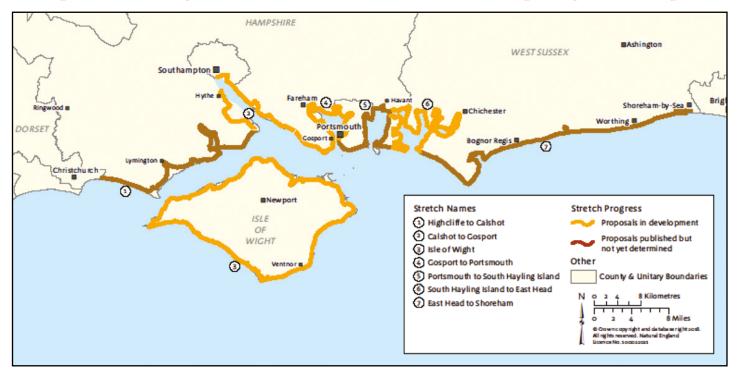
Protecting the Solent and its Environment for Future Generations

Autumn 2019

Proposed English Coastal Path (South) progress report



The English Coastal Path (South) is part of the proposal by Natural England (NE) to achieve as full a coastal path as possible along the area bordering the Solent. It is part of the coastal path project which covers the whole of England. In our last newsletter we set out the method and format for defining the path and the full text of our consultation comments on the important Highcliffe to Calshot section. This report brings the developments up to date although these are running later than expected. Progress is being made however, with more sections out to consultation.

The identification map above is published again for ease of reference: Three sections, Section 1 - Highcliffe to Calshot, Section 5 - Portsmouth to South Hayling and Section 7 - East Head to Shoreham, have now been published and the consultation period is now complete. However as far as we are aware, there has been no final decision on these sections from the Secretary of State.

Section 4 - Gosport to Portsmouth has now been published with consultation comments due by 15th August 2019 together with Section 2 - Calshot to Gosport with comments due by 11th September 2019. Solent Protection Society (SPS) has responded to the Gosport to Portsmouth section and our comments are set out below. We will also be responding to the Calshot to Gosport section.

Section 6 - South Hayling to East Head is now expected to be published in October 2019 and finally the Isle of Wight section in February 2020... we shall see!

SPS is supportive of better access to the Solent shoreline. Our main concern is with the safeguarding of the many protected areas and sanctuaries for birds, wildlife and environmental habitat along our shores and the control of access to "spreading room", that is the area between the path and the water.

The proposed route from Calshot to Gosport uses the Hythe ferry together with the ferry at the mouth of the Hamble river. This avoids the large Southampton docks industrial area though we feel it is a pity some of the western shore north of Hythe has been omitted. Along the River Hamble the north side of the river is difficult to access, the south side is more accessible, thus using the ferry is a sensible solution. SPS has asked what will happen if, in the future, the ferries cease to run and Natural England have stated that a review will be held by a new team in that event. The path on the eastern shore of Southampton Water diverts inland a little in a few places but the beach is still available where it is above high water. The path cannot officially transit the beach as part of its route.

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Porchester Castle from Port Solent

The Gosport to Portsmouth route makes the best of a job made difficult by the large tracts of MOD land for which no access can be granted. There are a few miles of dreary inland road walking, but the stretch from Fareham Creek via Portchester Castle to Port Solent, is well worth exploring. South of the Naval Dockyard, the route follows the established Millennium Promenade, a fine route which explores the rich history of the old harbour waterfront.

SPS is aware of a concern regarding access to the Camber Docks raised when the Land Rover/BAR development (now 'Ineos Team UK') was built in Old Portsmouth. There is a long established public right of access to walk the perimeter of the Camber Docks which includes access to the memorial to the lost crew of the 'Wilhelmina J'. We note that the preferred route clearly shows this, but we raised a concern that the draft wording could be

interpreted by the current tenants on the site to prevent public access to the dockside for extended periods, rather than the brief interruptions for which the documented diversion is intended. We believe that most members of the public would wish to simply wait for a few minutes while a boat is craned in or out, resuming their walk once the activity is complete.

More detailed information on each section can be found at https://www.gov.uk/government/publications/england-coast-path-in-the-south-of-england

The section maps are detailed and the text gives explanations about the various decisions taken along the proposed route. The full environmental appraisals are also available for each section.

HURST CASTLE







At its September meeting Solent Protection's Council were pleased to welcome Alison Naylor, the Free Sites Partnership Manager at English Heritage. This charity has responsibility for the management and repair of Hurst Castle. Many members will be aware of potential damage to the castle by storm and tidal erosion of Hurst Spit on which the structure is built.

Over recent years, the Western end of the spit has been strengthened to resist storm damage thus maintaining its protection of Keyhaven marshes and the nature reserve. The reinforcement, however, stopped short of the castle, where gravel continues to be eroded and the protective groins damaged or washed away. The result of this is that the foundations of the castle's southern wall, such as they are, are being exposed and undermined as our photograph shows. However, to date, there appears to be no resultant structural damage.

English Heritage propose to start reinforcement of that part of the Spit on which the castle is built during September with a view to preventing further erosion in anticipation of potential damage which may be caused by autumn and winter storms. This work is anticipated to last three months.

Council were told that the repair and strengthening would not be the same as earlier strengthening to the West, but comprise some rock defence plus repair or replacement of the damaged and destroyed groynes and back filling with gravel. Once completed, English Heritage anticipate that pedestrian access to this part of Hurst Spit will, at least in part, be restored.

It is to be hoped that the works will provide adequate protection to the structure of Hurst Castle and we welcome the action that is being taken by English Heritage. The Solent Protection Society will review the work undertaken and its results and will provide occasional reports on the Solent Protection Society website.

News on new and recently introduced species to the Solent area

Because of the extensive shipping movements and numerous marinas welcoming boats from overseas, the Solent receives a large number of new species from other parts of the world, often attached to hulls or in ballast water. This has long been the case and many, often termed invasive species, are far from welcome. DNA analysis of water and sediment samples is now being used to detect new members of our aquatic community. Using eDNA Holman et al (2019) report the presence in a marina in Southampton Water of three newly arrived species described below:

Arcuatula senhousia (Asian date mussel) This mussel is a native of the Pacific Ocean from Siberia to Singapore, but has invaded many other regions of the world. It can live in the intertidal or shallow subtidal zones. It grows quickly and lives for only about 2 years. It prefers soft substrates and surrounds its shell in a dense mass of byssus, the beard-like threads mussels use to attach to rocks etc. This species is considered detrimental to seagrass beds which are important in the Solent region (see article in this issue). In fact, shells had been spotted prior to 2018, but the presence of DNA indicates a living population is certainly in the Solent. Readers should look out for this mollusc when walking our beaches. Barfield et al (2018) reported shells of Asian date mussel on Solent beaches.



Musculista senhousia (Asian mussel) photo Graham Bond – Creative commons

Cephalothrix simula is a nemertean worm and is an invasive, non-native, 'highly toxic', species of ribbon worm. Commonly called the Pacific Death Worm, it has only physically been found in the UK at two sites, one in Cornwall and one in Dorset. Its presence in Southampton Water is only known from eDNA analysis. Do not be concerned by the name this worm currently poses little to no threat to health or the economy.



Mature male of Cephalothrix simula. Image Hiroshi Kajihara Creative Commons

The third species was **Paranais frici** an oligochaete worm. The first actual specimens were recently reported from Deptford Creek. It is now probably living in brackish waters within the Solent region.

Plankton has been monitored in Southampton Water for some years and recently noted surprising numbers of two invasive species which would not normally be considered members of the plankton. The first is the North Pacific pycogonid or sea spider, Ammothea hilgendorfi. This species cannot swim so it is surprising that at some times of the year they appear in the water column.



The pycogonid or sea spider Ammothea hilgendorfi, image © P. A. Henderson

The second is the Japanese skeleton shrimp, **Caprella mutica**. This is also a non-swimming species which is surprisingly common in the water column possibly when reproducing or dispersing to new habitat. It was first reported in Europe in the Netherlands in 1994 now widely distributed in British waters. These are truly odd-looking animals, the head is at the right of the picture.



Japanese skeleton shrimp, Caprella mutica, image © P. A. Henderson

Fawley New Town



View of the site from the west

In the Autumn 2018 issue of the Society's Newsletter we reported on the proposal to build a new town at Fawley on Southampton Water. This article is an update of developments since then. This is perhaps the most important development on the shores of the Solent this century and as such it is receiving close scrutiny from the Solent Protection Society (SPS). The new small town would be built on the site of the Fawley Power Station, which was closed in 2013. This is a brown field site but it is surrounded by the New Forest National Park and a small part of the scheme would be on National Park land.

The developer, Fawley Waterside Ltd., applied to both New Forest District Council and to New Forest National Park in May 2019 for Outline Planning Approval. The two applications are being considered together. NFDC invited comments by 31 August. Full details of the Plans, responses by interested parties, and comments from official bodies including local authorities and government departments are to be found on the NFDC Planning Department website: at the last count there were 406 documents. NFDC had originally hoped to make a determination by 31 August but need more time and have now agreed with the developers to an extension of the time to 15 January 2020. Even when NFDC have made their determination the scheme might need to be referred to the Secretary of State for a potential call-in.

We, the Solent Protection Society, submitted our response on 27 August. Of course we have concentrated on those aspects of the plan which directly affect the Solent, such as view from the sea, and possible effects of pollution of the sea and of the Solent air. The full text of our response is reproduced here.

"Dear Sirs

These comments are from the Solent Protection Society (SPS) which exists to protect the Solent and its tidal rivers and estuaries for future generations. The comments are primarily directed at the element of the scheme within the control of NFDC however we have copied them to NFNP as that aspect of the scheme in the national park, while of less concern to SPS, is an integral part of the whole and does have some impact on the waterfront. SPS is generally supportive of the planning policies laid down by both NFDC and NFNP, however, we are concerned that aspects of the proposals that front the waterside do not adequately meet some of those policies. In particular:

- We consider that the size and scale of the buildings fronting the water, being much further forward than the former power station could be over dominant, with no landscape mitigation and will be unacceptable when viewed from Southampton Water. They do not sufficiently 'scale down in density towards the waterfront' as set out in policy ii a).
- 2. We consider that the light pollution from these building will be to the detriment of the marine environment and have a far greater impact than the existing power station.
- 3. We would expect to see the waterfront buildings set further back with extensive tree planting in front to mitigate the impact and enhance the coastal margin, the coastal path and the proposed 'Solent Promenade'.
- 4. We would remind NFDC and NFNP that there is a real risk of storm water overflows from the proposed sewerage system and we would expect to see this fully mitigated with complete separation of storm and foul water and full storage capacity for foul water to prevent any storm discharge

of foul water into Southampton Water or the Western Solent. Petrol interceptors to all roads and parking areas should be provided before discharge of storm water. Such storage capacity should not rely on Southern Water.

- 5. We would expect to see regular monitoring reports on water quality adjoining outfalls and in the salt marshes as a legal condition of any approval with adequate penalties for any breach of EA standards and that this applies both during demolition and construction as well as in the future once the development is complete.
- We would expect any approval to condition by legal agreement any dredging activity and to ensure that there was beneficial use of dredging to replenish the salt marshes.
- 7. While not of direct concern to SPS we note that the infrastructure of roads in particular will be seriously impacted by the size of this development and that more extensive works than those proposed will be needed if it is not to cause serious congestion and further pollution to the north.
- We would expect the scheme to include mitigation of climate change and for a substantial proportion of the development to be to Passive House standards.
- 9. The proposal is likely to substantially increase the footfall on the coastal path and we would expect to see moneys from planning obligations directed to ensuring that the coastal margin and the many protected areas in the vicinity falling as spreading room, whether or not there is a Section 26 notice, are adequately protected by fencing to restrict both pedestrian and dog access in particular.
- 10. We note the National Grid building on the waterfront is to remain which is a pity as it will assume a greater prominence and has no merit in the landscape. Planting in front of this would be of assistance in mitigating the impact.

- would be a very significant building. It seems that the driver for the height of this landmark building is to provide a structure that is visible from both ends of the Solent. I don't believe this should be the overriding driver for determining the height of this building. The key objective should be to design a landmark building of a scale that is appropriate to the new townscape and to its location on the edge of the National Park, which I think could be equally achieved by a lower building.
- 4. The 49 metre high landmark building in the site's north-west corner is set fairly close to the taller 98 metre high landmark building. We need to see clearer images of how this tower would work in proximity to the larger tower, but together I do feel that these 2 landmark buildings would present too dominant an edge to this part of the development.
- 5. The 56 metre high crystal tower has been designed to reflect the glass end of the existing power station building. However, it has been confirmed that it would not be viable to rebuild the existing structure and that the proposed new building would therefore need to be built with new materials... I think this building, as proposed, is inappropriate.
- In the light of the Environment Agency's response, we would ask you to clarify the detail behind the foul drainage proposals, and to confirm what discharge consents are being utilised for these works.
- 7. As set out in Natural England's response, you need to better demonstrate how nutrient neutrality will be secured. This a critical matter, and unless you can demonstrate that nutrient neutrality will be achieved, it will not be possible to grant planning permission.
- 8. In their consultation response, our Environmental Health team have asked that you provide additional information in



Illustrative view of Fawley Waterside across Southampton Water

The Principal Development Management Officer of NFDC, Mr Ian Rayner, has written to Deloitte, the agent of Fawley Waterside Ltd, to set out the latest position of the Local Planning Authority on their application proposals, and has published his letter on the NFDC website. It is twelve pages long so we will not reproduce it here, but pick out the points which may be of most interest to SPS members. He says:-

- "We do need to have a clear understanding of the scheme's viability.
- 2. The south-east corner of block 11 extends very close to the harbour entrance and ought to have a greater setback.
- 3. In my view, 3 of the landmark buildings are of particular concern. The 98 metre high tower

- order to clarify the development's potential impact on air quality, as well as to ensure that future occupants have an appropriate quality living environment. I would ask that you respond to the specific questions that have been raised.
- Our Environmental Health team have also posed a number of questions relating to noise and lighting (aside from the noise concerns raised earlier in this letter). Again, I would ask that you provide additional information to address the concerns that have been raised."

We believe that, if approved, this project is likely to take about 10 years to complete. We intend to keep members up to date by reporting on progress in future SPS newsletters and on the SPS website, **www.solentprotection.org**

Local Planning Authorities - Development policy for new homes

The local planning authorities bordering the Solent are publishing development policies designed to meet government set targets for the construction of new homes for the years ahead. At first sight this seems an unlikely topic for the Solent Protection Society to dwell upon but it is of relevance to anyone interested in the future of the region.



Development at the southern edge of Milford taken on the road from Hurst Spit.

Of particular importance to the Society, is the consequential impact of new development on our shores, estuaries and river banks? Certainly some, such as that at Fawley, will, but this replaces an already heavily developed shoreline. In other cases development may be some way from the coast but will be clearly visible from the water. We have taken up with various planning authorities around the Solent the potential damage caused to the seascape by proposed new building development and are pleased to see that some authorities are exercising control on this point within their latest development plans. Can we hope that all authorities will follow this lead?

The wider Solent must maintain its attraction as a place to live and work as well as continuing as a successful destination for holiday makers and yachtsmen. To this end development plans should have particular regard to the visual impact of new buildings on the approaches to the towns and villages surrounding the Solent.

Secondly, dare we make the point that the number of new homes proposed is going to increase demand for more school places as well as hospital beds and medical practices. Can the existing facilities cope? If not where are the additional buildings to be put?

These are matters for the authorities to consider. From Solent Protection's position we will continue to monitor the proposals and endeavour to ensure that that the Solent and its environment are protected for future generations.

Royal Yachting Association (RYA) - South Region

RYA South Region is one of seven area committees representing the interests of all aspects of boating in England. The geographic area covered by RYA South comprises Buckinghamshire, Chichester Harbour, Hampshire, Milton Keynes, Oxfordshire, the Channel Islands, the Isle of Wight, and West Berkshire.

The purpose of the regional committees is to support the overall RYA Strategy and Purpose "To Promote and Protect Safe, Successful and Rewarding British Boating" in the specific context of regional and local initiatives.

The general purpose of RYA South is to provide a channel of communication between RYA affiliated clubs, classes, personal members, disabled boating groups, other boating groups and recognised training centres within the region, and also between such affiliates and centres and the English Region and to represent such on regional matters.

RYA South also undertakes relevant activities within the region such as seminars, conferences, competitions and meetings, also to encourage clubs to support RYA initiatives.

Other duties include:

- · Promulgate information on RYA activities;
- Advise the RYA on the appointment of persons to statutory or voluntary bodies within the region, including Harbour Advisory Groups;
- Create such time-limited working groups as may be required from time to time.

The committee comprises Chair and Deputy Chair, Secretary and Treasurer and up to twelve members representing clubs in the area including the Channel Island Clubs. RYA regional Staff include Development, Race Management, Youth Training, Communication and Environment.

RYA South reports through the English Regional Forum to the RYA Board and has links to all the other English regions. All English Regions provide monthly regional news through their RYA Regional website.

The region also communicates with all the major Solent port authorities and when required local and national government. It also represents the interests of its members on major navigational issues.



Seagrass in the Solent

I can still remember as a young teenager my amazement when told that there were flowering plants living completely submerged in the sea. Our sea grasses or eelgrasses, Zostera spp, form an important inshore plant community in the Solent and surrounding areas. There are 3 eelgrass species in British waters and all are considered vulnerable and in need of protection and all live in the Solent. There are large eelgrass beds along the north coast of the Isle of Wight, Langstone, Portsmouth and Chichester Harbours and in Stanswood Bay, near Calshot, intertidal beds are easily seen. Leaves shoot from a creeping rhizome system that binds and stabilises the seabed sediment reducing coastal erosion. Leaves and rhizomes contain air spaces that aid buoyancy. Eelgrass have separate male and female flowers on the same flower head. It usually flowers in late summer, dispersing threadlike pollen grains into the sea. Z. marina beds develop on firm sand, sometimes mixed sediments and usually grow below the low water spring tidal limit. Patches have been found in the Solent including to the west of Needs Ore, between Newtown and Gurnard Point, and to the east of the mouth of the Medina River on the north coast of the Isle of Wight (Tubbs, 1999). The Hampshire and Isle of Wight Wildlife Trust have been running the Solent Seagrass Project to gather information on the extent of seagrass beds in the Solent area.



Eelgrass underwater. Image by Ronald C. Phillips PhD, creative commons.

Zostera beds are species-rich, particularly the subtidal beds of Z. marina. A large number of algal species occur as epiphytes on Zostera leaves (some species are found only in eelgrass beds). Other algae grow amongst the eelgrass or as mats on the sediment surface. Eelgrass offers an attractive and protective habitat for small animals including many crustaceans and fish. For example, in Solent seagrass beds you can find deep-snouted pipefish, seahorse and fifteen-spined stickleback. There are also plentiful prawns and cuttlefish. When an area has healthy seagrass beds it is almost certain that it will hold plentiful marine life. Zostera spp. is also an important food for wildfowl including the dark bellied brent goose and wigeon which feed on intertidal beds.



Deep-snouted pipefish caught in Stanswood Bay Zostera bed. Image © P. A Henderson



Short-snouted seahorse captured in Southampton Water Image © P. A. Henderson



15-spined stickleback caught at Calshot. © P. A. Henderson

Although seagrass beds are critically important habitats that support human well-being the extent of the beds throughout the world are declining at a rapid rate. Within British waters the decline in extent and well-being of seagrasses is linked to pollution from industrial effluents and sewage, mechanical disturbance, land reclamation etc. Zostera marina is susceptible to a wasting disease caused by a slime mould. In the 1930s populations were decimated by this disease and some have never fully recovered. Zostera angustifolia and Zostera marina are both affected by nutrient enrichment from nitrates, oil pollution and anti-fouling paints used on boats.

Recent reductions in pollutant discharges have aided seagrass recovery, but we are still introducing large amounts of nitrogen and phosphates into the sea which encourage algal blooms and metabolic imbalance in eelgrasses. Eelgrass beds are not physically robust, and the plants are easily killed or damaged by trampling, digging, dredging, bivalve harvesting or other forms of physical disturbance.

Unfortunately, our direct impacts on the beds during our leisure activities have intensified. The damaging mechanical effects on Zostera marina (Common Eelgrass) seagrass beds in UK waters from recreational boating activities, anchoring and traditional swing mooring scour, have been of continuing concern. There is a clear need to implement good practices to limit these impacts while allowing people to enjoy their boating activities. Eco-moorings, a design that reduces the abrasion pressure of anchoring and mooring on the seabed have been developed and are being tested. However, there has been a limited uptake of eco-moorings to date. Eelgrass beds are a natural feature which we all need to protect and cherish if we are to maintain the rich marine life of the Solent.

Peter Henderson

The Fraser Range Development



The Solent Protection Society takes a close interest in the conservation of the natural heritage and historic assets of the Solent shoreline. In particular, we are concerned with safeguarding the views towards that shoreline by users of the Solent, a viewpoint not always given priority in planning applications.

The fortifications at the eastern end of Southsea seafront are of significant historical value, with Fort Cumberland a particular highlight, considered the most impressive piece of eighteenth century defensive architecture remaining in England. The context within which the fort is situated, on the low shingle spit at the entrance to Langstone Harbour, should be protected with any development in the vicinity suitably moderated.

SPS has objected to a plan to redevelop the former Fraser Range for housing, a site immediately to the south west of Fort Cumberland in this image from Google Earth.

The existing buildings on the Fraser Range site date from more recent occupation of the land by the Ministry of Defence and while we note that there have been valid objections raised

by others on grounds of twentieth century archaeological significance, our objection to this proposal is based on the adverse impact on the views towards Fort Cumberland from the sea.

The plans show five significant buildings immediately fronting the sea, two of which (Building 2 and Building 5) are redevelopment of existing structures, while Buildings 3, 4 and 6 are completely new developments.

Building 2 and Building 5 are existing two storey structures with flat roofing which includes small covered service access structures. We do not consider that these existing roof structures provide a precedent for the addition of a full third storey that the developer has added to each of these buildings.

While the increased height of Buildings 2 and 5 alone represents an unacceptable impact on the view from the sea, the new structures, Buildings 3, 4 and 6, are significantly more damaging to the skyline. Each of these buildings are drawn at a full five storeys in height, dwarfing the two redeveloped buildings and obliterating the view of Fort Cumberland from the south west.

Given the potential for future development of the south east corner of Portsea Island as an important destination for cultural tourism within the city, in our response to the planning application we have urged Portsmouth City Council to reject this development and safeguard the heritage context of the Eastney spit.

This is a particularly pertinent example of Solent Protection Society's commitments both to the preservation of the Solent area's cultural heritage and the maintenance of the view of the Solent shoreline from the sea.



Reconfiguration of Buckler's Hard Yacht Harbour



The Beaulieu River marina at Buckler's Hard will, over the next two winters, undergo major reconfiguration with a £2m investment.

The project will be carried out in two out of season phases, with the first beginning this October and offering improved facilities and a greater number of more convenient walk-ashore berths by March. The second phase will begin the following autumn, with completion of the extended marina providing an extra 66 berths and additional large moorings by March 2021.

Since opening in 1971 and with one subsequent extension, the yacht harbour has remained largely unaltered. The new plans, which have been approved by the Marine Management Organisation and New Forest National Park Authority, will accommodate current market requirements while continuing to preserve the harbour's unique character.

The private custodianship of the Montagu family has protected the Beaulieu River for over four centuries, as one of the few privately owned rivers in the world. The Beaulieu Estate is working with agencies including Natural England and the Environment Agency to continue to protect its unique habitats and species.

Beaulieu Enterprises Managing Director Russell Bowman said: "The reconfiguration will keep a similar look and feel to the existing yacht harbour, while providing a greater choice of berths and better accessibility in the future. We recognise that the Beaulieu River is a very special place and are committed to undertaking the project in a sensitive and sustainable way. Its unique character remains of paramount importance to us." A restaurant, bar and tea shop are nearby at the 18th century shipbuilding village of Buckler's Hard, with its Maritime Museum.

Specialist marina consultancy Marina Projects, based in Gosport, has been appointed to manage the project and the work is being carried out by locally based Walcon Marine. The project designs have included environmentally friendly features.

Walcon fitted the first pontoons for the original marina nearly 50 years ago and much of the current infrastructure remains in good enough condition to re-use for the future. New designs will also enable existing piles to become a key part of the refurbishment, where they are able to be re-used. The project will also trial the replacement of some of the river's swinging moorings with environmentally friendly alternatives, disturbing less of the river bed and using floating ropes instead of chains.



Solent Protection Society 'Away Day' 2019



This year our 'Away Day' to Eling Tide Mill took place on 7th October, a month later than usual and too late to include a report of the visit in our autumn 2019 newsletter. Instead this article describes the planned outing.

Eling is in the centre of our region, close to Totton, at the head of Southampton Water. There has been a tide mill at Eling for over 900 years and the current Mill is over 200 years old, having been rebuilt c.1785 after storm damage in the 1770s. It is one of only two tide mills still operating in the UK. It was re-opened in 2018 as a fully operational flour mill after a restoration funded by a Heritage Lottery grant, to provide "The Eling Experience". This includes the Mill itself, the visitor centre and a walk around Bartley Water (the mill pond). The Mill is a Grade II* listed building. The visitor centre includes a café and a museum. At the entrance to the Mill there is a small gift shop. Using the same method as millers from days gone by, freshly milled wholemeal flour is available for sale in the gift shop. The wheat, which is milled at Eling, comes from a local farm - Manor of Cadland - and carries the New Forest Marque.

The Mill is located on the seaward side of the causeway across Eling Creek. When the tide comes in, it pushes open one-way gates and fills up the millpond. When the tide turns and starts to ebb, it slowly uncovers the waterwheel, but the sea gates are closed, trapping the water in the millpond so the level in the millpond stays at the high tide level. When the tide has dropped to well below the waterwheel axle, the sluice gate can be raised. Water from the millpond strikes the lower blades of the waterwheel, spinning it round and allowing the milling to begin.

The photograph is an aerial view of Eling Creek facing East. In the centre is the artificial causeway which was once the main road from Southampton to Hythe and Beaulieu. The Mill is the red-roofed building on the causeway and the visitor centre is the white-roofed building to the left. The lake in the foreground is Bartley Water, the tidal pond which stores the water to drive the mill. In the distance, top right of photo is Goatee beach, which faces Southampton docks across the River Test.

For much of the mill's life it was owned by Winchester College. A lease survives from the year 1418, when the College leased the mill to Thomas Mydlington, requiring him to maintain the mill and the causeway. The causeway was prone to collapse, for example it washed away in 1887. This problem continued up until 1940 when modern engineering calculations revealed the cause to be the design of the sluices. This was then corrected.

The tenancy of the mill included the right to collect tolls from vehicles using the causeway. Four-wheeled vehicles were charged 6d (2.5p) and two-wheeled vehicles 4d. These rates remained unchanged until 1970. In 1967, the toll collector was Tom Mackrell who had been one of the last people to operate the mill when it closed in 1946. Tom was toll collector and mill foreman, working for his brother Raymond, master miller of Eling Tide Mill. Having been out of action since then, the mill reopened in 1980.

This visit provides an opportunity to see two sides of your Society's work – protection of ancient sites such as the Tide Mill, and mitigation of the effects of near-by large-scale industry such as the mountain of containers stored by Associated British Ports at the entrance to Eling Creek, top left of the photograph.

A Postcard from Bembridge and St Helens.



The Bembridge and St Helens area has an interesting history. The Harbour has been known historically as Brading Haven. In Roman times, small trading ships were worked up the Eastern River Yar to the quay at Brading. The estuary was much larger and extended across the area which is now Brading Marshes, forming a much larger inlet or estuary. In early medieval times Bembridge village grew from a few dwellings on the point to become a collection of hamlets and Brading was an important port for the Island. The Bembridge peninsular was cut off from the main Island by water or a marshy area near Brading, at the top of the Haven, and was known as "Binbridge Isle".



The topography of the harbour we know today is largely due to the draining of a major portion of the old Brading Haven for agriculture. The drained portion forms Brading Marshes, now a nature reserve. There are four documented attempts to drain the Haven, the most recent of which was completed in the 1870s and shaped the current harbour. The main embankment was eventually built for the railway and lies inland of the current embankment road. The result was disastrous for the future of the harbour; the smaller area has a reduced tidal prism (the amount of water flowing in and out on each tide) and most of the flow of water from the Eastern Yar River was blocked with sluice gates. The reduced tidal prism, combined with the sluice gates, limited the capacity of the tide to transport sediment through and out of the harbour estuary, causing the serious silting with which the Harbour Company and harbour users struggle today. Dredging is essential to keep the harbour open.

Silting is further exacerbated by the north westerly longshore drift along the beach on the Bembridge side of the entrance where some of the beach protection groynes are over 100 years old and have been allowed to fall into disrepair. Sand is carried by both wind and longshore drift along the beach in the direction of the harbour entrance. Currently there is an organised initiative to raise money to rebuild the groyne on Bembridge Point on the south easterly side of the harbour entrance.

Without a major seawall or strong groyne reaching from the harbour entrance out towards the St Helens Fort, total prevention of the longshore drift would be impossible, but the rebuilding of the main Bembridge Point groyne may well be successful in reducing the build-up of sand inside the harbour entrance. This is a large undertaking and estimates are nearing a quarter of a million pounds.



Currently the harbour is privately owned and the owners have recently invested in a dredger which will greatly assist in keeping the harbour open, hopefully ensuring the continued success of Bembridge Harbour as a sailing, fishing and watersports venue.

The Solent Protection Society (SPS) maintains a strong policy regarding the view of coastal land from the sea and this includes maintaining the wooded aspects of the Island shore, minimising development and associated lighting in the coastal woodland areas. The SPS therefore responded strongly to the planning application by Aria Resorts, which has bought the Priory Bay Hotel and who applied for a number of "tree houses" and chalets to be built in the woods immediately above Priory Bay. SPS is pleased to report that the campaign was successful in preventing houses being built in the woodland.

Continued on Back Cover

A Postcard from Bembridge and St Helens (continued)



Bembridge Harbour watersports

The Bembridge and St Helens area has much of interest to the naturalist. The harbour is a Ramsar Site and the immediate area lies within the Solent European Marine Sites conservation zone. The recently designated Bembridge MCZ (Marine Conservation Zone) covers the offshore coastal area and is considered one of the most biologically diverse marine reserves in the country. The RSPB Brading Marshes Reserve has been under a major management programme for some years to create and maintain the area primarily for waders. The proximity of the relatively peaceful and organically rich mudflats, combined with the careful management of the invertebrates and water levels on the marsh, has provided an important habitat for overwintering and breeding waders. Bitterns were heard booming in the reedbeds last year and are believed to have bred this year, and a recently released white tailed eagle (sea eagle) was photographed on the marsh at the end of August.

The harbour, marsh and coastal area comprise a mosaic of interesting SSSIs including the St Helens Duver fixed dune and grassland, several saline lagoons and the Whitecliff Bay to Bembridge Ledges SSSI with its interesting limestone tidal rock formations and clay outcrops. This all makes for a wonderful year-round birding, botanical and general natural history experience for all ages and levels of expertise.

The historian is spoilt for choice. The Roman Villa at Brading is very well curated and presented. The huge Bembridge Fort on Culver Down (National Trust) was completed in 1867 to deter attack from the French under Napoleon III. It was active in both world wars. There are also the remains of the World War II gun emplacements on Culver Down, all of which speak of more recent history. In previous centuries the fleet would anchor off St Helens to collect local water which was proven to stay fresh for longer than mainland fresh water on extended voyages. Nelson is rumoured to have spent time in St Helens! The Solent offshore forts were also built to protect the Solent from the French fleet. St Helens Fort was built in 1859 to give protection to ships in St Helens Roads anchorage. Fortunately a major attack by Napoleon III never came.

The Mission Statement of the Solent Protection Society is:-

"The Solent Protection Society exists to ensure the ecological and environmental well-being and wise management of the Solent area, its natural beauty and amenities, so that these may continue to be enjoyed by present and future generations."

Conservation costs money and requires the supportive will of both government and people. Such diverse and valuable conservation areas as those around Bembridge Harbour need constant vigilance. While being true to our Mission Statement, the Solent Protection Society believes in encouraging the socio-economics of an area, thereby enabling an element of local self-help in conserving these special areas against both inappropriate development and against natural forces such as erosion and silting.

SPS Council members are out and about all round the Solent, and we are handy with a camera to assess potential damage. The Solent Protection Society Council members are ready to raise issues with relevant Local Authorities and Government Agencies in the case of potentially damaging development or actions.

We remain vigilant. Please help us to continue our work.

DONATIONS

To enable us to continue our important work, the Solent Protection Society need more funds over and above our modest membership subscriptions, Please consider making a donation now to help us to protect the Solent for future generations.

GIFT AID - HAVE YOU COMPLETED A GIFT AID FORM?

Under the Gift Aid scheme, for every £1 you give, either as a subscription or donation we are able to recover 25% from the Inland Revenue. It does not cost you anything – you simply declare that you are a taxpayer. If you have not already completed a declaration would you now be good enough to do so by completing this coupon, cutting it out and sending it to The Secretary, Solent Protection Society, PO Box 449, Lymington, Hampshire, SO41 1FD

PLEASE TREAT ALL MY SUBSCRIPTIONS/DONATIONS UNTIL FURTHER NOTICE AS GIFT AID.

I confirm that I pay an amount of income tax/capital gains tax at least equal to the tax that Solent Protection Society (registered charity No. 1154317) will reclaim on my subscription/donations and on all other donations to charities or community amateur sport clubs.

Date/2019 Postcode	
Signature	
Name	

LEGACIES – PLEASE THINK OF THE SOCIETY AND ITS WORK

In addition to the very welcome donations over past years, from time to time we have also received very generous bequests from those who have had an interest in what we have been doing. If you are updating your Will and would like to remember the Society this would be appreciated. Equally if you have already made a Will you can make a provision for a bequest either by executing a formal codicil to the Will or by leaving a letter of direction to your executors.