

A Year in Depth

2002/2003 REPORT









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*Denotes staff

Text in this report written by HWTMA staff unless otherwise stated

FOREWORD

The Trust has now been operating for twelve years, during which time it has grown from strength to strength. Prudent management and developing research initiatives have laid the foundations for the Trust to deal with the challenges and opportunities being presented as the discipline of maritime archaeology matures.

The 2003 fieldwork season has been full. Work has continued on established projects in the Hamble River, Chichester Harbour, the River Itchen, the Weston Shore and Langstone Harbour. Underwater, exciting new discoveries have been revealed in the submerged landscape off Bouldnor Cliff, survey of freshly exposed timbers is continuing on the Hazardous and video footage has been collected from the wreck sites of the Needles and Alum Bay. New initiatives have included trials of diver trails in the western Solent, the excavation of a Saxon log boat from the inter-tidal silts of Langstone Harbour plus diver survey and ground-truthing of anomalies in the eastern Solent leading to the rediscovery of the warship Impregnable. On dry land, the Maritime Heritage Exhibition at Fort Victoria has played host to a series of lectures and an Open Day that was attended by hundreds of visitors. Work currently underway at the Fort will see the creation of an education research pack while plans are being forged to utilise the exhibition as a base for dive tourism in the region. All these projects have been conducted by professional archaeologists working closely with volunteers and members of the local community.

In addition to the fieldwork the Trust has continued to pursue its main aim of promoting interest, research and knowledge of maritime archaeology by presenting to local groups, giving papers at internationally recognised conferences and promoting maritime archaeology through the media. Over twenty five presentations have been given and the Trust has been recorded on national and local television and on radio.

This year we welcomed Councillor Terry Butchers, Isle of Wight Council and Councillor Lee Mason, Portsmouth City Council as Management Committee members. They have taken over from Councillors Brenda Lawson and Eleanor Scott respectively. We thank both Brenda and Eleanor for their past support and enthusiasm. In addition to Committee members, the Trust welcomes its new Administrator, Andrea Bushell and Jan Gillespie as Bouldnor Cliff Project Officer.

I would also like to thank Hampshire County Council, the Isle of Wight Council, the Department for Culture Media and Sport, English Heritage and the Local Heritage Initiative; along with those other authorities, companies, organisations, Trusts and individuals who are listed in this report for their sponsorship and support over the past twelve months.

Finally, I must pay tribute to Sir Charles Tidbury, who became patron of the Trust in February 1998. He was a great supporter of our work and contributed on many levels. He will be sorely missed.

DAVID GUY

Dail 8-1

Chairman
October 2003

THE TRUST'S POLICY STATEMENT

AIM

The Hampshire and Wight Trust for Maritime Archaeology will promote interest, research and knowledge of maritime archaeology and heritage in Great Britain with core activities concentrated in the counties of Hampshire and the Isle of Wight and the adjacent South Coast areas.

KEY OBJECTIVES

The Trust will:

- Promote maritime archaeological study in accordance with professional and museum codes of conduct and practice.
- Promote the in situ preservation and management of important archaeological sites in its area of interest.
- Support local, regional and national initiatives for improvements to the legislation regarding the preservation and management of the maritime archaeological heritage.
- Promote public awareness, enjoyment and participation in the maritime archaeological heritage.
- Provide a maritime archaeological service to Hampshire Council, the Isle of Wight Council, Southampton City Council, Portsmouth City Council and other Local Authorities.
- Ensure that maritime archaeology plays an important role in coastal planning, management and policies in the Solent and Wight areas.
- Carry out maritime archaeological surveys and investigations for incorporation into environmental assessments and similar studies.
- Compile and maintain a database, and base chart, of all known maritime archaeological sites in the Solent and Wight areas and exchange information with local SMR holders and the National Archaeological Record (Maritime Sites).
- Promote archaeological awareness and competence amongst divers.
- Support, and where possible, assist in the publication of the results of maritime archaeological investigations, surveys and research undertaken in the Solent, Wight and adjacent South Coast areas.
- Liaise with other local, regional and national organisations involved in maritime archaeology and related disciplines.

Summary of Principal HWTMA Activities

September 2002 - August 2003

Professional Dive Times	7,994
Volunteer & Student Dive Times	9,925
Total Minutes Underwater	17,919
Ratio of Professional: Student/Volunteer Dive Times	44%:56%
Number of People involved with Trust Activities	97
Diving/Non-diving Fieldwork & Activity Days	59
Meetings, Lectures & Conferences	176

Sir Charles Tidbury, DL

Sir Charles Tidbury, DL, who died in July, became a Patron of the Trust in February 1998.

Shortly afterwards, Sir Charles visited our office where he met the Trust's staff and learnt about its aims and aspirations. This was the first of many meetings with Sir Charles who was invariably full of ideas and wanting to know how he could help.

As a former Chairman of Whitbreads plc, Chairman of the Mary Rose Development Trust in the 1980s, a Trustee of the National Maritime Museum for eight years and one who was well acquainted with the Solent as a keen sailor, he was able to assist the Trust in many ways, not least with fund raising.

He attended the Trust Annual General Meetings whenever he could and, with Lady Tidbury, supported the annual public lectures. He also found time to be a member of the Trust's Advisory Committee where his wise counsel and helpful suggestions were much appreciated.

We were extremely fortunate to have had Sir Charles as a Patron and he is greatly missed.

Brian Sparks
Director, Hampshire & Wight Trust for
Maritime Archaeology, 1991-2001



Maritime Heritage Exhibition: a Vehicle for Education

Over the past 12 years the HWTMA has been accruing extensive maritime archaeological knowledge of the Solent region enabling an informed interpretation of the resource. This allows the identification of shipwrecks and drowned landscapes, the circumstances of their loss, methods for efficient interrogation of the remains and the acquisition of new information. The data recovered from sites is often unique, interrogation of which helps to reconstruct the cultural building blocks upon which our modern way of life is based. The HWTMA is looking to disseminate and reflect this in its Maritime Heritage Exhibition at Fort Victoria.

Local Heritage Initiative: education and participation

During the winter of 2002-03, a project supported by the Local Heritage Initiative (LHI) began with a series of lectures and activities. The purpose was to engage and inform members from the local community while encouraging involvement with HWTMA activities.

The activities, organised in conjunction with the Isle of Wight County Archaeology and Historic Environment Service as part of the initiative, have proved very successful. The first lecture in November 2003 was full to capacity, forcing several attendees to sit outside the seminar room. Visitors were invited to comment on the exhibition, a number of whom became involved with the refurbishment allowing them to assist in the realisation of their ideas (see page 20). Events continued over the winter including



Standing room only for attendees of the first LHI lecture

further talks and an archaeological field walk by Frank Basford of the Isle of Wight Archaeology Centre. The first year of the project culminated with over 300 people attending an open day at Fort Victoria. It was a huge success with flint knapping displays by Phil Harding (Time Team) and a range of simulated underwater archaeology activities aimed at the younger participants.

The winter of 2002/2003 saw a refurbishment of the Maritime Heritage Exhibition. A new display was installed while the existing displays were re-arranged to facilitate a themed approach, for which thanks must be given to Hidden Design Studio and a dedicated group of Friends of the Trust (see page 20). The range of maritime heritage in the Solent is reflected in four areas; shipwrecks,



Participants of the Open Day experience excavation in Solent waters



Friends of the Trust work through the winter to help revamp the exhibition

submerged landscapes, modern history and the practical aspect of maritime archaeology. Enhancements over the coming winter (2003-04) will introduce the processes of archaeological investigation to complement the displays. This will include the creation of an archaeological site and its discovery, survey, recovery and conservation by archaeologists. An education research pack is currently being developed to expand on the displays and link in with aspects of the National Curriculum. It will be available to school groups visiting the exhibition in 2004 and will be reinforced through practical activities and short talks. The displays and activities will highlight the relevance of the past, encouraging occupants of the 21st century to engage with their heritage.

In addition to enhancements of the exhibition, the HWTMA is looking to increase access to the underwater historic environment. This is being approached in two ways, directly to the diving community and indirectly to non-divers. Dive trails

are being created to enable divers to experience underwater archaeological sites in an informed and controlled manner while the Exhibition and the internet will bring the sites to the surface for the benefit of everyone.

Diver trails

Two areas are being set up to host Diver Trails. The first is in Alum Bay where two wrecks are linked by a reef. The diver trail will take people from one wreck to the other along a path of reference 'stations'. Each will be placed adjacent to a site of archaeological or marine biological interest. The divers will be provided with an information booklet which will contain plans of the wrecks and reef.

The second Dive Trail is around The Needles protected wreck site, which predominately contains the remains of *HMS Pomone*. The site lies in undulating geology of chalk gullies and can be very confusing in limited visibility. Here, a fixed line will be laid between interesting features next to which reference 'stations' are to be positioned. The divers will be given an underwater booklet with information and a site plan. The combination of information booklets and reference 'stations' is proving to be a very good method to guide and inform visitors about the sites while increasing their appreciation of the archaeology.

Access to the dive trails will be operated from the Maritime Heritage Exhibition and will be part of a 'dive trail experience'. Divers will attend a talk about the wrecks before the dive and be shown footage of the sites. Following the dives they will be debriefed and have a tour around the exhibition. This initiative is currently being supported by the LHI and English Heritage.



Divers visit the exhibition after trialing the diver trail



Improvements to the displays during 2003 have been well received by visitors

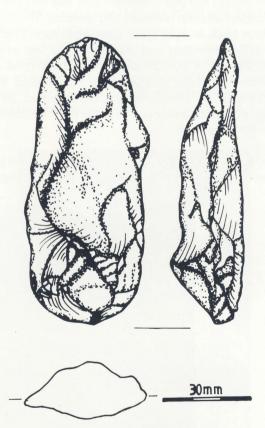
Underwater audio-visual images, the exhibition and the WWW

Purchase of an underwater video camera has enabled the HWTMA to collect footage from archaeological sites throughout the summer. This is now in the process of being edited to show investigations and work on underwater archaeological sites. Images will also be used for the education pack and will be available on the computer in the exhibition. School children and visitors will be able to appreciate the underwater environment which many bypass during the ferry crossings over the Solent. The audiovisual elements of the display will be supplemented by interactive exhibits and simulated archaeological activities. The provision of a practical component will allow visitors to relate the artefacts and information to real situations, previously the preserve of divers. Making the video footage available remotely via the World Wide Web will widen access further.

A way forward for the exhibition

Funding from the LHI and local charities (see page 23) has enabled the first phase of these initiatives at Fort Victoria. Presentations, open days and activities are involving an increasing number of participants and active volunteers while data collection is building foundations for videos, CDs and the research pack. Trials along the underwater dive trails have been successful and refurbishment in the exhibition has attracted very positive responses. The next step is to increase access to the heritage using modern technologies and create a stable environment in the exhibition to hold many more delicate archaeological artefacts. Applications to English Heritage and the Isle of Wight Economic

Partnership Leader + programme are currently being processed. This will enable the HWTMA to achieve its educational aims, aspirations we will hopefully be closer to fulfilling in 2004.



Hand axe discovered on the beach outside Fort Victoria by friend of the Trust, Carol Flux

Long Island Logboat

Thanks to a generous donation by John and Jane Bingeman the logboat, highlighted in last year's annual report, has been excavated and raised. The project has been a large undertaking for the HWTMA bringing together a team of staff, volunteers and archaeological specialists. Thanks must also go to all who provided the many donations in kind, without which the project would not have been able to progress.

After much research, planning and organisation a team went into the field on 3rd September 2003. Initial work involved mooring a boat on site to hold project equipment for the duration of the excavation. The journey to site for the excavation team involved a 45 minute boat trip, facilitated by Arthur Mack, John Male and John Bingeman, followed by a 20 minute walk around the inter-tidal region of Long Island. The wet and muddy environment did not deter people from volunteering for the project and a core excavation team of HWTMA staff and volunteers literally got 'stuck-in' for four days.

Previous to this year's fieldwork only one end of the logboat had been glimpsed and recorded. This took place back in April 2002 soon after John Cross (HWTMA Member) had discovered the find while fieldwalking. A radiocarbon date of AD500 (plus or minus 100 years) was obtained which dated the boat to a very interesting early Saxon period. So it was with much anticipation that the team embarked on the excavation.

On day one, survey points for the site were set up by John Cross with assistance from the Channel Coastal

Observatory while work began setting up the site. The boat was uncovered from beneath protective sand bags and was recorded before excavation. A combination of mud dams and a water pump kept the site free of water during the excavation, the pump being especially handy each morning because the tide had flooded the site and filled the excavation area with water.

Not far into the excavation it became apparent that the boat was in more than one piece. Cracks in the timber showed that time and tide had caused fractures which meant the boat would not come out whole. The excavation also revealed that the buried end of the boat was not intact and had broken off, potentially due to tidal erosion.

Excavation of the inside of the boat revealed the full extent of the remains. Sampling of sediments and recording of the boat in situ were carried out before it was removed. Due to warnings of bad weather which could have kept us off site and potentially damaged the boat, lifting was brought forward a day. The team put in a sterling effort to ensure all the recording was carried out, the boat pieces carefully lifted and packaged, and the material underneath the vessel investigated.

Lifting the boat revealed further interesting evidence. An area of grass or reeds had been trapped beneath, while further wooden elements lay under the bow. These wooden pieces do not appear, on initial inspection, to have been shaped. They may represent elements that were on the foreshore by chance, or they may have been deliberately placed.



The difficult excavation conditions presented many challenges for the team



Numbered among the many visitors to the site were the Lord Mayor and Lady Mayoress of Portsmouth

We look forward to wood technology specialist Nigel Nayling examining both the boat and associated timbers to reveal more about the finds.

During the excavation many samples were taken to gain information on the palaeo-environment in which the logboat was used and abandoned. Dr Rob Scaife will analyse the samples to provide this important information. Combining evidence of the environment with information on the boat, will reveal how Langstone Harbour once looked and potentially where the shore line was in AD500. This will add to knowledge of the development of the Harbour and the Solent region.

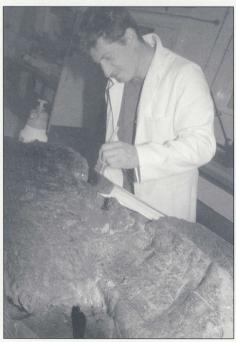
Each day a boat was laid on for site visitors and the media. Over the three days of excavation we welcomed interested individuals including The Lord Mayor of Portsmouth, Councillor Tom Blair. The project has gained substantial local press coverage both during and after the fieldwork stage.

The logboat is now safely packed and is being held in the British Ocean Sediment Core Research Facility (BOSCORF) at the Southampton Oceanography Centre. Work now begins on cleaning and recording the boat. When this is complete, specialists will examine the logboat before it goes to the Mary Rose Trust for conservation. The final destination for the logboat will be with Portsmouth City Museums Service.

The project has demonstrated the strengths of the HWTMA, bringing together professionals and amateurs to undertake fieldwork, and drawing on our many friends and associates for assistance in

kind. There are many people to thank for helping with this project, they are all mentioned on page 23. In addition to this we would like to acknowledge the following organisations for access and assistance; the RSPB, Langstone Harbour Board and English Nature.

The post-excavation work now continues. There will be an update on this work in next year's Annual Report. There will also be reports on progress posted on our website.



Post excavation work will include cleaning and full recording of the log boat (Photo by Mike Conquer, SOC)

Subterranean Secrets Below the Silt

The origins of the Solent can be traced back into the Pleistocene where river systems abraded a path across the southern part of the Hampshire Basin from Dorset through to West Sussex. A sea level over 100m below that which we see today exposed a European landmass where Britain was a remote peninsular separated from the continent only by waterways and lakes. As the glaciers retreated 10,000 years ago at the conclusion of the last Ice Age, the warming climate encouraged groups of hunters and foragers north. They exploited the resources (being richest adjacent to the watercourses) and occupied these newly accessible territories. It took another 5,000 years before the lands were totally lost to the steadily rising oceans.

In the western Solent, the course of the ancient river channels have not been satisfactorily detected. This is primarily due to erosion continually deepening the channel as the system is evolving. Large deposits of the early to mid Holocene landscape do however fringe the waterway. They survived because they were covered and protected by alluvial silts as the waters rose. Today, they represent a rich archive of sediments and peat that contain archaeological material. This material is being exposed as the Solent continues to mature. The loss of the resource is of great concern but it presents the opportunity for research into the geomorphological evolution of the landscape and its relationship to archaeological material. Investigations of these exposures by the HWTMA over the past few years have been based on a programme of monitoring and sampling using the following methodology;

i Bathymetric and geophysical survey to locate topographic variations and sites of potential archaeological or palaeo-environmental interest.

- ii Diver investigation to verify the qualitative images produced by the geophysical survey.
- iii Selection of sites for further monitoring or sampling and possible excavation. (Areas selected have been the edges of underwater cliffs, where erosion has revealed palaeoland surfaces).
- iv Monitoring horizontal and vertical recession of deposits using fixed reference points.
- Sampling with:

 a) a 30mm auger is used to track submerged deposits under the alluvium.
 - b) Hand saws and chain saws to collect timber samples for dendrochronological analysis. c) Monoliths to extract samples for palaeo-environmental analysis.
- vi Rescue or research driven excavation is conducted if required.





30 mm

Two of the many flint flakes recovered from context 7 during the 2003 excavation

Excavation in the summer of 2000 led to the discovery of over 300 Mesolithic pieces of worked and burnt flint from a submerged site lying 10-11m below ordnance datum. The site pre-dated 8,565-8,345 Cal BP (Beta-140104). In 2003 English Heritage funded a further excavation to characterise the landscape from which the archaeological material has been recovered, assessing the impact of human activity on the evolving landscape.

Excavations were conducted in a metre wide section cut into the cliff face with a smaller trench dropped into the seabed. Surface supply diving equipment

was employed for safety and enabling dive times of up to four hours.

Prior to the 2003 investigations, the large oak trees exposed in the peat on the seafloor around the site were believed to form the basal organic deposit, with roots extending into fresh water clays under small pockets of sand. New exposures in the trench, however, revealed a more complicated stratigraphy. A section was sampled using specially constructed monolith tins.

Initial assessment of the complex stratigraphic sequence suggests a number of events caused adaptations to

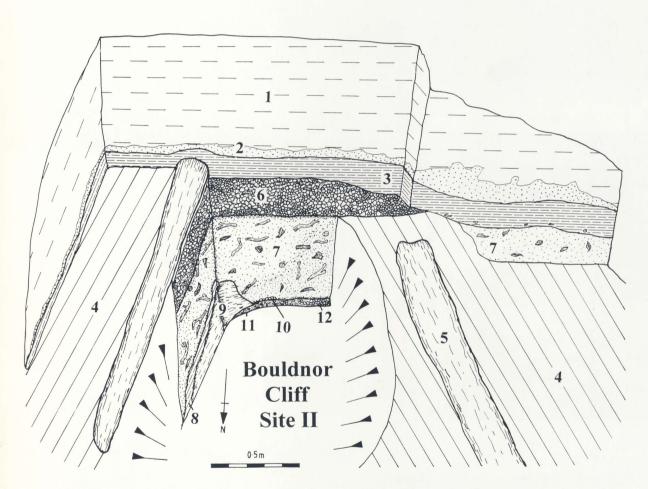


A fallen oak tree protrudes from the alluvial clays laid down over 8,000 years ago

the landscape (see plan below). The lowest exposed level (11 - 12) contained fluvial gravel lying within 500mm of fine sands and flint fragments. A small cluster of burnt flints were recovered from just above this horizon (10). This was covered by up to 550mm of fine grey silty sand containing freshly knapped flint flakes, worked cores and organic inclusions (7). This silty sand varied in hue, being much darker to the west of the trench. On the eastern side, timber (9) lay directly over the fine grained sand and flint fragments recorded at the bottom of the trench (11). This was covered by a peaty/humic seam, dipping to the north (8). Above this lay the fine grey silty sand (7) with flint flakes and organic inclusions. Central to the trench but not exposed in section to the west, were fluvial outwash gravels (6). These were recorded directly above the grey silty sand (7). The deposit contained a possible secondary archaeological

deposit of abraded Mesolithic and Upper Palaeolithic flints. The whole sequence was capped by a layer of peat dipping to the north and west (3), which in turn was covered by Holocene alluvial silts (1) laid down as the sea covered the landscape during the Flandrian Transgression. Layer 2 represents the interface between the peat and alluvium where the silts have become stained by vegetation.

Many samples were collected which are to be subject to dating and specialist analysis. Interpretation of the results will identify the potential archaeological and geomorphological significance of the drowned landscape and lead to a reconstruction of the events during a period that saw the rising sea engulf a continental shelf.



- 1 Silty grey alluvium
- 2 Silty alluvium with dark organic 'staining'
- 3 Peat deposit (in section)
- 4 Peat deposit covering sea bed
- 5 Fallen mesolithic oak trees
- 6 Gravel with timber inclusions and rolled worked flint
- 7 Fine grey sandy/silt with timber inclusions and freshly knapped flint
- 8 Peaty/humic deposit
- 9 Lower timber layer
- 10 Assemblage of Burnt flint
- 11 Course sand with flint and clastic material
- 12 Rounded gravel

Interpretation of Bouldnor Cliff Site II based on archaeological evidence and monolith samples



The Saxon Logboat from Langstone Harbour is uncovered and ready for lifting



Alum Bay II required re-survey during western SolMAP to record evidence of anchor damage

Students are given an opportunity to develop their recording skills on Eyersdown Hard in the upper Hamble

SolMAP project members take a well deserved rest between tides in Yarmouth harbour



Surface supply diver is 'dressed in' before a four hour dive off Bouldnor Cliff



Phil Harding demonstrates flint knapping to an enthralled audience during an archaeological Open Day at Fort Victoria

Rob Grice is the proud recipient of a magnificent Bekens of Cowes print, awarded after winning the 'Guess the Age' competition at the LHI Open Day, Fort Victoria

Diver following the prototype Underwater Diver Trail in Alum Bay

Eastern Solent Maritime Archaeology Project (ESolMAP)

During the 1990's HWTMA activities in the Eastern Solent had focused on investigating the anchorage site of Ryde Middle Bank and ground truthing remote sensing anomalies encountered during the 'Survey of the Solent'. ESolMAP added to work from previous projects with the ground truthing of charted wrecks and obstructions, investigating net snags and diver reports, and site survey of an 18th century warship.

The diving team was based in Southsea Leisure Park between 22 and 28 June 2003 and our dive boat for the week was 'Wight Spirit'. The project brought together a team of volunteers and professional divers and we were generously assisted by Mr Arthur Mack (local fisherman and HWTMA Member). The project focused on two areas of search and survey, with other dives to ground truth obstructions.

HMS Impregnable

Research on HMS Impregnable has come to fruition this year with the production of a site survey. HMS Impregnable, a 2nd rate warship built in 1786 in Deptford, had a colourful career which included action in the Glorious 1st June battle in 1794. Yet it was while engaged in more mundane duties that the ship would be wrecked. After escorting a convoy of ships from Lisbon in October 1799 the master was keen to make it into Portsmouth Harbour before nightfall, speeding towards its destination the crew soon realised that the ship was in shoal waters. HMS Impregnable ran aground and despite all efforts to

lighten the load the ship would not shift. Equipment and stores were taken from the vessel and the hull was abandoned to be sold to a Portsmouth salvage company. Reports suggest the wreck was stripped to the waterline and any available materials were recycled.

In June the site was re-located using a combination of transit marks provided by Arthur Mack and a magnetometer. The first pair of divers excitedly reported seeing four large concreted blocks and copper pins protruding between them. This description concurred with reports relayed by Arthur from 1981, and from the 308 SAA from 1988. Locating the site on day one meant that surveying could begin in earnest and continue for the whole week.

On initial inspection the remains of the wreck appear fairly unassuming, but on closer inspection more features become apparent. Four large 'blocks' dominate the site, these are the concreted iron ballast bars. This material has served to pin-down and preserve the remains of the lower hull. Lines of copper pins protrude between the blocks where once they would have been separated by timber. Looking down into these 'gullies' wooden structure is visible in places, a thin layer of sand and gravel protects it in most areas. Other tantalising wooden elements and pieces of copper protrude from the seabed around the main area of ballast blocks, hinting at further structure below.



The eastern SolMAP team prepare for ground truthing anomalies and survey of HMS Impregnable



Planning wreck of HMS Impregnable

Information was gathered in order to produce a plan of the remains. Several elevations were drawn across the site and photographs and video footage was taken. The surviving remnants are now being compared to the plans of the vessel to assess the remaining structure. Research is continuing into various aspects of the vessel, particularly the iron ballast blocks.

Horse Tail Sands

Reports of a large wooden vessel protruding from the edge of Horse Tail Sands had been relayed to Arthur Mack by a local fisherman and diver. As the location for the vessel was not specific the magnetometer was used to locate the sites. A large number of targets were encountered, particularly along the North edge of the sands.

One of the main targets which registered on the magnetometer was the site of UB21, a first World War submarine. This wreck has been heavily salvaged and dispersed since its loss while on tow in 1920. Little is recognisable amongst the twisted and broken pieces of rusting metal, although diver reports

confirmed the wreck's identity. The main spread of wreckage investigated was slightly south of the charted positions for the wreck.

Further drift dives located the source of many of the magnetometer readings, there are a large number of ammunition shells to the north of the sands, the source of these may be practice firings from the Solent Forts.

Divers did not locate the large wooden wreck although we aim to conduct further research in the future.

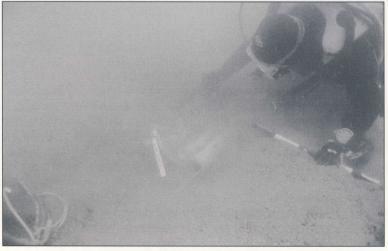
Western Solent Marine Archaeological Project (WSolMAP)

The first Eastern SolMAP did not detract from the HWTMA's work in the Western Solent. In addition to the projects at Bouldnor Cliff and the dive trail trials outlined earlier in the report, work under

the umbrella of Western SoIMAP included further investigations of the north west Solent submerged landscape. Ground truthing to investigate the fringes of the ancient Solent River did not reveal direct evidence this year although a modern ballast mound on the edge of the main channel was located.

The Needles protected Wreck Site was inspected and assessed in August, and anchor damage to the Alum Bay II wreck site was identified and recorded in July. Also in Alum Bay, samples laid earlier in the year

on behalf of Paul Simpson from the Isle of Wight Council Museums Service were recovered. They were placed beneath the sand on the seabed to monitor degradation of various materials.



Inspection of the wreck in Alum Bay and recovery of environmental samples

New Initiatives for the Warship Hazardous

The winter storms of 2002/2003 caused further damage to the Hazardous Protected wreck site. Freshly exposed timbers appeared on the east side of the wreck. Elements of cargo including barrel staves are visible for the first time and instability below two cannon has caused movement and split a concretion that joined them. Despite the ongoing degradation, proactive initiatives by the HWTMA have been a catalyst for multi-organisational collaboration to aid the Hazardous Project.



Exposed timbers on Hazardous site following winter storms

Towards the end of October 2002, Julie Satchell and Paola Palma worked with the Nautical Archaeological Society (NAS), Mark Jones of the Mary Rose Trust plus lain Grant and Peter Jolly of the Hazardous Project Team to run a NAS Concretion Opening course. A dozen participants removed concretions to reveal artefacts not seen for almost 300 years. The finds are undergoing first aid treatment and will be stabilized before being put on display.

The display is currently under review. A grant provided by English Nature through the Aggregates Levy Sustainability Fund (ALSF) is supporting its enhancement. Duplicate panels for a travelling

display are to complement the permanent exhibit in Earnley Gardens.

Work on the wreck site has focused on the planning the freshly exposed timbers and the monitoring of pins located at set points around the site. These have been put in place to record changes in the seabed relative to the structure.

The dive trail has required constant maintenance to regularly clean the numbers on the stations. Clement weather during the summer has enabled Wittering Divers to transport an increased number of visitors to the trail. English Heritage have provided a grant to help develop the dive trail and for the creation of an accompanying booklet.

Future plans for the project are to collate and digitise the archive while proposals are being prepared for a more active fieldwork programme on the wreck.



A new break in the concretion between two cannon grows as Hazardous wreck continues to degrade

SolMHER Database

Work continues on the HWTMA's important task of compiling and maintaining a Maritime Sites and Monuments Record for the Solent region. In keeping with current developments with terrestrial archaeological databases, the system has been named 'Solent Maritime Historic Environment Record' (SolMHER). This reflects the potential of the system for holding different 'layers' of information as it is linked to a Geographical Information System (GIS).

After several years beset with problems of database suitability and compatibility we now have the Exegesis HBSMR software installed. Progress is now being made in entering data gathered by the HWTMA over the past twelve years. Particular

challenges are the representation of submerged landscapes on the SMR.

In addition to entering data gathered during HWTMA projects, research continues into new sources of information. A particularly important aspect of this are the many contacts that have built up over the last twelve years with local sea users. The fostering of these relationships can lead to the HWTMA being given access to material which would otherwise remain unknown.

We would like to extend our thanks to all those fishermen, divers and foreshore walkers who have made their finds and collections available for recording.

The Archaeology of Chichester Harbour

The HWTMA worked closely with the Chichester Harbour Conservancy during 2002/2003. Geophysical survey throughout the harbour, a deskbased assessment and fieldwork investigations in Fishbourne Channel were completed with a final report presented in December 2002. A second report on a series of threatened hulks was compiled

early in the following year, all of which is contributing to the overall management in this area of exceptional beauty. Heritage initiatives in Chichester Harbour are ongoing and the HWTMA will continue to liaise with and advise the Conservancy to support these projects.

Wellies on the Weston Shore

Work on the Weston Shore has been prompted by finds of worked flint and archaeological features along the foreshore which have turned up over a number of years. The archaeological potential of the area has been recognised by the HWTMA and the current project is supported by Southampton City Council.

Investigations have been focused around fieldwalking opportunities over low water on several occasions. General fieldwalking across the shore has involved local volunteers and students, features and finds have been recorded by photography and plotted using Global Positioning Satellites (GPS). A range of different material is now in the project catalogue, which includes timber revetments, potential preserved forest remains and numerous find spots. The finds to date have mostly been worked flint, however pottery and clay pipe are also represented.

Controlled fieldwalking has taken place in an area identified as producing high numbers of worked flints by local resident Mr John Marlow. John led the team to a gravel spit which appears to run alongside on old palaeochannel. A line of fieldwalkers then successfully scoured the foreshore for flints while being tracked by GPS. As in the

previous year the area revealed a density of material indicating a favoured knapping site. This is further evidence that the productive coastal margins of the Solent were being utilized in prehistory and may be indicative of more artefacts.

The flints recovered during 2002/3 increased the collection gathered by John Marlow over the past 10 years. These have now been recorded along with recent finds. Maritime archaeology Masters students from the University of Southampton have been particularly active in the cataloguing process of measuring and drawing.

Further research and work is planned for the Weston Shore. This includes an auger survey of sub-surface deposits to investigate the potential presence of a palaeochannel bordering the archaeologically rich spit.



Volunteers locate prehistoric lithics as they wade through mud on the Weston Shore

The Itchen River Project

The Itchen River Project ran over a period of five years when the City of Southampton Archaeology Unit worked with the HWTMA and numerous volunteers to record the archaeological Heritage along the banks of the Itchen. The project concluded in December 2002 with a final report titled 'The Industrious Itchen: the ups and downs of a

distinguished waterway. The report looks a the history of the river and catalogues the known archaeological sites. It contains case studies to assess the management of the resource and highlights areas of concern. The report is currently being prepared for publication.

Hamble River Project

The Crown Estate has generously continued to fund our work on the Hamble River. This year has seen further fieldwalking at low tide, site survey of hards and quays in the Upper Hamble and work on a more comprehensive website for the project.

A key aim of the project is to enhance knowledge of the River's maritime archaeological resource. Through fieldwalking and survey we are involving local volunteers and students in recording their heritage. This helps to disseminate the information to a wider audience. The Hamble River Project has proved popular when recruiting volunteers and this year has been no exception.

Fieldwalking was conducted on the eastern side of the river mouth on the low spring tides. It was evident that there are fewer structures and features between Warsash, round the point and along to Hook compared to other areas of the river. It is open to the south westerly winds and as such is not ideal for accessing areas of settlement. This may be why less archaeological features have been discovered.

Following reports of an 'ancient' wooden wreck visible at particularly low tides, the mouth of the river was fieldwalked. The wreck was not exposed but local knowledge suggests the site is uncovered sporadically warranting further visits in the future.

Site surveys were carried out on two hards in the Upper Hamble. Harmsworth Hard and Eyersdown Hard have been selected for detailed recording. Harmsworth Hard has interesting multiple elements demonstrating how an area of river bank was utilized to construct a quay. A team of students and volunteers were introduced to the pleasures of surveying in a wet and muddy environment. This proved to be a valuable training ground providing experience in drawing scale plans and elevations and site photography. Initial work was conducted on Eyersdown Hard where a sketch plan was produced. Further study will hopefully be conducted next year.

Recording of the hards and quays of the Hamble is adding to knowledge of these long neglected maritime installations. They often provide an accessible and safe area for volunteers to survey, which helps to engage people with these unassuming features that once played a vital role in the daily life of the River.

All the information gathered from research and fieldwork is being brought together to compile a comprehensive project website which should allow information and images of sites to be viewed by a wide audience. Look out for the launch of this site early in 2004.

Annual Public Lecture: Our Eroding Heritage

The subject of the well attended Annual Public Lecture for 2002 was active changes in the Isle of Wight coastline. Robin McInnes of the Isle of Wight Council and David Tomalin, visiting fellow from the University of Southampton, enthralled the audience with a talk entitled 'Our Eroding Heritage - a lesson from LIFE'. Robin and David are the project co-ordinators for European Financial Instrument for the Environment (LIFE).

Robin began with an overview of the rock types found on the Isle of Wight which developed over millions of years. He contrasted the major landslide complex at Ventnor on the southern coast to the severed chalk ridge of the Needles with the creeks and estuaries of the north coast. He illustrated examples of how weathering and erosion caused by heavy rainfall has triggered ground instability, especially in densely populated areas such as Sandown Bay.

Ongoing land slips along the south western coastline have caused tension cracks under the Military Road, which has necessitated repairs. Stability schemes have been proposed which have cost over 2 million pounds over the last 2 years. On the northern side of the Island, where the land is low lying, flooding during wet periods presents a threat to economic assets. Robin outlined the cause and effects of natural hazards such as geological conditions, climate change, sea level rise and also those of human activity. We were also reminded that it is as important to leave some areas to the forces of nature. Eroding cliffs add to the sediment budget by being moved around by longshore drift and adding to coastline replenishment.

The Isle of Wight landslide management strategy was set up to try to understand the geology of the island and government funding enabled maps for

underlying geology. A database was created to compile a record of damage. At Ventnor, study of the longest continuous rainfall records in the country (since 1837) against land movement has shown a direct correlation between land slip problems and wetter years.

Robin discussed the setting up of the LIFE programme and with impressive slides showed examples of landslides and coastal erosion in Britain, Italy and France. Finally we were warned of increasing temperatures and a predicted rise in winter rainfall, a cocktail that will increase the risk of instability in the years ahead.

A short break ensued to let the message sink in, while many of the audience partook in an ice cream reminiscent of the interval at the cinema (another thing that has been eroded away!). David Tomalin's talk continued with the theme of a continually changing coastline through coastal submergence and land instability. The drainage from the ancient lands around the island underlie many of the current ria inlets which can all be followed to a drowned river channel known as the Solent River. As far back as 1861, William Fox, rector of Brighstone, postulated the Solent River which started a debate still ongoing today. Now, modern technologies have enabled seismic investigations to detect these ancient channels. In the 1970's French oceanographers found a complex of river channels in the English Channel.

Following the melting of the ice sheets at the end of the last Ice Age a great weight was removed from Northern Britain. As a result the area lifted while the south began to subside. It still continues to do so today. The question of how we measure these changes and their longevity was addressed. Sediment cores can be obtained from which dry

years, wet years, drought and floods can be ascertained. David pointed out that we should remember that the past is a model of what could happen again tomorrow. Evidence of inundated Neolithic settlements exposed along the edge of modern estuaries, axe heads found well below the high water mark and wickerwork fencing of ancient fish traps were cited as archaeological examples testifying past change in sea level. Other regions containing early settlements effected by sea level change included the Medoc on the west coast of France and the River Shannon in Eire, all of which are outlined in detail in the LIFE report.

Back on the Isle of Wight, sites where archaeological material has aided our understanding of coastal evolution include ancient dune deposits located at Redcliffe east of Sandown, and Ladder Chine which has yielded Bronze Age pottery. There is a sedimentary archive at the River Yar which dates back 12,000 years BC and a Neolithic track way dated around 3,000 BC located at Quarr beach. Investigation of the underwater cliffs off Yarmouth has yielded a landscape of ancient trees, and sediment samples show evidence of a 7m sea level rise between 6,000 and 4,000 BC. This is all helping to find a primary date for the Solent.

David pointed out that the presence of undisturbed archaeology on ancient landscapes can demonstrate stability. This information can be invaluable to coastal planners when making informed decisions ahead of development.

Finally David showed pictures from the CZCM satellite passing over the English Channel illustrating sediment from erosion around the Isle of Wight and suggested that it seems to be dissolving like an old Alkaseltsa!!



The Trust Director introduces Robin McInnes at the HWTMA Annual Lecture in the Medina Theatre

Friends of the Trust

The last year has proved to be a bumper year for our Friends. We have welcomed many new faces on board. The success of this has been largely due to events that the HWTMA organised which have included:

Submerged Secrets of the Solent - A talk with Ruth Waller from the Isle of Wight Archaeology Centre and Garry Momber from HWTMA.

The Tennyson Trail - A tour of local historic monuments and sites unique to the Isle of Wight. Frank Basford from the Isle of Wight Archaeology Centre kindly led the group and many joined the Friends of the Trust as a result.

Shipwreck on the Needles - A talk at Fort Victoria with Dr David Tomalin and Garry Momber.



Friends of the Trust work hard to enhance the Maritime Heritage Exhibition in the winter of 2003



Friends of the Trust follow Frank Basford on an LHI sponsored archaeological tour

Both the Eastern and Western SolMAP's this year included many Friends taking part and enjoying the good weather.

Saturday 16th August saw our Open Day at Fort Victoria, with star attraction, Phil Harding from Channel 4's Time Team, demonstrating the ancient art of Flint Knapping. The event proved to be very popular with over 300 visitors attending! The Friends helped us out with the organising and manning of stands and of course the tidying up! Our special thanks go to Anna O'Donoghue, Stuart Heath, and Dave (the Diver) Johnston.

Again with the seasonal jobs that needed to be done at Fort Victoria, the Friends didn't let us down. Many came armed with overalls and enthusiasm to make the newly designed exhibition look its best! Special thanks to Ronald Barclay, B A Corbin, John Gummer, Christine Harman, Malcolm Leech, Dave Mallard, Marigold Morphy, Sean O'Donoghue and Meg Sparks.

HWTMA Staff and Work Placements

There have been a number of new faces working for the HWTMA in the last twelve months. We welcome Andrea Bushell to the office as Administrator, Andrea comes to us from a varied background including customer services, secretarial and document control. After settling in very quickly Andrea has taken on the administrative tasks of the HWTMA including the Friends and is already proving indispensable!

Funding from English Heritage for the Bouldnor Cliff project has allowed the HWTMA to take on Jan Gillespie as a part-time Project Officer. Jan has a background in oceanography and geology and over the last few years has gained practical archaeological experience with the HWTMA. This, combined with her diving skills, has meant she has brought a range of experiences to the project.

Working on project specific tasks we have Gavin Stone, who originally joined the HWTMA as a work experience student in 2001. Since then he has gained a BA in Archaeology and History from Exeter where he specialised in wetland archaeology. His enthusiasm and skills have made a big difference to

the Fort Victoria enhancements, the LHI project, both SolMAP projects and the logboat excavation.

Sarah Holland is currently studying for a PhD in Maritime Archaeology at Southampton University. She has devoted some of her precious spare time to work with the HWTMA, particularly on the Hazardous project.

We have also hosted another work placement from Bournemouth University. Conan Parsons joined us for five weeks, during which he was thrown full force into the summer fieldwork season. Read Conan's report on his experience with the HWTMA below.

A Month in Trust

Spending a month working within an organisation which is solely funded by grants and generous donations, a student such as myself can gain exceptional insight into how the HWTMA works as cheaply and effectively as possible.

One way in which this organisation functions is by sheer devotion to the job; even when members of staff were at home they were ringing us, or we were ringing them, especially in the run up to the Western Solent Marine Archaeology Project (SolMAP).

During my time with the HWTMA I also felt the emphasis on increasing public awareness of the Solent's rich past, and with two SolMAP's this year, getting volunteers involved. This is what the Trust does most of the year round, when they actually get to survey or excavate it's just a bonus of the job!

Unlike many commercial companies HWTMA does take the human factor into consideration when

planning events, be it organising a barbecue when on site (for morale purposes of course), keeping Friends and Members up to date on current events, or constantly staying in contact with volunteers to make sure everything is okay. These volunteers aren't paid as with commercial organisations, they are taking up their free time to aid the HWTMA, doing something they enjoy, and hopefully find interesting.

Back at the office when there are no events planned there is still plenty to do - I don't know who will get time to do some of it now I'm not there! I was involved with cataloguing finds, sketching core samples, making an inventory of the storage container, helping to organise the MSMR data and researching logboats.

These people have a lot of patience, I have nothing but respect for that, and hope they continue doing a good job, as cost effectively as possible.

Conan Parsons

Reports & Publicity

- Annual Report
- 2003 Newsletter
- The Industrious Itchen: The ups and downs of a distinguished waterway
- Long Island Project 2002, Langstone Harbour, Hampshire
- The Hamble River Project, 2nd Interim Report
- Geophysical Survey of Chichester Harbour: High Resolution Side Scan Sonar Survey Interpretation
- The Chichester Harbour Project 2001/2002
- · 'Impregnable' Scuba World
- CBA Wessex Newsletter

- ◆ BBC South Today
- Isle of Wight County Press
- Southampton Daily Echo
- ◆ Portsmouth News
- ◆ Times Higher Education Supplement
- ◆ BBC Online
- ♦ BBC Radio 4
- ◆ BBC Radio Solent
- ◆ BBC Radio 3 Southern Counties
- ◆ Archeo
- Southampton TV
- ◆ Portsmouth TV
- ◆ Solent TV

Spreading the Word

The task of disseminating the results of the HWTMA research and fieldwork continues nationally and internationally. Talks have been given to professional seminars, at academic conferences, to local interest groups and at our Public Lecture. Talks at conferences and seminars included, Severn Estuary Levels Research Group Annual Conference (Keynote Speech), Institute of Field Archaeology Annual Conference, Brading Roman Villa conference, World Archaeology Congress 5th conference, Later Palaeolithic and Mesolithic Settlement of the North Sea Basin conference, North Sea Submarine Prehistory seminar, English Heritage (EH) Maritime Military Seminar, Standing Conference On Problems Associated with the Coastline full meeting, Local Heritage Initiative regional conference, Local Heritage Initiative presentations and Open Days at Fort Victoria, Aggregate Levy Sustainability Fund seminar, EH Maritime Archaeology Training seminar, University of Portsmouth/Nautical Archaeology Society (NAS) Maritime Archaeology Seminar, NAS Prehistoric Archaeology Seminar, Portsmouth City Council Seminar, University of Southampton student presentation and a NAS archaeological Concretion Opening Course.

Talks to local groups included the Whiteparish Local History Society, Royal Solent Yacht Club, Isle of Wight Industrial Archaeology Society, Lymington Probus Club, Winton Probus Club, West Wight Probus Club, the Wallington Village Hall Community Group, Southampton Medical Society and the Royal

Southampton Yacht Club. The mobile exhibition has been displayed at the NAS conference, IFA Conference, LHI Opens days and at Rock Watch at the Southampton Oceanography Centre.

The HWTMA continues to be represented at meetings of the Standing Conference on Problems Associated with the Coastline, the Solent Forum, the Institute of Field Archaeology Marine Affairs Group, the Joint Nautical Archaeology Policy Committee, the Executive Committee of the Nautical Archaeology Society and the Underwater Science Group of the Society for Underwater Technology, Hamble Harbour Advisory Committee, the Poole Harbour Heritage Project Limited Steering Committee & the Solent European Marine Sites Strategic Advisory Group.

Additional coverage of our activities has appeared on national television. The HWTMA featured in three episodes of the Wreck Detective series, focusing on the wrecks of the Hazardous, HMS Pomone and Mingary Castle. The excavation of the Langstone Logboat witnessed a flurry of local coverage including BBC South Today, Portsmouth TV and a variety of radio stations, newspapers and websites (see page 21).

The Trust's website (www.soc.soton.ac.uk/HWTMA) is regularly updated with information on fieldwork, projects, events and other HWTMA activities.

Dates for your Diary

2003 Annual Public Lecture

The HWTMA's 12th Annual Public Lecture will be given this year by Nigel Nayling. Nigel's topic will be timber, tree-rings and maritime archaeology in a lecture entitled 'Leafing Through Time'. It will take place in lecture theatre A, Avenue Campus, Southampton on Thursday 27 November at 7pm.

NAS Annual Conference 2003

The conference takes place on Saturday 8th November at the University of Portsmouth. Speakers include: R Parthesius (Avondster Project), C Martin (Swan), I McCartney (Operation Deadlight), D Elkin (HMS Swift), N Nayling (Newport Boat), J Adams (TBA), J Parlour (Meta Caterina Von Flensbury), J Hopkins (Save Ontario Shipwrecks), C Brandon (Roman Concrete), B Kaye (Monitoring Shipwrecks), J Satchell (HMS Impregnable).

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Standing Conference of Problems Associated with the Coastline

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Dr J Dix Dr R Scaife

Mr A Harvey

Langstone Harbour Master

British Ocean Sediment Core Research Facility

Isle of Wight Council

Southampton Oceanography Centre

Seaflex Ltd

Mr N Nayling Mr A Mack

Dr D Tomalin

Hamble Harbour Authority

Mr D Parham

Seatech Commercial Diving Services Ltd

Mr N Blake

Cosalt International Ltd

Mr C Cockburn

Mary Rose Trust

Dave Wendes, Wight Spirit Charters

Dave Mallard

Stuart McVey, CCO

Tanya Cooper

Mr P Simpson

Chichester Harbour Conservancy

Mr S Campbell-Curtis

And a big thank you to all our volunteers whose help and support have enabled us to achieve the project results that have been outlined in this report.

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