

# A Year in Depth

SOLENT ARCHAEOLOGICAL REVIEW 2003/2004











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## **FOREWORD**

Outreach, education and research have been the primary objectives of the Trust over the last year. New initiatives and developing technologies, such as video and web sites, are enabling us to reach a greater number of people thereby giving access to the submerged cultural resource for those who cannot dive. New fieldwork and research by the Trust team and volunteers continues to provide the building blocks upon which all our outreach programmes are based.

Thirteen years of operating has provided the Trust with a sound basis from which to move forward. The past year has seen the employment of new staff and the formation of a trading company: Maritime Archaeology Ltd. The staff are enhancing the Trust's capabilities to advance its charitable aims while our trading company will provide an income to support the work in future years.

The 2004 fieldwork season has been yet another busy one. Work has continued on projects in the Hamble River which is to be the subject of a new 'Archaeological Companion' booklet being developed. Hulk recording helped assess the potential of vessels in Chichester Harbour. The River Itchen Project popular publication is in its final draft. The Weston Shore and Langstone Harbour have witnessed further survey while a new site is being investigated at low water near Lepe. Underwater, investigations in the eastern Solent have led to the inspection and recording of a newly discovered wooden ship. In the western Solent, the submerged landscape off Bouldnor Cliff and the New Forest continue to reveal their secrets. The diver trail on the *Hazardous* shipwreck is going from strength to strength with enhancements to the display at Earnley gardens and the production of a booklet for the non-diver. Comparable trails have now been laid in Alum Bay and on the Needles which should be open to visitors next year. On dry land, the Maritime Heritage Exhibition at Fort Victoria now has a full time Exhibitions & Education Officer, a Project Officer and part time staff. A series of education and open days have attracted hundreds of visitors. Work at the Fort has seen the creation of an education resource 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 aims 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.

The Trust welcomes its new staff and project officers, Claire Campbell, Natasha Fry, Gavin Stone, Simon Aubertin-Watson and Robert Proctor, and I take this opportunity to thank them along with existing staff for their contribution to the Trust's success. I would also like to thank Hampshire County Council, the Isle of Wight Council, English Heritage, Southampton City Council, Isle of Wight Economic Partnership's Leader + programme, the Local Heritage Initiative, the Crown Estate, the Department for Culture Media and Sport and the Hampshire and Isle of Wight Wildlife Trust 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.

I am very pleased to have been Chairman of the Trust for the last four years as it has grown from strength to strength and would also thank Maldwin Drummond who over the last six months has taken on the role as Acting Chairman.

**DAVID GUY** 

Dail 8-1

Chairman
October 2004

## 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 County 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.

#### Eastern SolMAP 2004

Following last year's successful Eastern Solent Marine Archaeology Project (ESolMAP) the area was revisited in June 2004. A range of different sites was highlighted for possible investigation, these included known wreck sites, unidentified wrecks, fishermen's net snags and charted anomalies. Due to the large number of potential sites the dive team, consisting of professionals and volunteers, concentrated their efforts along a stretch of seabed offshore from Hayling Island to Portsmouth.

#### Unidentified Wreck on Horse Tail Sands

During ESoIMAP we were assisted by HWTMA member and local fisherman Mr Arthur Mack, he let us know that fellow fisherman Mr Melvin Gofton had snagged his nets close to Horse Tail Sands. A brief diving inspection by HWTMA Trustee Mr John Bingeman revealed a wooden vessel with copper fastening pins. This made the site an obvious target for investigation in 2004.

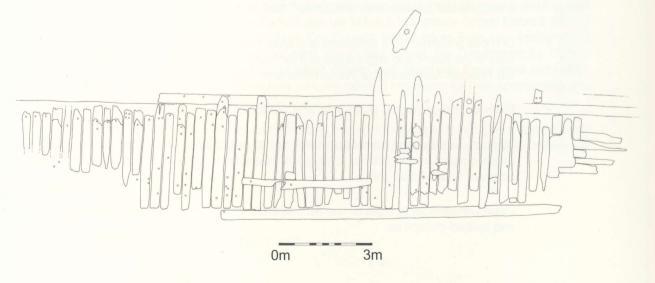
The site was located on the first day of diving; the excited faces of the first pair to surface confirmed that there was something special on the seabed. The site is extensive, with large areas of coherent timber hull structure which lie flush with the seabed in two main sections.

An exciting find at the western end of the site was an iron cannon, from its proportions it appears that we may be dealing with a carronade. Only one other gun was found around the site and this was a small piece located off the west of the wooden remains.

The site survey generated a plan of the wreck remains, which spanned a distance of over 40 metres. An offset survey at a scale of 1:20 has provided information on the dimensions of these timber elements and the positions of the fastenings. We recovered a number of copper pins for analysis to help with dating the vessel and other finds included some sherds of pottery.

Investigation into the site's identity continued back in the office. We have been lucky to have the assistance of the Archaeology and Historic Environment Group, Bournemouth University who have undertaken an initial analysis of the copper pins. It would seem that the smaller fastening pins are made of copper, while the bigger pins contain a larger amount of zinc indicating that they are a metal closer to brass, they may even be yellow metal which is often referred to as 'Muntz' metal. This could help date the vessel, as yellow metal was not used extensively until the second quarter of the 19th century.

Investigations revealed that the wreck lies in an area that has been licensed for aggregate extraction by United Marine Aggregates Ltd (UMA). Contact with UMA resulted in a dredging exclusion area being applied to the site almost immediately. We are pleased to have had such a swift and positive response from UMA to help ensure that the wreck site will not be damaged by future dredging activity. We now look forward to discovering the identity of our mystery wreck site through research and further fieldwork.



Site plan of the western section of the unidentified wreck on Horse Tail Sands



Environmental samples are recovered from HMS Impregnable wreck site

#### **HMS** Impregnable

The site of HMS *Impregnable* was inspected for any changes that might have occurred since the survey in 2003. Visible on the seabed are prominent blocks of concreted iron ballast which were once in the lower hull of the ship. In between these blocks are large copper pins, the floor timbers that were once fastened to the frames are now gone.

The site of this 2nd rate ship of the line, which sank in 1799, appears to have been relatively stable over the past year with only a small localised change in the seabed levels. Measurements were taken from designated points on the ballast blocks to the seabed, these records will help us monitor any changes more effectively. We collected seabed samples from two areas of the site, which will be analysed to help tell us more about the

environmental conditions and the possible effects these may be having on the wreck remains.

To complement our diving activities we have been researching the history of HMS *Impregnable* and gathering evidence on the seabed remains. Over the past season we have been assisted by Mr Richard Larn and the 308 SAA diving group (Hazardous Project team). They have been involved with diving on the site at different times over the past 25 years since the initial discovery and identification. Thanks to their generous provision of information we are building a picture of the site over time. Although relative short term stability has been observed it would seem that some significant changes have occurred since its discovery.



The volunteers are debriefed after the day's diving

## The Hamble River Project

Along and within the shores of the River Hamble lies a wealth of archaeological material. Despite the developments in the lower reaches of the river a remarkable number of sites remain as a testament to the past maritime history and archaeology of the area. The Hamble River Project aims to investigate and record this maritime archaeology to ensure that sites and finds are included in the Sites and Monuments Record for Hampshire and the National Monuments Record.

To complement our practical archaeological work on site we have been developing a range of education and dissemination initiatives.

#### Intertidal Fieldwork

Numerous fieldwork trips to the river have been undertaken this year, utilising HWTMA staff, volunteers and students. We have been continuing work to enhance knowledge of the visible archaeological remains.

Survey work has been carried out on sites identified as a priority for more detailed recording. This has included hulks and wharves up and down the river. In the upper Hamble a survey of Eyersdown Hard has recorded all the various timber elements that

have been used to build up the river bank to enable ships and boats to come along side.

Students from the University of Southampton have surveyed the hulk of an old barge, which has been abandoned in a creek of the Botley arm of the upper river. This hulk is believed to be the remains of the Wessex which was built in 1918 in Littlehampton and spent its life as a coasting barge.

South of Hamble village in the marshy creeks leading into the river lie a number of hulked vessels. In many cases these are only visible as a few frames and a keel where much of the upper structure has gone leaving only the lower hull preserved in the mud. One such vessel has been surveyed this year. We now have a scale plan of the wooden remains although further research is necessary to reveal its name and enable us to find out more about its history.

In addition to investigations of the visible archaeology an auger investigation close to the Institute of Maritime Studies in the lower Hamble below Warsash has been carried out. The augers revealed evidence of peat deposits buried almost two metres below the current foreshore. A substantial peat layer measuring over 1.5 metres thick was



Volunteers survey Eyersdown Hard in the Upper Hamble



A hulk on the west bank of the river is recorded by students from the University of Southampton

recorded. This shows evidence of past sea level change and is adding to our knowledge of the development of the Solent and its tributaries in prehistoric times.

In June, Trust staff aided the Hampshire & Isle of Wight Police Search and Recovery Team. The police had been alerted to a find of human remains from the foreshore. The bones were recovered during initial searches which led to the suspicion that they might be archaeological and the Police felt the investigations could benefit from a more systematic approach. Consequently, the HWTMA were contacted to help. Employing archaeological techniques under the guidance of HWTMA staff, further bones were discovered and their relationships defined. We were very impressed with the Police equipment for working on mud - we hope to be able to work with them again in the future.

#### Hamble sites go global!

In order to make the information we are gathering about the sites and finds on the river available to a wide audience we have redeveloped the 'Hamble River Project' web pages. These now include descriptive, photographic and graphic information from the project catalogue.

The site allows you to search for information in a variety of ways - by geographical location, by date or by site type/ theme. This should allow the viewer to gain quick and easy access to information. It also contains details on how you might be able to help the Hamble River Project. Many of the remains of old hulks found on the foreshore are currently unidentified; we often rely on local people providing information, photographs or clues to the identity of sites. Please get in touch if you can help us discover more about the sites around the river. We will continue expanding the site as we gather more information.

See the Hamble River Project webpages: www.hwtma.org.uk/projects/hamble

# In need of an archaeological companion?

As a new outreach initiative we are developing an archaeological foreshore companion for the Hamble River. Supported by the Crown Estate we are hoping that this booklet will enable walkers, visitors, sailors and anyone interested in their surrounding environment to recognise and appreciate their maritime heritage.

The splash proof booklet takes a period based approach and includes information on foreshore sites and finds from the Hamble River, the Solent area and nationally. This full colour booklet will contain plenty of images to illustrate the diverse and numerous types of archaeology that can be discovered around this and other rivers, harbours and estuaries. The booklet is due for publication in January 2005. Please get in touch if you require further details about availability.

#### Grace-ing the River

Increasing the public knowledge and enjoyment of maritime archaeology is one of the principal aims of the HWTMA. Thus, we were happy to support the work of the Time Team when they filmed an instalment for their new series based around the investigation of the Medieval protected wreck site of the *Grace Dieu*.

The Time Team utilised the HWTMA catalogue of archaeological sites and finds and research to help set up the programme and their story line. Look out for the HWTMA Archaeological Officer, Julie Satchell, and our Trustee, Dr Jon Adams (who was leading the underwater excavation) when the programme is aired.

## **Investigations in Langstone Harbour**

Following last year's excavation of the Langstone Logboat the HWTMA has been busy with post excavation work. The early Saxon logboat was raised from the intertidal mud by a team of HWTMA staff and volunteers in September 2003. The project has been generously supported by John and Jane Bingeman.

Through the winter months, work to clean and draw all of the pieces of the fragmentary logboat boat continued. The work in progress was viewed by a range of guests during a 'logboat visit day' in November and a special viewing for the Maritime Archaeology Masters Students from the University of Southampton. The visit day served as a way of showing all the individuals and organisations who had helped with the excavation how things were progressing. The viewing arranged for the students was designed to present detail of the project planning, management and methodology, to help demonstrate all the tasks involved in such a project.

When each piece of the logboat had been drawn and photographed it was reassembled for further recording and analysis. The boat was studied by Nigel Nayling, University of Lampeter, for aspects of wood technology. He determined that the tree used was a fast grown oak and that it was not a very good specimen! This was shown by the high number of knots within the boat's structure.

We were hoping that Nigel would be able to carry out dendrochronological dating on the logboat, however, there were not enough rings present in the wood for a good sample to be taken. A second radio carbon date will now be acquired from a piece of wood from close to the heartwood - sapwood boundary which may enable a felling date for the tree to be obtained. This will help confirm the original radio carbon date of AD400-620.

The logboat is now with the Mary Rose Trust for conservation, which should take around two years before completion. After this the boat will be passed to Portsmouth City Museum for curation and display alongside other finds from Langstone Harbour.

#### Back out in the Field....

Our fieldwork out in the Harbour has continued this year. During August a group of volunteers led by HWTMA staff and HWTMA member Arthur Mack ventured back out onto the shores of Long Island and North Binness Island. Investigations focused on an area rich in Roman pottery along the shores of North Binness Island, which was recorded and collected to prevent its loss to the harbour waters. Funds are now being sought to enable a study and report of this Roman Pottery Collection.

The logboat site was also revisited to probe and search for other pieces of the fragmentary logboat close to the excavation site. Unfortunately it appears that what was recovered last year is all that remains of the original boat. Other work included an inspection of a Bronze Age cremation urn eroding from the shores of Long Island and a potential posthole close to previous Bronze Age finds.



Volunteers investigate the shores of Long Island

## Submerged Landscapes of the Western Solent

The underwater cliff face at Bouldnor rises from the remains of a drowned forest 12 metres beneath the western Solent. Swimming over the remnants of this lost land has an eeriness which conjures up images of once mighty oaks standing proud on the banks of an ancient valley. It was a landscape crossed by waterways around which Mesolithic people camped, created flint tools and harvested the rich local resources.

This is the deepest site of its type to be identified in British territorial waters, radio carbon dated to 8,565-8,345 years BP. Sampling has shown that it is probably the oldest sequence of oak in Britain. As the coastline was in continual retreat during this period, the discovery is very important and reinforces the need to further investigate submerged coastal environments.

This year has seen an assessment of the work conducted during the 2003 English Heritage funded excavation. Over a hundred worked and burnt flints were discovered from in and around the excavation site. This was complemented by palaeontological investigation of the sediments collected by divers using specially constructed monolith tins, and bulk sediment samples. The pioneering fieldwork has shown that the site has a high potential for preservation, but is subject to erosion due to the strong tidal flow in the deeply scoured western Solent.

Environmental specialists have been analysing pollen, plant and insect remains. Their work has revealed a changing environment which saw pine become dominated by an oak and hazel woodland, with alder probably fringing the rivers and streams.

Hazel nuts, which had been nibbled by rodents and terrestrial insects, were amongst the remains, and the deposit also contained carbonised hazel nut fragments and oak charcoal. This is significant as waterlogged hazel nuts may be the food waste of rodents, although carbonised nutshell fragments relate to human occupation activity. This discovery is quite exciting as food remains from the Mesolithic in southern England are rare. At this time the on-site sedimentological characteristics suggest that the habitat may have been a semistable river bar, allowing possible summer seasonal Mesolithic encampments to take advantage of the local resources.

Of the flint pieces (lithics) discovered, more than 40 are struck flakes in a remarkably fresh and sharp condition. The knapping process shows evidence that it was carried out with the aid of an antler or bone hammer, a technique confirmed by archaeologist Phil Harding's experiments in replicating the flint industry at this site. The sharp edge blades have signs of re-use and to learn more, examination by photomicrophotography at high levels of magnification is to take place during the analysis phase of the project. A surprising discovery was that of the tip of a flint axe displaying a uniform and bifacially prepared cutting edge similar to axes of Neolithic type (2000 years later), this is an unusual occurrence in a British Mesolithic context.

Analysis of the sediments characteristics demonstrates a changing vegetation with conditions becoming wetter. The diatom assemblage shows brackish water, salt marsh or mudflat habitat before complete marine inundation occurred.

On the opposite side of the Solent at Pitts Deep (another submerged landscape) investigation by divers has revealed a sloping peat platform which suggests a riverbank. This site was excavated in 2000. Since that time the primary cause of erosion would appear to be piddock infestation resulting in many holes in the sediment that underpins the peat face. Investigating this area will help us understand the wider landscape of the Western Solent. Further analysis will take place on the material recovered over the next year. This will help to shed light on this very important and interesting site.



Diver inspecting submerged landscape by Bouldnor Cliff excavation

## Ship & Shore: Archaeology Roundup



Auger sampling on the Weston Shore

#### **Weston Shore**

The Weston Shore is a relatively undeveloped stretch of shoreline that overlooks the busy port of Southampton. It is an area of high archaeological potential which has been subject to research and fieldwork by the HWTMA. This has included consulting a range of maps and documents and the more practical task of an auger survey. The survey concentrated on an area where there appears to have been a palaeochannel which ran across the shore heading for the Solent river when water levels were much lower than today. This is the same area from where we have previously reported finding a number of worked flints.

#### Lepe

Investigations of worked stone blocks and timbers have begun on the foreshore at Lepe. The site, that would appear to be a shipwreck, was brought to our attention by Maldwin Drummond.

An inspection of the remains at low water revealed the stone blocks, however, no timber is currently visible above the foreshore. The date and identity of the vessel is unknown. Some information is known from a newspaper article detailing its initial discovery in 1938.

Further fieldwork is planned for the end of September which aims to investigate the blocks to see if there are any associated timbers buried in the foreshore. If any of the ship features remain they would help to date or identify the vessel.

#### Yarmouth Roads

During 2004, the HWTMA Archaeological Officer became the Licensee for the Yarmouth Roads Protected Wreck Site. This mid 16th century vessel was discovered in 1984 during the IOW Maritime Heritage Project. Parts of the wreck were investigated through excavation and finds were raised, recorded and conserved. This project was one of the driving forces behind the formation of the HWTMA, so we are pleased to be actively involved in the site.

Diving on the wreck site showed that there are some timbers visible on the seabed. Areas of the site were covered in sand bags at the end of the 1980's excavation work. The sandbags are still visible, although some are now torn and degraded. Photographs of the site were taken, these will aid site monitoring between seasons by providing a visual record of the wreck remains.

#### **IFA Conference 2004**

The work of the HWTMA featured in two sessions at the Institute of Field Archaeologists conference held in Liverpool in April 2004. This event gave the chance to present results of HWTMA archaeological fieldwork and research to members of the profession. Garry Momber's paper included the most recent findings from the investigation of Bouldnor Cliff and how it can help inform our interpretation of Mesolithic occupation. Julie Satchell presented a talk on the Langstone logboat describing the detail of the excavation, but also the wider issues of the size of the boat, its abandonment position and the likelihood of finding further vessels around the Solent shores.

#### **OASIS Project**

The OASIS project is investigating 'Offshore Aggregates and Species Inhabiting historic Shipwrecks'. Our aim is to demonstrate the importance of the marine environment as a whole, highlighting the inter-dependence of seabed deposits, sea life and historic shipwrecks. The marine areas around the Isle of Wight are among some of the most important sand and gravel extraction areas in UK waters. Alongside, on and within these natural resources exist the traces of cultural heritage with evidence of early human occupation and shipwrecks. The wrecks now form reefs which are teeming with marine life.

The project focuses on wreck sites in the West Wight area. Diving took place on these artificial habitats to record the marine life living on them. The information was used for the Marine Week event held at Fort Victoria and will be used for new displays.

#### **EFCHED**

The experience gained from working on submerged landscapes around the Solent has placed the HWTMA in a unique position within the UK. As a result, the HWTMA has been invited to participate in the International Environmental Factors in the Chronology of Human Evolution and Dispersal (EFCHED) project. This project is looking to chart the movement of early humans when sea levels were much lower than today.

#### Milton Lock

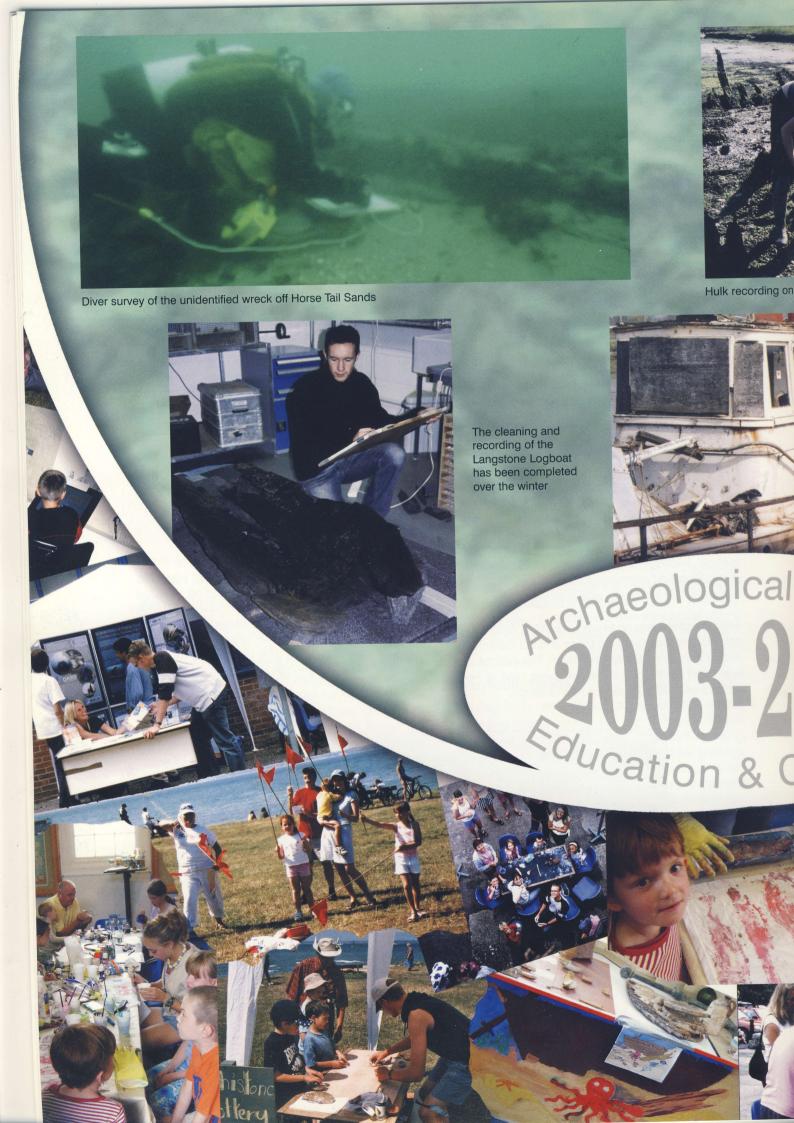
Following a request by the Langstone Harbour Master the HWTMA carried out a survey of the remains of wooden posts which once formed the entrance to Milton Sea Lock. The posts are now reduced to stumps which protrude from the foreshore up to a height of around 0.75 metres. Survey concentrated on posts to the south edge of the lock entrance. Posts on the opposite side have already been cut off and are visible as small stumps. The remaining posts are considered to be a hazard to navigation so will be reduced in height.

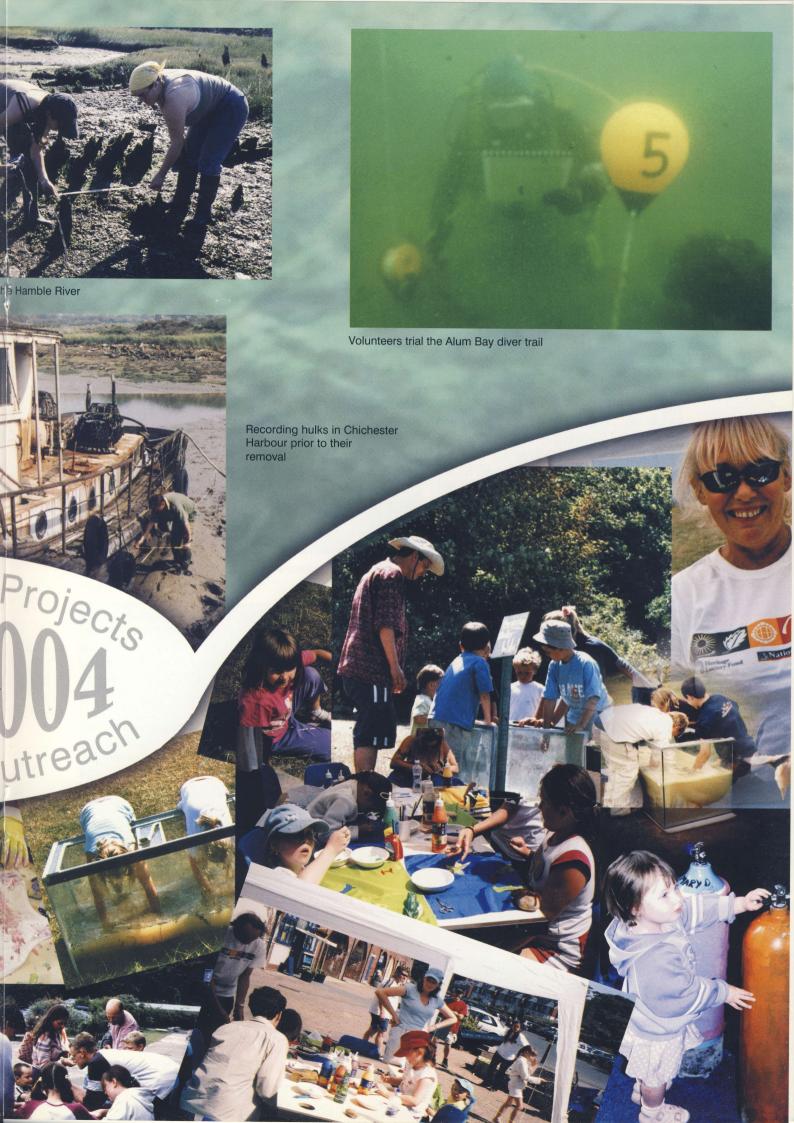
#### **Chichester Hulk Survey**

During April the HWTMA undertook a survey of four hulks on behalf of the Chichester Harbour Conservancy. These vessels are due to be removed as part of the Lottery Funded Project which will focus on a number of environmental projects around the harbour. A photographic and drawn record of the vessels was completed and preliminary research into their history and origin carried out.



Surveying one of the hulks in Chichester Harbour prior to its removal





## **Increasing Access for All: Events and Exhibitions**

#### **Display Enhancements**

The Sunken History Exhibition at Fort Victoria on the Isle of Wight has undergone a facelift during the winter of 2003/04 to provide a more welcoming and accessible environment. We have maintained and reinforced the themed sections of the exhibition by redisplaying the artefacts and information as well as updating our mediums of interpretation. This has been complemented by the employment of two part time exhibition assistants, one for the full season and one for activity days throughout the summer holidays.

The majority of the original information panels have been redesigned to increase access and understanding for children, those with visual impairments and people with learning difficulties. New panels have been installed which increase the depth of knowledge disseminated. These include displays on the protected shipwrecks around the Solent, excavation on the Mesolithic site at Bouldnor Cliff and the importance of protecting our maritime heritage.

There are new artefacts on show in the exhibition. Through displaying physical objects, we are increasing the impact of the visitors' experience and their appreciation of maritime archaeology. This is aided by redisplaying previous artefacts with increased interpretation. Research into some of the



Children learn about local Protected Wrecks

artefacts donated over the years has highlighted a particularly interesting story. With the help of Andy Gilliam we identified an aircraft propeller blade recovered by a Solent fisherman. It was from a Miles M33 Monitor, designed during WWII to tow targets for gunnery practice, which crashed in 1945.



Our diver trail activity was popular at English Heritage's National Archaeology Day

New technologies have also been installed in the exhibition. Two new DVD's filmed and edited by the Trust are now showing. They focus on the history and the archaeology of HMS Pomone and the 2003 excavation of Bouldnor Cliff. Using underwater video footage they are opening a window to the rich maritime heritage which lies around the Solent. Video footage of other Trust projects is used for talks and other local displays. Touch screen monitors have been used to great effect in the exhibition. A combination of information, games and photographs is enhancing the learning experience of both young and old.

Another initiative is the development of a dissemination network with other exhibits in the region. This means our work and that of similar organisations will find a wider audience. Yarmouth Castle on the Isle of Wight will be taking displays on the Yarmouth Roads protected wreck site. Displays on HMS *Pomone* are being installed at Hurst Castle, Hampshire. Future partnerships include Southsea Castle and Portsmouth City Museum.

The changes at the exhibition have received rave reviews from visitors. It is rapidly becoming a favoured educational establishment, spreading understanding of our maritime heritage through a variety of media. We hope to build on this success in the coming

years, expanding our capacity for education and outreach while developing links with other regional and national organisations.

#### **Events and Activities**

As part of our mission to increase access, life long learning and community involvement, the year has seen a busy programme of events and activities both at Fort Victoria, on walks and tours, and at events hosted by other organisations in the Hampshire and Wight area.



Visitors to our NAD try Iron Age fish stew and add to prehistoric murals



A successful excavation by three young enthusiasts!

We ran our own National Archaeology day at Fort Victoria in August which had over 250 visitors. The activities included the ever popular diver trail activity, clay pot making, painting prehistoric murals and a simulated underwater excavation tank. There was also a cooking demonstration where visitors could test an Iron Age fish stew.

South East Marine Week is a regional event organised by the Southeast Wildlife Trusts. Our event run at Fort Victoria proved an outstanding success with nearly 500 visitors. Families were able to learn about the marine environment in local waters and how they can help to preserve our wildlife. It was also an opportunity to publicise our new OASIS project which looks at shipwrecks as habitats for marine life. Visitors were fascinated to discover the submerged landscapes and the biodiversity around shipwreck sites. Other activities included flag making and pot making, which proved so popular with visiting children that we ran out of materials by 3pm!

In July we joined in the National Archaeology Days at the English Heritage site at Fort Cumberland, Portsmouth. The 'blind diver trail' activity gave visitors, young and old, the chance to learn about the diving environment and the challenges of working underwater. It was also a chance to promote the newly published *Hazardous* booklet and the *Hazardous*, Alum Bay and Needles dive trails.

As a new initiative to encourage children's interest in maritime archaeology we have been running children's activity days every Wednesday through the summer holidays. This has provided a valuable service for parents and children alike. Over 30 families, both locals and tourists, attended every week. The children engaged in a variety of activities including fish printing t-shirts and a 'Secrets of the



Children take part in educational activities during the school holiday open days

Sea' mural. While the children were occupied it gave parents the time to fully appreciate the displays in the Sunken History Exhibition.

We have several upcoming events before the exhibition closes for winter. We have signed up to be part of the national Big Draw event in conjunction with BBC learning's Natural History of Britain programme, where we will be recreating rock art on a large scale. We will also be organising more events for children over the October half term.



School children on a visit to the exhibition

#### Schools Activities

The provision of guided visits, workshops and educational resources for school parties at our Maritime Heritage Exhibition has been a popular feature of our expanded education programme. Schools are welcomed to the exhibit and children of all ages benefit from educational work sheets themed with the displays. They are designed to provide a cross curricular based visit that encompasses history, geography, English, science, maths, art and design. Local and national schools have showed growing interest in using the Exhibition. We have had many school visits this year and they have benefited from having staff to provide activities and information.

#### **Education Packs**

The development of a pilot education pack for schools has enabled a version to be produced on the Internet. This pack takes Maritime Archaeology, Shipwrecks and the Lost Lands of the Solent as its main themes. It provides teachers with materials to help bring maritime archaeology into the curriculum. It will be freely accessible to download from the Autumn 2004 and will be reproduced for schools across the country. Initial work has begun on a interactive CD-Rom to accompany the pack. This will be available from Spring 2005. In addition to the education resource we are developing an outreach pack in the Sunken History Exhibition. This will include replica artefacts, interactive activities and learning opportunities for those who have special needs, learning difficulties and visual impairments.

## **Increasing Access Underwater: West Wight Dive Trails**

The Trust is continuing to increase access and appreciation of shipwrecks by developing the diver trail programme in the Solent. This benefits both divers, who gain access to protected sites normally off limits, and non-divers through video footage and greater dissemination. The trails have been laid on two sites in the western Solent, the Needles Protected Wreck Site and Alum Bay.

The Needles wreck site is protected by law and diving is usually restricted to licensed divers. The site is littered with wrecks including HMS *Pomone*, HMS *Assurance* and the *Anglo Saxon*. Hidden within the chalk gullies lie many artefacts including cannon, ballast blocks, cannon balls and anchors. It is an interesting yet difficult site to dive and the trail allows investigation in an informative and safe manner. The dive also incorporates the diverse marine life and geology of the area.

The trail route around Alum Bay encompasses two wreck sites and the adjacent reef. The Alum Bay I wreck site has extensive timber remains, copper pins, iron knees and copper sheathing. The Alum Bay II wreck is a smaller ship built with carvel planking and treenail fastenings. The reef is home to a variety of marine life including lobsters, bryozoans and anemones.

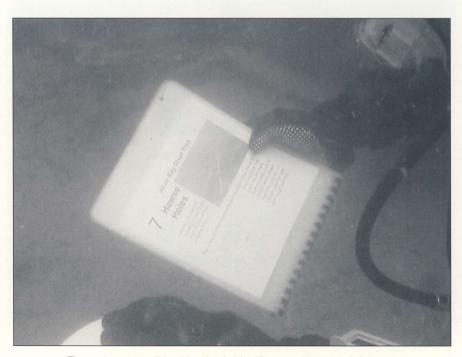
The trail routes were laid and tested during the summer of 2004. Divers follow numbered markers on the seabed using a booklet for guidance. The booklets also highlight the important features on the



Divers study the copper pins on Alum Bay I wreck

trails helping divers to identify key areas. Video footage was also taken and it will be used to brief divers before they board the boat. The success of their work in the summer means the trail will be fully operational for the diving season in 2005. It will be used to boost both local tourism and knowledge of this important resource.

The trail is also an important feature for non-divers. The combination of video footage, underwater booklets, displays in the Sunken History Exhibition and talks by the Trust staff will bring these submerged secrets to life for those who cannot reach them. The initiative provides a more detailed examination of these interesting and dynamic sites for both divers and non-divers alike.



The underwater trail booklet clearly identifies prominent wreck features

## The Warship Hazardous

Our work with the protected wreck site of the Warship *Hazardous* and the Hazardous Project group over the past year has involved a variety of archaeological and outreach activities. Originally *Le Hazardeux*, this vessel was a third rate ship of the line built for the French Navy in 1698. The ship was captured by the English, refitted and commissioned *Hazardous* in March 1704. In November 1706 the ship was wrecked in Bracklesham Bay.

#### **Diver Trail**

The HWTMA helped establish a diver trail around the Protected Wreck Site of *Hazardous* in 2000, since then the trail has become a popular diving attraction. There are currently few such opportunities for divers to gain guided access to our protected wrecks. Once again the diver trail has been drawing in divers from around the country.

On the seabed there are a large number of archaeological and marine biological features for divers to see. The wreck consists of cannon, wooden structure and a prominent mound of concreted cannon balls. Divers are led around the wreck site following a blue diver trail line and designated stations highlight the most important features using an underwater booklet. The trail also takes the diver onto the adjacent reef which is teeming with marine life.

#### **Display**

Through funding from DEFRA's Aggregate Levy Sustainability Fund, SE Wildlife Trusts and English Nature we were able to help re-vamp the Warship Hazardous display at Earnley Gardens, near Bracklesham. The display is the work of the Hazardous Project Team who have provided and created this outlet for showing their work to the public. Featured in the display are some of the fascinating artefacts from the Hazardous wreck site and from other wrecks in the region. This large range of artefact types demonstrates the potential of the underwater environment for preserving the remains of our maritime past.

The HWTMA contributed to revamping the display by designing and producing new information boards to act as backdrops for the display cases. The boards bring together aspects of maritime cultural heritage with the wider marine environment. There are a number of panels concentrating on aspects of *Hazardous* including 'The History of *Hazardous*', 'Wrecking & Discovery', 'The Fighting Ship', 'Life on Board' and 'Shipboard Specialists'. The display also includes information on the history of diving, the wealth of wreck types and remains around Britain, the local geology and seabed, fossils and marine biology in Bracklesham Bay and threats to the marine environment.



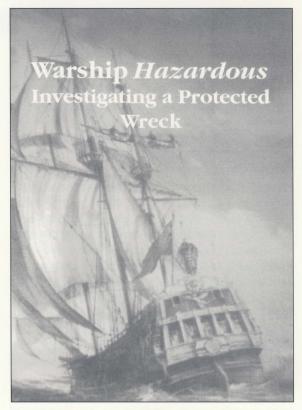
The new Hazardous display boards on show with various artefacts

#### **Booklet**

To disseminate information on the wreck site, the work of the *Hazardous* Project team, and the HWTMA, a booklet about the site has been published. This project was part funded by English Heritage. This A5 booklet contains a wealth of information about the history of the vessel, archaeological work on site, life on board, the ships armament and much more.

All these themes and subjects are linked to the diver trail stations on the site; this aims to provide divers who have visited the trail with more in-depth information, while providing non-divers with a simulated experience of the diver trail.

If you are interested in buying a copy of 'Warship *Hazardous*: the investigation of a Protected Wreck Site' please get in touch with the office.



The front cover of the Hazardous publication

## **Online Opportunities**

To enable wider dissemination of the Trust's activities we have created a new website hosted at www.hwtma.org.uk. This has provided a raft of new opportunities to increase access to our work locally, nationally and internationally.

We now have far more space which allows a greater depth of available information. The site looks at all areas of our work. The archaeological project pages have been reorganised to give easy access to visitors. Increased information on each project is complemented by more photographs and archaeological drawings. A news section will allow us to immediately update visitors on current developments and activities.

The expansion of the education and outreach programme is well represented with sections on the Maritime Heritage Centre at Fort Victoria, the Friends scheme, Lectures and Conferences and an Events Diary with how to get involved. There is also an area specifically for education and outreach with details of our education policy, downloadable versions of our education packs, information for students and details of our activity days.

We have also developed a new email system to streamline enquiries and allow for the recent increase of staff numbers. In future all general emails should be directed to info@hwtma.org.uk. Staff specific contacts can be found on the website.

We are looking to develop the site in the future to include more features to increase appreciation of maritime heritage and aid understanding of our work. This includes video footage from submerged sites around the Solent, photographs available for both private and public use and an archive of our previous reports and publications. The internet is an excellent tool for dissemination as information can be accessed in homes, schools and libraries around the globe.

Visitors to the site have been very positive about the changes. In fact we have noticed increased enquiries in recent months. Over the winter we will work towards promoting the site and adding new features so remember to update your bookmarks and keep returning to www.hwtma.org.uk!

#### Friends of the Trust: A Vision for the Future

This year saw an overhaul of the Friends of the Trust scheme thanks to funding from the Local Heritage Initiative. The revamped scheme will develop over the coming years, creating a network for volunteers to get involved with all aspects of maritime archaeology. Feedback via meetings and questionnaires from long standing Friends members has provided the backbone for future development.

We have established more regular contact with our Friends through the new 'Friends Bulletin' newsletter as well as providing occasional mailshots about forthcoming events. Links are being created with similar organisations, both locally and nationally. The aim is to share information, experiences, ideas and arrange joint visits, lectures and social events. With ongoing input from our members we are confident that the scheme is moving in the right direction for the future.

In addition to the usual fieldwork opportunities and lectures, we are expanding the programme of events. This has included an educational walk back in time along the cliffs at Brook Bay on the Isle of Wight, a cruise to Swanage Bay on the Shieldhall a restored 1955 steamship, a walk along the historic Titchfield Canal and a HWTMA Fieldschool, held in association with the Nautical Archaeology Society (NAS). The weekend Fieldschool began with a day of NAS training in the principles and practice of maritime archaeology. With their new skills at hand, the Friends spent the following day working in the field on a post medieval salt works site near Keyhaven in the New Forest. Using a combination of survey, photography and site walking they added to our previous work on this vast and undervalued archaeological site.

Next year we are aiming to involve more Friends with our event days at Fort Victoria, representing the

Trust at fairs and shows and, with the appropriate training and support, spreading knowledge of maritime heritage around the region.



Discovering a dinosaur footprint along Brook Bay

The overhaul has already shown signs of success with an increase of around 20% in membership this year. Administration of the scheme has been streamlined to provide a foundation for future growth. Membership fees have risen slightly, the first increase for many years, although we still believe the new direction provides value for money. We want to create a scheme which people can take part in on any level; from those who wish to organise events to Friends who just want to know they are contributing to preserving their maritime heritage. If you want to know more about how you can benefit from the Friends scheme please get in touch with the Friends Department at the office.



Friends learn the art of archaeological survey in the Keyhaven Saltworks

## Annual Public Lecture: Leafing Through Time

The importance of dendrochronology, known as tree ring dating, in maritime archaeology was the subject of the 2003 lecture. Nigel Nayling, dendrochronologist and lecturer at University of Wales, Lampeter, discussed its use in dating structures from the past and as an indicator of past climate and environmental change.

Some of the earliest datable trees have been recovered from inter-tidal sites in the Severn Estuary. Here oak trees aged up to 466 years old have been sampled about ½ a mile from the current coastline. The trees date to approximately 8,000 years old and are associated with a landscape containing a raft of information. Even older trees are found off Bouldnor Cliff, Isle of Wight lying 11m below ordnance datum which can only be accessed by divers. These provide the oldest tree ring sequence currently available in the UK, dating from c.8350BP.

Submerged forests are relatively widespread around our coasts. Sections of trees collected from the intertidal forest off Wootton Quarr, near Ryde, have pushed the continual dendrochronological sequence back to the middle of the 4th century BC. It should be stressed that tree ring dating can be very accurate and valuable but the dates are only as good as the samples from which they are derived. It takes a trained eye and good quality material to be sure of good results.

Dendrochronological dating of the Roman waterfront in London demonstrated a period of large scale riverside consolidation and quay building only five years after their arrival. Dating the waterfront timbers has provided an accurate gauge of shoreline development during the Romano-British period which itself would have reflected both social and maritime influences. The Blackfriars Boat (130-175AD) is constructed in the heavily built Romano-British technique, which was adapted well to the tidal British waters. Comparing this boat to the lighter build of the Mediterranean style employed in the County Hall ship of 285AD (vessels designed to run alongside quay walls) suggests a development in infrastructure that supported extensive maritime interaction and trade.

On discovery of the Magor Pill boat in the Severn Estuary, the opportunity was taken to conduct as much timber analysis as possible. Study showed oak members for the vessel were felled between September and April AD 1239-1240 while the beech planks primarily came from two trees harvested in the summer of 1240. A reused Irish timber was incorporated as a repair. This information helps to

open a book on the past, not just chronological but offering insights into communication between areas and the organisation of boat building.

A much larger discovery from AD 1468 was the Newport ship, revealed during construction work for a new Arts complex on the edge of the River Usk, Wales. Over 1500 timbers were excavated from the ocean going ship which contained artefacts suggesting links with Portugal. The largest Medieval ship preserved in Britain is the Grace Dieu built in Southampton in 1418 and lost in 1439 when it was burnt to the waterline on the River Hamble. Timbers from this vessel have been investigated to tell us about ship building in a period when we have little more than iconographic evidence from town seals. Study of the wood tells us about trade and local economies as well as commercial and social organisation that facilitated construction.

Shipbuilding sites provide further evidence of local economies and by studying the remains at sites such as the 18th century Bucklers Hard on the Beaulieu River we can learn about timber employed by shipwrights. The need to import timber was a major political issue during the Napoleonic wars which makes interpretation of the archaeological evidence important as it often paints a different picture!

Mr Nayling concluded that we should also look at living trees to see how they can help provide an insight into the past. They can tell us about the management of woodlands and offer an insight into previous environmental conditions. They are also the front line of any dendrochronological sequence. The future of the study of the past should include development of methodologies employed in the discipline, revisiting existing finds that have not yet been under the saw and enthusing a new generation of tree ring specialists to take the sequence forward.



Nigel Nayling inspects the Langstone Logboat

## Spreading the Word

#### SeaBritain 2005

2005 is set to be an important year in the maritime calendar. The 200th anniversary of the Battle of Trafalgar stands at the heart of a year-long festival celebrating Britain's relationship with the sea. The aim of the festival is to raise awareness of our rich and varied maritime heritage and give people the chance to learn about all the ways in which the sea influences their lives.

The Trust is delighted to be a partner organisation of SeaBritain 2005 and we are looking forward to organising a range of events, activities and educational resources as part of the celebrations throughout the year.

To find out more visit www.seabritain2005.com

#### **New Outreach Staff**

This year the Trust has expanded its presence at Fort Victoria which has led to the success of the exhibition revamp, educational initiatives and open days. Claire Campbell has been employed as the Project Officer for Fort Victoria and the coordinator of the new dive trails. The responsibility for the displays in the Sunken History Exhibition and the Trust's education programme has been given to Natasha Fry. Their work has been aided by the employment of Simon Aubertin-Watson, a part time exhibition assistant, and Robert Proctor who has assisted with the summer holiday activity days.

#### **Itchen Booklet**

After the success of the *Hazardous* booklet, a second popular publication is nearing completion on the Itchen River Project. The project was run by the Trust and the Southampton City Archaeological Unit with support from students and staff at Southampton, Portsmouth and London Universities. The booklet traces the maritime heritage of the river in the face of redevelopment along its banks. Case studies are investigated including the sampling of submerged prehistoric landscapes, surveying Roman posts at St Denys and recording hulks prior to their disposal.

#### **HWTMA 2004 Annual Public Lecture**

This lecture will be given by Stephen Riley, Director of Maritime Heritage at the National Maritime Museum and Garry Momber, the Director of the Trust. The lecture entitled, 'Shipwrecks and Lost Landscapes: A window beneath the waves' will explore how maritime heritage is made more accessible to the general public. It will take place on Thursday 25th November at 7pm in Medina Theatre, Newport, Isle of Wight. Admission is free, please contact the office for more details.

#### **Work Experience**

The Trust continues to provide valuable experience to those who want to take their archaeological interest a step further. Volunteers are an important asset for the Trust as they support us in achieving our charitable aims.

Helen Pritchard helped the Trust during the spring of 2004, volunteering a couple of days a week for several months. She helped us adjust to moving into the second office, reorganising our archaeological information including records, slides, books, plans and maps.

Charlotte Moll is a GSCE student who spent a week with the Trust. She took part in fieldwork on the Hamble River, helped to create the trial underwater booklets for the dive trails and spent time organising images for the new website.

For the third year running we hosted a work placement from Bournemouth University. Kevin Matthews spent five weeks with the Trust over the summer. Kevin took part in the intertidal fieldwork in Langstone Harbour and the Hamble River. He was also a willing helper at the activity days at Fort Victoria, his clay pot making was a hit with all the visitors. His time in the office was spent learning how the Trust works and gaining an insight into maritime archaeology, which will help his dissertation.

#### Articles, Reports, Publications and Publicity

- Annual Report
- 2004 Newsletter
- Warship Hazardous: Investigating a Protected Wreck
- Redraft of the JNAPC Code of Practice
- Bouldnor Cliff Assessment Report
- · Chichester Harbour Hulk Survey 2004
- Milton Lock Posts Survey
- NAS Newsletter
- · Solent News

- Scuba World
- Underwater Contractor
- World Archaeological Conference 5 Proceedings
- CBA Wessex Newsletter
- Time Team episode on the Grace Dieu and the Hamble River
- · Isle of Wight County Press
- BBC South Today
- BBC Radio Solent
- · Hampshire Life Magazine

#### Talks, Lectures & Representation

The HWTMA regularly presents talks and lectures to a wide variety of audiences locally and nationally, speaking to thousands of people each year. This includes professional seminars at academic conferences to local interest groups and our Public Lecture.

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, the Solent European Marine Sites Strategic Advisory Group, the Council for British Archaeology Wessex Region Committee, Society of Underwater Technology Diving and Manned Submersibles and Underwater Science Group Committees, the Scientific Diving Supervisory Committee, Poole Harbour Heritage Project, the Hamble Harbour Advisory Committee, the Hamble Estuary Management Plan Implementation Forum and the River Hamble Education Group.

## **Summary of Activities**

September 2003 - August 2004

Total visitors to the Sunken History Exhibit (from April - August 2004)	10,328
Number of people attending Open Days	1,116
Fieldwork and Activity Days	66
Volunteer and Student Dive Times (in minutes)	5,532
Number of people involved with Trust Activities	104

## The Trust gratefully acknowledges the generous support of the following: October 2003 - September 2004

### **Grants and Donations**

Hampshire County Council • Isle of Wight Council • Southampton City Council

English Heritage • Crown Estate • English Nature

Isle of Wight Economic Partnership Leader + Programme (supported by DEFRA & the European Union)

Hampshire Wildlife Trust & English Nature (supported through DEFRA's Aggregate Levy Sustainability Fund)

Local Heritage Initiative administered by The Countryside Agency (supported by the Heritage Lottery Fund and the Nationwide Building Society)

Wightlink Ltd • Herapath Shenton Trust • Betty Silverwood Lamb • David Guy

British American Tobacco 

Daisie Rich Trust

Hilton Cheek Trust

Manifold Trust 

The Rachel Charitable Trust 

Lady Tidbury 

Solent Protection Society

Wartsila UK • Chichester Harbour Conservancy • J R Kelting

Watson Wyatt 

Ovalway Hydraulic Engineering 

A & P Group

Mitchell Powersystems • CBA Wessex • Ernst & Young • Macfarlanes

## Assistance in Kind and Services

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Mr S Campbell-Curtis

Channel Coastal Observatory

Mr C Cockburn

Dr K Collins

Mr J Cross

Dr J Dix

Mr P Donohue

Ms S Exelby

Hampshire County Council

Hamble Harbour Authority

Mr J Jensen van Rensburg

Isle of Wight Council

Mr R Larn

Langstone Harbour Master

Mary Rose Trust

Mr A Mack

New Forest District Council

Mr J Male

Mr D Parham

Mr N Nayling

**RSPB** 

Mr D Pascoe

Mr P Simpson

Dr R Scaife

Mr B Sparks

Southampton Oceanography Centre

University of Southampton

Dr D Tomalin

Mr D Wendes, Wight Spirit Charters

Mrs J Verrinder

The 308 SAA

Mr M Woodward

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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## Hampshire County Council







































Supported through the Defra Aggregates Levy Sustainability Fund The Solent Archaeological Review is a summary of the work of the Hampshire & Wight Trust for Maritime Archaeology. The Trust promotes interest, research and knowledge of maritime archaeology and heritage in Great Britain, concentrating its efforts in Hampshire and the Isle of Wight. This years main archaeological projects include diving in the eastern Solent, intertidal investigations along the Hamble River and the assessment of the Bouldnor Cliff excavation. Education and outreach initiatives encompass display enhancements, the publication of popular booklets and the development of underwater dive trails on shipwreck sites.



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