

The Tasmanian Maritime Heritage Program

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Figure 1. Map of Tasmania, Bass Strait and southern Victoria. (eg design.)

Introduction

This article presents the development of a historic shipwrecks program in Tasmania within the broader context of a more general maritime heritage program. By definition maritime archaeology is concerned not just with the study of shipwrecks but also with the material remains of all related maritime activities such as ports, shipbuilding yards, navigation aids, etc. (Muckelroy, 1978: 4). Concurrent with work on historic shipwrecks a number of maritime related projects have been undertaken in Tasmania including conservation works on lighthouses, studies of the state's whaling and sealing industries, and surveys of the marine infrastructure of convict establishments. This increasing role in the overall management of the state's heritage places also has implications for the future of a dedicated shipwrecks

program and how it fits into a more comprehensive program dealing with the full range of Tasmania's heritage sites.

Despite various departmental changes, the management of the state's heritage places since 1970 was largely the province of the Tasmanian Parks and Wildlife Service (PWS) through what was known as the Cultural Heritage Branch. As well as directly carrying out works on historic locations on reserved lands (including shipwreck sites) the Branch traditionally provided direction and advice over a wide range of heritage issues, including maritime. In 1997, the Tasmanian Heritage Council was also established to carry out functions under new heritage legislation which could be applied to historic sites regardless of their land status. In 2001, a review of these functions led to the combination of the government's heritage organisations into what is now known as the Tasmanian Heritage Office located within the Department of Tourism, Parks, Heritage and the Arts.

The major restructuring of the organisation and department that will be delivering the maritime heritage program in Tasmania presents a timely opportunity to summarise and present some of the results of two decades of work in the field. The program is presented as it stands up to the date of this publication. The future of the program is not discussed as it is subject to many variables including the levels of state and federal funding and the direction that the Commonwealth Historic Shipwrecks Program takes. During 2003 the Tasmanian Heritage Office will be developing a five-year strategic plan to address many of the issues relating to the future of maritime heritage in the state.

Background

Geography and history

As an island colony and later state of the Commonwealth of Australia, Tasmania has always been fundamentally dependent on maritime activity to connect it with the outside world. Tasmania lies off the south-eastern tip of continental Australia between latitudes 40°30'south and 43°30'south Bass Strait, a distance of approximately 190 km, separates it from the mainland with a northern boundary lying 10 km off Wilsons Promontory, Victoria. Tasmania has more coastline per unit land area than any other state in Australia—about 4900 km. The northern coast of Tasmania, fronting onto Bass Strait has relatively gentle terrain and is the most densely populated region with a number of major port facilities. In contrast, the western coast is rugged and largely uninhabited with only two safe anchorages along its



Figure 2. The New Wharf, Hobart, in the 1870s. (Courtesy: State Library of Tasmania.)

entire length. The southern coast is deeply and extensively indented with long stretches of sea cliffs, but also includes the relatively sheltered approaches to the Derwent River estuary and the capital city and deep-water port of Hobart. The eastern coast is also indented with numerous bays and there are a number of small towns but few major port facilities. There are some 334 off-lying islands in Tasmanian waters with the largest concentrations in Bass Strait comprising King Island, the Furneaux Group and the Hunter Group. Also included in Tasmanian territorial waters is sub-Antarctic Macquarie Island.

The indigenous inhabitants of Tasmania exploited marine resources along these coasts and islands for over 30 000 years. While much of the evidence has been inundated by the rise of post-Pleistocene seas, massive coastal shell middens, hut sites and enigmatic stone carvings still attest to the extent of this occupation. The first European explorers described and depicted watercraft and their usage, and the earliest sealing parties exploited the skills of indigenous women to help hunt and kill their prey. Since 1642, vessels from the Netherlands, France and Britain explored the coastline of Tasmania but it was not until 1798 that the island, known as Van Diemen's Land, was circumnavigated. The first official European settlement was established in 1803 and the colony rapidly developed in tandem with New South Wales and the later states of Victoria and South Australia. The rugged topography of the island and the ready sea access ensured that for much of its history the state's external and internal communications and commerce were

almost entirely dependent on water transport. As well as agriculture, mining and forestry Tasmania's economy depended on a number of maritime-based industries including sealing, whaling, fishing and shipbuilding.

The movement of colonial products and the redistribution of overseas cargoes from the main ports of Hobart and Launceston was carried out by a fleet of small locally built sailing vessels, and to facilitate this trade infrastructure was developed at almost every navigable river entrance or sheltered bay. In the mid-1800s, steamship services were also developed to service the main ports and across Bass Strait to the Australian mainland. From the 1870s, steam propelled vessels dominated regular coastal services although sailing vessels continued to carry a large proportion of interstate and overseas cargoes. By the turn of the century, steam had largely replaced sail although sail traders, both large and small worked until the 1930s. Coastal services declined in the 20th century as land transport increasingly developed and most of the state's shipping now operates out of only six main ports. A major fishing industry still works in Tasmanian waters and is largely based at the smaller coastal towns. The main southern port of Hobart is also increasingly a host to passenger liners, naval craft and southern oceans research vessels.

Maritime Heritage

Tasmania is rich in maritime heritage objects and traditions. The State Library, Archives Office and museums hold significant collections of maritime artefacts,



Figure 3. Wreck of the SS *Karitane* at Deal Island in 1923. (Courtesy: Maritime Museum of Tasmania.)

photographs and documents, such as the majority of the surviving log-books from Australian whaling vessels. The islands' shipbuilding tradition is evident in a number of surviving historic craft such as the ketch *May Queen*, built in 1867, and one of the oldest sailing vessels still afloat in the world. These skills are still taught at the Wooden Boat Building School at Franklin, south of Hobart. The maritime tradition is still celebrated through events such as the biennial Wooden Boats Festival and the numerous regattas still held around the state since the earliest Hobart event in 1838. The annual Sydney to Hobart yacht race remains as the nation's premier sailing event and receives widespread recognition.

Tasmania's maritime history has also left a significant collection of associated buildings and structures. A historical study on jetties and wharves in south-eastern Tasmania has over 1 500 structures in that region alone (Guiler, 1998). Buildings associated with maritime activities still abound in Tasmania with the customs houses of Strahan and Launceston, naval defence batteries around Hobart, the sandstone warehouses of Salamanca Place and the country's oldest pilot station at Low Head. There are a total of 25 lighthouses in the state, a number of which still retain their original light keepers' quarters. Survey work over the last decade has also identified numerous archaeological sites connected with maritime industries such as sealing, whaling and shipbuilding.

Tasmania's shipwreck resource

Situated in the path of the winds known as the Roaring Forties, surrounded by contrary currents and often inhospitable shores, and once solely reliant on seaborne trade, it is not surprising that Tasmania has had numerous shipwrecks. In all, over 1 000 wrecks have been recorded in Tasmanian waters. Many of these have occurred on the major sea routes through Bass Strait and the approaches to major harbours such as Hobart, and Launceston. Clusters of wrecks also appear where there are major hazards to shipping such as King Island (60 wrecks) and the difficult entrances to some harbours such as Strahan and St Helens. The scope of maritime activity in the state is reflected in the high percentage of shipwrecked vessels under 100 tons (75%), including around 300 fishing craft. Most of the remaining larger wrecks are from misfortunes encountered in the interstate trade, or from the passing trade, such as the coal route from ports in New South Wales to Melbourne and Adelaide. A smaller number of wrecks (45) are from the international trade, mainly with the United Kingdom, but also Mauritius, India and North America.

The earliest shipwreck in Tasmanian waters, the *Sydney Cove*, occurred in 1797 when Tasmania was still considered geographically as part of mainland Australia. During the 1850s and 1870s there were proportionally large rises in the number of wrecks as two booms in interstate trade

brought an increased demand for shipping. Despite the introduction of steam and diesel propulsion, navigation aids and improved construction techniques the rate of shipping losses during the 20th century remained high, particularly among the state's fishing fleet and has only recently diminished with the enforcement of strict fishing quotas. Even in relatively recent times disasters could still occur to larger vessels such as the 7 000-ton *Lake Illawarra* in 1975 and the 37 000-ton *Iron Baron* in 1995.

The history of shipwrecks in Tasmanian waters is also a direct reflection of the development of settlement and commerce in the state. The importance of the shipbuilding industry is shown by the loss of over 300 locally built craft not counting those wrecked in other Australian state waters, where many operated. The cargoes of the local craft are those of the primary and extractive industries that the Tasmanian economy was based on—timber, minerals, grain, stone, whale oil and fish. Smaller trades such as the transportation of firewood to Hobart also show up in the number of overloaded and elderly sailing craft that foundered on the Derwent River during sudden wind squalls. Wreck locations also reflect the opening up of new settlements or new industries, such as mining on the west coast where a number of wrecks occurred around the turn of the century when an increased number of ships were delivering machinery and stores or loading minerals.

At the time of writing some 70 (7%) of the state's shipwreck sites have been relocated. Although they cover a wide range of dates and vessel types the located sites cannot be regarded as an entirely representative sample. For example, only a few examples of the smaller timber craft that make up the majority of the Tasmanian losses have been found. In contrast iron wrecks account for less than 5% of the total number of recorded sites yet represent close to 50% of the located sites. This is a function of their construction materials, larger tonnages and generally later date of wrecking. In terms of individual sites the archaeological potential of the wrecks varies enormously, although there are considerable difficulties in accurately assessing this potential. Timber wrecks having substantial hull and cargo remains are limited, being confined to sites in sandy environments such as the *Sydney Cove*, *George Marshall* and *City of Edinburgh*. Other sites such as the *Brahmin* and the *Asterope* have substantial surviving archaeological material but their potential is decreased by the scattered nature of the sites and the lack of structural remains. Conversely, a number of iron wrecks such as the *Bulli*, the *Farsund* and the *Nord* have highly intact structure although most artefact material has been removed.

The Maritime Heritage Program

Development of legislation

The establishment of shipwreck legislation in Tasmania began with the discovery of the *Sydney Cove* (1797) shipwreck in the Furneaux Group, Bass Strait (see below). Following the reporting of this site to government

authorities in early 1977 the significance of the wreck and also the need to legally protect the remains were quickly realised. Although the state had no specific legislation protecting shipwrecks existing provisions under the *National Parks and Wildlife Act 1970* were used to declare the wreck and parts of the surrounding islands as a designated historic site. This Act had previously been applied only to land sites but it was deemed that provisions under the legislation were applicable to the shipwreck. As a declared historic site it was illegal to interfere with the wreck without permission from the Tasmanian Parks and Wildlife Service.

On 23 February 1982, The Tasmanian State Government became a signatory to the *Historic Shipwrecks Act 1976*. This Act, which had been proclaimed by the Commonwealth Government, required individual states to adopt the legislation before it could be enforced in their adjacent waters. Under the Federal Act, the Tasmanian Parks and Wildlife Service was made responsible for all activities relating to historic shipwrecks and associated relics and subsequently received regular federal funding to carry out these responsibilities. The legislation was designed to protect significant shipwrecks on a national basis and required the nomination of individual sites as determined by a set of recognised criteria. The *Sydney Cove* was the first shipwreck in Tasmanian waters to be nominated and was proclaimed as a protected site under the legislation on 29 February 1984.

During the 1980s, inspections of a number of shipwrecks in the north of the state resulted in the declaration of nine more sites under the *Historic Shipwrecks Act*. These were the *Asterope*, *Cambridgeshire*, *City of Edinburgh* and *Litherland* in 1985, the *Brahmin* and *George Marshall* in 1987, and the *Cataraqui*, *Bulli* and *General Picton* in 1989. In 1993, the federal legislation was amended so that all shipwreck sites more than 75 years old were automatically protected without the need for individual nominations. However, as the legislation did not apply to individual states' internal waters such as enclosed bays and rivers, an estimated 20% of Tasmania's shipwreck resource still had no nominal protection. In previous years some other Australian states had introduced complementary shipwreck legislation and, in 1995, Tasmania followed with the proclamation of the *Historic Cultural Heritage Act* that contained specific provisions relating to shipwrecks. It is within this legislative framework that a program to provide protection, research and interpretation of the state's maritime heritage has been developed.

The Historic Shipwrecks Program

Although the study of maritime archaeological sites in Australian waters had been undertaken since the 1960s, most notably by the Western Australian Museum, no such work occurred in Tasmania before the late 1970s. The initial work on the *Sydney Cove* and other shipwreck sites was largely undertaken by amateur divers who formed themselves into the Tasmanian Underwater Research

Group, later to be incorporated into the Maritime Archaeology Association of Tasmania (MAAT). As managers of the *Sydney Cove* site the Tasmanian Parks and Wildlife Service also supplied staff for diving operations although the expertise in recording underwater archaeological sites was still developing. In 1978 and 1980, Graeme Henderson of the Western Australian Maritime Museum was contracted for short periods to guide work on the *Sydney Cove* site.

The Queen Victoria Museum and Art Gallery (QVM) based at Launceston in the state's north also became involved with shipwreck sites through its responsibility for the conservation of artefacts from the *Sydney Cove*. In 1981, archaeologist Shirley Lester (née Strachan) was appointed on a permanent basis by the QVM to continue the work of conserving and recording the *Sydney Cove* material. While the work on the *Sydney Cove* proved to be a major stimulus to the development of an archaeological program in Tasmania, in the 1980s the focus of work in the state shifted to the documentation and inspection of other shipwreck sites. During this period the Maritime Archaeology Association of Tasmania began to inspect sites around the coast and started to compile basic historic research with guidance from the QVM (Lester, 1983a). This work also included the recording of underwater material adjacent to two major convict settlements (see below) and a survey and training project on the wreck of the *Mary Wadley* (Lester, 1984).

In 1984 the Parks and Wildlife Service appointed their first maritime archaeologist, Paul Clark, who undertook investigations into a number of sites of which six were nominated for protection under the federal legislation. In late 1987, the author was appointed to the vacant maritime archaeologist position and has continued in that role up to the present day. The initial priorities of the program were to continue to record the state's known shipwreck sites, particularly where there were known concentrations such as on the approaches to Hobart and the Bass Strait islands. This work resulted in the production of a number of general survey reports (Nash, 1988, 1989a, 1990a, 1997a; Richards, 2003b) and more detailed investigations into two of the state's declared shipwrecks, the *Brahmin* and *Litherland* (see below). As priorities lay with recording the shipwreck resource that was already available no active search for previously unlocated sites was undertaken during this program. Similarly, large scale predictive modelling of unlocated shipwreck sites was not attempted although preliminary assessments of some individual sites were completed.

During the early 1990s, the focus of the shipwreck program returned to the *Sydney Cove* with a dedicated project to excavate, conserve and interpret the state's most significant wreck. The site of the steamship *Tasman*, discovered in 1998, has also been the subject of a recording project that demonstrates the potential of deep-water wrecks (see below). The decade also saw the completion of a comprehensive shipwrecks database for the state and



Figure 4. Wreck of the *Svenor* on the west coast. (Courtesy: Tasmanian Heritage Office.)

the production of popular books based on this resource. Other interpretation projects have included publications, maritime heritage trails, web sites and displays at capital and regional museums.

Shipwreck database and publications

Like most other Australian states at the beginning of their shipwreck programs, basic information on Tasmania's shipwrecks initially relied on a number of popular publications. The single volume *Wrecks in Tasmanian Waters* written by Harry O'May and published during the 1950s (O'May, 1954) provided brief details on around 600 of the state's shipwrecks. Other early Tasmanian publications containing varying degrees of information on shipwrecks were *Pioneer Shipping* by Leslie Norman (1938) (*Blue Gum Clippers* by Will Lawson (1949) (and *Wooden Hookers of Hobart Town* and *Hobart River Craft* by Harry O'May (1954, 1959) (As informative and useful as these publications were, the problem faced by the earlier maritime writers in Tasmania was that their knowledge of sources of information and their usage was limited. Normans's work was based largely on compilations of oral history and Harry O'May's books relied on readings of a single Hobart newspaper. When research is limited to the popular press it must be remembered that newspapers were very patchy in their coverage of local events and often quite significant marine events were published in only one, sometimes obscure, newspaper. The earlier researchers were largely unaware of, or unable to access official sources such as the British Registers of Shipping and Marine Board and Customs records that included official inquiries into marine accidents. They were also generally unable to sight non-Tasmanian records, especially mainland newspapers.

The quality of information on Australian shipwrecks improved during the mid 1970s to late 1980s with the publication of the four-volume *Australian Shipwrecks*, initiated by Charles Bateson (1972) and completed by Jack Loney (1980, 1982, 1987) However, the broad scope of these works meant that the level of detail provided on any one wreck was relatively minor and gaps in the research



Figure 5. Wreck of the *Netherby* at King Island in 1866. (Courtesy: State Library of Victoria.)

became apparent with closer scrutiny. Systematic research on Tasmanian shipwrecks increased during the 1980s with the first foray into the compilation of a database under the provisions of the Commonwealth *Historic Shipwrecks Act 1976*. A general register of around 500 sites was compiled by the Queen Victoria Museum during the early 1980s (Lester, 1983b) and researcher Graeme Broxam provided the PWS with a comprehensive card index of shipping losses up until 1860. The author continued this research after his appointment as state maritime archaeologist and in 1989 the information was first computerised. During the late 1990s, the general site records of the Cultural Heritage Branch of the PWS were progressively computerised into what is known as the Cultural Heritage Information System (CHIS) including a subset for historic shipwrecks. The database currently holds over 1 000 shipwreck records and includes the capacity to undertake electronic mapping, record images and track management activities.

In 1986, the first publication dedicated to a single Tasmanian shipwreck appeared, detailing Australia's worst civil shipping disaster at King Island in 1845 (Lemon & Morgan, 1986). During the 1990s, the first regional studies of shipwrecks were published in *Shipwrecks of Tasmania's Wild West Coast* (Broxam, 1993) and *Shipwrecks of the Furneaux Group* (Nash, 1996a). The financial cost of producing large and detailed regional shipwreck

studies led to discussions by authors Broxam and Nash in 1997 that culminated in a decision to combine their researches and produce a single-volume publication on Tasmania's shipwrecks under the auspices of the Historic Shipwrecks Program. Even then, it soon became apparent with additional research into the latter 20th century period that the book would have to be divided into two volumes, due to the size and proposed publication date.

As with most archival projects, further research led to previously untapped sources of information including the fishing boat registration records compiled by the Department of Sea Fisheries and the unpublished inquiries into marine accidents held by the former Navigation and Survey Department. From a wide variety of local, interstate and overseas sources a pictorial collection of Tasmanian vessels involved in shipwrecks was also compiled, eventually comprising over 400 images. The resulting two volumes covering the periods 1797–1899 and 1900–1999 are currently the most complete and up to date record of shipwreck occurrences in any Australian state (Broxam & Nash, 1998, 2000).

Shipwreck projects

Sydney Cove

Wrecked in 1797 during a journey from Calcutta to Port Jackson (Sydney), the *Sydney Cove* was rediscovered in

Tasmanian waters at the beginning of 1777. It is the eighth oldest shipwreck site in Australian waters and the first merchant vessel lost after the establishment of the colony of New South Wales. In 1796 the Calcutta merchant house of Campbell and Clark had assembled a speculative cargo for New South Wales, composed largely of spirits, but also including textiles, foodstuffs, stores, livestock and luxury goods. To transport these goods the company acquired a locally built ship of around 250–300 tons which they renamed the *Sydney Cove*. The vessel departed in November 1796 and had a troubled voyage beset by bad weather and the deaths of six of the crew. In February 1797 the *Sydney Cove* was struck by further storms off north-eastern Tasmania and the badly leaking vessel was consequently run aground at Preservation Island in the Furneaux Group. A rescue mission to Port Jackson cost the lives of fourteen of the crew but brought assistance to the survivors in June 1797. Three salvage voyages returned the crew and around half of the *Sydney Cove*'s cargo to Sydney by March 1798. The reports of the *Sydney Cove* survivors and the rescue voyages to the wreck subsequently led to the discovery of the strait separating Van Diemen's Land (Tasmania) from the Australian mainland, and the commencement of the colony's first export industry in sealskins and oil from the Furneaux Group.

While divers had sporadically searched for the wreck of the *Sydney Cove* during the 1970s it was not until 1977 that the site was located in 5 m of water off the southern end of Preservation Island. The responsible attitude of the divers in immediately reporting their find meant that legal protection of the site was quickly put into effect (see above). Over the next three years the newly formed Maritime Archaeological Association of Tasmania carried out a number of surveys of the wreck with the assistance of the Western Australian Maritime Museum, the Tasmanian National Parks and Wildlife Service and the Queen Victoria Museum (Atherton, 1977, 1978a, 1978b; Henderson, 1978). This work established that a considerable section of the ship's keel and hull structure remained buried, together with items from the cargo, stores and equipment. A number of artefacts were also recovered for conservation and display at the Queen Victoria Museum.

Lack of funding during the 1980s precluded major work on the *Sydney Cove* although continued monitoring and some recording and stabilisation of the site was carried out (Clark & Smith, 1986). In 1986 archaeologist Shirley Strachan, who had been involved with the *Sydney Cove* through the Queen Victoria Museum, produced a resource document that summarised the previous work on the site and provided an excellent basis for further research (Strachan, 1986). Since the mid-1980s the focus of the historic shipwrecks program in Tasmania was concentrated on the documentation and inspection of other sites around the state. The completion of the initial stages of this program served to emphasise the significance of the *Sydney Cove* as well as developing the expertise essential

for more detailed work on the site. On this basis it was also perceived that an excavation project would serve to focus attention on the state's maritime heritage and aid in its appreciation and preservation.

State and federal governments as well as a private philanthropic body made funding for the project available. The work was carried out under the direction of the author through the Parks and Wildlife Service with the assistance of the Queen Victoria Museum in artefact conservation and registration. The excavation and the ongoing process of conservation, research and analysis were also supported by a number of organisations and individuals throughout Australia that were crucial to the completion of the project. Between 1991 and 1993 five expeditions uncovered a total of 216 m² of the site including approximately 95 m² of timber structure and thousands of artefacts including major collections of glassware and Chinese porcelain (MacNeill, 1993; Nash, 1991, 1994). A final expedition to the wreck in March 1994 stabilised a number of major features and sealed the hull remains by the placement of over 500 sand-bags across the site. Periodic monitoring of the *Sydney Cove* continues to be undertaken since this work took place.

Analysis of the artefact collection and further documentary research has continued for a number of years and resulted in a range of reports and publications (Steele, 1995; Nash, 1996b, 1997; Halley, 1998; Staniforth & Nash, 1998) as well as a major contribution to a doctoral thesis (Staniforth, 2003). Publications summarising the results of the project have recently been finalised (Nash, 2001a, 2002b). The extent of the *Sydney Cove* collection and the range of documentary and visual material from this earliest period of Australia's colonial history also offered considerable opportunity for the development of an exhibition based on the wreck. In 1995 and 1996 the Queen Victoria Museum received grants for this purpose from Visions Australia, the federal government's touring visual arts scheme (Clark, 1997). With support from the Parks and Wildlife Service, the Ian Potter Foundation and a number of local sponsors a display opened at the Museum in December 1996 and culminated in an open day on 9 February 1997 to mark the bicentennial of the *Sydney Cove*'s loss. During the following two and a half years the exhibition travelled to six interstate and Tasmanian venues before returning to Launceston.

Litherland

The 305-ton *Litherland* was built at North Birkenhead, England, in 1834 and operated in the West Indies trade until 1840 before transferring to voyages to the Far East. The vessel was purchased for the Tasmanian whaling fleet of Charles Seal in 1849 and made four whaling voyages out of Hobart, including two to the Bering Sea. A downturn in whale oil prices during the early 1850s caused a number of owners to find alternative employment for their ships and on its final voyage the *Litherland* was carrying a cargo of coal and primary produce from Newcastle, NSW to

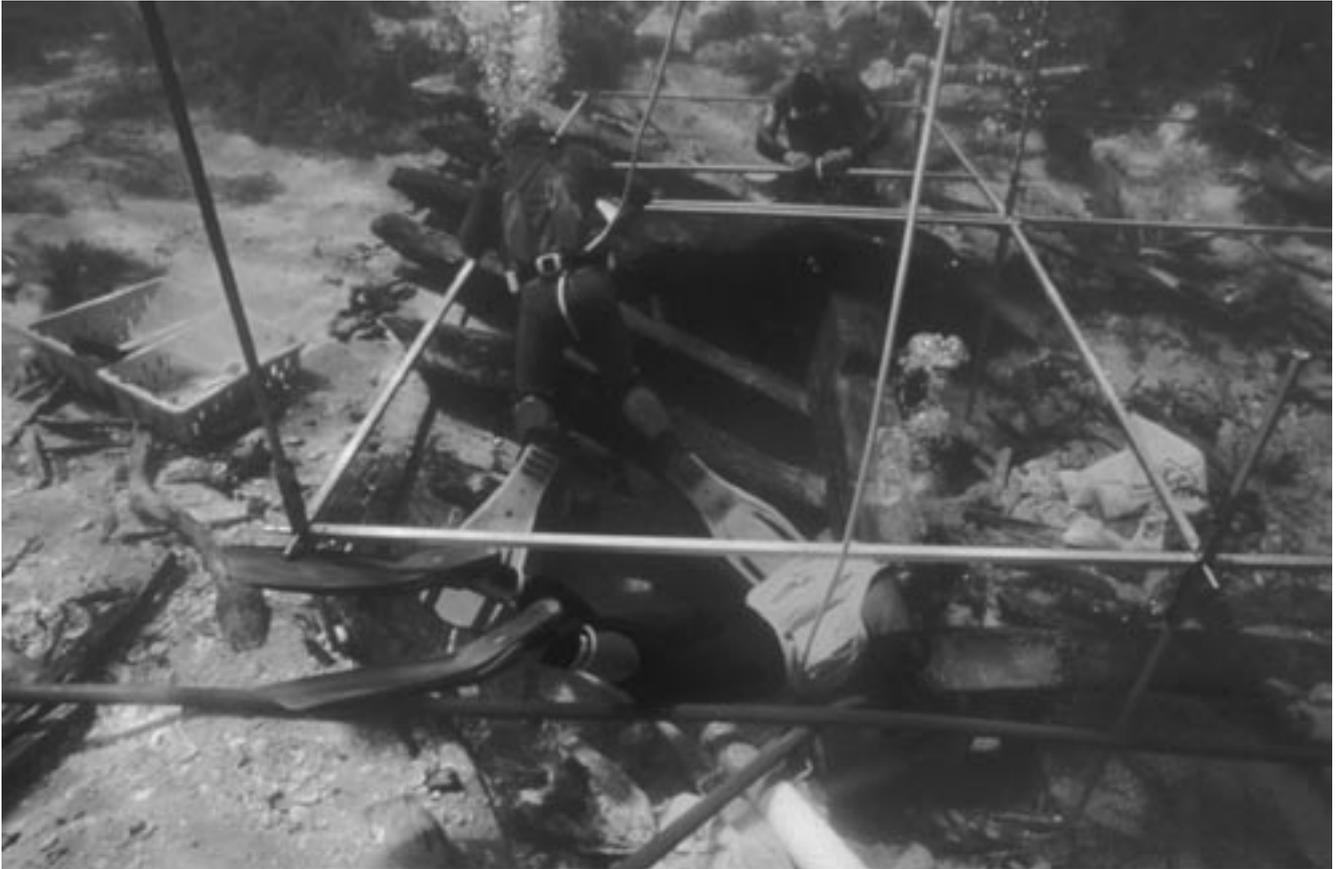


Figure 6. Divers recording excavated hull timbers on the *Sydney Cove* shipwreck site. (Courtesy: Tasmanian Heritage Office.)

Hobart. On 23 June 1853 Captain Smith brought the vessel in to shelter from strong winds on the coast of Clarke Island in the Furneaux Group, Bass Strait. The ship had been brought up to an incorrect anchorage and struck a pillar of rock close to shore and filled rapidly. There was no loss of life and those on board reached a hunting camp and were picked up a week later by the schooner *Scotia*.

The wreck of the *Litherland* was rediscovered in 1983 by local divers and formally inspected in 1984 by the Tasmanian Parks and Wildlife Service. The undisturbed nature of the site and the presence of three try-pots determined that the remains represented the only known example of a Hobart whaling vessel and possibly one of the better preserved whaling sites in Australian waters. The *Litherland* was declared under the Commonwealth *Historic Shipwrecks Act 1976* on 22 August 1985 together with three other Tasmanian shipwreck sites. The development of a maritime archaeological program in the state precluded the intensive investigation of specific wreck sites until an adequate research base was established and a series of field inspections had been carried out. With the assembling of a basic site register and the completion of a number of survey reports by the end of 1989, further investigation of protected sites could proceed.

From a base on Preservation Island work on the *Litherland* site was subsequently undertaken by a small

team of divers between 25 November and 8 December 1989 during a general survey of the southern Furneaux Group (Nash, 1990b). The site is located between Spike Island and the western coast of Clarke Island. It lies approximately 50 m offshore amongst large granite boulders interspersed with clear sand patches. The wreckage is orientated in an east-west direction over an area of approximately 50 m by 15 m. The material is mostly confined to the eastern half of the site where the surrounding rocks have served as a trap for the wreckage. Site depths range from 13 m at the western end of the site to 10 m at the eastern end.

The survey work recorded the positions of a number of major features including the try-pots, two Admiralty pattern anchors, chain cable and a windlass. Test excavations were also carried out at three locations within the eastern half of the site where artefact deposits and/or exposed timbers were apparent. However, as a result of these excavations it was found that the survival of material on the site was severely limited by the shallow depth of sediment covering the granite sea floor. Although heavy items such as metal fittings and fastenings, ballast stones, coal, sheathing and fire-bricks were located no ordered distribution pattern was evident. Test excavation on the *Litherland* site demonstrated that the structural integrity of the vessel is virtually non-existent due to the process of wrecking and the poor preservation environment. For similar reasons, artefact material relating to the function



Figure 7. Chinese export porcelain recovered from the *Sydney Cove*. (Courtesy: Tasmanian Heritage Office.)

of the vessel and its crew is limited to the extent that no new information could be obtained from further excavation. Consequently further site work has not been undertaken except for periodic inspection. Although the archaeological value of the site has been shown to be low, for management purposes this information has proved useful in the subsequent allocation of limited funds.

Brahmin

Built in 1842 the 616-ton ship *Brahmin* was primarily used in the trade from Britain to India and China. In February 1854, the vessel departed from London for Sydney with a large general cargo. By late May the *Brahmin* was approaching the western entrance to Bass Strait but the master was unable to take navigational sightings in the rough weather. On the 21st the vessel struck a reef off the western side of King Island and a total of seventeen crew and passengers were drowned. The survivors spent almost five months on the island and were not rescued until another shipwreck occurred and a small boat became available to reach Melbourne with news of the disaster.

The *Brahmin* site was rediscovered in 1976 by three local divers at a small reef approximately 700 m offshore. The site lies on a north-east to south-west axis. The bow section, identified by two large iron anchors and a windlass, is at the southern end in 6–7 m of water. The stern section, identified by a broken rudder gudgeon, lies close to the reef in 2–3 m of water. The remains of the vessel and

its cargo lie scattered over a rocky sea-bed interspersed with boulders, crevices and small sand gullies. Visible artefact material includes broken slate, ceramics, glassware and piles of lead shot concentrated in the shallower part of the site. There is, however, little evidence of the vessel's timber structure due to the generally exposed nature of the site. The camp where the *Brahmin* survivors spent at least some of has been found on the adjacent shoreline, slightly south of the wreck site. The camp lies approximately 50 m from the high tide mark at the entrance to a prominent sand gully that has been disturbed by artefact collectors over a number of years.

Following the discovery of the wreck site a considerable quantity of loose artefact material was removed and this material has for the most part remained with one of the original finders, Mr Robert Cooper, and the King Island Historical Society. In 1985, the then state maritime archaeologist, Paul Clark, was shown the wreck site during a general survey of King Island. Due to the quantity of surviving archaeological material the site was nominated for protection under the Commonwealth *Historic Shipwrecks Act 1976* and was formally gazetted in June 1987. In April 1989 the site was revisited and the artefact collections that had been raised from the site were assessed (Nash, 1989b). Although the artefacts were randomly salvaged and site context has not been accurately recorded, the existing collection is extensive and includes a selection of intact ceramics and glassware that are useful for



Figure 8. Whaling try-pots on the *Litherland* shipwreck site. (Courtesy: Tasmanian Heritage Office.)

comparative dating purposes. In 1999, Flinders University student Pauline O'Malley commenced a Masters thesis concentrating on the *Brahmin* collection and aspects of 19th century trade between Britain and Australia. An AIMA scholarship to assist this study was awarded in 2000 and a paper on the research was presented at the combined Australasian Institute for Maritime Archaeology (AIMA)/ Australasian Society for Historical Archaeology (ASHA) conference at Adelaide in the same year.

SS Bulli

At the end of June 1877 the 468-ton iron steamship *Bulli*, left Bulli, New South Wales with a cargo of coal for Launceston. On the 28th the *Bulli* put into the Kent Group, Bass Strait, to shelter from a southerly gale. As the weather moderated during the evening the vessel got underway but shortly after leaving the anchorage the *Bulli* struck rocks off Erith Island. The steamship returned to its previous anchorage but despite all efforts of the crew it foundered soon afterwards. The 27 crew rowed to the nearby light station at Deal Island and were later rescued by the steamship *Tararua* and taken on to Melbourne. A subsequent attempt to refloat the vessel was abandoned after storms sunk or destroyed the salvager's small craft.

The location of the *Bulli* has never been truly lost. The wreck lies at the northern end of West Cove, Erith Island, on a north-west to south-west orientation with the stern at 16 m depth and the bow at 13 m. The site is remarkably intact and stands up to 5 m off the flat sandy bottom, being visible from the surface on clear days. The stern half of the hull is intact up to the upper deck, although no deck timbers or the deckhouse remain in place. Both the rudder and the single propeller remain *in situ*. The hull has partially collapsed in part of the midships area exposing the ship's two iron boilers. The first 10 m of the bow have also collapsed and the remains of this section are largely buried. Most of the surface area of the hull is covered in marine growth that partly obscures many of the features. No small artefact material remains on the site and all fittings such as portholes have been removed.



Figure 9. Artefacts recovered from the *Brahmin* shipwreck site. (Courtesy: Tasmanian Heritage Office.)

The *Bulli* has been regularly visited over the last twenty years, particularly by Victorian divers, although the isolation of the area tends to limit numbers. The condition of the wreck and the sheltered nature of the site make this one of the most attractive and interesting dives in Tasmanian waters. Vessels anchoring over the wreck have caused damage to the site and in 1987 a Navy patrol boat was reported to have broken some structure off while freeing its anchor. Following an inspection of the *Bulli* in April 1988 the site was recommended for protection under the Commonwealth *Historic Shipwrecks Act 1976* and it was formally gazetted on 23 October 1989. The present chart of the Kent Group (AUS 148) has the location of the wreck clearly marked to assist in the prevention of damage to the site by careless anchoring.

At the beginning of 1997 a week-long field trip to the Kent Group concentrated on the recording of a number of sites including the *Bulli* (Nash, 1997). An extensive video and photographic record was compiled and some measurement of the site was carried out. In February 2000, a group of divers from the Maritime Archaeology Association of Victoria visited the Kent Group and recorded further video footage as well as producing a basic site plan of the wreck. While a comprehensive research project on the *Bulli* site has yet to be undertaken the wreck is of particular interest as one of the earliest of a number of steam colliers specifically built for the Australian market. The *Lady Darling* site in New South Wales and the *Blackbird* in Victoria offer useful comparative sites for this type and period of ship design.

SS Tasman

In December 1883, the steamship *Tasman*, one of the Tasmanian Steam Navigation Company's (TSNCo.) fleet of inter-colonial traders, struck rocks and foundered off Fortescue Bay on the south-east coast of Tasmania. The 707-ton *Tasman* had been built at Glasgow, Scotland in



Figure 10. Diver at the stern of the SS *Bullish* wreck. (Courtesy: Tasmanian Heritage Office.)



Figure 11. A diver inspects the stern of the SS *Tasman* wreck. (Photo: Mark Spencer.)

1873 for the TSNCo. and entered into the Company's regular service out of Hobart to NSW. The *Tasman* was on a voyage from Sydney to Hobart with passengers, cattle and general cargo when Captain John Evans retired off watch leaving the first mate with specific route instructions. The mate subsequently disobeyed the orders and went off course while racing another steamship to Hobart. Steaming between two small islands the vessel struck an isolated rock pillar and foundered in deep water some fifteen minutes later without loss of life.

In the 1990s, well-known steamship expert John Riley led the search for the *Tasman* site. Based on the known historical information of the vessel's course, speed and time before sinking a search area south-west of the Hippolyte Rocks was mapped out. Depth sounding of the area was carried out by local dive charter operators, Eaglehawk Dive Centre and this showed maximum depths of 90 m that precluded the use of ordinary compressed air scuba cylinders. A magnetometer survey of the area was carried out in April 1996 and a substantial target was located in the search area at a depth of 70 m but remained uninvestigated due to strong currents. In February 1998, Riley and a team of Sydney-based divers returned with mixed gas diving equipment which would enable them to work safely at the expected depth of the wreck. Their first dive on the strongest magnetometer target discovered the wreck of the *Tasman* on a relatively flat area of reef. The wreck was broken up and highly degraded but all major structural features were still evident (Riley, 1998).

To enable a more detailed survey of the site to be undertaken, funding through the federal Historic Shipwreck Program was obtained in 1998. With limited capacity to undertake deep-water diving operations the funding was used to support volunteer dive teams with air fares, boat charter costs, equipment hire and accommodation. John Riley subsequently led two expeditions to the site in March and December 1999 to record the wreck. Over the two expeditions the three/four person dive teams carried out a total of ten days diving and compiled an extensive video and photographic

record of the site. At the completion of the second expedition a number of items from the collapsed galley pantry were raised for identification and eventual display. Subsequently, Riley produced a detailed site plan of the wreck and also constructed a 1:100 scale three-dimensional model (Nash, 2003).

The recording of deep-water shipwreck sites by management authorities will become an issue as technological improvements allow amateur divers to explore deeper and impact on more sites. The relocation and survey of the *Tasman* site has occurred at a time when work is being carried out in Australia on a number of relatively untouched iron steamship sites including two at comparable depths. This work is demonstrating that technological improvements allow divers to accurately and safely record deep-water sites at a relatively low cost. The use of non-professional but highly qualified divers under supervision should be considered as a means of recording difficult sites that may be beyond the current expertise and experience of government bodies tasked with managing shipwreck sites.

Maritime heritage projects

King Island Maritime Heritage Trail

Lying at the western entrance to Bass Strait, King Island's maritime heritage consists of shipwrecks, lighthouses, port facilities and sites associated with early exploration and sealing. In 1999 the King Island Regional Development Organisation (KIRDO) applied to the Commonwealth Regional Assistance Program for funding to develop a maritime heritage trail on the island. Sums of \$38 000 were received as well as in-kind support from the King Island Council and the state government's Cultural Heritage Branch. Commencing in July 2000, a total of thirteen signs were developed for the trail, including the interpretation of lighthouses at Cape Wickham and Currie, the ports of Currie and Grassy and the visits of a French scientific expedition in 1802. Of the island's 60 known shipwrecks interpretation focussed on the *Carnarvon Bay* (1910), *Cataraqui* (1845), *Blencathra* (1875), *British Admiral*



Figure 12. Signage overlooking the site of the *Blencathra* shipwreck on the King Island Maritime Heritage Trail. (Courtesy: Tasmanian Heritage Office.)

(1874), *Loch Leven* (1871), *Netherby* (1866), *Neva* (1835) and *Shannon* (1906).

Initial research was carried out by the state maritime archaeologist and design and graphics were undertaken by a Hobart based company. The polycarbonate signs were constructed by Thylasign Systems who also built custom made mounting frames out of weathered timbers to give an appropriate 'look' for the interpretation panels. Both these products were designed to withstand the harsh weather conditions of King Island and the exposed locations of some of the signs. The panels and their frames were then mounted on low standing concrete and rock plinths built by the King Island Council together with some minor road works to allow easier access to the signage. A brochure providing details of the maritime heritage trail was also developed as part of the project. This was to be provided free for visitors to the island as both a promotion and guide to the trail. The trail was officially opened in August 2001 to coincide with a weekend celebration for ex-residents and descendants returning to King Island.

Maritime Museum of Tasmania

In 1998 the State Government, as part of its asset reduction program sold historic Secheron House located in Hobart's Battery Point area. Secheron House had been leased since 1983 to the Maritime Museum of Tasmania and the loss of their premises, although regrettable, provided an opportunity to redevelop the Museum into a major attraction. After lengthy negotiations the Hobart City Council provided the Carnegie Building (1906) with its central business district location and proximity to Hobart's waterfront and the Tasmanian Museum and Art Gallery. Funding for the refurbishment of the Carnegie Building and the re-establishment of the Maritime Museum included \$180 000 from the sale of Secheron House as well as \$60 000 from Arts Tasmania and various grants.

As the State Government had provided funding for the re-establishment the author was tasked with providing

guidance to the Museum through membership of a number of committees and acting in a curatorial role for the new display. Although the Museum's collection is considerable there had been an emphasis on the technical aspects of ships, through models and photographs, to the exclusion of many aspects of the Tasmania's maritime heritage. A thematic approach to the new display saw a number of different topics introduced (Clark, 2001). The exhibition now covers the major themes of exploration, development of the port of Hobart, whaling, ferries and river steamers, trading ketches and shipbuilding. Additional minor themes are the Tasmanian Steam Navigation Company, lighthouses, shipwrecks, abandoned vessels and navigation. An additional display on the Royal Australian Navy and warship visits was added to the exhibition in November 2000 through a grant from the Centenary of Federation fund. The display has also been enhanced by material from a number of private collections and organisations such as the Tasmanian Museum and Art Gallery, the Queen Victoria Museum, the Australian Marine Safety Authority and International Catamarans.

On 28 March 2000, Queen Elizabeth II officially opened the Maritime Museum at its new home. As part of the new professional approach to business at the Museum, a manager now works full-time, and decisions are now made through a board of management (formed in early 1999). The broad membership of the board provides expertise and access to outside contacts that were not previously available to the museum. The Museum is staffed by a team of dedicated volunteers who provide desk services, run the Museum shop and provide a research and library service. The Maritime Museum is now working to become a focal point for other maritime displays across the State and is establishing links with a variety of maritime enterprises. The Museum has recently entered into a partnership agreement with the main state museum, the Tasmanian Museum and Art Gallery.

Whaling sites

When the first European settlement in Tasmania was established in 1803 the colonists soon discovered that the local waters abounded with whales during the winter months. The taking of whales for their oil and baleen was to become vital to the economic development of the colony, with the first shore-based whaling station in operation by 1805. The shore-based industry peaked during the late 1830s but by the 1850s it had virtually come to an end. Pelagic whaling from ocean-going craft then dominated the industry until the end of the century, while the former whaling stations fell into disrepair. Part of the legacy of the industry is also a rich collection of documentary and artefact material held by a variety of state institutions.

As managers of a large proportion of the state's cultural heritage assets the Parks and Wildlife Service recognised that a thematic survey of the history and archaeology

of the whaling industry was required for the adequate conservation and interpretation of the remaining stations. In 1993 and 1994 the PWS received funding from the National Estate Grants Program for the project, which was managed by the author and completed in 1995. Historian Kathryn Evans compiled a background study of the industry and sought to identify individual site locations and detail their histories (Evans, 1993). This report was used by archaeologist Parry Kostoglou to subsequently locate and recorded over 50 whaling stations as well as a number of associated sites such as lookouts, pilot stations, farms and constabularies (Kostoglou, 1995). Information on these sites was subsequently added to the Cultural Heritage Information System, the electronic database maintained by the Tasmanian Heritage Office. The locations of a further two whaling stations and a look-out have also been confirmed since the original study was undertaken.

In July 1997, La Trobe University, Melbourne, organised a conference on whaling archaeology and papers were presented detailing the results of the Tasmanian survey (Kostoglou, 1998; Nash, 1998). The conference also resulted in the formation of a collaborative research project known as AWSANZ (Archaeology of Whaling in Southern Australia and New Zealand). As a result of this agreement in December 1997 La Trobe and Flinders Universities conducted excavations on the Grass Point whaling station at Bruny Island south of Hobart. A further excavation was carried out in February 1999 at Lagoon Bay on the Tasmanian east coast (Lawrence 2001a, 2001b). To complete the Tasmanian part of the AWSANZ project a publication detailing the history and archaeology of shore-based whaling has recently been published (Nash, 2003a).

The research project has also resulted in a number of interpretation activities. At the former whaling centres of Recherche Bay and Adventure Bay south of Hobart, signage has been erected at existing coastal walking tracks explaining the significance of the industry. In 1998, assistance was given to the Tasmanian Museum and Art Gallery to mount a temporary exhibition on the whaling industry to coincide with a major travelling display on whales (*Giants of the Deep*) being coordinated by the Australian National Maritime Museum, Sydney. The artefacts used for this exhibition now form the core of a more permanent display that was established at the Maritime Museum of Tasmania in 2000.

Macquarie Island

Sub-Antarctic Macquarie island lies approximately 1 500 km south of Tasmania and has been part of that state's territory since 1825. The island has been subject to intensive periods of resource exploitation, and between 1810 and 1830 the resident fur seals were exterminated and the elephant seal population declined by 70 per cent. A second wave of activity occurred during the 1880s to 1919 based on the use of greater capital investment in steam



Figure 13. Base of a try-works excavated at the Grass Point whaling station in 1997. (Courtesy: La Trobe University.)

digester technology. Both elephant seals and penguins were processed for their oil during this period. Since 1948, the island has housed a permanent scientific station run by the Australian Antarctic Division. Macquarie Island became a Nature Conservation Area in 1971 and also received World Heritage Area listing in 1997. The island is currently managed by the Tasmanian Parks and Wildlife Service with logistical and support facilities provided by the Antarctic Division.

The activities on the island and its isolation from further development have left a rich legacy of maritime related sites including at least twelve shipwrecks, animal processing areas with huts, try-works and digester plant as well as sites connected with early scientific studies. Very little of the extensive scientific research carried out on Macquarie Island during the latter part of the 20th century considered the cultural heritage of the island. Martin Davies was the first professional archaeologist to visit Macquarie Island in 1982 to record a number of sites at the northern end of the island. In the summer of 1986–1987 archaeologist Karen Townrow spent seven weeks on the island with funding from the Australian Heritage Commission. As a follow up to this preliminary work Townrow 'wintered' on the island for a period of twelve months during 1987 and carried out an extensive survey and test excavation program (Townrow, 1989, 1990; Townrow & Nash, 1990).

Since this recording program was carried out activities at Macquarie Island have concentrated on the management and interpretation of cultural heritage sites including the completion of a number of planning documents (Burdon, 1999; Nash, 2003). Interpretation activities have concentrated on the provision of brochures on cultural heritage for both tourists and expeditioners, signage at one of the more accessible processing works and the provision of information through the website of the Tasmanian Parks and Wildlife Service. The website also houses an educational site called *Shipwrecks, Sealers and Scientists* that uses shipwrecks as an entry point to



Figure 14. The remains of a steam reduction plant at The Nuggets, Macquarie Island. (Courtesy: Tasmanian Heritage Office.)



Figure 15. Recording discarded shipbuilding timbers at the Sarah Island historic site. (Courtesy: Tasmanian Heritage Office.)

explore many aspects of the island's cultural and natural history. The site was developed with federal government funding and has won two national and one international award for the high school students who were involved in the programming. The work at Macquarie Island has also included visitor surveys and guiding during the brief 'tourist' season, site protection activities and assessment of conservation requirements for the numerous historic artefacts and machinery that remain on the island.

Convict sites

Tasmania was founded as a penal colony in 1803 and during much of the 19th century its population was comprised of large numbers of convicts in various forms of servitude. As part of the convict system penal settlements were established at relatively isolated locations such as Sarah Island (1822), Maria Island (1825) and Port Arthur (1830). The most significant convict establishment was the Port Arthur penal station at Masons Cove on the Tasman Peninsula and its satellite establishment at Point Puer. During 1830-1877 approximately 13 000 convicts served at the Port Arthur complex, which at its peak supported a population of up to 3 500 people. The establishment also had a considerable industrial output including a large shipyard building finished vessels as well as servicing both government and commercial craft.

For reasons of security, as well as simple economy, the transportation of goods and personnel at Port Arthur was largely carried out by water. The high frequency of use of the waters between Masons Cove, Point Puer and other smaller facilities has resulted in the creation of a substantial infrastructure including jetties, wharves, slipways and moorings, much of which is still archaeologically visible. A small scale study of some of the underwater heritage at Port Arthur and the Sarah Island penal station on Tasmania's west coast was carried out by Parks and Wildlife ranger Clive Cook and members of the Maritime Archaeological Association of Tasmania in 1979, 1980 and 1985 (Cook, 1983, 1987).

In 1999, the Port Arthur Historic Site Management Authority (PAHSMA) secured funding for a program to progressively map the convict related underwater heritage resources adjacent to the Port Arthur site. The aims of the project were to provide baseline information for future management and to assess whether the boundaries of the historic site, which ended at high water, needed to be extended to cover adjacent waters. The PAHSMA contracted consultant maritime archaeologist Cosmos Coroneos to carry out the project over three summer seasons (Cosmos Archaeology, 2002). Each of the field seasons has also been run in conjunction with a NAS/AIMA training course in maritime archaeology, which will provide sufficiently skilled staff and volunteers to progress further work on the site's underwater heritage.

The work at Port Arthur is the first large-scale survey of non-shipwreck underwater sites undertaken in Tasmania and the results of the study will hopefully provide a model for future projects of this nature. Further work on convict sites was carried out in 2003 when an underwater survey of the southern end of the Sarah Island penal settlement was carried out by the THO (Richards, 2003). This work was a component of a Conservation Management Plan being undertaken on the historic site, focusing on the heritage impact of the installation of a new jetty for large tourist ferries. A study of the convict shipbuilding activities at both these historic sites has also been completed (Nash, 2001b, 2003c).

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