

Fight or flight? An introduction to recent coastal change at Woodspring Bay

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RESEARCH TEAM (YCCART)**

General Editor: Vince Russett



The rubble remains of a former sea defence runs along the shore of Kingston Seymour

*'The sea pronounces something, over and over, in a hoarse whisper; I can't quite make it out' -
Annie Dillard*

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Abstract

The history of the northern Somerset coast has been far less well investigated than the work in south Wales of Derek Upton and Martin Bell. The Rapid Coastal Zone Assessment made some small contribution, but the detailed studies of Mark Hildich around 2000 in Woodspring Bay are foremost in the understanding of the intertidal zone in the area. This first paper concerns the cartographic evidence for coastal change in Woodspring Bay since the 16th century: documentary and field studies are underway.

Acknowledgements

The help and knowledge given by Jane Bell (Kingston) and Jane Lilly (Clevedon) is freely acknowledged and appreciated, and many of their own ideas and writings will have influenced this paper and its intended successors. My appreciation also to Sue Ryall, Les Candal (Kewstoke) and Linda Jenkins (Wick St Lawrence) for their publications. My second thought is - where are the Y chromosomes in local history? Perhaps these are provided by the late Prof John Allen, whose work in Wick St Lawrence is the reason why that estimable parish does not form a major part of this first paper (Allen 1998), and Mark Hildich, whose studies of the intertidal zone around 2000 were an astonishing achievement. Philip Beisley's undervalued 'The Northmarsh of Somerset' (1996) is a good general introduction.

Introduction

Yatton, Congresbury, Claverham and Cleeve Archaeological Research Team (YCCCART) is a Community Archaeology team working across northern Somerset.

Our objective is to undertake archaeological fieldwork to enable a better understanding and management of the heritage of the area while recording and publishing the activities and locations of the research carried out.

This paper is intended as the first in a series exploring the archaeology and landscapes of the claylands of the Northmarsh in the three parishes. Interested parties should also be aware of YCCCART's geophysical surveys in the post-Roman alluvium of Kingston Seymour (YCCCART 2023a; YCCCART 2023b; YCCCART 2023c). It should also be read alongside the other series on rivers in the Northmarsh (available at ycccart.co.uk)

The report was written in Libre Office 5 Writer.

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Please also note that this paper does not continue into the Internal Drainage Board era after 1930.

Site location



Fig 1: Woodspring Bay

Woodspring Bay is a natural embayment of the Severn / Bristol Channel, running some 5.5km as the crow flies, from the limestones of Sand Point (Kewstoke) to Wains Hill (Clevedon). It lies midway along the North Somerset coastline between Weston-super-Mare and Portishead, its central point at the northern end of Hurdiches in Kingston being at ST38006821.

Land use and geology

This is an empty coast, difficult to reach on foot, except for a short distance south of Clevedon. The vast majority of the coast is in agricultural use, apart from a small golf course at its northern end, and a former MoD / Qinetiq base at the eastern end of Sand Point, now returned to pasture.

The coast is entirely of Tidal Flat Deposits, the soft clays and peats being very vulnerable to tides and river erosion, to which huge and expensive modern sea defences have been erected and maintained.

The Banwell River forms the southern end of the Bay, and the Clevedon Pill the northern, while the Congresbury Yeo, the historically reduced Kenn River, and the mid-20th century Blind Yeo all debouche into the Bay.

Clevedon, Kingston Seymour and Wick St Lawrence, Documentary and photographic study, Woodspring Bay, 2023, Y13, v1.

Historical & archaeological context

Passing through the meadow by the sea, Mr. Green gave an episode of some litigation about the repairs of the sea wall.

It seemed that there was in Clevedon a farm, known as Perry's Marsh farm, worth about £80 a year, and there belonged to it a large piece of ground called the Worth adjoining the sea shore by the Severn, but about seven feet higher than the shore, forming a natural bank of earth against the sea, and which had never been repaired by anybody. Within this marsh ground was a ditch and a bank cast up about three feet high, forming a second barrier.

The sea breaking in, in 1667, destroyed the outer bank, and carried away about four score acres several feet in depth, and not only were the other forty acres left threatened with a like destruction, but the marsh land further in was also in danger. The question was who should repair.

As the owners of the shore land refused to do so, an action was brought in the Exchequer by the inland owners, who alleged that it was from carelessness on the part of the shore owners from not keeping out the 'woose' [liquid] soil brought down by the river that the wall then lay 'lacerated and worn down'. The owners asserted to the contrary, and claimed that the whole district should be assessed, as the whole level would be preserved and benefited.⁶²

The court decreed that this was right, but the plaintiffs not liking the judgment refused obedience and as local magnates endeavoured to intimidate their opponents by inflicting a heavy fine for their asserted neglect. The consequence was that Mr. William Strode and others the more inland owners found themselves committed to 'ye p'son of ye fleete' [Fleet prison in London] for their contempt.

On their bringing another action (Michaelmas, 33rd Chas. II) the former decree was confirmed,⁶³ and in the end of a long account occupying thirteen skins of parchment written on both sides, Mr. Strode and the others were ordered to be freed and their bonds for four hundred pounds to be cancelled.⁶⁴

(62). Exchequer Decrees, Michaelmas, 27th Chas. II, p. 208.

(63). Exchequer Decrees, p. 311.

(64). Memoranda Rolls, Michaelmas, 33rd Chas. II, Roll 135.

(Green, Mr. 1881)

When we walk along the lonely shores of Woodspring Bay today, the massive concrete shore defences below, and (at the right time of year), the Severn so far out as to leave 'shining fields of mud', leave this feeling a desolate, forgotten place.

Yet management of this shore has been absolutely vital for the people and the agriculture (much the same thing) of the three parishes, keeping the sea out, while letting the rivers empty, a balancing act once performed by the Romans (with apparently limited success) and since the 10th century, with greater and greater use of technology and power to control the sea.

The Great Flood of 1606 shows the calamity that occurs when the sea banks are

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overwhelmed, with flood waters up to 2m deep standing in the fields for weeks. We only need to remember the effects of the Somerset floods of 2014, with good grazing land effectively put out of action for a season, and cattle having to be moved by truck to higher ground, to understand.

Mr Green's story (above) also illustrates the changeable nature of the shoreline in Woodspring Bay: could this have been the episode that unearthed Black Rock?

The earliest images we possess of this coast are from the 'Coste of England uppon Severne' map of c 1539, apparently planning coastal defences that were never built (YCCCART 2019) (Fig 2 below).

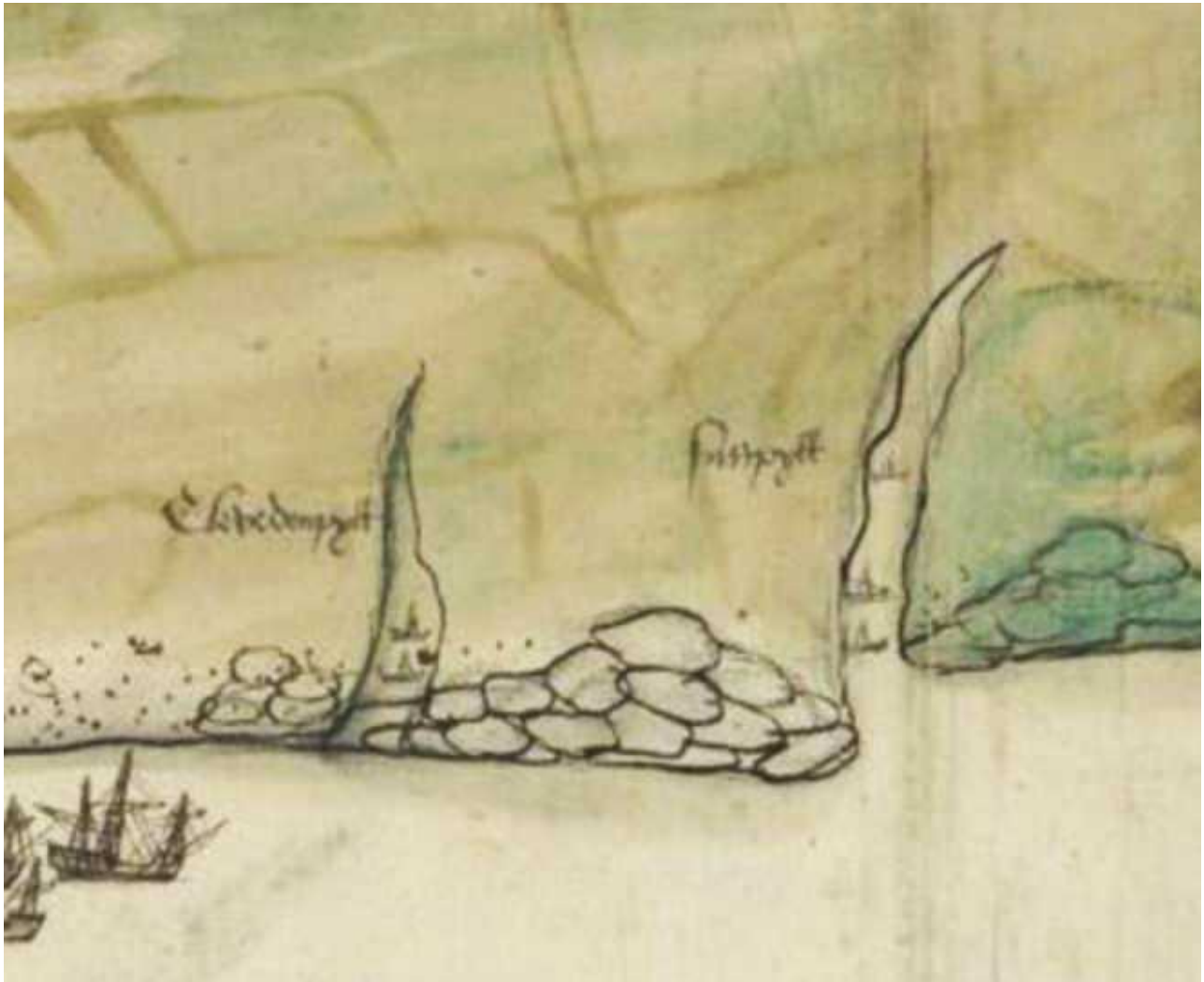


Fig 2: Part of 'The Coste of England uppon Severne' map

This shows *Clevedonpyll* (left) and *Suttpyll* (mouth of Kenn River) to right, with the land between being part of Woodspring Bay. Intriguingly, the map shows piles of rocks on the coast between the two (the same system is used to depict rocky shores at Portishead and Watchet). The map is clearly derived from a sea-borne position, so this represents the visual impression of the Clevedon and Kinsgston shores (that for Wick is far more difficult to interpret).

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Is this an impression of mid-16th century sea defences? Without further work, we cannot be sure where this line lies with respect to the modern shoreline.

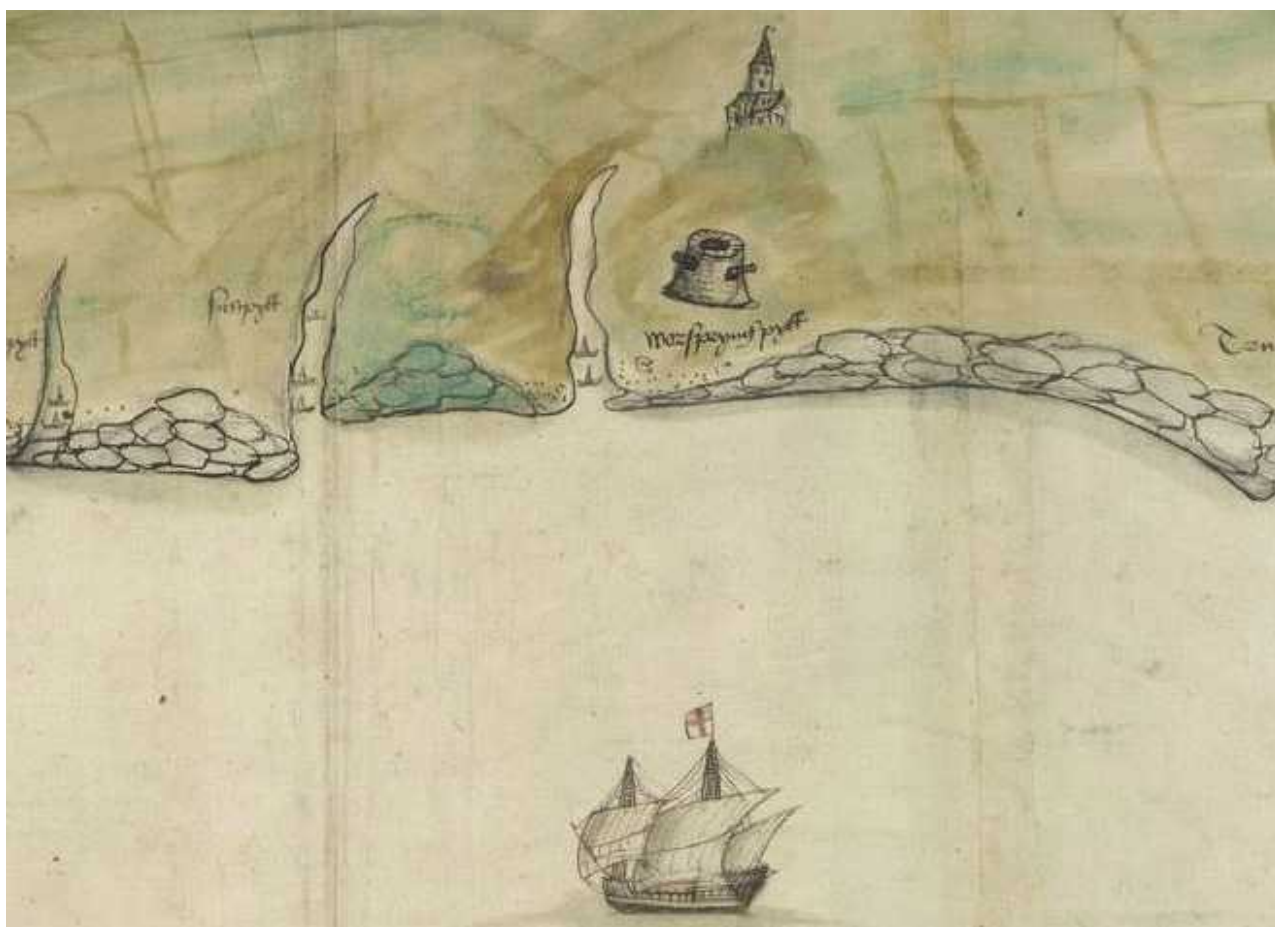


Fig 3: Suttpyll to Sand Point, 1539

Further down the coast (Fig 3), the area between *Suttpyll* and *Worspryngs pyll* is also shown to have some kind of sea defence (the tower with guns above Woodspring Pill seems never to have been built). In view of some later evidence (see below), it is possible that this represents earthen (painted green on the map) banks, just possibly those at the rear of Hurdiches in Kingston (or possibly, Wick Warth).

The line of the coastal defences in the three parishes seems not to have been rigorously built or defended: for example, see the 1784 map of Kingston Seymour (Fig 4 below).

This clearly demonstrates a less-than-settled line for the coastal defences at Hurdiches, immediately north of the Congresbury Yeo, as can be seen from the map annotation '*Wharfe Wall to Keep Back the Spring Tides*' applied to the inner edge of the area, which itself is defined on the map as '*Warth*'. This term seems to have acquired a dual, but related, meaning: '*Higher ground alongside a river / coast*' and '*Land close to the sea and occasionally subject to tidal inundation*'. A little thought can see how these two meanings (clear and separate in, for example, field names), relate.

upon', the original meaning being replaced by the noun 'sleech'. Alternatively, of course, this could simply be misunderstanding by the cartographer of the subtleties of Somerset dialect!

This perhaps slightly unexpected situation is confirmed by the OS maps of c1900 (Epoch 2), which show the 'Stones' marking sections of sea wall the responsibility of individual land owners running along this inland defence, and not those at the outer edge of Hurdiches. Of these, further publication to come.

Incidentally, the area continues to perform a useful anti-flood option:



Fig 6: Hurdiches acting as flood reservoir during winter 1981 (Environment Agency)

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Although the reservoir was clearly not capacious enough to store all the excess water, it is obvious that much that might have spilled into agricultural land and dwellings in Kingston was held back.

Next in time are the OS 1st draft maps of 1809 and 1810 (British Library). By their nature, these are slightly impressionistic views of the land, and show a similar situation to that implied by the Kingston 1784 map.



Fig 7: Southern end of Woodspring Bay from OS 1st draft, showing sea banks and shore defences



Fig 8: Northern end of Woodspring Bay from 1st draft, with 'Black Stone' and shore defences

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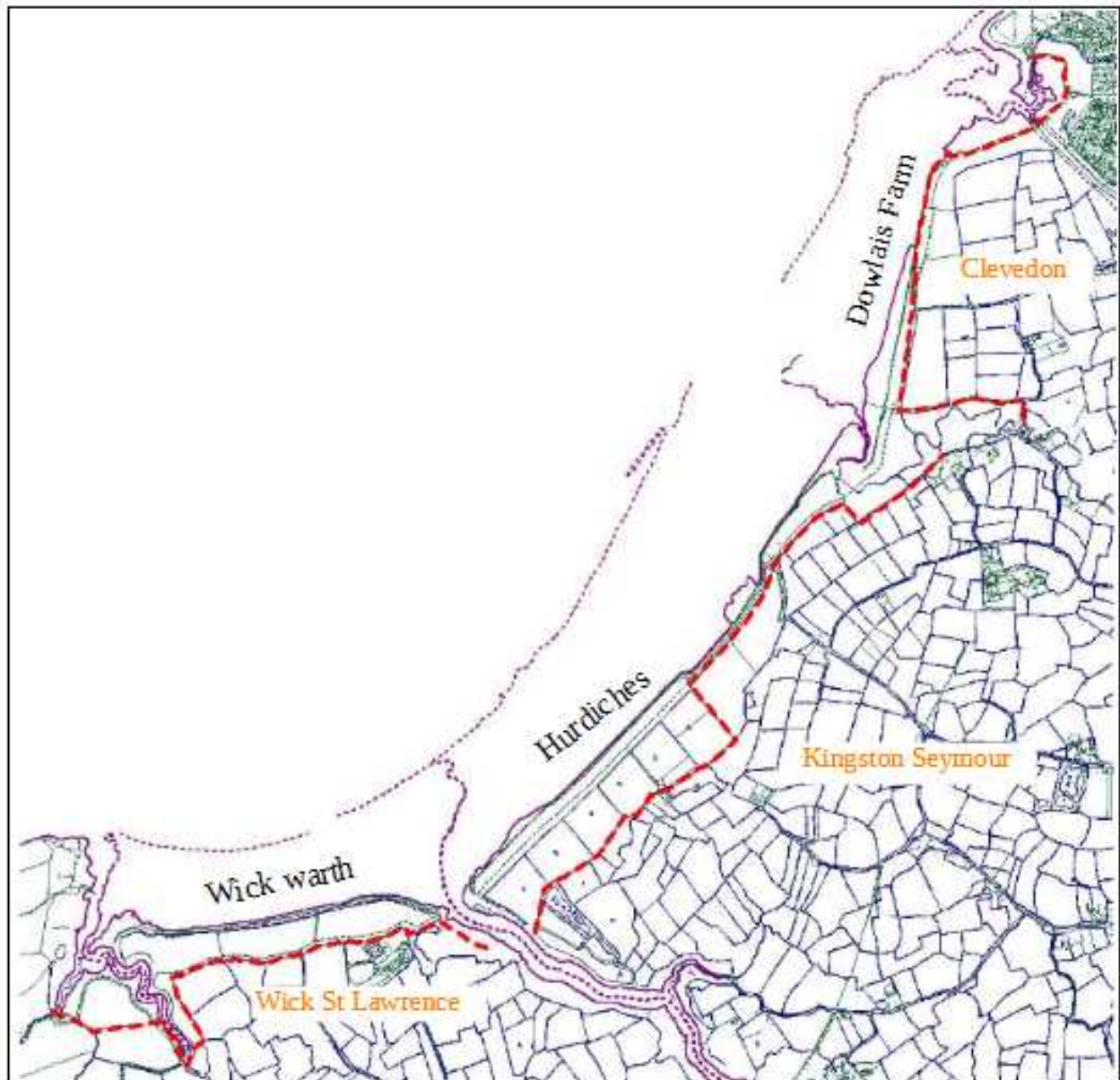


Fig 9: 1810 sea defences as depicted, on modern mapping

Further mapping helps to understand the modern state of the sea defences.

The Commissioners of Sewers (of whom much more will be heard as these publications continue!) were becoming moribund by the mid-19th century. In Congresbury, for example, the failure of enclosure to effectively drain Great Moor to the NW of the village led the villagers to appeal to the Commissioners, who were unable to help, and it was the private commissioning of Rennie to develop his New Rhyne/Siphon system that successfully accomplished the drainage (YCCCART 2017).

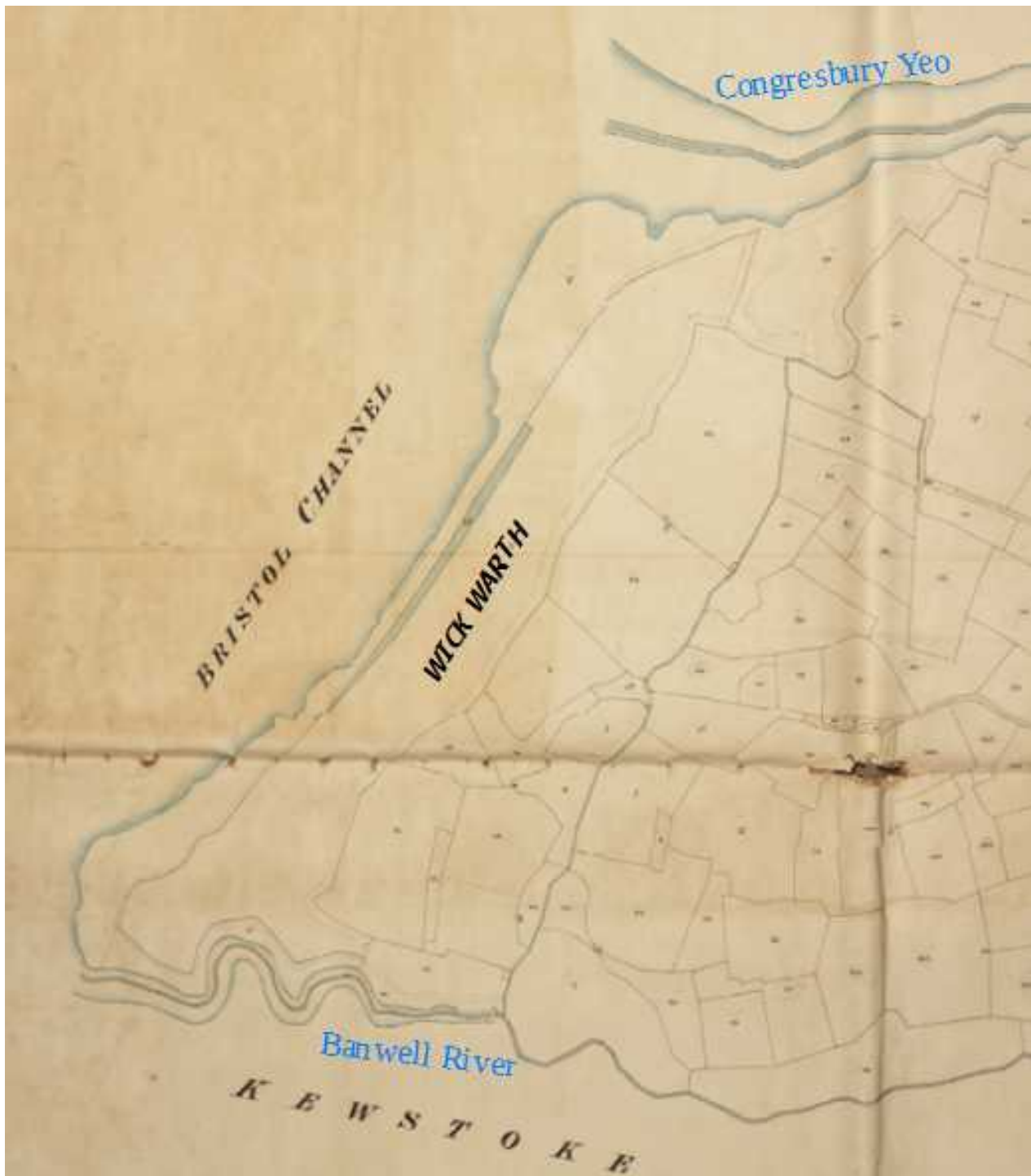


Fig 10: Coastal strip at Wick St Lawrence (Tithe Map, 1838)

By the time the Tithe Maps arrived, Wick Warth (the former high saltmarsh) had acquired protection on the seaward side, with a skirt of saltmarsh outside.

A very clear second line, slightly further inland and parallel to the shore marked by a ditch almost all the way across the parish (Fig 10 above) is the earlier / secondary sea defence recorded by Allen (1998).

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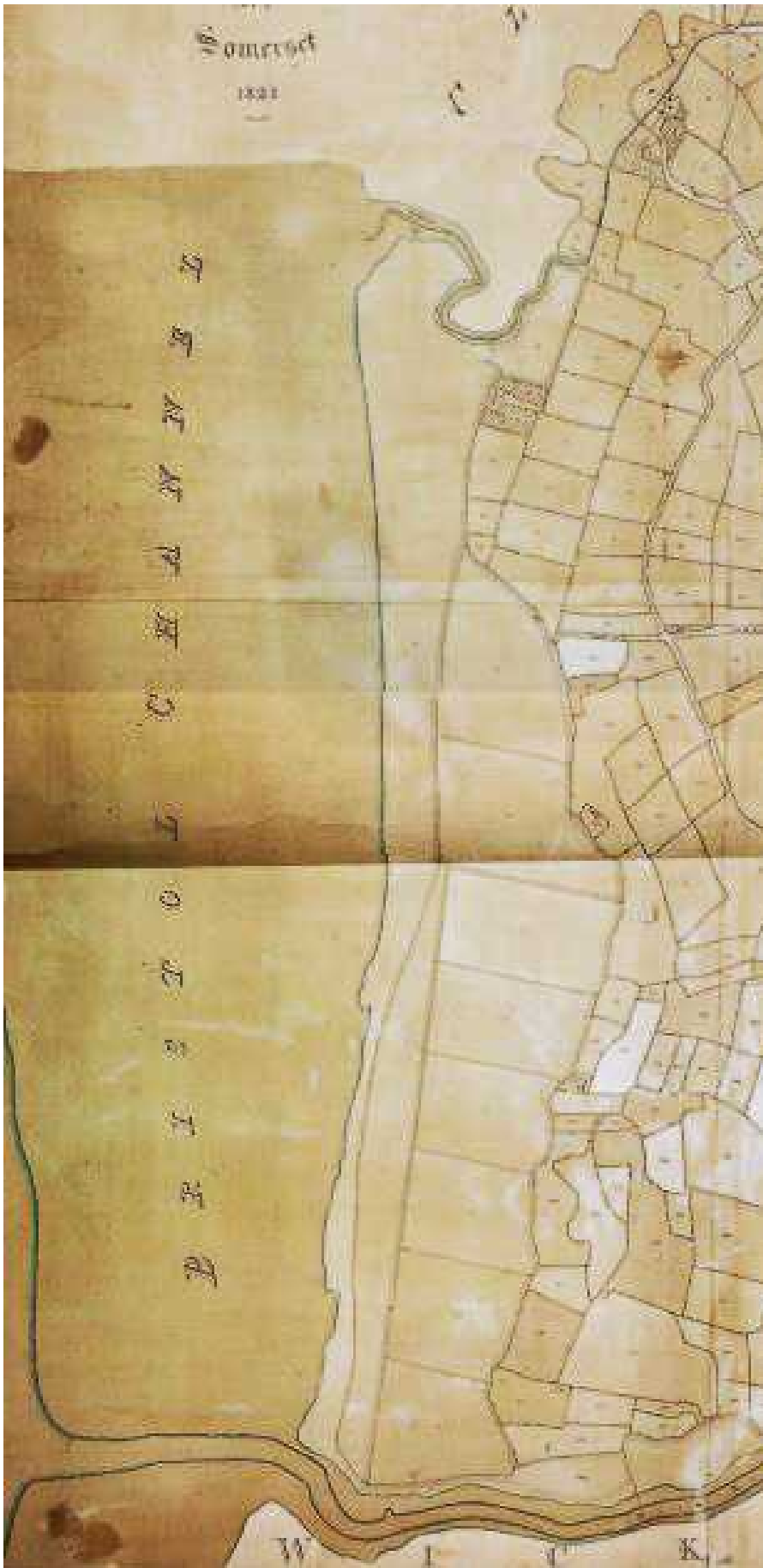


Fig 11: Kingston Seymour coastal strip 1821 (per Jane Bell)

In Kingston, we are fortunate that a slightly earlier map of 1821 is available.

By this time, Kingston has also acquired some external defences on the sea side of Hurdiches. Note: there was also some fairly extensive wath outside of this, which is treated as normal agricultural land that just happens to be washed by the sea from time to time.

Hurdiches has also been separated by arrow-straight divisions, which are referred to in late 18th century coastal defence papers and maps.

The alterations in area of saltmarsh outside of sea defences, despite the slightly panicky attitudes of our biodiversity colleagues, are clearly cyclic over decades or possibly centuries - John Allen (*pers comm*) drew a strong correlation with the growth or diminution of arable farming upstream.

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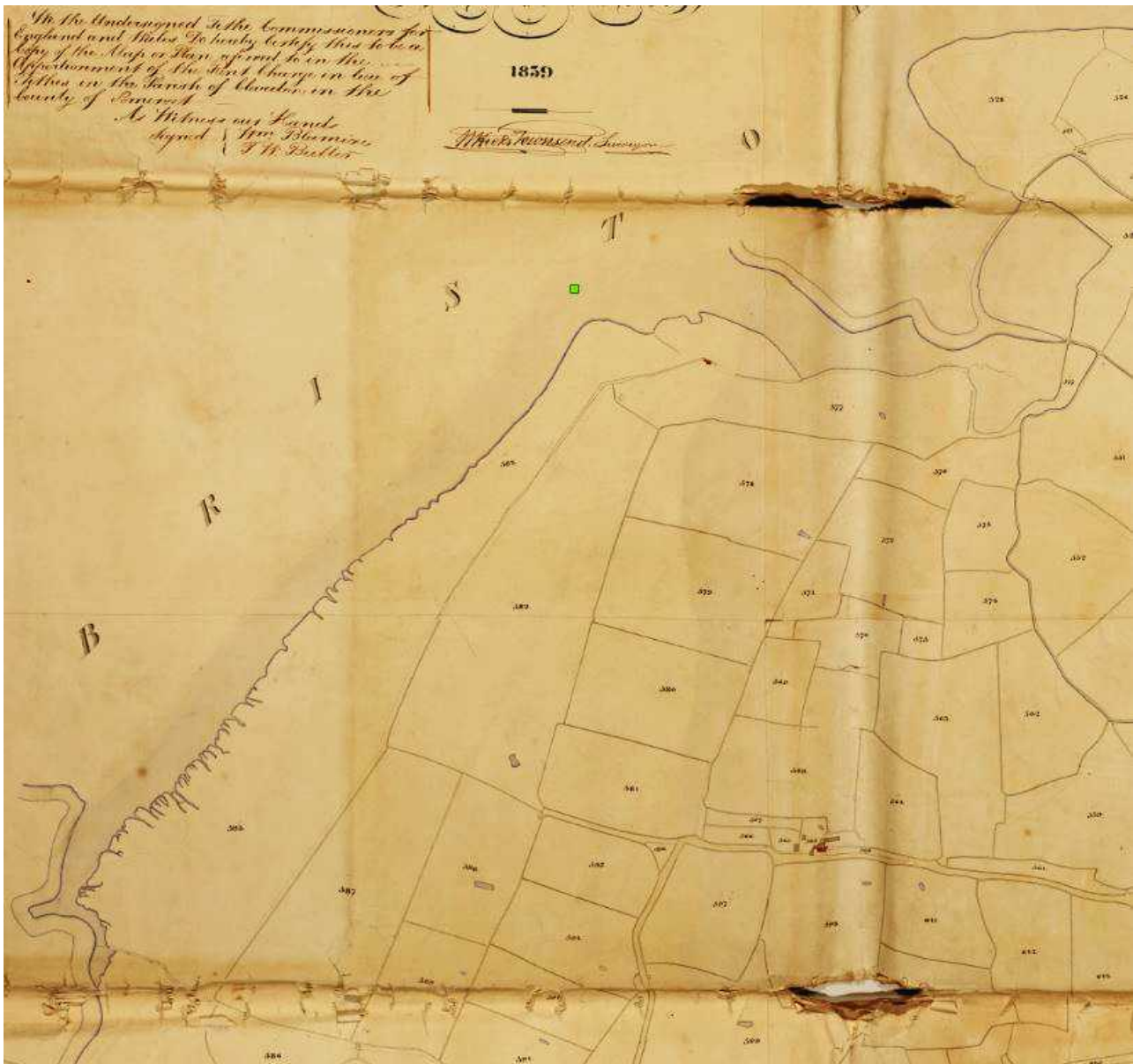


Fig 12: Clevedon coastal strip from Tithe Map 1839

The Clevedon Tithe Map of 1838 (Fig 12 above) shows the contemporary sea defences as a normal field boundary, with the current ones set back slightly. There is, however, a substantial warth outside of this, seemingly somewhat reduced by today, although this process can be seen in action as early as the Epoch 1 OS plan of c1885.

The construction of the c1950 Blind Yeo drainage river at the southern end of Clevedon Pill has affected the general coastal topography less than might be expected (Williams 1970).

References to earlier sea defences in the 1667 document at the head of this section are instructive. Despite Green's insistence that the lost land was '*a natural bank of earth against the sea, and which had never been repaired by anybody*', he then goes on to talk of the '*The sea breaking in, in 1667, destroyed the outer bank*' and '*Within this marsh ground was a ditch and a bank cast up about three feet high, forming a second barrier.*' Presumably at least the second

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barrier must have been man-made, and from his description, possibly the outer as well. Assuming that this land was in Woodspring Bay (and a case might reasonably be made for siting it in Clevedon and Salthouse Bay: see Fig 13, where a large area of sands is exposed at low tides), this nevertheless shows that the site, wherever it was, was subject to coastal maintenance like the rest of the area.



Fig 13: Sandbank in Clevedon Bay at low water

Consideration of the potential landing-places on Woodspring Bay at Clevedon Pill, Kenn River mouth and Woodspring Pill will be considered elsewhere.

Some hints at possible earlier changes to the coastline are evident in both the field shapes and systems adjacent to the sea, and in the surveyed features in the intertidal zone recorded by Hildich (2000). Intertidal features may be reported in later reports in this series.

From the sea inwards: Hildich's results clearly illustrated two separate lines of monuments in the intertidal zone (Wick St Lawrence area was not in a suitable state to survey at the time). Recent and 20th century coastal defences are defined in blue dashed lines. Inland topographical linear features parallel to the coast are shown in red dashed lines: some are ditch lines: most are eroded earthwork banks, either accompanying ditches or on their own. Interestingly, at least two of Gilberts infields (Longworth and Poplar Farm) lie immediately within and against the furthest inland line, perhaps helping with relative dating (Gilbert 1998; YCCART 2023a).

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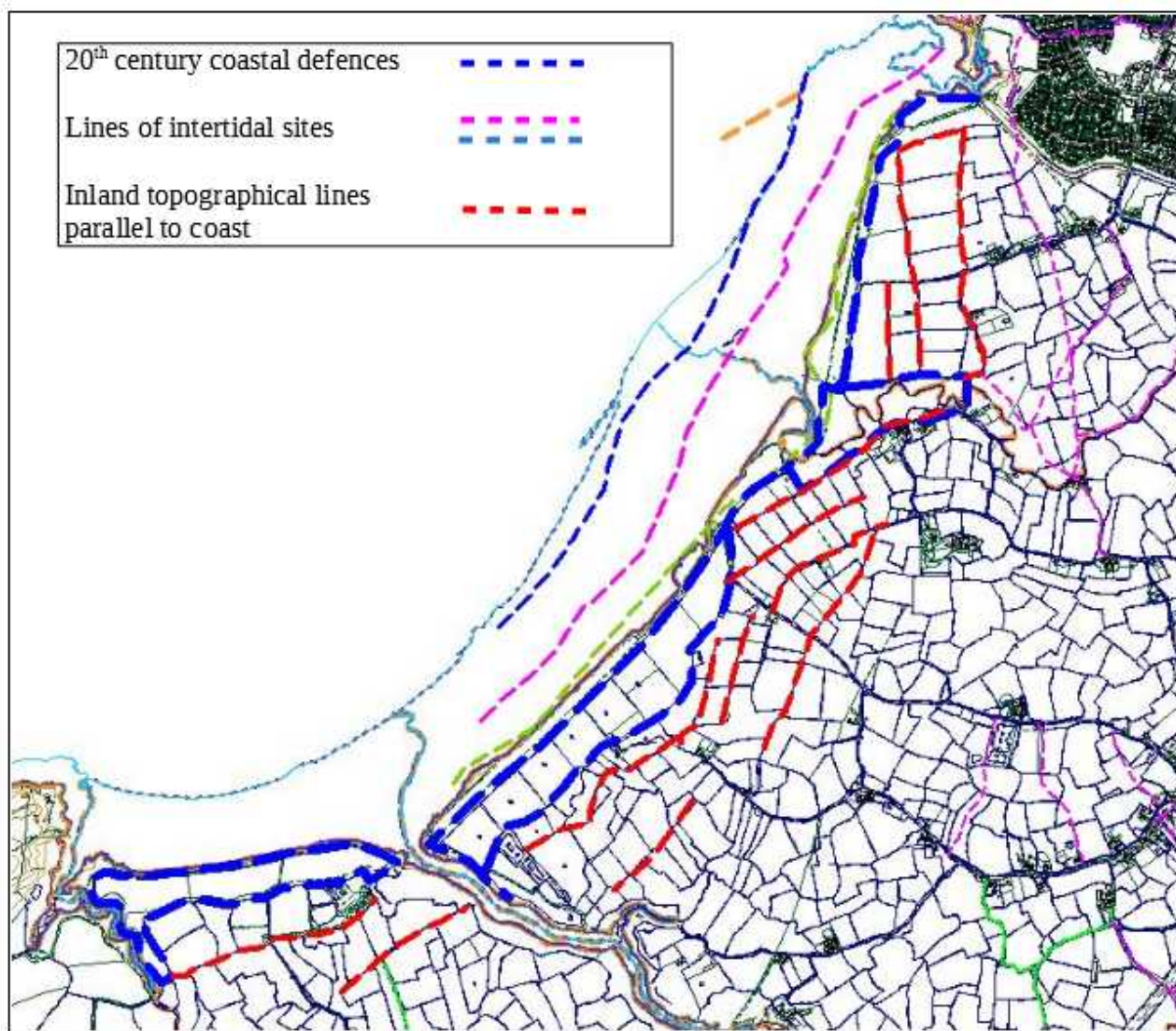


Fig 14: Woodspring Bay topographical features, possibly related to historic coastal defence

Some examples of the topographical and other features relating to coastal defence and other activity are shown below.

In the intertidal zone, there is much evidence of the onshore fishing industry: important historic fisheries are also recorded at Portishead and Weston-super-Mare (Portishead Tithe Map; Wigan 1950; Baker 1928).

This coast shows signs of V-shaped basket and other fishtraps (Figs 15; 16). It is always suggested that such traps are set at the edge of the modern warths / saltmarsh, both in Europe and the New World (Lutins 1992). Since Hildich recorded what are in effect, two lines of traps at different heights on the beach, this might well be interpreted as former saltmarsh edges, something which might be clarified if sufficient C14 dates could be obtained from the timbers in the traps. Other forms of fish traps, such as putcher rows, and basket rows are also evident in the intertidal zone: lines of stones that might be the net weights that are all that remains of others, can also be seen.

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Fig 15: Offshore V-shaped fishtrap at Kingston Seymour: Kenn river channel in background



Fig 16: Remains of offshore putcher (longbasket) row, Kingston Seymour

Current coastal defences are generally huge, concrete and not particularly photogenic, but their protective function is critical to life in the three parishes.

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Fig 17: Hurdiches, Kingston, with modern concrete sea defences. Note the immense width.



Fig 18: Wick Warth earthen sea defences

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Fig 19: Parallel ditch system at Dowlais farm, Clevedon, marking a possible former sea defence

Some of the potential earlier sea defences (such as the ditch systems at Dowlais Farm, Clevedon) no longer possess any accompanying earth banks, although other origins for these ditches parallel to the modern coast all seem less likely.

The fact that these parallel features occur in these three contiguous parishes in Woodspring Bay, but not (for example) in parishes with similar geology and topography (such as Brean, Berrow and Burnham-on-Sea) point to an unusual coastal history in Woodspring Bay.

Here, unlike these other areas, and areas like Weston-super-Mare / Kewstoke / Uphill, 'natural' barriers such as sand dunes do not seem to have appeared (although the dunes in Uphill are of very recent origin from 20th century plantings on the golf course).

This means that any defence of this coast from the sea has to have been entirely anthropogenic, which obviously requires more academic attention than it has previously received.

There is also room for speculation as to whether the inclusion of Kingston (and some adjacent parishes) in a Hundred based on Chewton Mendip, with its medieval links to Jumieges, may have any implications for how this Bay defended its coast against 'ye rage of ye salt water'.

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Fig 20: Five landscape lines parallel to the coast at Hook's Ear, Kingston Seymour



Fig 21: Black Rock, in the intertidal zone at Clevedon Pill: was this rock denuded by the recorded marine incursion of 1667?

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The existence of Roman pottery at Kingston Rocks, and of prehistoric flintwork at Black Rock should be some clue as to the maritime history of this part of the North Somerset coast: it is putting these finds in context which form one of the challenges of this fascinating area of work.

Recommendations for further work

Documentary work and field work will expand on and (hopefully) date the events in this paper. In particular, some relations between the 'worths', the potential earlier shorelines (as hinted at on page 15 above), and the history of the shorelines will be worth pursuing.

References

Allen, J. 1998	Geological Impacts on Coastal Wetland Landscapes: Sea Level Rise, with illustrations from the River Banwell: <i>Proceedings of the Somerset Archaeological and Natural History Society</i> 141: 17 - 34
Baker, E. E , 1928	Local lawsuit in the time of Henry VII in <i>The village of Weston-super-Mare. Historical notes.</i> Baker, Weston-super-Mare
Green, Mr. 1881	Notes in <i>Proceedings of the Somerset Archaeological and Natural History Society</i> 1881: 31
Hildich, M. 2000	<i>Woodspring Bay survey</i> Unpub report in North Somerset HER
Lutins, A. 1992	<i>Prehistoric fishweirs in Eastern North America</i> MA Thesis New York State University
YCCCART 2017	Gang Wall, Yatton and Rennie's siphon, Congresbury <i>Available at ycccart.co.uk</i>
YCCCART 2019	The Coaste of England Uppon Severne <i>Available at ycccart.co.uk</i>
YCCCART 2023a	Geophysical surveys at Longworth, Ham Lane, Kingston Seymour <i>Available at ycccart.co.uk</i>
YCCCART 2023b	Geophysical surveys at Rushy Ground, Ham Lane, Kingston Seymour <i>Available at ycccart.co.uk</i>
YCCCART 2023c	Geophysical surveys at Blackey Lands, Ham Lane, Kingston Seymour <i>Available at ycccart.co.uk</i>
Wigan, E. 1950	<i>The Tale of Gordano:</i> The Wessex Press, Taunton. (Second edition 1971; Chatford House, Bristol)

Williams, M. 1970	<i>The Draining of the Somerset levels</i> Cambridge University Press
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Date

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