

## Protected Zones and Partnerships: Their Application and Importance to Underwater Cultural Heritage Management

**David Nutley**

*Underwater Cultural Heritage Program*

*New South Wales Heritage Office*

*Australia*

### The Steam Collier *Myola* 1919

The *Myola*, a steam collier built in 1913, sprang a leak on the 2nd April 1919 and foundered off Sydney's northern beaches.

The wreck of the *Myola* was discovered by recreational divers in July 1994. The site was protected as an historic shipwreck under the Australian Government's Historic Shipwrecks Act 1976. However, a recommendation for the declaration of a Protected Zone around the site was not supported by the Minister responsible. Although the majority of divers strove to protect the site, significant damage was inflicted on the site. This has significantly reduced its archaeological potential as well as its visual appeal and subsequent recreational activity.

The failure of this site to be adequately protected sits in contrast with another collier, the *Lady Darling*, a much shallower site on the New South Wales south coast.

### The Steam Collier *Lady Darling* 1880

The *Lady Darling* foundered in 1880 but was located on 16 August, 1996 after a trawl net became snagged. On the 19 August, divers freed the net, found the wreck site and promptly notified the New South Wales Heritage Office.

Heritage Office archaeologists then visited the site to establish its identity and location. These inspections revealed no signs of prior visitation by divers or previous damage by trawl nets. The professional fisherman who hooked up on the wreck leading to its discovery was unsure why his nets fouled in an area thought to be barren. A few isolated fishing weights

have been identified however, indicating that some limited line fishing has occurred over the site.

### Wreck Site Description

The stern and midships remain intact as does the heavy engine and boiler. The decks, deck beams and hull sides have collapsed where they are not supported by bulkheads. With the loss of support, the bow, a relatively strong unit, has broken away from the hull. The bow has pivoted along the keel line and collapsed to starboard, due to the breakdown of the hull sides aft. The structurally strong stern of the *Lady Darling* stands intact to near the upper deck level. Forward of the stern bulkhead, the hull sides have disintegrated to approximately the level of the surrounding sand. The engine room area itself is discernable only by the positioning of the engine and boiler. Two vertical stanchions are visible forward of the boiler and mark the centreline of the hull. They probably served to support the upper deck. This was the main cargo area of the steamer, and with few structural supports in this region, the hull sides have been severely reduced.

All fittings associated with the bow have tumbled outside of the hull and lie to starboard, following the direction of collapse. These include an Admiralty and Porters Patent anchor, the Patent Capstan, a davit, anchor chain and a collection of tumbled deck beams. In the midships region, the donkey boiler, a winch and timber rigging deadeyes, have fallen just outside the hull to starboard. The remainder of the visible relics have fallen within the area limited by the hull. In the stern area, these include a ship's lantern, crockery, deck beams and other structural elements. Towards the bow is a mound of anchor and chain, and the remains of the iron collars which probably supported the forward mast.

Other identifiable features are expected to survive beneath present sand levels, particularly forward of the boiler, the



**Figure 1:** *Lady Darling* wreck – from stern to boiler at midships (D. Nutley)

presumed area of the bridge. Sand levels are likely to vary over the site due to storm and swell activity, with buried structure becoming exposed at certain times. This body of sand is actively helping to preserve the structural remains and other artefacts that form this site.

## Legislative Protection

Shipwrecks along the Australian coast are protected by legislation which aims to conserve sites, while encouraging public access.

Shipwrecks lost more than 75 years ago are protected from interference or damage by the Historic Shipwrecks Act, 1976. The *Lady Darling* has additional legislative protecting it through a Protected Zone placed around the wreck site under section 7 of the Act. A permit is required from the Heritage Office to visit these exclusion zones.

## Site Management

The *Lady Darling* site has been assessed as an important local reminder of the dangers of coastal maritime trade in the 19th-century. Its engine and associated machinery survive as a rare Australian example of a specific development period in marine engineering last century. The shipwreck and its associated *in situ* artefacts retain high recreational importance as the most intact shipwreck for diver visitation in the Eurobodalla Shire region.

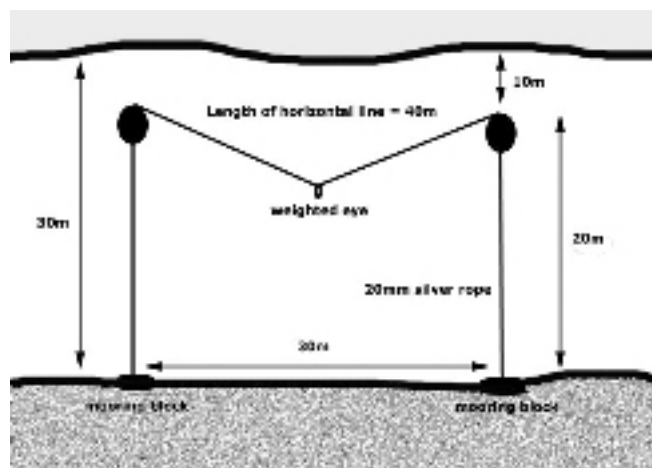
On this basis the Heritage Office developed a management strategy to ensure the retention of these values, while also fostering public access. Experiences with the discovery of the *ss Myola* were a critical factor in the desire by the Heritage Office to seek a workable management solution to maintain the integrity of the site.

Expectations were that the *Lady Darling* would be a well sought-after recreational dive site, especially amongst the wreck diving component of the sports diving fraternity. This was despite its relative isolation away from a major urban centre like Sydney. The relative isolation of the site also meant that effective policing of visitation was difficult.

## Development of a site management strategy

With the support of the finders of the wreck site, a 150 metres radius Protected Zone was established around the wreck site. This enabled visitation through a permit system and more detailed examination by the Heritage Office.

Discussions with the charter boat operators focused on protection of the *Lady Darling* wreck, access arrangements and the potential to work jointly to manage the site. A permanent sub-surface mooring system was devised to enable visitation to the site without the threat of inadvertent anchor damage occurring. The mooring design consists of two vertical lines weighted to the seafloor. In the case of the *Lady Darling*, railway wheels have been utilised, but chained segments of railway line could also be used instead of or added to the railway wheels. The vertical stands are connected some ten



**Figure 2: Configuration of *Lady Darling* mooring system (New South Wales Heritage Office)**

metres below the surface by a horizontal positively buoyant line. Mooring vessels approach the mooring with a grapnel, hook up on the horizontal line and secure it to the boat. The mooring stands either side of the shipwreck to enable efficient entry and exit points for divers.

In line with the Heritage Office's commitment to acknowledge and publicise significant contributions to the Historic Shipwrecks Program in NSW, the award of Finder's Recognition Plaques was arranged for 26 March, 1997. This date enabled the presentation of these awards to the two finders, by the Chair of the Heritage Council of NSW, assisted by the General Manager of the Local Council, and the Narooma Coastal Patrol.

The Heritage Office assisted Local Council to design a bronze outdoor interpretative plaque. Council also funded the production of five separate plaques detailing the protection and access conditions applicable to the site. These were mounted at all local boat ramps and slips. The location of the *Lady Darling* Historic Shipwreck was added to the third of the Office's Shipwreck Atlas of NSW, officially launched at the ceremony, and the Council's interpretative plaque is included in the Heritage Office's Maritime Heritage Online website's Signs and Trails section (<http://maritime.heritage.nsw.gov.au>).

## Outcomes of the management strategy

The success of the management approach is confirmed by the number of divers visiting the site and its state of preservation. During the initial period alone (August 1996 - June 1997), a total of 448 divers visited the *Lady Darling* wreck site in 61 visits. The seven permit holders applied for and received permits for the 1997-8 year. During this period, 597 divers visited the site in 76 separate visits — a total of 1,045 divers in the 22 months since discovery.

To date there have been no reports or evidence of artefacts removal from the site. This is a remarkable outcome. It reflects the result of prompt notification, control and the contribution of permit holders in monitoring diving operations at the site. It is an encouraging success story. There is no other iron



**Figure 3: The plaque - funded by the Eurobodella Shire Council (D. Nutley)**

shipwreck in Australia as accessible and as frequently visited as the *Lady Darling* that is as intact and as attractive as the day it was found.

The Heritage Office has received requests for artefacts to be removed from the site in order to safeguard these items and to make the site less attractive to looters. In response, the Heritage Office developed the following advice to assist users of this site to understand the link between archaeological integrity and recreational appeal:

- The site has become a significant facet of dive tourism in the Narooma and Bermagui district. The retention of the site's tourism potential is closely associated with its retention of its archaeological potential. The appeal of the site is enhanced by the knowledge that it has not been 'picked over' either by souvenir hunters or archaeologists. Divers can experience this enhancement either by actually seeing a porthole, dead-eye or ceramic plates on site, or by being aware that these items are somewhere hidden under the sand. Where these items become visible, good quality photographic records can be compiled to enable non-divers to experience the visual context of these elements of a diving experience.
- Removal would deplete the significance of the site and would be accompanied by a very high level of cost. This cost, depending on the quantity and nature of the

items removed, the level of conservation required and the preparation or construction of suitable storage and display facilities could be considerable.

- The removal of artefacts from the site would not only reduce its appeal as a dive destination but would remove conditions that lead to the establishment of the current permit system. The site would then be indistinguishable from dozens of other iron shipwreck sites on the NSW coast — none of which control access through a permit system like that on the *Lady Darling*.
- Removal of the site's artefacts, such as portholes, lanterns, ceramics, dead-eyes, etc would remove much of the justification for tightly control access conditions.
- The above issues need to be considered in any proposals for archaeological excavation or other removal of artefacts from the site.

This advice was supplied to the permit holders and has assisted them in dealing with these inquiries also.

The management of the *Lady Darling* site has been a successful partnership. This partnership has included the local dive industry, local council, other key interest groups as well as the State Government through the NSW Heritage Office and the Australian Government through the Historic Shipwrecks Program. Most importantly, the system could not work so effectively without local interest in historical values and long term recreational viability of this site. It is this sense of partnership that is critical to the successful implementation of the UNESCO Convention for the underwater cultural heritage.

## Information Sources

Myola Information Sheet, NSW Heritage Office 2004, ISBN 1 876415 711

Smith, T and Nutley, D, September 1998, ss *Lady Darling* (1864 - 1880) Wreck Inspection Report, NSW Heritage Office, Sydney.

Maritime Heritage Online <<http://maritime.heritage.nsw.gov.au>>

Shipwreck Atlas of New South Wales, 3rd edition, 1996, NSW Heritage Office, Parramatta.