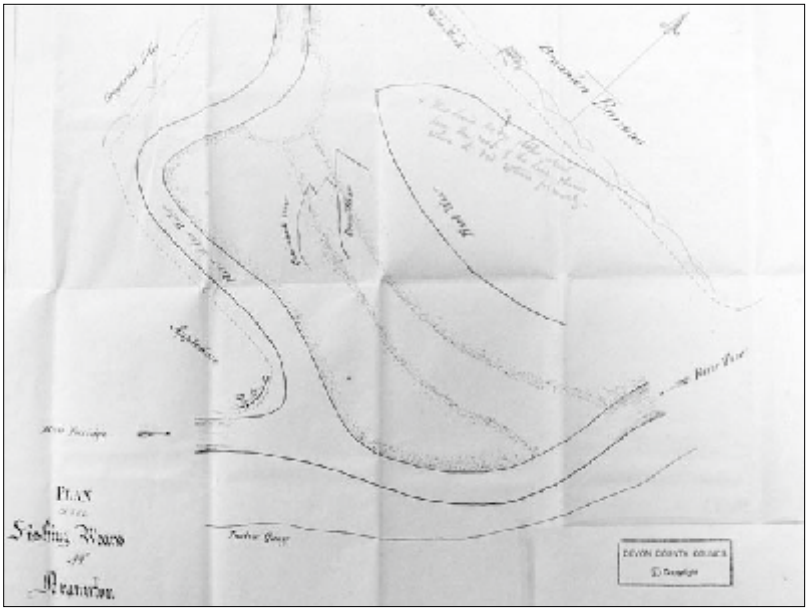


Fig 8: Plan of the Braunton weirs
(courtesy of North Devon record Office)

Crow Point, Bellamy's weir and Upper weir. The plan of the Braunton weirs *(Fig. 8)* shows a fourth, Charleshook weir **(7)**, still further out in the channel. The remains of a weir *(Fig. 9)*, which may be the latter, were found by two experienced NDAS members, Anne and Chris Mandry, during exceptionally low tides in 2005. The window of opportunity to visit the remains of this weir is therefore extremely limited and great care should be taken, as it is easy to get cut off by the incoming tide.

There are easier remains to visit nearby, however. Just 200 metres or so from the Crow Point lighthouse are the stumps of a number of stakes. These were initially thought to be the remnants of the Upper weir **(8)**. However, survey revealed that the two 'wings' of the weir appeared to be pointing in the wrong direction for trapping fish on an ebbing tide! It may be therefore, that one wing is part of Upper weir and the other wing is part of another weir, or a rebuild.

Of the two other weirs, little remains but they are worth describing briefly. The larger of them, named on one plan as 'Hart Weir', on another as 'Bellamy's Weir' **(9)**, was a huge structure *(Fig. 10)*.

Fig 9: Charleshook (?) weir
(photo by Chris Mandry)

Fig 10: Artist's impression of Bellamy's weir, Crow Point (by Derry Bryant)

Richard Frayne, a Barnstaple publican who worked on the weir in 1814, was a witness in what has become known as 'the fish weirs dispute' of 1847. He stated that "the whole extent of the fence of the wear" (*sic.*) was "three quarters of a mile in length including the land or return fence". As can be seen from Fig. 7, the wing (or 'fence') nearest the channel was often the larger. The same witness describes the height of the stakes at the 'coffle head' (the apex, where the wings meet) as being 12 to 14 feet high (c. 3.7 to 4.3 metres) - clearly a hazard to shipping, particularly at high tide.

Another witness statement by John Cory Chichester, describes how the sailors of Appledore (on the opposite side of the estuary) had previously, on two occasions, destroyed Crow Point weirs.

It seems that the rebuilding of the Crow Point weir **(10)** in 1832 was the touch-paper for a major dispute between seamen and fishermen. By 1847 witness statements (such as those above) were being taken and strong letters were flying to and fro between the Admiralty's solicitors and those of Sir Arthur Chichester who owned the weirs. The following letter of 21st December is unequivocal: "Sir, Captain Vetch having reported to the Lords of the Admiralty that the New or Upper, and the Lower or Crow weirs, near Appledore, are injurious to Navigation, I will thank you to inform me whether it be the intention of Sir Arthur Chichester to have them removed or to defend legal proceedings in respect of them."

Although Lieutenant Alldridge's chart of 1851 still shows the Crow Point weirs, they can not have survived much longer.

In 1861 the Salmon Fisheries Act spelled the end for all but a few weirs. Those that were allowed to continue were subsequently licensed as 'privileged fixed engines', a curious legal term of the time (engine here meaning device or instrument).

By then the decline in salmon stock was all too evident however. On the 11th December 1860, the editor of the Bideford Weekly Gazette had referred to a "war of extermination" and the "murderous system pursued here".

***11. Horsey Weir* (SS478333)**

This is the weir that prompted the NDAS survey in 1999. At the time of writing, the southern wing was 'sanded' (effectively buried) but

photographs taken in 1999 show a considerable structure with several phases of build suggesting longevity *(Fig. 5)*. Notes made at the time describe some 90 metres of posts interwoven with twigs and branches ('wattle').

The northern (landward) wing is visible however and lies some 900 metres to the east of the 'White House'. It was surveyed in 2003 by NDAS *(Fig. 11)*and as well as a line of posts with collapsed wattle in places, a possible sluice gate was revealed near the apex of the two wings.

Thanks to a 'living history' interview conducted by D'Arcy Andrew (of Braunton Museum) with Sid Crick, we have further details of how the weir operated. Sid Crick was born in 1913 and fished the weir. In a wonderfully rich Devon accent he states that the two gates of Horsey weir "opened on the tide and closed on the ebb…. that's how it used to work." He also mentions a small stone fishing house for storing nets and explains the need for them thus: "When the tide was out the weirs was a lot deeper than it was then if you 'ad a net and they'd come each side and pull 'em up see and what salmon was in there they'd…. they was out see." He also says the pool inside the weir was deep enough to swim in, as a local couple regularly did.

The NDAS survey confirmed that Horsey weir had an unusual feature - a 'reverse weir' further upstream *(Fig. 12)*. This seals the

Fig 11: NDAS members surveying north wing of Horsey weir.

Fig 12: 1888 Ordnance Survey map showing 'reverse' weir of Horsey

end of the channel and presumably prevented fish being flushed back into the main river channel and escaping.

Before Horsey was licensed as a 'privileged fixed engine', William Williams was summoned for failing to make a gap through the weir which he agreed to do a week later (N. Devon Journal Herald 1st & 7th Jan. 1863). This probably refers to the need for a gate as subsequently required by licensing. Valerie Robson, whose father owned the coastal fish weir at Lynmouth (also a licensed 'fixed engine'), had assisted in fishing the weir. She had the foresight to video its operation in 1993 when it was still being worked and in a talk to NDAS members related how the gate had to be left open outside of the fishing season in the summer.

To give an idea of how effective these weirs were, in 1995 a total of 208 salmon and 52 sea trout were caught by the one at Lynmouth.

The Lynmouth weir is now owned by the Environment Agency who are aware of the importance of the maritime heritage of one of the few extant weirs in Britain.

12. Ashford Kiln Weir **(SS523348)**

This is one of the easiest weirs to visit, being some 900 metres to the east of the Tarka Inn (formerly Heanton Court). From the car park, walk east along the Tarka Trail; just past a bridge turn right by a lime kiln. The weir is just slightly downstream of this. There are also two other weirs either side, both difficult to find and comprising just a few posts. It is possible therefore that documents referred to below could relate to one of these two but on balance 'West Ashford' is probably Ashford Kiln (for detailed arguments see author's article in the bibliography).

The earliest reference to a possible weir in the vicinity is in the Domesday Book where a fishery at Heanton was valued at 2 shillings a year. A later reference, cited by Reichel (1928, 433), details a Thomas Pever, who died in 1430 'seised of half a fishery at West Ashford in Heanton.' A document of 1847 is strong evidence that West Ashford is Ashford Kiln (the NDAS name). It is a lease of a limekiln to Lewis and James Sommerwill for a yearly payment of £50 "and also all that salmon weir across the said River Taw with all the rights of fishing on the said river Taw to the manor of West Ashford." Several of the weirs on the Taw are located close to limekilns and it has been suggested that they may have been worked in conjunction *(Fig. 13)*.

Fig 13: Ashford Kiln weir showing kiln in background (photo by Colin Humphreys).

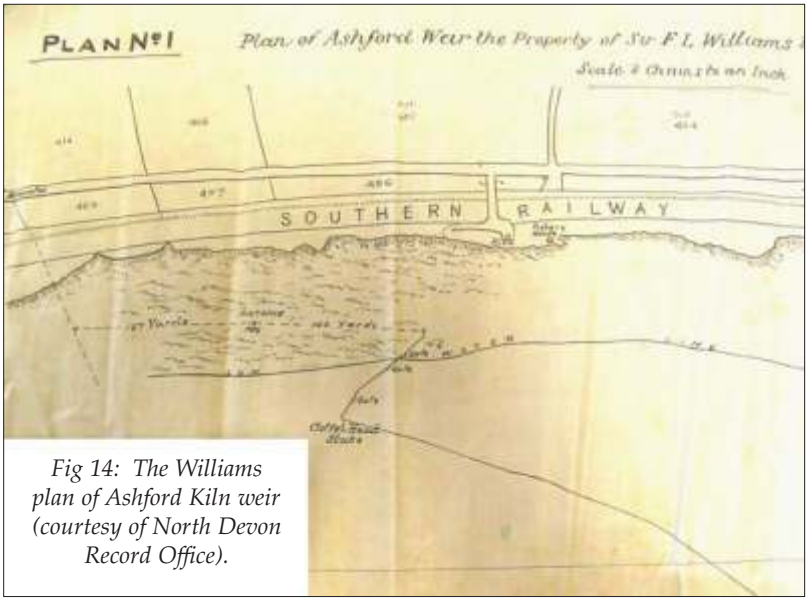


Fig 14: The Williams plan of Ashford Kiln weir (courtesy of North Devon Record Office).

Fig 15: William Payne's painting of Coolstone Weir c.1795 (courtesy of the West Country Studies Library).

Resentment against weirs was exemplified by an incident in 1851 reported by the North Devon Journal Herald, when the weir was maliciously damaged by one William Trevisick. In 1866, the weir was licensed as a 'privileged engine' but continued to engender controversy when in 1912 Supt. Gregory's boat nearly came to grief on it! A report to the Board of Trade ensued!

NDAS members surveyed the weir in 2005 and recorded 78 posts of the north (landward) wing. One post was square with a through mortise (slot) and may represent part of a gate (three gates are shown on the Williams plan of the weir *(Fig. 14)*. The 'Coffel Head' (or apex) of the weir was located by divers, indicating the beginning of the return of the south wing. Some 300 metres to the south-east c. 25 posts were noted on a sandbank. As will be seen from the Williams plan *(Fig. 14)*the south wing is of considerable length and these posts may be the end of it.

The kiln mentioned in the lease may also be visited and a fisherman's house to the east (see Fig. 14) was probably, as with Horsey, for keeping nets in.

***13. Coolstone Weir* (c.SS472318)**

No evidence of a weir could be found by NDAS members here and it was not recorded by Lieutenant Denham in 1832, suggesting that by then it had fallen into disuse. However there is documentary evidence of a weir here as early as 1609 and a painting by William Payne (c. 1795) shows Coolstone weir with Appledore in the background. The weir is evidently decayed but effective enough still to trap good sized fish!

Despite the fact that there is no evidence of the weir to be seen, it is a pleasant place to pause and with the help of Payne's picture, to envisage the scene *(Fig. 15)*.

***14. Yelland Power Station Weir* (SS478325)**

Details transposed onto the composite Denham chart suggest a smaller weir inside a larger one. This is either a rebuild (with the other one decayed or redundant) or a variation of type. The larger is a considerable weir and NDAS noted stakes as far as 200 m apart to the west of the jetty.

***15. Allen's Rock Weir* (SS503334)**

This weir is unusual and ingenious. The wings of the 'V' appear to go either side of Allen's rock (a large rock jutting out just below the low water mark in the estuary). This is presumably to use the eddies which flow either side of the rock and which would naturally funnel fish through. The southern (landward) side of the weir was surveyed, with the stumps of some 80 stakes recorded. A splay, which increases the opening of the trap, was noted once the survey was drawn up.

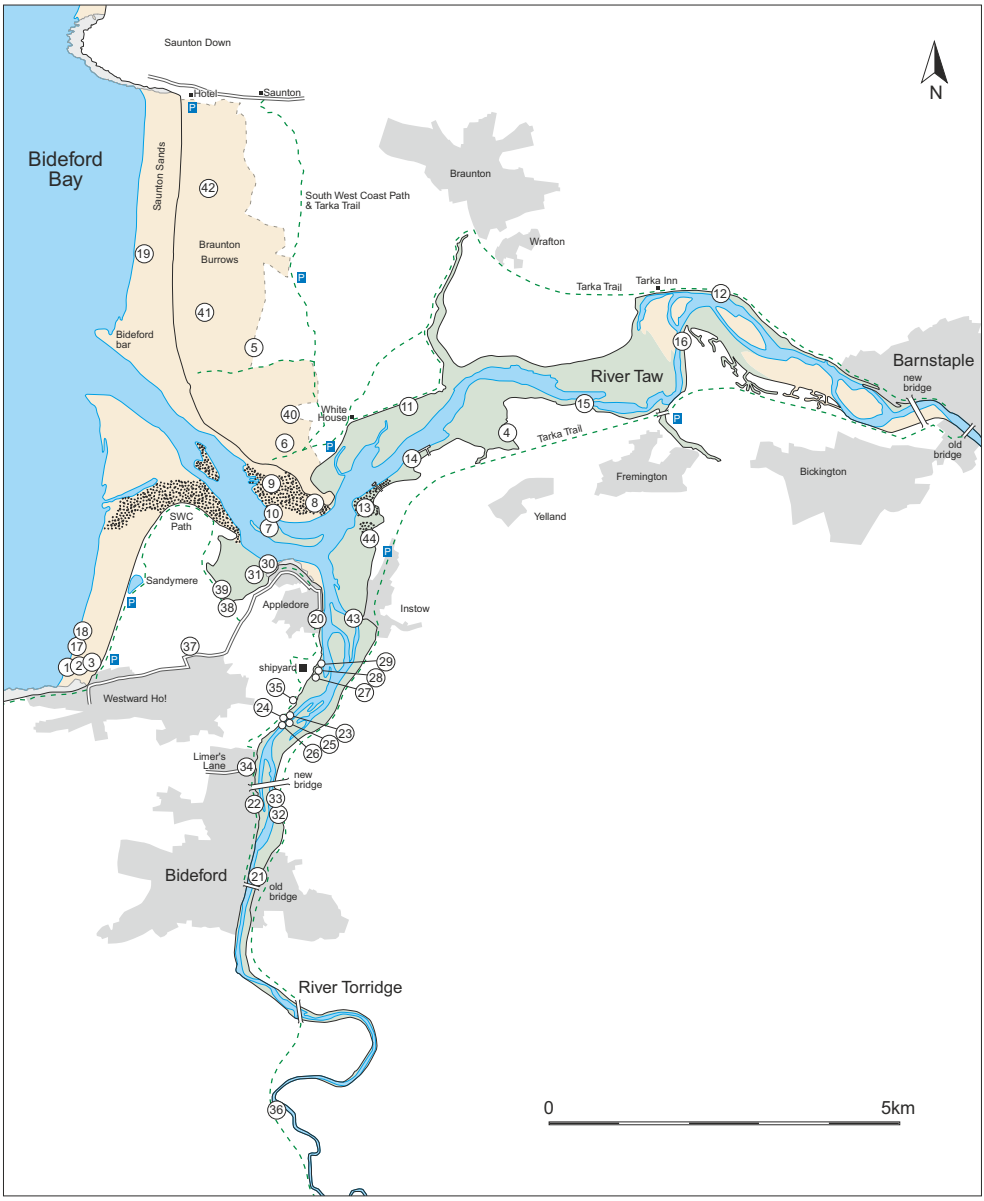
These stumps are hard to spot, often being cloaked with seaweed or difficult to differentiate from the stony foreshore here. The NDAS survey team initially walked straight over them! The density of the stakes suggests a number of rebuilds of this weir. It is one of a number of variations of type which appear to be unique to Devon.

***16. Penhill Point West Weir* (SS516341)**

Part of the smaller, southern wing of this weir was located by NDAS but not the return (or outer wing). A few abraded stumps, often in twos or threes can be seen with an eagle eye. The remains are sited near a disused limekiln.

How old are the weirs?

Despite documentary evidence for a fishery at Braunton in 857 and one at Heanton in 1086 (both of which could have been weirs) we can not say that the weir posts that remain today are of any great age. It would however be interesting to select some for radiocarbon dating but at a minimum of £100 a sample, this would be costly, as well as something of a lottery. (Any rich philanthropists please contact the NDAS!) Why a lottery? Well, we know that at intervals the weirs were rebuilt, that the posts were constantly replaced and that sometimes the posts were re-used. This means that selective sampling of posts for dating will give dates that do not necessarily inform us of the original date of construction. In addition, the form of the weir may have changed. William Chichester (a witness in the Fish Weirs Dispute of 1847) described how during rebuilding in 1828 "The old stakes were taken up and put down again more towards Appledore the effect was to widen the mouth of the wear." Sometimes the form of the weir changed even more. A comparison



Archeological site location map showing footpaths

of the Denham map shows a zig-zag weir. This was mapped in 1832 but by 1851 the larger 'V' shaped Bellamy's weir had superseded it (both are shown on the composite Denham chart, *Fig. 6*).

So the remains we see today may contain several phases of building. Nonetheless, the density of stakes surveyed at some weirs suggests that if a decent length were sampled (for radiocarbon dating), along with excavation to look for redundant posts, then the results might be interesting.

Shipwrecks

The north coast of Devon is an inhospitable zone for mariners, witness the countless recorded wrecks from Welcombe on the Cornish border to Foreland Point near to Somerset (Larn 1974). One of the few (apparent) safe havens is suggested by the estuary mouth formed by the confluence of the Taw and Torridge estuaries. False hope however for the countless sailors in ships wrecked on Bideford Bar, the perils of which were spelt out only too clearly in Lieutenant Denham's sailing directions for the Bristol Channel (1839). He regarded the bar as too dangerous without a pilot, but acknowledged they weren't always easy to come by. He continued by saying "Strangers should never attempt it but by daylight, and then only with a commanding breeze, for the tide runs at the rate of 5 knots…..whereby a vessel not skillfully handled might be swept on the Crow or Sprat Ridges."

A search of the maritime index at the National Monuments Record bore this out, with over fifty recorded losses on the bar in the eighteenth and nineteenth centuries alone.

A number of vessels were also driven ashore and wrecked on the beaches either side of the estuary mouth. Many are occasionally revealed by scouring and then as quickly, buried again. Most are unidentified and therefore undated. One or two are worth pointing out however.

***17. The 'Sally' of Bristol, Westward Ho!* (SS431298)**

This wreck is usually visible *(Fig. 16)* and is a little to the east of the peat 'islands' previously described. It has been variously described as anything from a sand barge to a Viking ship, although Muriel Goaman correctly believed it was a late 18th century vessel

Fig 16: Wreck of the 'Sally', Westward Ho!

(1965, 11). It has now been dated by dendrochronology which suggests it was the 'Sally', wrecked on the 15th of September 1769. Customs records describe how early in the morning, in thick cloud, the wind dropped. The master of the vessel had miscalculated his position and when he sounded only 6 or 7 fathoms, he quickly dropped anchor. To no avail however, as it dragged and the ship continued to progress inshore, until her stern struck. The crew abandoned ship and managed to get safely ashore on the Burrows.

18. Unidentified, Westward Ho! **(SS432300)**

Some 250 metres away from the 'Sally' lies another wooden wreck, often uncovered after storms. This is a smaller vessel, some 15 metres in length remaining, with frames, some planking and ceiling (inner planking), and sternpost all occasionally visible. This is possibly a North Devon craft known as a Polacca Brig (see *Fig. 23*) built for the limestone trade (Barry Hughes, personal comment).

Both these wrecks were added to the protected list in 2016.

There are a number of other wrecks at Westward Ho! which are periodically revealed. Both Appledore Museum and Devon Historic Environment Record at County Hall, Exeter, have sites listed off

Sandymere (further up the beach towards the estuary) and a large Dutch East Indiaman is recorded as having gone ashore c. 1771 (Larn 1974, 192).

***19. Unidentified, Saunton Sands* (approx. SS440353)**
This wreck is clearly marked on one of the Alldridge charts (1851) at the Hydrographic Office. Also marked, just to the south-west, is a pile of ballast. Although the wreck must have been visible at the time of mapping, it has not been revealed recently to the author's knowledge.

To the north of the above site, there are records at Appledore Museum of at least three unidentified wooden wreck sites on Saunton Sands. The index in Larn's book (1974) shows there are a good number of candidates.

From cradle to grave; shipbuilding and ship remains

The maritime history of Bideford, Appledore and Barnstaple has been extensively covered elsewhere (see bibliography). Here it will suffice to look at the nautical archaeology - the shipyards and the hulks (the beached or abandoned remains of ships) - the estuary is particularly rich in the latter.

Shipyards

Research has indicated that since the 18th century there have been at least 18 shipyards on the estuary, with the majority being on the Torridge (Farr 1976). Shipbuilding has thus played a major part in the life of the community here and the recent restoration of the schooner 'Kathleen and May' showed that the skills survive. The Bidna Yard, despite some difficult times, maintains the tradition of ship construction and continues to produce modern vessels.

Appledore Museum is a good place to acquaint oneself with the history of the yards. There is a reconstruction of the Brunswick Yard at East the Water, Bideford, as well as displays relating to Blackmore's Yard and the Richmond Yard and Dry Dock, all in Appledore.

Richmond Dry Dock **(20)** was built in 1856 and can be adequately viewed from the south end of the quay **(SS 465303)**. It is a Grade

II listed structure and of late has been little used. It is, at the time of writing, still subject to a controversial waterfront development proposal. At the south end of the quay, by Richmond Dock, are display boards showing the location of estuary shipyards and giving details of their history.

One site which may be visited is that of the Brunswick Yard, East the Water **(21)** (formerly the Restarick Yard) where the schooner Kathleen and May was restored **(SS457264)**. A local businessman, the late Steve Clarke, had the vision to rescue her and to organize and finance the restoration of this wonderful ship. As the last three-masted topsail schooner in existence, she is a vital part of our maritime heritage and reminds us of the former glory of her sisters who now lie rotting on the estuary foreshore (see 'hulks' below). Sadly, for the people of Bideford, she is now moored in Liverpool.

Many of the shipyards are no more; Bank End **(22)**, for instance, where warships were once built, is now a Bideford riverside housing estate **(SS457277)**. A little further north however, Lower Cleave Houses, a shipyard, intermittently, from the late 18th to the mid 20th century, still has vestiges of its past in the names thereabout, such as Cleave House and Cleave Quay.

The slipways at Hinks Yard at Watertown can be seen when visiting hulks nos. 30 and 31.

Hulks

There are numerous ship remains to be seen along the foreshore, mainly on the Bideford/Appledore side of the estuary. Here, a select few of the wooden-hulled vessels are detailed.

Four of the most accessible are easily reached from the South West Coast path between Bideford and Appledore, below Northam. Approaching from the Bideford end, they can be seen from the top of the path which then drops down to a small cove in the Burrough Farm National Trust land. By walking back along the shoreline towards Bideford, the hulks can be accessed (low tide is safest). A comparison of the black and white photograph (*Fig. 17*) taken in 1980 and the colour photograph (*Fig. 18*) taken in 2007, shows how much degeneration has taken place in a short time.

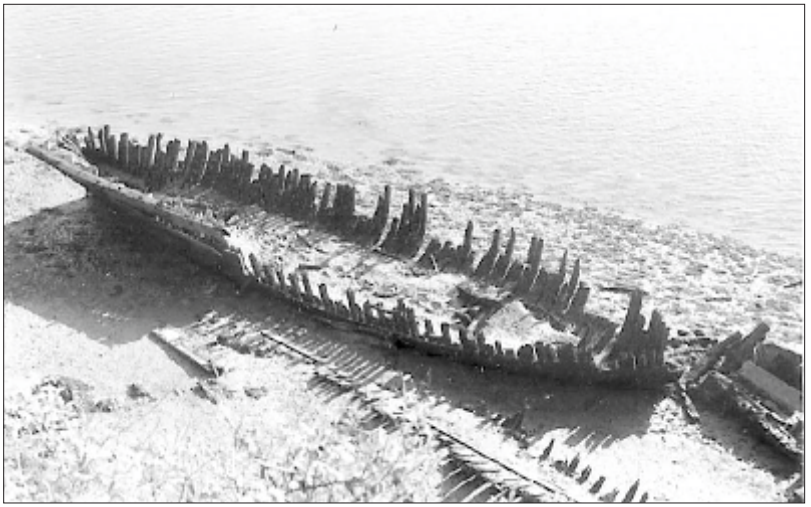


Fig 17: Photo of hulks ('M.A. James' most extant) in 1980 from the SW coast path above.

Fig 18: Photo of hulks from foreshore, showing deterioration by 2007.

Fig 19: 'M.A. James' (painting by Mark Myers).

***23. M.A. James* (SS 462289)**

In the black and white photo (*Fig. 17*), this is the most extant hulk. She was a three masted schooner with double topsails and beautiful lines, built at Portmadoc for the Newfoundland trade in 1900. Subsequently owned by the Plymouth Co-operative Society and then bought by Capt. W.J. Slade of Bideford in 1930, she was unusual in having all three ports of registry on her transom. She is brought to life by Mark Myers' wonderfully evocative painting (*Fig. 19*) and by the account of her last master in the book *Out of Appledore*. Like several of the vessels mentioned below, she was requisitioned for barrage balloon service in World War II, suffering terminal neglect in the process and was subsequently stripped and beached in her present position.

***24. Hobah* (as above)**

Just inshore of the M.A. James and partly under it, lies the backbone of the Hobah, all that remains of a ketch built by one man and a few workers at Trelew Creek, Cornwall in 1878. Thomas Gray, master shipwright, had a sawpit dug on the foreshore and with two sawyers, cut all the timber for the ship. From 1908, she was based in

Appledore, and for nigh on 30 years was skippered by Captain William Lamey, who eventually became sole owner. She made her last voyage home with coal from Plymouth in 1940 and by then was overdue retirement. The affection these vessels inspired is typified by the story related in Basil Greenhill's book (1951, 197). Captain Lamey's father, who had brought the vessel to Appledore, would often, towards the end of his life, just sit on the quayside, admiring her.

***25. Emma Louise* (as above)**
Astern of the M.A. James is the Emma Louise, a schooner/ketch. She was built in Barnstaple at the Westacott yard in 1883 and initially sailed out of Appledore and Braunton to the Irish ports. After the First World War she changed hands and sailed out of Minehead before returning to Appledore. A model of the vessel is on display in Appledore Museum, as is the fiddlehead (carving from the bows) of the original ship.

***26. Bessie Clark*(as above)**
This is the southernmost of the four hulks and can be identified in the right foreground of Fig. 18. She was a ketch, built in 1881 at the Restarick Yard, East-the-Water, Bideford. Like many local ships she was named after a family member, in this case the owner's wife. The captain, George Clark, a keen vegetable gardener, kept his bicycle on board so that he could access his allotment when in port nearby!

A little further north, on the foreshore near Appledore Shipbuilders (Bidna Yard) are more historic hulks. In the photograph (*Fig. 20*), 'Ketch' is in the foreground, 'Margaret Hobley' is background left and 'Maude' background right. At present access is problematic due to a footpath diversion and industrial site security. A viable alternative is to take a river boat trip from Appledore (look out for adverts for 'fishing boat trips' on the quay), a good way of seeing many of the sites mentioned here.

Fig 20: Hulks 'Ketch' (foreground), 'Margaret Hobley' (background, left) and 'Maude' (background, right). Photo by Barry Hughes.

***27. Ketch* (SS 466297)**

A rather uninspired name for … a ketch, unsurprisingly (*Fig. 21*). She was built in 1894 at Fairlie on the Firth of Clyde, spent a while in Ireland before the Jewell family brought her to Appledore in the early 1920s. She was sold on again and after a spell sailing out of Bristol, was requisitioned for war service at Falmouth. Her hull deteriorated during the war and she was returned to the Torridge and beached where she lies today.

***28. Margaret Hobley* (as above)**

A schooner, built in Pembroke in 1868, she was brought to Appledore by the Slade family (cf. the 'M.A. James') and as with the 'Ketch', did barrage balloon wartime service in Falmouth. She too was returned in poor condition and was put ashore in her present position.

29. Maude (as above)

Built as a topsail schooner in Widnes in 1869, the Maude initially took coal from Lydney to Ireland. She was then brought to

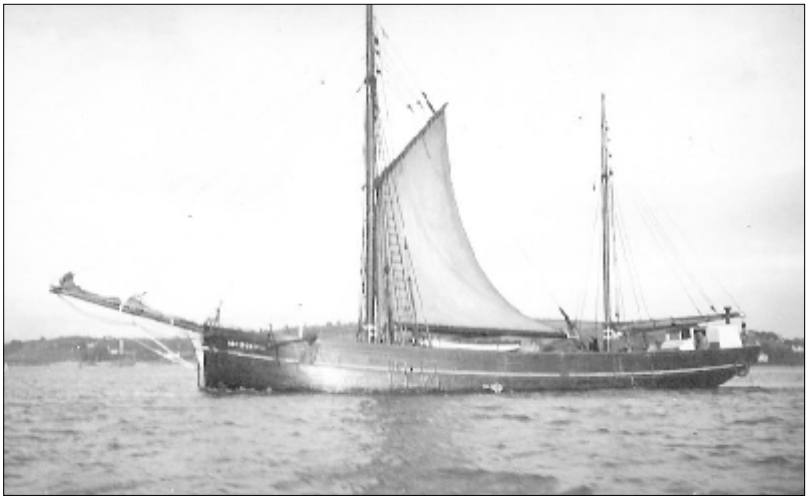


Fig 21: Photo of the 'Ketch' (courtesy of N.D. Museum Trust).

Appledore by Jack Stoneman and sold on to Braunton where she had an engine fitted. At about this time too she was re-rigged as a ketch.

Two more hulks which are easier to visit however, are those at Watertown, near the former Hinks shipyard. These can be seen from the Westward Ho! - Appledore road and can be approached by walking along the shoreline to the south-west at low tide from the lifeboat station at Appledore. After about 150m there are the bare remnants of a limekiln. Close by is the Shamrock. 100m out towards the high tide mark is the Goldseeker.

***30. Shamrock* (SS 456308)**

Not much remains of this Thames barge but as with Brixham Trawlers (no. **33**, below) there is enthusiasm for their restoration and they can often be seen in the old port of Faversham, Kent. The 'Shamrock' was sent to Bristol during World War II and then sold on to Barnstaple owners. Her flat-bottomed hull was unsuitable for this estuary however and by 1947 she had been deregistered and beached.

***31. Goldseeker* (SS 457308)**
A schooner, the 'Goldseeker' was built in the Isle of Man in 1873. Her claim to fame was that amongst her owners, albeit it briefly, was the Blackshirt, Oswald Mosely. After World War II she was purchased by the Harris shipyard for spares and once stripped, abandoned in her present position. Most of her keelson, with bolts protruding, is visible (*Fig. 22*).

Two other hulks of interest on the opposite side of the estuary can be easily accessed. Nearly under Torridge Bridge are lay-bys on either side of the road. A path leads on to the Tarka Trail. Head back towards Bideford and on the right is a ruined lime kiln next to a little cove. Go onto the shore and head away from Bideford. Round the other side of the cove are the hulks, the first of which is the 'Welcome'.

Fig 22: 'Goldseeker' with Hink's Yard slipway in background.

***32. Welcome* (SS459275)**
A three-masted schooner, built in Lancashire in 1885, she had a number of owners before being bought by an Appledore man, William Cox. Like many other vessels, barrage balloon service in World War II saw her returned to her owner in unserviceable condition.

***33. T.H.E.* (as above)**

Just to the north of the 'Welcome' lie the remains of a Brixham trawler, the T.H.E., built in 1908. (A number of these beautiful sailing vessels have been restored and can be seen in their full glory at the annual Brixham Heritage Regatta.) The T.H.E. was skippered by a Salvation Army man, then a Captain Pile of Bideford, before becoming a houseboat for a post-war writer.

Limekilns

There are a number of limekilns along the shoreline of the estuary. Two have already been mentioned in regard to the weirs (**12**, Ashford and **16**, Penhill). Two others have been pointed out near hulks **(30 and 32)** and one is located near the Sea Lock at Annery **(36)**.

For those with a particular interest in the subject a visit to the Burton Art Gallery in Bideford is recommended. For greater detail, there are informative chapters in Barry Hughes' book (2006) and an index of all known kilns of the estuaries.

For our purposes here, it will be noted that limestone and culm (a form of coal) were shipped from South Wales to North Devon for conversion, in kilns, into quicklime for the agricultural improvement of the 18th and 19th centuries. Often it was offloaded in piles on the foreshore (*Fig. 23*). This practice was not universally popular. The Bristol Channel Pilot railed against "the promiscuous deposit of limestone imported from Wales which is dropped in the most reckless way along the foreshores of both rivers and projects into the navigable channels ... these have like the fishing weirs, been the cause of many accidents" (Bedford 1879, 30).

One kiln which is easy to visit and of some interest is 'The Old Kiln' (*Fig. 24*) at the bottom of Limers Lane **(34)**. It is on the coast path just north of Bideford **(SS456282)**. Unusually, it has been integrated into the fabric of the house of the same name and has probably thus been better preserved than many kilns which stand alone. Another, similarly adapted, is at Boat Hyde **(35)**, just south of the Bidna Yard **(SS462291)**. Boat Hyde was the name of a former shipyard located in this vicinity.

There are also a number of other kilns between Bideford and Weare Giffard, one of which can be seen from the old railway bridge on the Tarka Trail at Landcross.

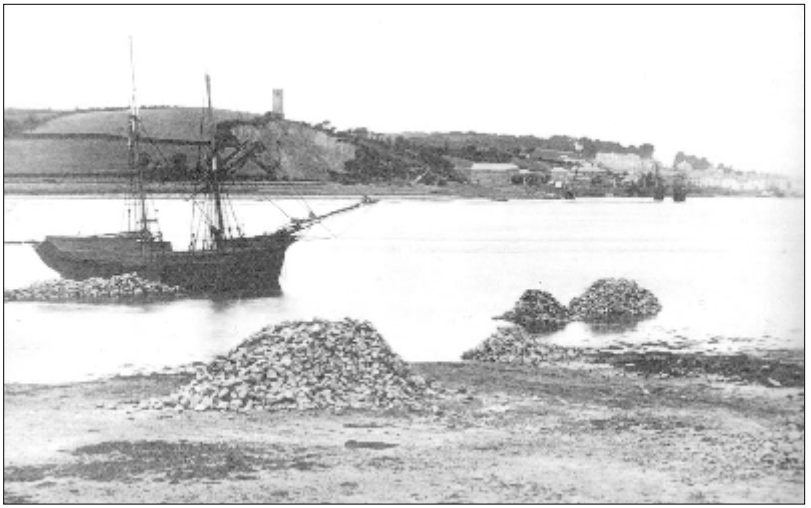


Fig 23: Polacca brig unloading limestone near Tapely (courtesy N.D.M. Trust; Colin Green Collection).

Fig 24: The Old Kiln.

Rolle Canal

36. The Sea Lock at Weare Giffard **(SS459232)**

This is on private property but can easily be viewed from the Tarka Trail, especially when the trees are leafless. Just to the north, past the turn off for Annery Kiln, is a small railway building and then a picnic area. Stop here and look down to the river. A few years ago there was little to see but an overgrown depression. Now, thanks to one couple's efforts, the sea lock of the Rolle Canal is visible once more and in the process of restoration, testament to the vision and hard work of Adrian and Hilary Wills. With some grant assistance and the help of volunteers from the Waterways Recovery Group, the vegetation is being cleared and the masonry renovated (*Fig. 25*).

Fig 25: Restoration of Sea Lock (photo by Adrian Wills).

The history of the canal and its construction in the 1820s is well documented by two recent books (Hughes 2006; Scrutton 2006) and is beyond the confines of this survey. Suffice it to say that at this time, upstream of Bideford Bridge, barges were used, in the main, to transport cargo to Weare Giffard (the effective head of navigation on the Torridge). At high tide, a vessel would enter the gates of the sea lock which were then closed behind her. The sluices would then fill the lock chamber with water from the canal above and when

high enough, the vessel could be manoeuvred out into the basin for transhipment of cargo, predominantly limestone and culm. This was then taken on in tub boats which could be hauled along the canal as far as Torrington. The limestone, as previously mentioned, was burnt in kilns and used for the improvement of fields. One such kiln can be seen easily at Annery, near Halfpenny Bridge.

The sea lock is now clearly defined and at the time of going to press, lock gates have been obtained to further the restoration.

An old Torridge barge, the 'Advance', was threatened with destruction by the authorities. It was saved from this fate by Barry Hughes who towed it up to Sea Lock. It can now be seen laid up at the side of the canal basin (*Fig. 26*) where it awaits the care a wealthy benefactor might lavish.

There was also a shipyard at Sea Lock in the 19th century.

Fig 26: The barge 'Advance' in the basin, Sea Lock

***World War II remains* (37 - 44)**

For those with a particular interest in the archaeology of this period, a visit to Appledore Maritime Museum is highly recommended. There, detailed information can be gleaned about how the region was involved in both defence and offence. Of particular note are the displays regarding the development of experimental weapons, the most unusual of which was the 'Great Panjandram'.

This looked like a giant Catherine Wheel and was intended to hurtle towards its target and explode on impact. Unfortunately, during trials at Westward Ho! it was, perhaps unsurprisingly, found to be too erratic.

Another display in the museum details the radar station between Westward Ho! and Appledore, part of the western chain home network. The remains of this **(37)** are amongst the best preserved anywhere and their historic value is beginning to be recognised. Head towards the burrows from Northam and turn right to Appledore. Just after the stables, the structures can be clearly seen from the road. They include the bases and anchors of the masts, control centres, generator installations and air raid shelters **(SS447298)**.

A little further along the road to Appledore, at Watertown, is another turning for Northam Burrows. Adjacent to the entry kiosk is a radar bunker **(38)**, (*Fig. 27*) **(SS452304)**. A little further along the Burrows track, in the mud of the estuary can be seen conical cement blocks **(39)** known as 'dragon's teeth', which would have been used to hinder the advance of the enemy **(SS452306)**.

The WW II remains on Braunton Burrows deserve (and have) a book to themselves (Bass 2005). Here, some of the structures are highlighted but there is not space to list them all. In late 1943 and early 1944, the American military transformed the Burrows into a centre for Assault Training in preparation for D Day. They built mock-ups to simulate landing craft, pillboxes and obstacles. There are concrete remnants all over the Burrows, often imprinted with the corrugated metal that was used for shuttering.

The most vivid reminder of these times is provided by the dummy landing craft **(40)** of which there are several (*Fig. 28*). Made of concrete, these probably had 6 foot high scaffold poles along the side (the bases survive), supporting canvas curtains to represent the sides. Efficient disembarkation of tanks, trucks and artillery was practiced here by the Americans. A commemorative plaque to the servicemen now adorns one of the concrete craft. Easiest access is past Velator Quay and onto the toll road, past the White House to the car park. Continue in the same direction (on foot) until you pick up the coast path. Turn right (i.e. north) until you see a wooden five-bar gate. Turn left here and after 300m the dummy landing craft are on your left **(SS461331)**.

Fig 27: Radar bunker, Watertown (photo by Barry Hughes).

Fig 28: Dummy Landing Craft, Braunton Burrows.

Two other features are worth visiting, although both are less accessible: firstly, the Rocket Wall **(41)**, a long concrete section used as a backdrop for firing practice **(SS449345)**. Bazooka shell remnants suggest the type of projectiles used, whilst steel wreckage nearby suggests vehicles were often targets. Secondly, the remains of a Matilda tank **(42)** can be seen further to the north **(SS450363)**. Both sites can be accessed from a central N/S footpath which runs through the middle of the Burrows. The tank is at present in a fenced off area.

Many defensive military structures were cleverly designed to avoid detection by the enemy. The pillbox **(43)** at Instow Quay is still easily missed today **(SS472303)**. It is best viewed from the riverside (*Fig. 29*).

Lastly, remnants of the former coastal battery (wall/concrete building) at Instow **(44)** can be seen adjacent to the Cricket Club **(SS474314)**.

Fig 29: Disguised World War II pillbox, Instow Quay.

Finally, what's missing … ?

Although a recent review (Newberry and Pearce 2005) noted no Palaeolithic (Old Stone Age) sites in the vicinity, it suggested this was unlikely to represent an absence of hunter gatherers here at that time and that a lack of diagnostic artefacts was the cause.

The silts and sands of the estuary have covered known and unknown sites. The silts in particular often ensure good preservation and there may well be early wooden ship or boat remains encased in the mud. Bronze Age sewn-plank boat fragments, for instance, have been found not far away on the Severn Estuary.

Although this area was not much Romanised, the location of the fortlets on the Exmoor coast and the iron smelting at Brayford would suggest that the Romans must have been familiar with the estuary and surely would have used it.

In the post-Roman period there are interesting trade patterns between the South West and the Eastern Mediterranean. Recent finds of Byzantine amphorae sherds on Lundy match those from Tintagel and other sites in Devon and Cornwall. The estuary could be another findspot in the future. Byzantine coins have been found at a number of places along the estuary.

The construction of both the Bideford and Barnstaple new bridges produced artefacts (a greenstone Neolithic axe from the Torridge; a dump of medieval and post-medieval pottery in the Taw). The riverbed itself will undoubtedly hold many more secrets.

Acknowledgements

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