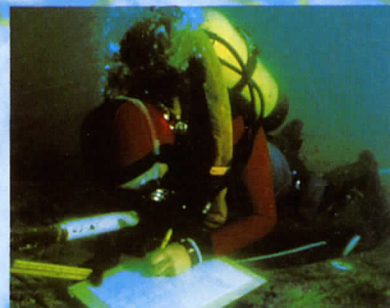


# SEARCH



**ANNUAL REPORT 1999/2000**



### **President**

Mrs Mary Fagan, JP

### **Vice-Presidents**

The Earl of Selborne, KBE FRS

Mr CDJ Bland

The Lord Montagu of Beaulieu

### **Patrons**

The Lord Mottistone, CBE

The Rt Hon the Earl Jellicoe, KBE DSO MC FRS

Sir Charles Tidbury, DL

### **Chairman**

Councillor DA Keep, Hampshire County Council

### **Vice-Chairman**

Mr DEJ Guy, MBE JP

### **Management Committee**

Councillor DA Keep (Chairman), Hampshire County Council

Mr DEJ Guy, MBE JP (Vice-Chairman)

Councillor Mrs M Jarman, Isle of Wight Council

Councillor D Giles, Portsmouth City Council (until June 2000)

Councillor PA Ross, Portsmouth City Council (from June 2000)

Mrs V Fenwick

Mrs SB Emery-Wallis

Mr M Drummond, OBE JP DL Hon DSc

Mr G Cadman

Mr J Adams

Mr JM Bingeman

### **Officers**

Mr B Sparks, OBE, Director

Mr J Adams, Archaeological Director, University of Southampton

Mr G Momber, Archaeological Officer

Miss J Satchell, Archaeological/Administrative Assistant

Mr J Pittam, County Treasurer, Hampshire County Council, Treasurer

Mr MJA Fisher, Managing Director of Corporate Services,

Isle of Wight Council, Secretary

Mr B Boulton, Environment Group Leader, Hampshire County Council

Mr D Hopkins, Senior Archaeologist, Hampshire County Council

Mr P Airey, Planning Policy & Environment Manager, Isle of Wight Council

Mr F Basford, Archaeological Officer, Isle of Wight Council



## FOREWORD

A glance at the contents of this ninth Annual Report will demonstrate the wide range of projects that have been undertaken by the Trust during the past twelve months.

A major 'gearing up' on the research front was the intensive fieldwork successfully carried out in mainly adverse weather conditions on Bouldnor underwater cliff in May. A decision taken earlier to use a larger dive platform than the Trust had used before paid off in terms of the amount of work completed, the excellent results and the comprehensive media coverage. Although this project used considerable resources, the Trust was still able to undertake further research projects both underwater and in the intertidal zone.

The Government's major strategic review of England's historic environment has given us the opportunity to emphasise, in this context, the importance of wreck sites and ancient submerged landscapes, and the need, in particular, for more protection of sites below the low water mark through stronger legislation.

I am particularly pleased that Garry Momber, our Archaeological Officer, has had an article published in the first edition of the year 2000 new-look International Journal for Nautical Archaeology and was the joint author of a technical communication in the same publication. Work on the European Commission LIFE Project, *Coastal Change, Climate and Instability* is nearing completion as is publication of the major report on the Langstone Harbour Project and a second edition of the booklet 'The Story beneath the Solent', which is being sponsored by the Crown Estate. Our series of winter lectures have continued to be well supported, a new edition of the Trust's leaflet was printed earlier this year and our website is up and running.

Last November Julie Satchell joined the Trust as Archaeological/Administrative Assistant. Julie has already made her mark in this newly established full time post, which increases the staff to 2.5 paid posts. We also welcomed Councillor Angus Ross, Portsmouth City Council, who took over from Councillor David Giles as a Trustee and Management Committee member in June. We thank David for his support and interest.

I also thank the Department for Culture, Media and Sport, English Heritage, Hampshire County Council and the Isle of Wight Council, along with those other authorities, companies, organisations, trusts and individuals who are listed in this report.

No Foreword would be complete without mentioning our Director whose enthusiasm and wise leadership, allied to the dedication of his staff, have made a marked contribution to the success of the Trust.

Finally, as I step down on completion of my second term as Chairman, I am confident that our small but effective Trust is well on track in the pursuit of its aim and primary objectives.

**DUDLEY A KEEP**

A handwritten signature in black ink, reading 'Dudley A. Keep'. The signature is stylized with a large, sweeping initial 'D' and a long horizontal line extending from the end.

**CHAIRMAN**  
September 2000

# 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:*

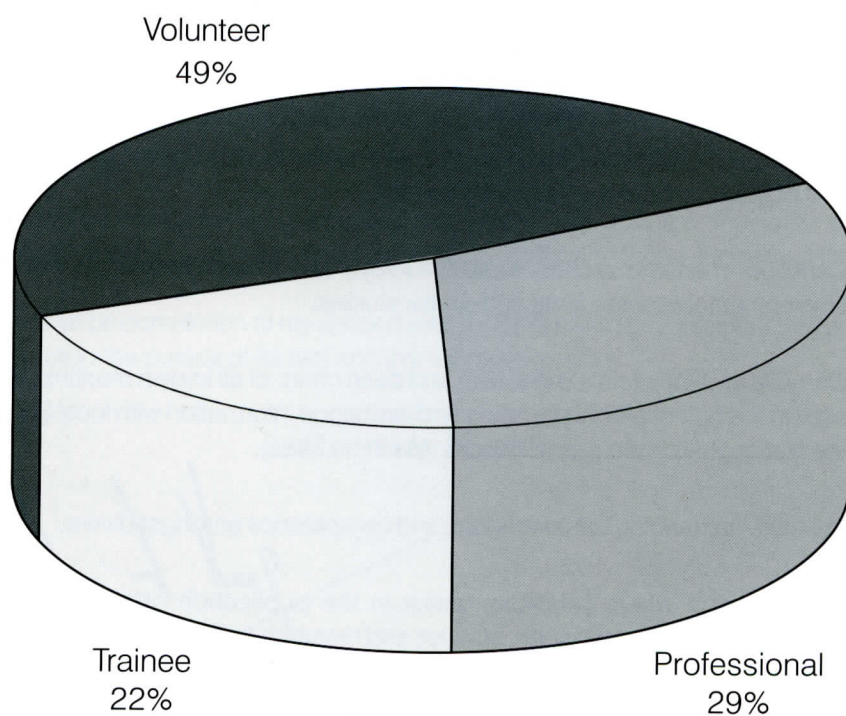
- Promote maritime archaeological study in accordance with professional and museum codes of conduct and practice.
- Promote the in situ preservation and management of important archaeological sites in its area of interest.
- Support local, regional and national initiatives for improvements to the legislation 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.



**SUMMARY OF PRINCIPAL FIELDWORK ACTIVITIES**  
**September 1999 - August 2000**

DIVING AND NON-DIVING FIELDWORK	52
MEETINGS, LECTURES & CONFERENCE DAYS	146
<b>TOTAL</b>	<b>198</b>
NUMBER OF PEOPLE INVOLVED WITH FIELDWORK	103
Professional dive times (minutes)	7,821
Volunteer dive times (minutes)	12,995
Trainee dive times (minutes)	5,892
<b>TOTAL MINUTES UNDERWATER</b>	<b>26,708</b>

**Ratio of Professional to Volunteer and Trainee  
Dive Times**



## SolMAP 2000

The western Solent conceals a legacy of archaeological treasures. The shelter afforded by the Isle of Wight has allowed the accumulation of silt and sediments with a high potential for preservation. Under these deposits, human activity has left its mark on ancient landscapes, inundated by a rise in sea level following the end of the last Ice Age. Within the silts, organic material from wrecks of the many vessels lost in the Solent can remain preserved for millennia.

During the past three years the Trust has organised projects to focus attention on the western end of the Solent. The initial objectives were to investigate anomalies and enhance our knowledge of the archaeological resource in the region. This work has resulted in the discovery of the oldest submerged, stratified occupation site in UK waters (See Bouldnor Cliff report) and investigation of two important wreck sites.

During SolMAP 2000 a number of sub-projects were created for the specific sites where groups of professional, NAS trained amateur divers and university students worked together. In total 37 divers participated in the fieldwork spending 10432 minutes underwater, mobilising 7 boats.

The project headquarters was based at Keyhaven in the Sea Scout Hut from 22-30 July. Permission was kindly granted to use the facilities at Keyhaven Yacht Club, at which we were given temporary membership. Thanks must also go to the River Warden for on site support, Hurst Castle Services for housing dive plant, for the assistance of the New Forest District Council and Edgars Farm, Milford.

We are particularly grateful for the sponsorship provided by Wightlink Limited for SolMAP 2000.

## Needles Wreck Site

Since its discovery in 1969 over 3,000 items from the *Needles Wreck Site* have been surveyed, excavated and recorded. Many more artefacts lay scattered in the gullies around the site, most of which are from the wreck of *HMS Pomone*. It is an area of sharp eroded chalk gullies and ridges, formed into east-west aligned channels along the remains of a former chalk ridge. It is a very interesting site to dive, the complex and irregular gullies offering a broad range of environments for divers to examine. The presence of wreck material, much of which is concreted to the sea floor or lying in the gullies, enhances the scene. However, the site creates problems for the divers visiting or working on the wreck, as the confused geology makes orientation difficult.

To aid access to the wreck scatter, an underwater line has been placed around part of the site. The line runs between sinkers positioned adjacent to noteworthy artefacts. Boards have been attached to sinkers, upon which salient information can be read by divers using the trail. In addition, an underwater plan has been generated which shows the main topographical features. These can be used as markers to navigate divers around more easily accessible parts of the site.

The aim now is to monitor the dive line over the autumn and winter to see if it can stand the test of time. If so, this presents the possibility of opening a diverse and interesting dive trail around the Protected Wreck Site to be used by licensed sport divers in managed groups.

**Garry Momber**



## **Excavation in Alum Bay**

The Alum Bay wreck has been the subject of intensive survey over the past two years. The next step in the investigation was limited excavation to determine the extent of the material on the seabed and to try to answer the question of which wreck the remains represent.

Work was carried out from a variety of vessels, RIBs were used all week and a hard boat was moored over the site for three days providing a solid platform for conducting operations with a larger group. Both airlifts and a water dredge were employed for excavation, enabling volunteer and student participants to gain experience using both types of equipment.

The site was divided into two concentrated areas. The north end was mainly worked on by the London Marine Archaeology Group (LoMAG) a group of NAS trained volunteers, who have put a lot of time and effort into surveying the wreck in previous years. Here, a water dredge was used to excavate a trench in the area near the bow. Their objectives were to reveal copper sheathing for diagnostic purposes and to delineate the eastern extent of the site. The area was cleaned and further timber structure revealed. The structure around the hawse holes includes several layers of substantial timbers, which would have been necessary to withstand the extra strain on the hull produced by the anchor rope running through the hawse holes.

To the south a group of Masters students from the Centre for Maritime Archaeology, University of Southampton, led by Jon Adams, were joined by other SolMAP volunteers to investigate the buried structure. During the three days of excavation extensive timber remains were uncovered, extending further to the east than expected. Additional details of frames were revealed along with areas of the outer hull planking, which can be seen running under the frames on the eastern side of the site. The exposed structure was recorded at a scale of 1:10 using planning frames. The information was directly related to the previous survey and the site plan continued to grow through the week.

During the recording a number of ships fastenings including copper nails, bolts and interesting

concretions were raised from the site, these had become loose or completely detached, so were raised to prevent them their loss to natural erosion or anchor damage. However, the main danger to the site was highlighted by the disappearance of one of the large copper drift bolts that had been prepared for lifting; as soon as the hard boat, which had been giving us a permanent presence on site, had left, another group of divers must have gone to investigate and taken a souvenir with them. This caused much anger within the group who had so painstakingly excavated and recorded the artefacts, and is a sad reflection of the attitude of a small number of divers who continue to remove items from historic wreck sites.

However, on a more positive note, on the penultimate day of the project two pieces of copper sheathing or patches were recovered from the structure. On close inspection one of the pieces was clearly stamped with a broad arrow, leaving no doubt that this was a naval vessel. This was an exciting end to the week which had involved much hard work from all concerned. Research now begins to see if we can use the information gained to positively identify the remains.

**Julie Satchell**

## **Submerged peat deposits of the north west Solent**

Examination of historical charts from the past 200 years indicates large recession of the mud flats between Pitts Deep and Hurst Castle. Comparison of modern Admiralty charts with the Murdoch Mackenzie chart of 1781 suggests that about half the salt marsh has been lost. As the mud flats have eroded away, areas of peat and submerged forest have been seen at the lowest tides off Oxey Marsh near Pennington and a large number of Stone Age flint tools have been dragged up by oyster fishermen. It appears that the mud flats are being washed from the top of an ancient drowned landscape containing the remains of human occupation.

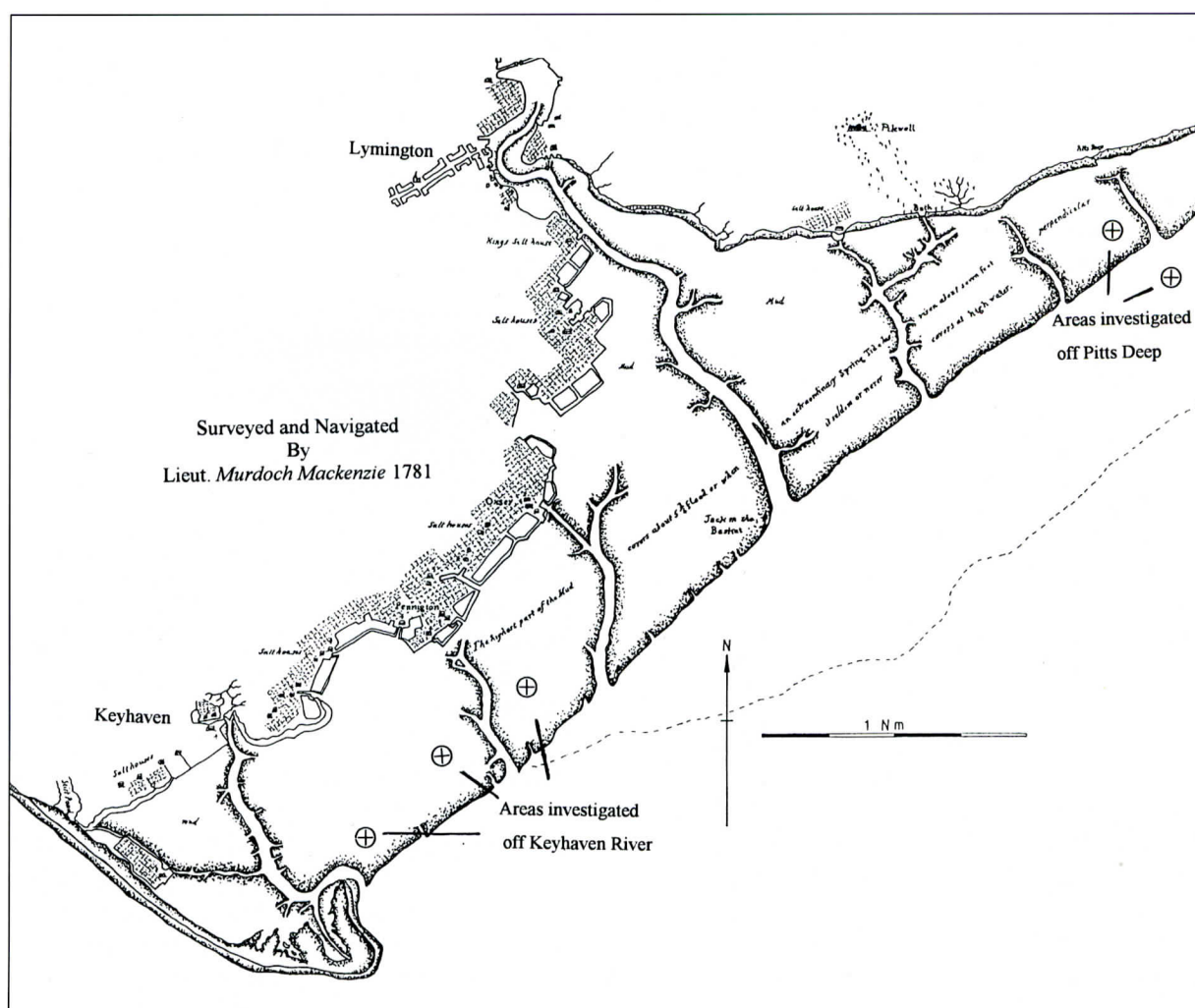
During the 1999 field season a number of drift diving surveys were conducted parallel to the New Forest

coastline off Pitts Deep, Tanners Hard and Hawkers Lake where large areas of peat deposits inlaid with timber were recorded. These were interspersed with clay channels of different widths, some overlaid with sand. The depth of the peat beds range from about 4m below OD in the south rising gently towards the shore, which is comparable to the upper peat beds found below Bouldnor Cliff. Here, the base of the deposit has been dated to 4525 - 4330 BC. This period, towards the end of the Mesolithic and beginning of the Neolithic, saw levels of population grow and occupation patterns became more sedentary. Work on similar locations in Langstone Harbour and the intertidal reaches of the Severn Estuary has shown extensive exploitation of such environments. Evidence is particularly rich adjacent to palaeochannels which lie within the peat deposits.

Here, the remains of structures, indications of boat activity and evidence of coastal fishing with fish traps have been identified. It is highly probable that such sites exist within the upper peat deposits of the north west Solent. The initial searches conducted as part of the SolMAP projects have provided information on the seabed environment and is now helping to map the deposits and identify sites with a high potential for archaeological material.

For the purpose of survey during SolMAP 2000, the north west Solent was divided into two distinct areas separated by the Lymington River. The area to the west was primarily investigated by a team from Bristol University Underwater Club while research in the east was conducted by the Poole Bay Archaeological Research Group.

**Garry Momber**



Area of interest in the north west Solent

Drawing: Garry Momber (after Murdoch Mackenzie)



## Searches at the mouth of Hawkers Lake and Keyhaven River

An area off the Keyhaven Marshes was searched to define the limits of the submerged forest found in about 3-4m of water. There was also a search to find a lower peat horizon at 5m below OD, comparable to that recorded off Bouldnor. An auger core was used for this purpose, while a 50mm core was used to collect samples of the seabed for further analysis in the laboratory.

Large areas of seabed were searched off the Keyhaven marshes. East of the entrance to Keyhaven River, consolidated peat beds were found inlaid with timber. Moving offshore several hundred metres from the marshes, the peat becomes broken and less cohesive. To the south, the seabed is covered with pockets of unconsolidated, dark organic material. To the north, beyond the Pennington sewage outfall, the seabed is covered with a fine, silty material with the occasional organic inclusion.

Initial interpretation of the results confirms the presence of a large area of drowned landscape. However, to the south of Keyhaven River, the peat has been eroded with only reworked material remaining. Further north, off the new sea defences at Pennington, the seabed is devoid of peat. It would appear that the new defences have had an impact on the local hydrodynamic regime causing localised erosion. Auger cores, penetrating the seabed by over a metre in all of these areas were unable to provide any evidence for an underlying peat deposit.

**Garry Momber**

## Investigations off Pitts Deep

After several years of summer visits to the eastern Solent, Poole Bay Archaeological Research Group spent five days this season in the western Solent. The objective was to search the north west Solent seabed between Lymington and Sowley for

evidence of ancient land surfaces similar to those under investigation off shore near Bouldnor Cliff.

Day one was spent conducting a bathymetric survey of the area to identify possible dive sites. This revealed a shallow underwater cliff around 1m high, which ran right through the target area, approximately parallel to the shore in a water depth of about 3m. The existence of a fairly steep slope in the seabed at a depth of about 10m, which is suggested by the contours shown on the Admiralty chart of the area south of Pitts Deep, was also confirmed. In four days of diving, both of these areas were investigated further.

Two distinct methods were used. Large areas were examined and depths and seabed details mapped by divers drifting with the current, and three spot targets were investigated more thoroughly. Two of these were along the shallow cliff, with the third being on the top edge of the slope in the deeper water. Underwater visibility was quite good (generally around 4m, and occasionally more), so that the carefully targeted drift searches were an effective means of mapping the peat exposures which were the main focus of attention.

At two points along the shallow cliff a transect was taken from the shoreward side of the top edge, down



Coring peat beds near Pitts Deep  
Photo: Mike Markey



the face of the cliff, and then out away from the base of the cliff. The almost level seabed above the cliff consisted of exposed peat, which contained some eroded timber, twigs and roots. The cliff was a soft grey clay around 1m deep, and this gave way at the bottom to a second layer of peat. There were some quite substantial eroded logs laying on the surface of this lower layer. The peat itself extended almost horizontally away from the foot of the cliff, eventually giving way to a mainly gravel seabed. The clay cliff is very soft. The upper peat layer clearly provides some protection from erosion, and in places the cliff has an almost vertical face. Core samples were taken along both transects, and the cliff was drawn and photographed.

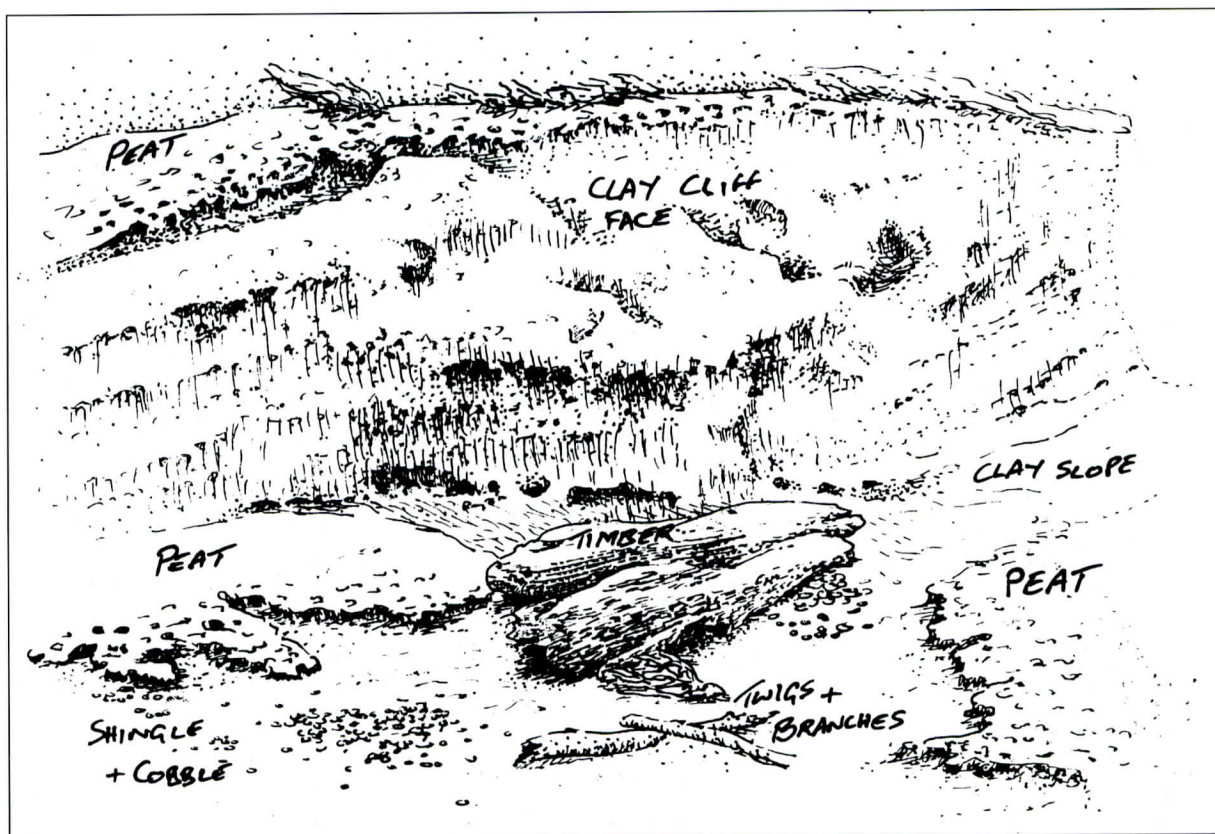
In the deeper water there was a well defined and visible change in the gradient of the seabed, from almost horizontal to a south facing slope of around 6% - 12%. In the level seabed at the top of the slope there were patches of exposed clay, but no peat

was seen. Cores could not be taken from this area owing to the high flint and gravel content of the seabed.

The double peat layer and intervening clay seen in the shallow water is very similar in depth, structure and general appearance to that seen off Bouldnor Cliff. The change in slope observed in the deeper water off Pitts Deep is at the same depth as the basal peat layer off Bouldnor. No peat was seen there, but scientific analysis of the seabed clay may provide a further link with the south side of the Solent.

Over the four days of diving a total of eight divers logged nearly 35 hours of time in the water. Cover was provided by the dive tender *Peveril Myth*. We are grateful to HWTMA for providing a berth at Lymington Yacht Haven and an air account at New Dawn Divers in New Milton.

**Mike Markey**



Metre high underwater cliff off Pitts Deep  
Drawing: P Cowling

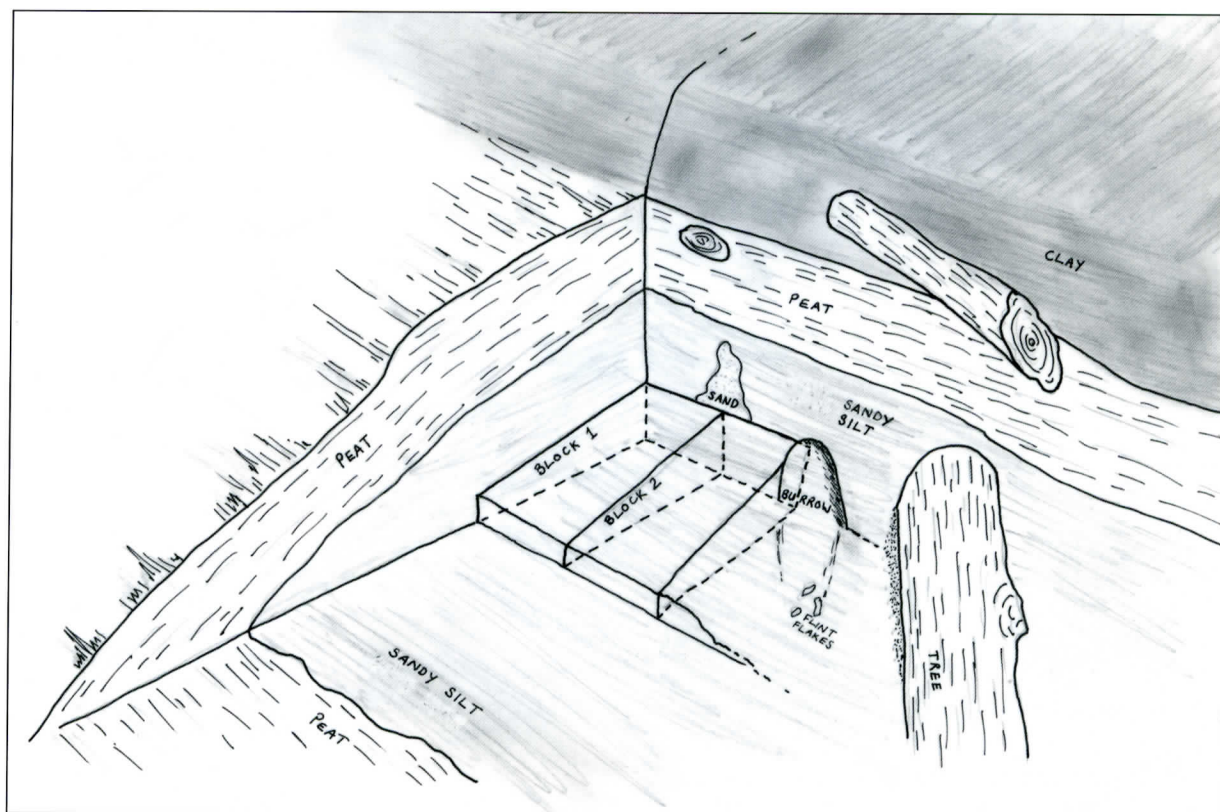


## The submerged occupation site off Bouldnor Cliff

Diver survey of an 8,500 year old submerged forest in the western Solent during July 1999 revealed humanly worked and burnt flints. The site lies in 11 to 12m below OD on a peat platform at the foot of a silty clay cliff, north-east of Yarmouth on the Isle of Wight. The flints were recorded lying in lobster burrows etched into the surface of the sea bed.

The submerged forest in the western Solent was first identified in 1976 when local fishermen dredged up timbers and peat. Preliminary investigations by Drs David Tomalin and Rob Scaife recognised the significance of the find, then in 1985, the source of the material was traced to the foot of an underwater cliff by John Cross, Coastal Research, University of Southampton, during the Isle of Wight Maritime Heritage Project. In 1991 this section of the Solent coast was identified as a key area to be investigated by the Trust and in 1997 this site was adopted as a study area for a European LIFE Project (see below).

Following the discovery of worked flints in 1999, the Trust organised a project between the 23 - 30 May 2000. The primary aim was to confirm the existence of stratified Mesolithic material. The area of cliff investigated consisted of silty clays interspersed with seams of peat. One protruded from the top of the cliff at 4.1 m below OD and another lay a metre below it. At the foot of the cliff, over 11m of water, the seabed is an expanse of peat and tree boles with associated root systems lying in a long narrow band running east and west of the site for over 1500m. A sample of wood from the site has been C14 dated to 6615-6395 BC (Beta-140104) and analysis of the peat by Dr Rob Scaife, Dept. of Geography, University of Southampton identified a regime of floral colonisation comparable with other sites from the same region at similar depths. It was here that the flints had been found and here that a test trench was to be excavated.



Schematic of underwater excavation trench off Bouldnor Cliff

Drawing: J Satchell (after J Adams)



The western Solent is not the easiest area to run a diving operation. Despite its shelter afforded by the Isle of Wight, the wind seldom abates and the tide only slackens for the shortest of windows. Diving is limited to about 2 hours in every 6, between which times currents can reach almost 3 knots. To maximise productivity in these circumstances, the project was run from Flat Holm, Coastline Surveys' 23m vessel which was moored over the site. The ship was home to eight diving archaeologists, accommodating additional experts and volunteers on a daily basis. The excavation was conducted using surface supply diving equipment (SSDE) with air lifts, trowels and purpose made coring boxes in an area delineated by a stainless steel grid, built specifically for the project by Analytical Engineering. All the work was recorded on a head mounted Seahawk camera system provided by Kongsberg Simrad, linking the dive supervisor and archaeological director with the excavator.

When sections of the seabed were collected in the cores, they were recovered to the surface for examination in the coring boxes, the artefacts within them were then excavated and recorded on deck. The overwhelming majority of lithics were located in a dark sandy/silt context below the basal peat deposit. Analysis of their distribution revealed an increase in concentration towards the eastern end of the excavated trench, which suggests a centre for the site. To date over 300 humanly worked or burnt pieces of flint have been identified. Despite the assemblage being relatively small, the technology compares favourably to that of the early to mid Mesolithic. This was a period when populations were adapting to a changing environment caused by the rise in sea level following the last Ice Age which reduced the land mass and separated Britain from mainland Europe.

In addition to the archaeological and palaeoenvironmental studies, eight samples of timber were sawn from trees within the peat for dendrochronological analysis by Nigel Nailing of the University of Wales, Lampeter. These timbers were moved around the seabed with the aid of lifting bags provided by Seaflex Ltd. before retrieval to the ship. The samples were of excellent quality, providing a 280 year sequence over 8,000 years old.

The methods employed during the project proved very successful and enabled the main outcomes to be realised by demonstrating that worked lithics were stratified within the seabed. The project is unique in the UK, and aims to demonstrate the

archaeological potential within the prehistoric coastal zone during the Flandrian transgression.

## Work during SolMAP 2000

Following the excavation in May, monitoring was conducted during SolMAP 2000 when the site was revisited and the rate of erosion in the surrounding peat deposit was recorded. This was achieved by measuring calibrated rods that had been placed at selected locations across the site 10 months earlier. From the results it was clear that material from the peat platform was being lost, this was most evident to the north of the site where 160mm of erosion was recorded at the outermost edge of the basal peat deposit.

Drift dives along the upper cliff identified a further peat platform at 5m below OD delineated to the south by a peat capped metre high cliff. This topographical feature was mirrored to the north by a comparable cliff off Pitts Deep (see above).

**Garry Momber**



Mesolithic flints from the submerged landscape at 11m OD





### **The Hayling Island Wadeway**

Local volunteers surveying the wadeway between Langstone village and Hayling Island

*(Garry Momber)*

### **HMS Hazardous Project**

Diver surveying cannon on the HMS Hazardous wreck site

*(Garry Momber)*



### **HMS Hazardous Project**

The dive team at base camp

*(Virginia Dellino)*

### **The Hamble River Project**

Volunteers surveying the 18th Century Shipbuilding yard at Bursledon Point

*(Julie Satchell)*

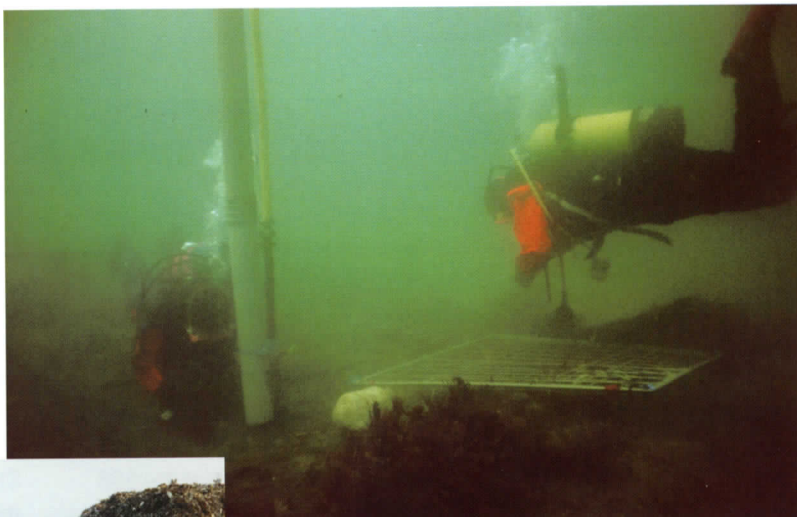




## Alum Bay

Excavation and survey on the Alum Bay wreck site, carried out during SolMAP 2000

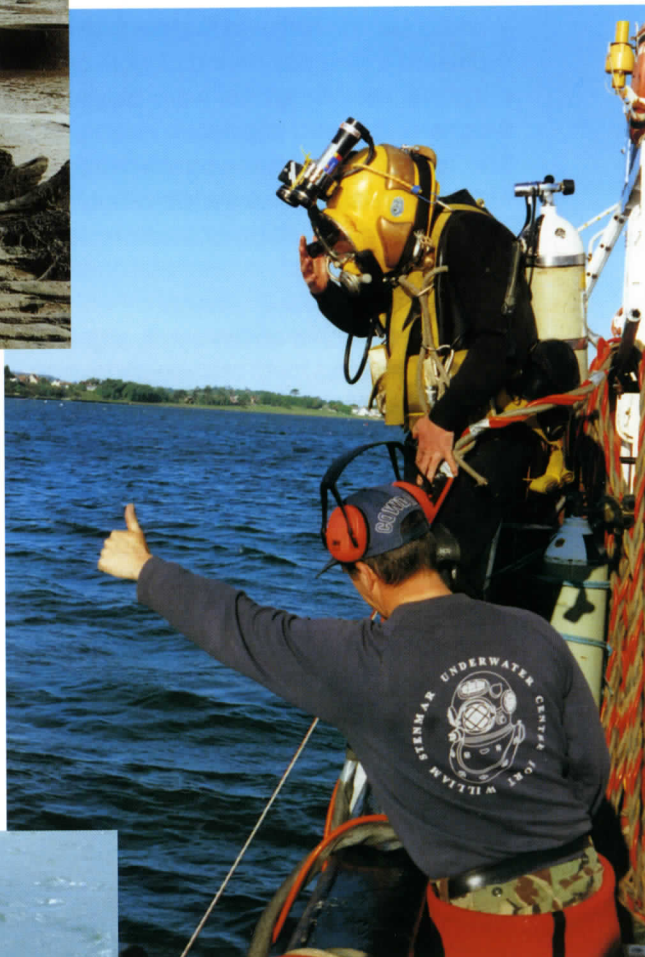
(Jon Adams)



## The Itchen River Project

Detailed survey of one of the hulks in the river which is gradually eroding away

(Julie Satchell)



## Bouldnor Cliff

Surface supplied diver about to enter the water from the support vessel 'Flat Holm'

(Julie Satchell)



## Bouldnor Cliff

The back deck of the diving support vessel, showing some of the equipment and personnel employed for the project

(Julie Satchell)



## Hazardous Diving 2000

This 4th rate ship of the line started life as a 3rd rate, 'Le Hazardoux', when built by the French in 1698, the change of name and rate came after the Royal Navy captured the ship in 1703. However only 3 years later the ship was reported lost off the north east coast of the Isle of Wight. After being rediscovered in Bracklesham Bay in 1977 by members of the 308 branch of the Sub Aqua Association the ship was subject to extensive investigation and survey and the results enabled the site to be designated under the Protection of Wrecks Act (1973).

Working with the 308 branch of the SAA the Trust co-ordinated a nine day period of work on the site in June this year, when we were blessed with fine weather and equally impressive visibility underwater. The project brought together professional archaeologists, volunteers and students who worked underwater on the shipwreck, and on land with the finds.

The wreck lies on a north - south alignment and is around 40 metres long, at its southern extreme is a reef which is home to a wealth of marine life. Timber structure is exposed around the site with the ships cannon along the western edge, around the cannon ball mound can be found many local lobsters. Survey work concentrated on setting up datum points around the wreck which can be used over the coming years as the site continues to be monitored. By measuring the distance between all of the datum points and feeding the information into the computer programme 'Site Surveyor' (courtesy of 3H Consulting Ltd), an accurate network has been produced. This can now be used to record site stability and erosion around the wreck.

Some artefacts had become uncovered and were in danger of being lost. These were raised and work on their conservation has started. Some of the concretions raised in previous years had been x-rayed and were opened during the project, these revealed more small finds such as pottery, glass, bone, wood, cannon balls and brass dividers. These add to the already impressive collection of artefacts, some of which are on display at Earnley Gardens, near Chichester.

An important aim of the project was to assess the site for a diver trail, which would combine the archaeology with the abundant marine biology

associated with the natural reef. Part of the trail was established and information boards will be laid and monitored over the rest of the season. This exciting project will allow visitor access to one of the otherwise restricted protected wreck sites.

This project would not have been possible without the help and patience of Iain Grant (licensee) and Pete Jolly (whose garden we invaded), who invited us to help build on their already impressive work which has been ongoing for the last 20 years. We would also like to thank the volunteers and organisations, in particular the Pilgrim Trust and West Sussex County Council, who have supported this project.

**Julie Satchell**



Opening concretions from the HMS Hazardous wreck site

*Photo: Virginia Dellino*



## The Sinah Circle - Langstone Harbour

Work in Langstone Harbour this year saw a return to the Sinah Circle, a circle of at least 24 upright timber stakes, the age and function of which is unclear. The site was originally discovered by Trust members Arthur Mack and John Bingeman. In recent years it has been comprehensively surveyed and in 1996 a stake was excavated for carbon dating revealing a date of AD 980. A monitoring visit in 1997 revealed a number of the stakes had been unearthed from the site and were lying on the seabed nearby.

Unsure what state the site would be in this year, plans were made to visit it in April and undertake limited excavation. The exercise involved Masters students from the Centre for Maritime Archaeology, University of Southampton, who were able to gain excavation experience using airlifts. The aim was to excavate a trench into the circle, in order to ascertain the relationship between stakes and surrounding deposits, this information would help reveal how the circle had been constructed and what materials this involved.

There proved to be significant degradation of the circle, and many stakes had been lost. Limited excavation was carried out around these elements. The process of excavation was helped by a new site grid, generously donated to the Trust by Analytical Engineering Limited. The grid, made from lengths of box channel with specially constructed brackets, takes much less time to construct underwater than the lengths of scaffolding used previously. Using the grid as a support, divers can concentrate on excavating without being concerned they may contact and damage the site.

The work carried out in Langstone Harbour over the last 7 years has come to fruition with the publication of the project being due out later this year, to be published by the Council for British Archaeology.

**Julie Satchell**

## Ground-truthing South of the Wight

A number of wrecks south of the Isle of Wight have been investigated by a small team of experienced volunteer divers working in liaison with the Trust, from the boat *Colonel Mustard*. Local ground-truthing of sites and anomalies has been one of the main Trust objectives since its formation in 1991. Information gained is added to a wreck database, which in turn will be accessible to the regional Sites and Monuments Records and the National Maritime Record held by the Royal Commission on the Historical Monuments of England.

The most revealing findings drawn from the investigations to date have been the incompatibilities between recorded losses and actual wrecks. Several sites dived have not turned out to be that which was expected. One such wreck which has been identified on Hydrographic Office records as the *Venezuela*, is a case in point. The wreck has also been attributed to the *Asborg*. However, diver survey identified two boilers in the wreckage while both the above mentioned ships only had one. Other possibilities include the *Empire Crusader* or the *Borgny* although further evidence and research is necessary to provide an answer.

South of the Wight there are many such wreck sites. They are in relatively deep water so only limited time is available for diagnostic analysis. However, more work is planned next year when a few unresolved ship identities may yet be revealed.

**Greame Herlihy**

## Preliminary Investigations on the Hamble River

Today the Hamble is one of the most popular rivers in the region for boating activities, but it also holds evidence of past cultures from prehistoric times onwards. The river boasts a substantial Roman settlement at Curbridge and the 'Grace Dieu' built in 1418 as one of the largest ever clinker-built



(overlapping planks) ships, the site is one of only 48 protected wreck sites in the whole of the UK. The Trusts interest in the Hamble was first sparked by Andy Russel of Southampton City Archaeology Unit who has been searching for Roman remains along the river. We accompanied one of the fieldwalking visits and were amazed at the number and variety of maritime related sites which lay preserved within the river bed and banks, particularly in the Upper Hamble.

Research then began into documentary sources and historical maps which detailed the busy shipbuilding communities of the river throughout the ages. These pointed to specific sites of shipyards. Before investigations to find traces of these sites began on foot the Trust was invited by Mr John Madin, a council member of the Solent Protection Society who lives on the river at Bursledon, to visit a shipbuilding site in his garden. This proved to be one of the largest 18th century sites which had been referred to in the documentary sources!

Our work this year on the river has focused on data gathering; field walking along sections of the river bank has revealed many new sites. We pin pointed several of these sites for detailed recording, and this resulted in beginning a survey of the shipyard at Bursledon. We have established survey points around the slipways, these were used to help produce detailed scale drawings of the visible wooden structure in selected areas of the site. Local volunteers helped carry out the planning on a cold and wet Saturday in April. We will build on this work over the coming year. We have also begun recording the many remains along the river banks which include hulks, dock and jetty installations and fish traps. This involves producing a sketch, taking photos, using a Global Positioning System (GPS) unit to gain a position and then recording any information which may help to identify the type of site and period, and whether it is worth returning for a more comprehensive survey. This information will be passed on to the County Sites and Monuments Record and the National Monuments Record to enhance the data base of maritime archaeological sites.

We are particularly grateful to Steve Waring, Maritime Team Leader at the National Monuments Record Centre for his support and interest in this important project.

**Julie Satchell**

## Further Work on the River Itchen

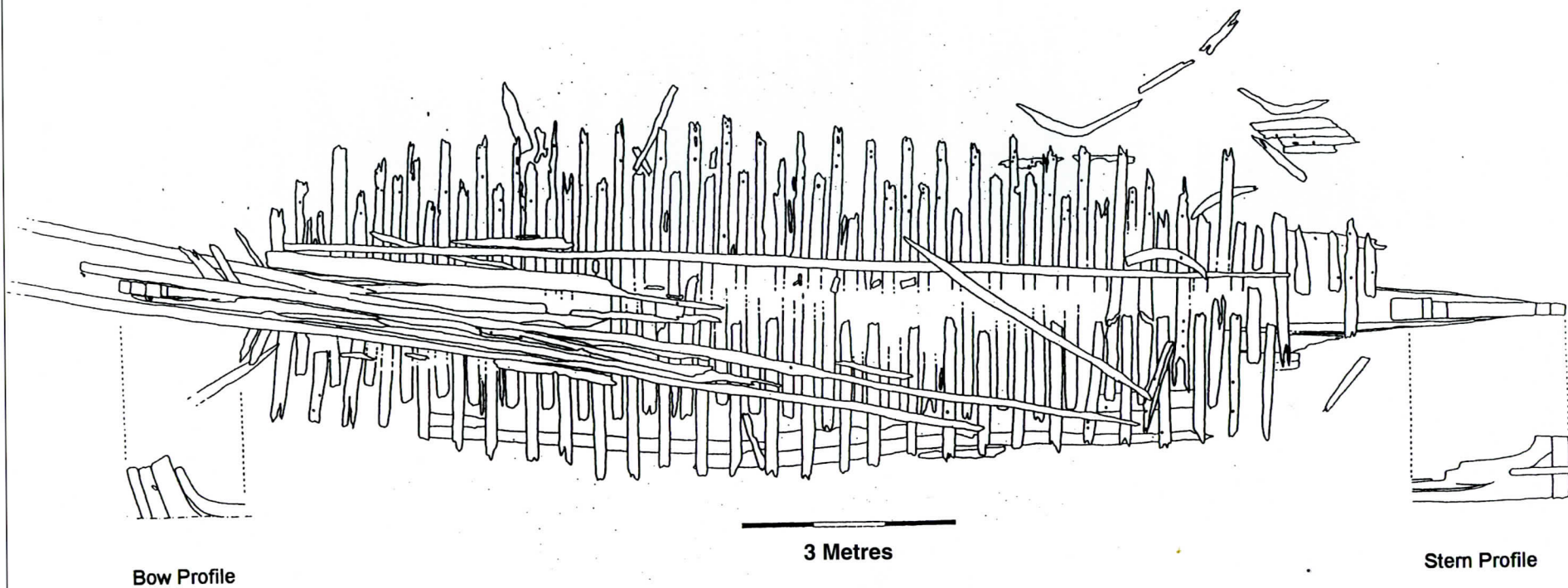
The Itchen River Project is now in its fourth year of fieldwork. This initiative to record the river is a collaboration between the Trust and Southampton City Council. This year our attention has been focused on continuing the survey and recording of hulks located in previous years and extending the areas searched to include the Bitterne manor area, and further to the south around the Chessel Bay local nature reserve.

The fieldwork on the river began with survey of hulks lying in and around the river banks. Students from Southampton University, University College London and local volunteers all worked to gain more information on the large numbers of vessels and structures that are gradually rotting along the river. In the area adjacent to Bitterne Manor hulk recording sheets were used to identify and record basic information about individual vessels and a photographic record of each of them was produced.

Just down river to the south of Northam Bridge another team spent their time planning one of the wooden hulks that sits relatively far out into the river and is only accessible at low tide. Even over the last few years there has been noticeable degradation of the remains of this vessel, so it was decided that a more detailed record was needed. Using base lines and planning frames a scale drawing was produced (see drawing). We can now use this information to research further into the vessel's possible age and function.

Research into the Chessel Bay area by Amanda Williamson (Masters student at the Centre for Maritime Archaeology, University of Southampton) uncovered charts indicating the position of several 'wrecks'. The type and position of these features were recorded, along with others that were archaeologically or historically significant. Many of the 'wrecks' turned out to be remnants of floating jetties that had been left out of the way in the bay.

# Plan of wreck south of Northam Bridge, Itchen River



Julie Satchell



## **The Hayling Island Wadeway**

Between Langstone Village on the mainland and Hayling Island runs a raised passage known as the 'Wadeway'. This path is constructed with various materials, those visible are predominantly gravel and wood. At low tide part of this path becomes navigable on foot for a few hours, however due to channels being cut through the Wadeway you can no longer pass safely from one side to the other.

The Trust became involved in response to a local request. Due to the possible age and importance of the Wadeway to the history of the local area, and because there had not been a systematic survey of the site completed before, the Trust has initiated the creation of such a record.

Hayling Island has evidence of significant human occupation which dates to the Bronze Age. In the Roman period a Romano-Celtic temple was built at the north of the Island this had been constructed over an Iron Age shrine. It is reasonable to assume (in the absence of firmly dated evidence) that there was a need for a crossing to the Island from these early periods, and that the construction of the Wadeway may correspond to such dates.

On a cold and blustery Sunday in April a group of twelve local volunteers turned out to help record in detail some of the features within the Wadeway. Work concentrated on the northern half of the Wadeway where there are numerous phases of building and repair are visible. This detailed survey was tied together with a topographical survey which was undertaken by John Cross of the Southampton Oceanography Centre, using a total station, allowing an image of the contours of the site to be produced digitally.

Permanent datum points were established within the Wadeway and features were tagged with individual reference numbers. These were then recorded using a proforma sheet then more detailed plans and/or elevations were produced. A photographic record of the features was also produced. The total station was also used to gain positions for each of the tags positioned on features, allowing them to be fixed within the structure as a whole.

It is clear that the Wadeway is a very interesting site which holds many clues to the past route to Hayling Island. Within its structure there are features which have been produced to consolidate the deposits of which it is constructed. To gain more detailed information on its construction more intrusive investigation is needed, excavation would show the type and extent of deposits. However, there is further work needed to complete the survey of the structure, the southern end of the Wadeway remains to be surveyed topographically, and there are more features on the northern side to be tagged and recorded in addition to those which may lay to the south.

**Julie Satchell**

## **Chichester Harbour Project**

The Trust continues to be involved with the project which is examining the environmental heritage of the Solent coast which is taking Chichester Harbour as its main case study as little is known about the intertidal/subtidal history and archaeology of that harbour. Under the aegis of Chichester Harbour Conservancy, West Sussex County Council and the Department of Geography, University of Portsmouth, topographical and paleoenvironmental research, along with some fieldwalking, is underway.

When resources permit, further work is planned for this project and will include a geophysical survey of part of the harbour which will be co-ordinated by the Trust in conjunction with the High Resolution Marine Seismology Group, University of Southampton.

## **Poole Harbour Project**

Although the Trust is not actively involved with the fieldwork and diving operations of this project, it continues to be represented on the Steering Committee and the Trust Director has been able to offer advice on the fund raising and administrative aspects of the project.



Representation on the Steering Committee has also allowed Trust officers to be kept up to date with developments on this important project, located in one of our immediate neighbouring counties.

## Portsmouth Harbour Project

Work on this project in recent months has concentrated in preparing further text and illustrations for the project's website. A detailed study of the historic buildings located in Portsmouth's Naval Base, formerly Dockyard, has been progressed. Information on, and photographs of, buildings such as Admiralty House, the Dockyard Church of St Ann, the Porters Lodge, the Staff Officers Mess, the Parade, Short Row, the Block Mills, the various Boathouses, Storehouses, Ropehouses and the Mast Pond have been compiled.

In May, at the invitation of Trust member Ted Sutton, Trust officers viewed a large number of hulks located in Forton Lake and at Hardway. Ted has already carried out a lot of survey work on hulks in the area but it would appear that local plans will mean that many of these hulks will now be removed in a relatively short timescale, prior to further development on the Gosport side of the harbour. The Trust has offered to help with further survey work in this area.

## LIFE: Coastal Change, Climate and Instability

Archaeological investigation has been underway over the last three years to address 'Task 1' of the European Commission L'Instrument Financière de L'Environnement (LIFE) Project: *To demonstrate the value of archaeological evidence to predict the nature, scale and pace of coastal change*. The project titled, *Coastal Change, Climate and Instability*, was instigated by the Isle of Wight Centre for the Coastal Environment, working with partners throughout Europe. The research seeks to examine the evolution

of coastal areas within the European Union, where human settlement has been subject to adverse coastal processes.

A main area of fieldwork has been along a submerged cliff off Bouldnor (See above). Here, working closely with Dr Justin Dix, School of Ocean and Earth Science, University of Southampton, remote sensing and geophysical surveys were conducted. An area was then selected for coring, where cores have been taken from a cross section of the cliff face. The silts and peats in the cores have been analysed by Dr Robert Scaife for palaeo-environmental evidence and samples were dated by the Carbon 14 method. Three layers of peat were recorded within the submerged cliff face. These were seen to be laterally consistent at depth of 4m, 5m and 11m below OD. The calibrated C14 dates of the deposits are 6475 – 6280 BP (Beta 140102), 6870 – 6485 BP (Beta 140103) and 8565 – 8345 (Beta 140104), respectively.

In addition to the fieldwork, the Trust has undertaken an assessment of archaeological sites along the shoreline in the Solent region. An inventory has been compiled within which the sites have been ranked in relation to their cultural amenity, fragility and significance as indicators of coastal change. The system is based on a model devised by Dr David Tomalin. The study of the coastal archaeology and palaeoenvironmental resource, can help assess demographic and geomorphological responses to past sea level fluctuations. Such data represents a valuable archive against which future changes in sea level can be compared. It is hoped that the information collated will be a source of data that coastal planners can call on to help predict the effects of future sea level change.

The project is being run in collaboration with the Isle of Wight Council, the University of Southampton, the University of Bordeaux, the National Research Council Italy, BRGM France and the Discovery Programme, Ireland.

**Garry Momber**



## **1999 Annual Public Lecture The Itchen River Project**

The Trust's eighth annual public lecture was given on 18 November by Dr Andrew Russel, Southampton City Council and Mr Garry Momber, the Trust's Archaeological Officer, at the Avenue Campus, University of Southampton, in conjunction with the Department of Archaeology. Once again we are most grateful to Professor Peacock and his staff for their assistance.

Addressing an audience of over one hundred people, Dr Russel described how the Itchen River Project started as a venture between the Trust and the Southampton City Archaeology Unit in response to local interest, and had grown to involve groups and individuals from the local area and nationally. He then put the river into the wider context of its place within the city.

The mud of the Itchen holds evidence of periods from the Palaeolithic onwards, the landscape has changed dramatically since this period albeit the stone tools produced by early people remain as evidence.

Evidence from the Neolithic period and artefacts from the Bronze Age have been discovered close to the river. It was the Bronze Age that saw some of the first known boats and we have evidence of their use in trading through tools and hoards found around the area.

In the Roman period river use was intensified. Evidence from the 1st Century onward is found especially at the Roman centre of Clausentum, situated on the defensible peninsular at Bitterne Manor. A series of posts in the inter-tidal zone dating to the Roman Period, which may be the remains of a river crossing, have been found on the other side of the river.

In the Saxon period the old Roman settlement was again inhabited, this preceded a move to the opposite side of the river in the 8th century. The Saxon town of Hamwic developed grew into one of the largest centres in Britain. Maritime trade was extensive in this period but a Saxon boat find in the area remains illusive.

Through Medieval times the river was still a busy thoroughfare, the trade in wine and wool saw a rise in the prosperity of the town. As the port infrastructure grew there was a shift towards the River Test, where the focus remained until the 18th century. It was not until this period that the Itchen once again became used more intensively and Southampton continued as a centre of maritime innovation, including the production of iron-clads in the 19th century. Until the 1930's many people were employed in the boat building industry, but since this time there has been huge change.

Garry Momber then talked about the more practical side of the Itchen River Project, highlighting the sheer number of hulks and old structural features remaining along the river. A number have been surveyed; this has proved to be a productive training ground for archaeological enthusiasts and also a vehicle for raising public awareness of the maritime past. The results of such work have been published via the Internet on a site developed by Portsmouth University and information has also been disseminated by lectures.

The recording of vessels along the shoreline has taken us a step closer to quantification of the visible archaeological resource and can aid in the prediction of further material. During the survey it became apparent that the hulks tend to lie in clusters along certain stretches of the river. This suggests such sites contain characteristics that lend themselves to such groupings, and it is highly probable that the river mud has preserved older archaeological material buried beneath the modern hulks. It is vital that management plans are formulated to protect remains both above and below the silts.

The lack of a comprehensive management plan for archaeology along the shoreline contributed to the destruction of a 19th century vessel which lay in the mud 100 metres north west of Cobden Bridge. Here, the stern section of a 30m long hulk was being dismembered with a chain saw at the request of the adjacent land owners, as it was obstructing their view. Fortunately, the work was noticed by Dr Russel during a chance drive over Cobden Bridge. He brought it to the attention of the Trust, which mobilised a small team to work around low water and record the structure before it was lost. Further survey was to be conducted of the remaining 25m of the wreck, but on visiting the site later, a digger was found pulling it from the foreshore and dumping it in a skip. Little could be done to save the well preserved hulk as it was excavated from the mud



but liaison between the Trust, the City Archaeology Unit, the Centre for Maritime Archaeology at the University of Southampton and Itchen Marine brought about the rescue of two stern portions, which will be used for training maritime archaeologists at the Centre for Maritime Archaeology. This is the only encouraging outcome following the destruction of a piece of maritime history. The final irony was presented by the site foreman who declared he was being paid £7 per ton by Customs and Excise to remove the 'obstruction'. Is this how we see the future management of a diminishing archaeological resource?

On the other side of the Itchen at Holdens Yard, a former shipbuilding site is being investigated. A rescue survey is recording barges and parts of the water front revetments.

A consequence of riverside developments can be seen at the site of the Roman post alignments opposite Bitterne Manor. Exposure of these structures after over 1500 years suggests a change in the river hydrodynamics. Changes of this nature would be brought about by adaptations along riverbanks such as reclamation, development or the narrower river, thus bringing about increased water velocities. Further evidence for erosion is seen at extreme low water where a submerged landscape immediately offshore from the Roman site has become exposed. Core samples have been taken through the river silt nearby, which have yielded evidence of past land surfaces.

The work conducted to date along the shores of the River Itchen has demonstrated the vast potential of archaeological material in an urban river not untypical of other river systems around the country where substantial segments of the human past are represented.

The Itchen is only one of the local rivers which holds unlimited potential. The Test and the Hamble are yet to be fully investigated and these will offer more clues to the maritime development of the region. As the pace of redevelopment grows the threat to these sites increases, making the need for a management strategy an immediate issue.

## **Fort Victoria Maritime Heritage Exhibition**

Further improvements were carried out last winter to the Maritime Heritage Exhibition, which is housed in part of the old Palmerston fort, Fort Victoria, on the Isle of Wight, one mile west of Yarmouth. Work was completed in time for the start of the 2000 season.

Improvements include a computer which gives visitors details of the Trust's current projects, better entrance signage, a tank demonstrating how artefacts can be preserved and a further 18th Century 'sailor' to augment the major First Fleet display.

Other 3 dimensional displays include replica cabin from the Santa Lucia which sank off Yarmouth in 1567, a full scale model of a diving archaeologist working on the wreck and a diorama of the excavations. Display panels and a video tells the story beneath the Solent, along with artefacts, many of which are on loan from the Bembridge Maritime Museum.

We are grateful to Dr Michael Bishop, Museums Officer, Wight Heritage, Martin Woodward, Nick and Paul Blake for their continuing support.

The Maritime Heritage Exhibition is open from Easter to the end of October.

## **Spreading the Word**

With its aim of promoting interest and knowledge of maritime archaeology, the Trust has continued to further 'spread the word'. In addition to the annual public lecture, talks and presentations have been given to Christchurch Borough Council, Friends of Gosport Museum, Lymington Town Sailing club, Wightlink Ltd management, the Avon Valley Archaeological Society, the Solent Protection Society, Crown Estate officers, the Selsey Society, Coastal Management Course Bournemouth University, the London Maritime Archaeological Group, Southampton City Museums Archaeological Society, Highcliffe Rotary and the Soberton Fellowship.



Formal links continue with the Standing Conference on Problems Associated with the Coastline, the Nautical Archaeology Society, the Joint Nautical Archaeology Policy Committee, the Solent Forum and CBA Wessex.

The Trust's website:

**[www.soc.soton.ac.uk/HWTMA](http://www.soc.soton.ac.uk/HWTMA)**

went on line in April. The site is regularly updated with information on fieldwork, projects, conferences and other Trust activities.

Improvements have been made to the Trust's database of maritime sites and monuments which is now linked to a MapInfo Geographic Information System (GIS). This allows the data to be more easily interrogated and more effectively displayed.

Media coverage both local and national was particularly good for the Bouldnor Cliff Project and included:

BBC World News: News 24

BBC Radio 4

BBC South Today

BBC Breakfast Show

Meridian TV

Radio Solent

Times Educational Supplement

Independent on Sunday

Daily Echo

Times on Saturday: Meg@ Section

## Publications

International Journal for Nautical Archaeology: articles in Volume 29:1

'Drowned and Deserted: a submerged prehistoric landscape in the Solent, England' - G. Momber

'The application of the Submetrix ISIS 100 swath Bathymetry system to the management of underwater sites' - G. Momber and M. Geen

Solent Protection Society Spring 2000 Newsletter

SCOPAC 2000 Newsletter

Diver Magazine

Underwater Contractor Magazine

Nautical Archaeology Newsletter

Subsea Diving Magazine

Irish Sea Forum Seminar Report

## For Your Diary

### Nautical Archaeology Society Annual Project Seminar

28 October 2000 at Portsmouth University.

For more information contact the NAS -

**Phone: 02392 818419**

e-mail: [NAS@nasportsmouth.org.uk](mailto:NAS@nasportsmouth.org.uk)

### CBA Wessex Conference

'Wessex and Water'.

To be held on the 4 November 2000 at Abbey Hall, Netley Abbey. For more information contact the Trust.

### 2000 Annual Public Lecture

The Trust's ninth annual public lecture will be given by Mr David Motkin. Entitled 'A Bird's Eye View of our Coastal Heritage: Aerial Photography of the Isle of Wight', the lecture will be delivered on Thursday 23 November at 7pm, Medina Theatre, Mountbatten Centre, Newport, Isle of Wight.

### 5th Underwater Science Symposium

The Society for Underwater Technology's 5th Underwater Science Symposium entitled 'Visualising the Underwater Environment 2001 An Inner Space Odyssey', will be held at the Southampton Oceanography Centre, 29 March to 1 April 2001.

### 6th International Conference on Waterfront Archaeology

'From Shipyards to Fishing Settlements: Medieval Maritime Industries in NW Europe' will be held at the Avenue Campus, University of Southampton, 17 to 19 September 2001, to be co-hosted by the University's Centre for Maritime Archaeology and the Trust.



*The Trust gratefully acknowledges the generous support of the following:*  
**September 1999 - September 2000**

## **Grants and Donations**

Department for Culture, Media and Sport • English Heritage  
National Monuments Record • The Crown Estate  
Hampshire County Council • Isle of Wight Council  
West Sussex County Council • Southampton City Council • European Commission  
Standing Conference on Problems Associated with the Coastline  
Solent Protection Society • Wightlink Limited • Oakmore Trust  
Herapath Shenton Trust • Hilton Cheek Trust • Daisy Rich Trust  
Manifold Trust • Charlotte Bonham Carter Charitable Trust  
Inverforth Charitable Trust • Bulldog Trust • Pilgrim Trust  
Esmee Fairbairn Charitable Trust • George Gale & Co Ltd • Lymington Town Sailing Club  
Avon Valley Archaeological Society • Selsey Society  
Southampton City Museum Archaeological Society • Rotary Club of Highcliffe-on-Sea  
Sir Charles Tidbury DL

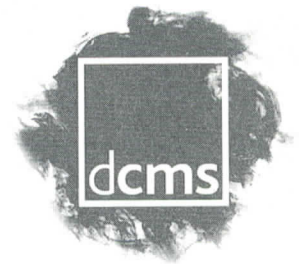
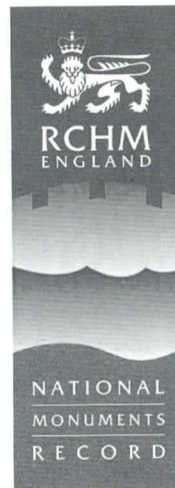
## **Assistance in Kind and Services**

Hampshire County Council  
University of Southampton  
Coastline Surveys Ltd  
Seaflex Ltd  
Keyhaven Yacht Club  
Treble Light  
Royal Naval Museum  
Hurst Castle Services  
Mr I Grant  
Mr P Jolly  
Dr A Russel  
Mr A Mack  
Mrs V Fenwick  
Mr J Cross  
Mr P Blake  
Mr M Woodward  
Ms C Harker

Isle of Wight Council  
Southampton Oceanography Centre  
Analytical Engineering Ltd  
Kongsberg Simrad  
ABP Southampton  
Poole Bay Archaeological Research Group  
Royal Navy Submarine Museum  
Mr P Holt: 3H Consulting Ltd  
Mr A Bradbury  
Mr N Nayling  
Mr K Keighley  
Mr J Bingeman  
Mr M Markey  
Ms A Gale  
Mr N Blake  
Mr and Mrs R Witheridge  
Ms V Dellino

Company Limited by Guarantee  
Registered in England - Number 2394244  
Registered Office - County Hall, Newport, Isle of Wight  
Charity Registration Number 900025  
Bankers: Lloyds TSB Bank Plc, 49 High Street, Winchester  
Auditors: Harrison Black, Pyle House, 136 & 137 Pyle Street, Newport, Isle of Wight









**The Hampshire and Wight Trust  
for Maritime Archaeology**

Room W1/95  
Southampton Oceanography Centre  
Empress Dock, Southampton  
Hampshire SO14 3ZH

Telephone: 023 8059 3290  
Fax: 023 8059 3052  
email: [hwtma@mail.soc.soton.ac.uk](mailto:hwtma@mail.soc.soton.ac.uk)  
website: [www.soc.soton.ac.uk/HWTMA](http://www.soc.soton.ac.uk/HWTMA)