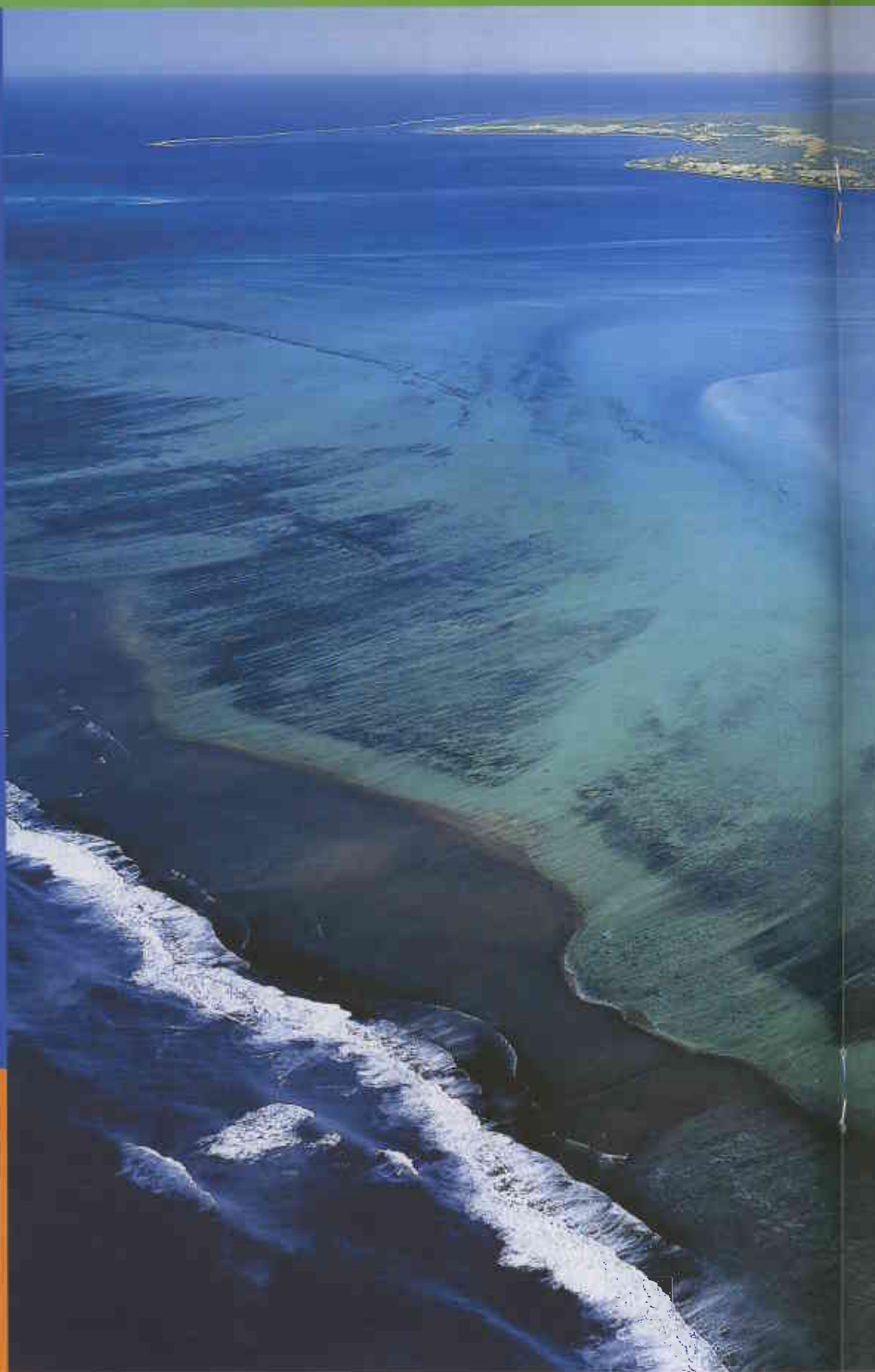
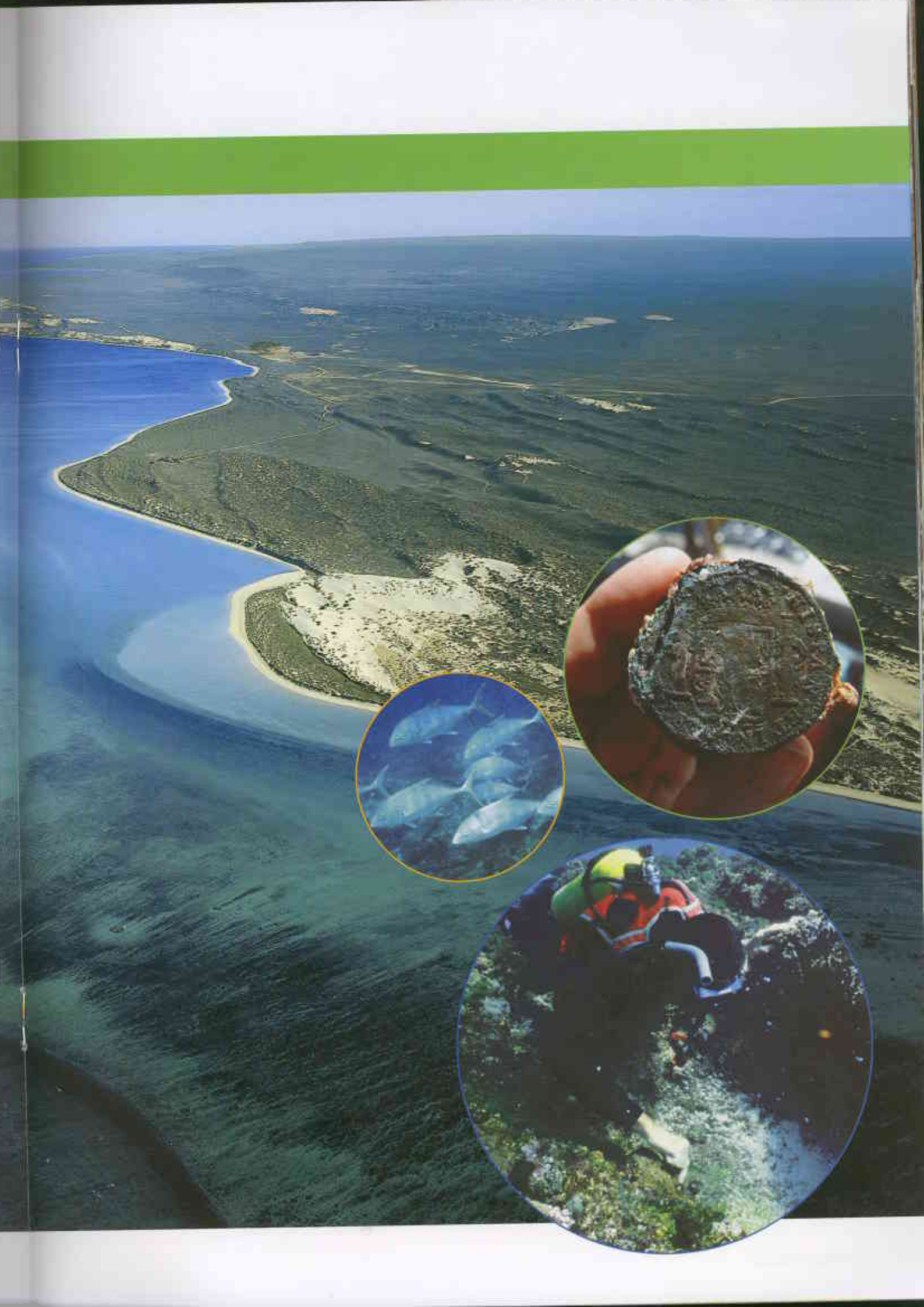


# Ningaloo's sunken treasure

In April 2004, the Ningaloo Marine Park finally gave up one of its secrets—the internationally significant shipwreck *Correio da Azia* (the Asia Mail). The find was no accident but was the culmination of several searches by an archaeological team from the WA Maritime Museum over a number of years. This Portuguese vessel, carrying a small consignment of silver, sank in 1816. The remains of a second mystery wreck were also found only 600 metres away.

by  
Jeremy Green





For at least the last 20 years the *Correio da Azia* has been the most sought-after wreck on the coast of Western Australia.

The *Correio da Azia* was described in historic accounts as: 'coming from Lisbon to Macau against weather, seas and wind, fire, shallows and coastal dangers and errors of maps' when it ran aground on Ningaloo Reef at about 1.00 am on 26 November 1816. Macau at that time was the oldest permanent European settlement in Asia. It was leased to the Portuguese in 1557 and returned to China (after the lease ran out) in 1999. In the sixteenth and seventeenth centuries, Macau was a focal point for Portuguese trade in the Far East.

Although the *Correio da Azia* was following an established route to Canton, the charts available at the time clearly underestimated the size of the western extension of Point Cloates (the promontory that was originally called 'Ningaloo' by local Aboriginal people from which the reef takes its name), which is about 60 kilometres north of Coral Bay. This, combined with a number of mishaps, including a fire in

the binnacle that created a navigational problem with the compass, may have contributed to the wrecking.

The survivors from the wreck set off in the ship's boat, stopping once further up the Western Australian coast to make repairs to the vessel. The Captain's account mentions that no natives were seen, despite crew apprehension and the fact that two of the crew were accidentally left behind. It was concluded that animals or natives had killed these sailors when they could not be found. Shortly after their departure, the American ship *Caledonia* picked up the survivors, and they eventually reached Macau. Later, a party was sent back in the brigantine *Emillia* in the hope of salvaging the wreck, but no trace of it could be found.

### Uncovering archives

The account of the loss by Joao Joaquim de Freitas, Captain of *Correio da Azia*, was found at the Arquivo Historico Ultramarino in Lisbon in 1987, being part of a report filed by Manuel de Arriaga Silveira, Governor of Macau. This document, dated



February 1817, also describes the organisation of the *Emillia* salvage expedition prior to the mission itself. No further accounts concerning the outcome of this mission have been found in this or any other archive consulted.

A second account was written by Luis Antonio da Silva Beltrao, the pilot of the *Emillia* hired to chart the navigational dangers and to effect the salvage of the *Correio da Azia*. The report was published in Calcutta in 1818. The account deals largely with issues relating to the longitude and plotting of Point Cloates, which was at the time a notorious navigational danger. This was especially important, for all charts of the region were based on those of Vlamingh produced in the late seventeenth century. While more recent charts were available, namely those of Flinders and de Freycinet,

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**Main** Point Cloates, Ningaloo Marine Park.

*Photo* – David Bettini

**Insets** Trevally; a Portuguese silver coin; diver with a coin in situ.

**Above** A gully in the reef near the *Correio da Azia* site.

**Left** The *Correio da Azia* expedition campsite at Ningaloo Station.

*Photos* – Patrick Baker





**Above** During a search for the *Correio de Azia* by maritime archaeologists in April 2004 a ship's bell was found almost immediately, but turned out to be from a nearby unidentified shipwreck. Photo – Patrick Baker

neither of these explorers had charted this part of the Australian coast as the Portuguese and many others had thought.

The information available in 1816 was thus a composite work derived from earlier charts, inherent with the navigational errors of that period. The Beltrao instructions mentioned, but did not locate, the exact position of the site. The account also mentions that the Captain of the rescue ship *Caledonia* showed his charts of the coast to the Portuguese commander, who noted the longitude was  $2^{\circ} 25'$  by the 'London Meridian'. This is a reference to the difference in longitude between Greenwich and Paris. While Greenwich was the Prime Meridian by the end of the eighteenth century, some French cartographers insisted on defining longitude as east or west of Paris. It is possible that the Captain of the *Correio da Azia* was using a French chart, adding to the problems.

The loss of a Portuguese vessel at Point Cloates in 1816 is also mentioned in the 1841 edition of *The India Directory or Directions for Sailing to and from the East Indies, China and Australia and the adjacent ports of Africa*

and *South America* by James Horsburgh.

Over the last 20 years, there have been many seaborne searches for the *Correio da Azia*, using both manual and remote sensing techniques. Ningaloo Reef, in the vicinity of the Beltrao report, is a very complex structure, making it almost impossible to efficiently search the reef in the surf zone.

### Cosmic clues

In 1997, the historic navigational records made by the search party in the *Emillia* were analysed using the Marcq St Hilaire or Intercept method, in conjunction with the computer program Sky Map 2.1. This method, used to obtain position at sea, involves calculating a heavenly body's zenith distance on the assumption that dead reckoning is correct. Beltrao took a number of lunar distances so as to plot the longitude, using the altitudes and times of observation. With the program Sky Map, it was possible to predict the position of the stellar bodies at the time of Beltrao's visit, and so rework these sights.

The lunar distances are based on a simultaneous sight of the moon and, in

this case, the sun. Normally this is insufficient to obtain a fix and must be crossed with a further position line. However, here the position lines are almost at right angles to the coast, and the position of the wreck can be fixed by the intersection with Ningaloo Reef.

Following this analysis, comprehensive field surveys were undertaken in 1997 and 1998, using a marine magnetometer (an instrument for measuring the intensity of a magnetic field) and towed diver search. The accessible sections of the reef selected from the earlier analysis of the data were examined, but the divers and equipment could not be taken in close to the reef because of the swell. The wreck of the Austro-Hungarian barque *Stephano* was located during this survey, an exciting find in itself, but the *Correio da Azia* still eluded us.



## Breakthrough

In 2003, after negotiations between Fugro Surveying Pty Ltd and the Department of Maritime Archaeology of the Western Australian Museum, Fugro offered to fly a sophisticated aerial magnetometer survey over the target area of the reef. Four targets were detected in the anticipated area. A team from the department investigated these sites in April 2004, and two shipwrecks were discovered within minutes of entering the water at their respective resting places. At the first site investigated, a bronze bell, anchors and rudder fittings were found close to the wreck of an unidentified 250 to 350 tonne vessel from the mid-nineteenth century.

At the second site, two cannons—each measuring about 1.2 metres—were found near an anchor, together with a big field of ballast consisting of hundreds of different-sized slabs of iron. But the most exciting find was a 22-kilogram lump of coral containing at least 1000 silver coins. There were also a lot of loose coins, each about four centimetres across and weighing 25 grams. They featured the head of a Spanish king on one side and a Spanish shield, pillars and nobility symbols on the other and were thought to have been minted in central or South America. This wreck was believed to be that of the *Correio da Azia*, which had been resting on the seabed there for nearly 200 years!

## Historic significance

The *Correio da Azia* is an archaeological site of international significance, in terms of both its story and its location. It is thought to be the earliest Portuguese shipwreck found in Australian waters. Its discovery will heighten public interest and further focus the discussion and debates about early European–Australian contacts.

**Left** An archaeologist extracting the hinge section of a rudder from the site of the unidentified wreck.

Photo – Patrick Baker

**Right** Soon after their recovery, WA Maritime Museum archaeologists examine artefacts recovered from the wrecks in an old shearing shed at Point Cloates.

Photo – Patrick Baker

Portugal's trading ventures, beginning in the sixteenth century, brought many vessels to regions quite close to Australia. Historians are divided over the likelihood of a sixteenth century Portuguese discovery of the fifth continent. However, there is currently no concrete evidence of a Portuguese discovery before the Dutch.

The *Correio da Azia* is described as a *galena*, usually indicating a three-masted full-rigged ship. Information derived from its archaeological excavation and survey is expected to provide new insights into nineteenth century Portuguese seafaring.

The site in which it is located is a high-energy environment, and can provide further information in relation to ship disintegration and the effect of micro-environments, which contribute to corrosion and other deterioration processes. Hence, it has significant potential to inform the public—through exhibitions and lectures—of current archaeological (and conservation) techniques, as well as European history of contact with Australia.

This site is not recommended for the recreational diving community at this stage. It has yet to be fully investigated, and there are other magnetic anomalies yet to be found. The two sites present an extraordinary opportunity for archaeologists to investigate sites that have never been interfered with. Once the sites have been fully assessed, their positions will be made publicly available. However, they are subject to high wave and swell action. Only divers highly experienced in such dangerous conditions should attempt to dive in such areas.

Subsequent reinvestigation of this nationally significant wreck will be imperative. At the completion of this work, a plan of interpretation for the



public should be initiated, in conjunction with the Department of Conservation and Land Management and other stakeholders of Ningaloo Reef. Similarly, the site should be considered for submission as a site of

national heritage significance under the Environmental Protection Biodiversity Conservation Act. One thing is certain: the wreck's discovery will add to the allure of Ningaloo Marine Park and the reef that it protects.

Jeremy Green, the leader of the expedition to find the *Correio da Azia*, is the Head of Maritime Archaeology at the Western Australian Maritime Museum. He can be contacted on (08) 9431 8140 or by email ([jeremy.green@museum.wa.gov.au](mailto:jeremy.green@museum.wa.gov.au)).

The WA Maritime Museum team that discovered the wreck included archaeologists Corioli Souter, Matthew Gainsford and Mike McCarthy, conservator Jon Carpenter, museum diver Geoff Kimpton, photographer Patrick Baker and volunteers Annie Boyd and Geoff Glazier and camp cook Susan Green.

The *Correio da Azia* expedition was part of a collaboration with Fremantle documentary maker Prospero Productions, which also contributed to the cost of the fieldwork.



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