

Zuytdorp: unfinished business



Dr M. McCarthy. *Zuytdorp* project leader 1986–2002
Maritime Archaeology Department, WA Maritime Museum

Frontispiece: Excerpt from expedition artist Stanley Hewitt's impression

Report—Department of Maritime Archaeology
Western Australian Museum, No. 256

2009

Zuytdorp: unfinished business

Abstract

The Western Australian Museum's investigations at the wreck of the Dutch East India Company ship *Zuytdorp* (1702–1712) first began in 1969. They were originally driven by concerns about the threat to the vessel's bullion until 1986 when pre-historians, historical archaeologists, private scholars and others joined the Museum in a multi-faceted, interdisciplinary archaeological research program.

This paper will serve to provide the reader with an insight into the evolution of the methods and underlying philosophies used in approaching the *Zuytdorp* site(s), the problems encountered in working in such a difficult environment and some of the solutions found in pursuing this combined maritime and terrestrial, historical and pre-historical archaeological project. The forces at work in shaping the various approaches will become evident, as will the fact that the work remains unfinished on land and at sea.

Dr M. McCarthy
Zuytdorp project leader 1986–2002
Maritime Archaeology Department,
WA Maritime Museum.

Paper first published in
Dutch Connections: 400 years of Australian–Dutch maritime links 1606–2006
Australian National Maritime Museum (ANMM)
Reproduced with amendments November 2009

Introduction

Of the seven East Indies and China trading ships known to have been wrecked off the coast of Western Australia (*Trial*, 1622; *Batavia*, 1629; *Vergulde Draeck*, 1656; *Zeewijk*, 1627; *Rapid*, 1811; *Correio Da Azia*, 1816), the Dutch United East India Company (VOC) ship *Zuytdorp* (1702–1712) was the only one to be lost without trace, or satisfactory explanation. After spending a great deal of time and effort in searching and after losing

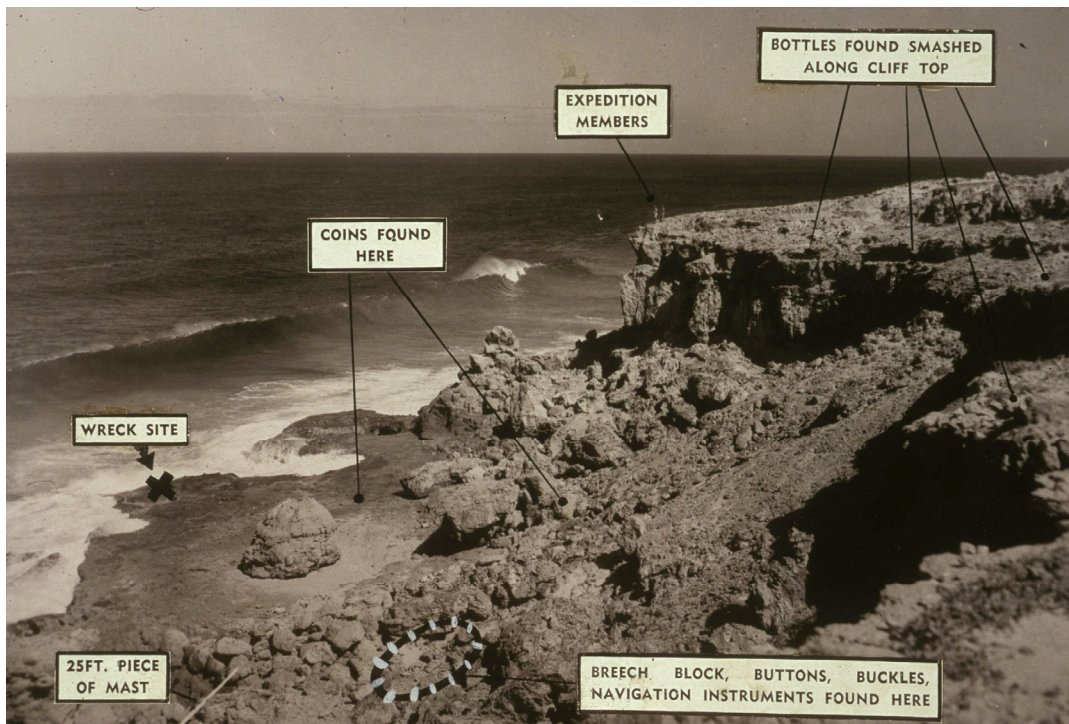
numerous boats and their crew in looking for the survivors of ships lost in the previous century, the VOC effectively abandoned the *Zuytdorp* people to their fate, thus rendering the material remains their only record. In 1927, on the cliffs that now bear the vessel's name—at a place close to the border of Murchison House and Tamala Stations—evidence of a wreck, that later proved to be the *Zuytdorp* was found by members of an Aboriginal/European family group of pastoral workers. Led by the well-known stockman, Tom Pepper Snr., the group included his wife Lurleen, her sister Ada Drage and her husband Ernest. The women's father Charlie Mallard is also believed by some to have been involved, though the timing in each instance is the subject of some disagreement within the family itself. When Tom Pepper eventually made the discovery known to the authorities, he was indisputably recognised as the first to report the find. An expedition under the auspices of the *Sunday Times* arrived at the site in 1941.

The first expeditions to the site

In an otherwise unremarkable visitation, one member Ennemond Faye produced a colour and black-and-white film that remains a unique record to this day. While the identity of the wreck still remained a mystery, from that time on the land sites were regularly visited and a great deal of material was removed. Much of it is unaccounted for, as it was dispersed far and wide. In some instances it was buried at station out-camps having been carried there by the station workers. In 1954 Pepper told the geologist Phillip Playford about the site and its whereabouts.

After a long solo trek in his Land Rover he used coins, silver schellings marked 1711, to identify the area as the camp of the *Zuytdorp* survivors. Playford made another visit in 1954 in association with a team funded by the *Daily News*—undertaking a hunt for relics and,

more importantly searching for evidence of survivors. It being impossible to dive, their finds on the reef platform and on the adjacent cliff were mainly European in origin; though they also located some small gnamma holes, indicators of an earlier Aboriginal presence. Clearly some survivors had got ashore.



The materials found by the 1950s expeditions. Photo Todge Campbell.

Convinced that the wreck lay nearby and that survivors got ashore Playford was successful in having the *Daily News* back another expedition. He also believed there was a possibility that the survivors had interacted with the local Aborigines, the Malgana tribe adjacent, and perhaps the Nhanda whose lands lay just to the south and the Yinggarda people to the north. The *Daily News* expedition arrived in 1958, this time well equipped with expert divers, including the author and journalist Hugh Edwards, four Land Rovers, an Auster

aircraft and a tractor in order to prepare an airstrip. Again diving was not possible and activity centred on the land. Evidence of fires and a number of items of European origin, themselves also indicative of a beacon erected on the cliff tops, were recovered.



*The expedition team at work: Lurleen Pepper with John Stokes and Jim Cruthers.
Photo Todge Campbell.*

A metal detector was deployed, and as had happened in 1954, some blasting occurred in an attempt to dislodge boulders and debris in the search for historic materials. The tractor was used to plough a number of areas in the sand behind the cliff top in a search for objects, but with little result. All the shipwreck timber found on the land—only what lay suspended on rocks away from the ravages of white ants remained—was also removed.

In 1959 Playford published a short, but ground-breaking monograph. It was the first published account of the investigation of a shipwreck and its relics by a Western

Australian, with only the nineteenth-century guano miner, Florance Broadhurst's collection and catalogue of relics from the VOC ship *Zeewijk* survivor's camp in the Abrolhos Islands in a similar vein.

In May 1964, the same year in which the Museum enacted protective legislation at all the known East India sites, Tom Brady of Geraldton led a dive team that saw two anchors,



numerous iron guns (cannon), lead ingots and a number of smaller, badly eroded brass cannon.

Brady's team with their finds. Tom Brady, Alf Morgan, Max and Graham Cramer. Photo Tom Muir.

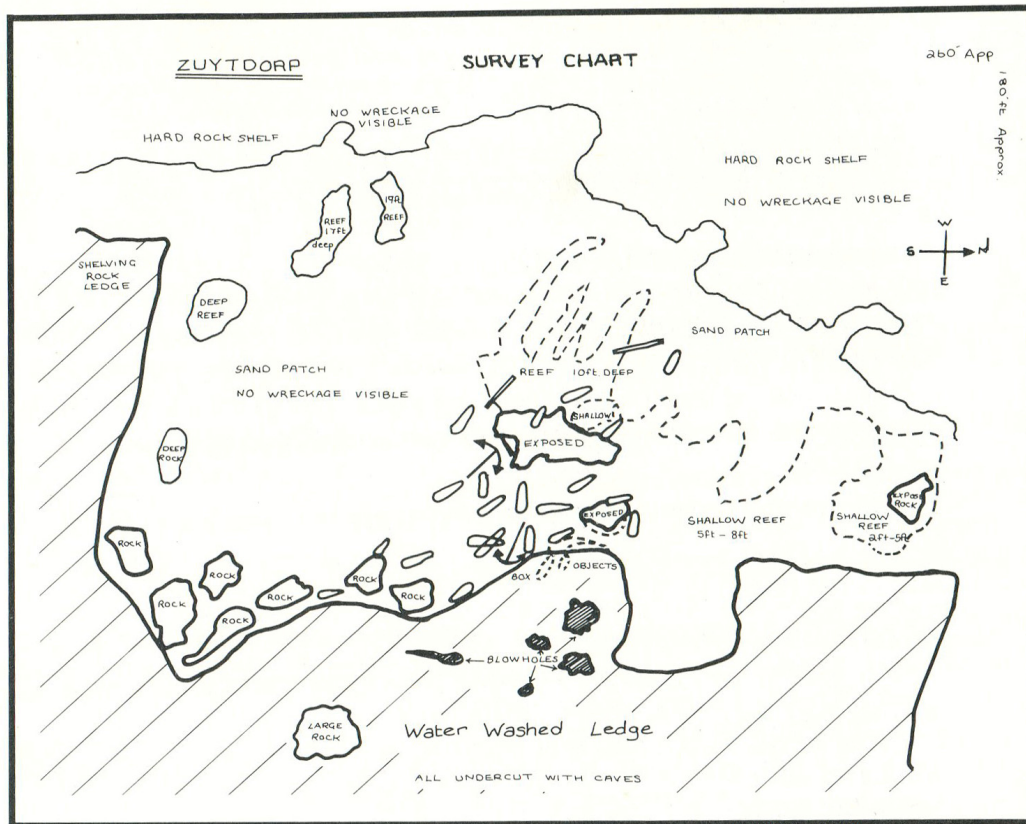
Brady's next team conducted another visit in February 1967, diving for 4 hours. It was on this dive that a silver deposit was seen at the northern end of the wreck. Brady also began work on a plan of the wreck. Some of the silver was also salvaged. The Brady group then made all their material, a sketch of the site and notes, available to the W.A. Museum and the site was declared a protected wreck under new shipwreck legislation introduced as an amendment to the Museum Act. News of the find soon spread and on separate occasions in 1968 the controversial salvage diver E.A. (Alan) Robinson and an RAN team lead by LCDR A. Cuthbert, dived. The latter resulting in injury to one of the dive team, leading to the conclusion that the wreck was too dangerous to work. This photograph is believed to be from that time.



An unidentified diver emerges. Photo Todge Campbell?

The WA Museum begins its involvement at *Zuytdorp*

Numerous schemes put to the WA Museum as to the best means of working the site. Robinson's plan, which included a flying fox, moorings offshore and a derrick for heavy lifting was accepted. Though they did not proceed with the device, his team had a number of dives, one of which proved near fatal, ironically for the team doctor when he was dashed against a reef, breaking ribs and almost his spine. Thwarted by the seas, the party then turned their attention to locating relics and coins on the shore. Soon after Robinson conducted another dive, this time out of a local fishing boat, sighting the silver and stirring up controversy by claiming it was a deposit of immense size. He also provided a site plan, albeit without showing the silver earlier noted by Brady. This lay under and around the 'exposed rock' shown at the northern end of Robinson's plan.



E.A. Robinson's site plan.

Robinson then put up another proposal, this time using an offshore barrier comprising rock fill bulldozed down from the cliff adjacent. He also offered to split the proceeds 80–20 to himself and to the Museum (as representative of the State) respectively.

Brady then countered, but in offering less of the bullion in return, Robinson's proposal proved more attractive, in that it best reflected the attitude of the Dutch government of the time. In concluding its salvage agreements elsewhere in the world in respect of its interests as heir to the VOC, its property and its ships, it generally sought first choice of materials and around 20% of the proceeds.

Thus Colin Jack-Hinton, the then Curator of Archaeology favoured Robinson's scheme. When he explained to his Director, David Ride, that 'there is a greater chance thereby of Government making some profit and there is likely to be a total excavation of the site', the scene was set for all that was to follow.

By way of explanation, there are two overarching issues in this statement. One is the (necessary) acquisition of objects from exciting sites for the State and for museological purposes and the other is the notion that an archaeological site is not considered to be properly 'worked' unless it is totally excavated (called 'area excavation'). The temptation for looting is also thereby removed. It needs be added that while it has since lost all credence today, the 'area excavation' philosophy also drove the excavation of many other maritime archaeological sites for well over the next decade and a half. The American China Trader *Rapid* (1811) and the slave ship *James Matthews* (1841) are two of the best-known examples (Henderson, 1987).



Within a few years, the Museum established its own diving team. It comprised mainly ex-military and oil industry-trained divers led by well-known Navy Clearance Diver Harry Bingham (BEM) who had been honoured for his diving exploits whilst serving in the Royal Australian Navy. In May 1970 they proceeded to the site by land, investigating the cliffs for c. 5km either side, but without diving. Unbeknownst to Bingham, Robinson dived the *Zuytdorp* wreck sometime in mid 1971, recovering one or two bronze swivel guns, some coins and some lead shot. Anecdotal evidence also refers to his using explosives and also narrowly-missing injury in the waves. One intact swivel gun was later found at the Denham Jetty in Shark Bay and it contrasted markedly with the heavily eroded specimens recovered by the Brady team years earlier. Apparently it had been protected from the sand-blasting effect of wave action by being buried, or fixed in concretions.

In January 1971 Bingham, assisted by former commercial diver Geoff Kimpton and others dived, estimating the silver deposit to be around 3 metres long and 1.5–2 metres wide.

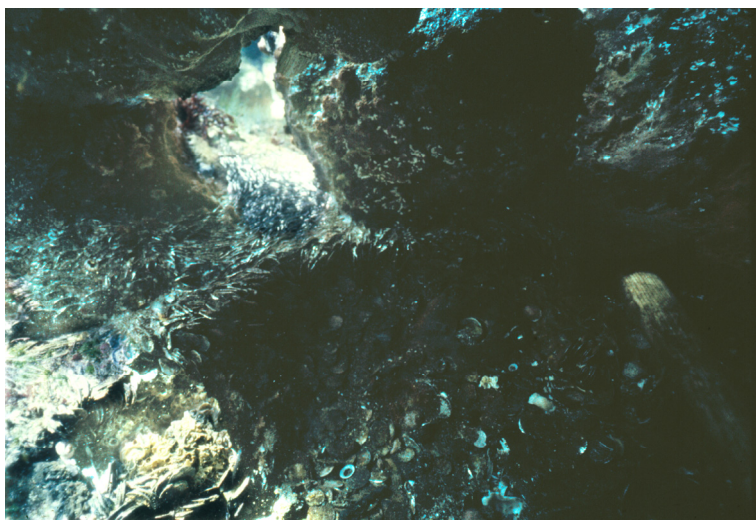


Two, once identical, swivel guns from the Zuytdorp. Top: Recovered by A. Robinson. Bottom: Recovered by the Brady team.

Using hammers and geopicks—standard excavating equipment in a coralline environment to this day—they recovered silver and other material including a section of a ship's bell. It was found firmly cemented into the vertical face of shoreline reef, a few metres inshore of the coin deposit and part of it was recovered. Working against the reef Kimpton was lucky to escape injury as the seas rose later in the dive and he was washed over a nearby outcrop. Mindful of their brief to recover silver, there was no attempt to produce a record of the site or of the location of their finds, though an underwater film was produced by TV cameraman Neil Trudgeon.

As concern grew about the lack of archaeological expertise amongst Bingham's team, Oxford graduate Jeremy Green was appointed head of the newly established Department of Maritime Archaeology in 1971. In the interim Bingham left the Museum. With Green's focus firmly on the *Trial*, *Batavia* and the *Vergulde Draeck*—all of which were suffering from endemic looting (often effected with explosives)—*Zuytdorp* remained in abeyance for a number of years, however. Moves to form what soon became *The Australia Netherlands Committee On Old Dutch Shipwrecks* (ANCODS) also began. After its first meeting in 1973, ANCODS convened annually and served to safeguard the legal position of both countries and also to 'protect the Museum's programme of recovery and treatment of artefacts'. It was also to ensure that the recoveries were equitably shared between the State of Western Australia, the Commonwealth of Australia and the Netherlands (Bolton, 1977: 28). In that same year, the Museum's Maritime Archaeology Advisory Committee (MAAC) was formed. Comprising historians, an anthropologist, archivists, oceanographers and divers, its role was to advise the Director—then John Bannister, a natural scientist—about shipwreck matters.

Soon Green was able to turn his attention to the *Zuytdorp* wreck. In the context of ANCODS' requirement that looting at *Zuytdorp* be stopped by the recovery of the bullion, and with the MAAC and all his superiors in the Museum concurring, it comes of little surprise that the priority was recovery of silver. Green then led a number of successful shore based dives on the site. One dive occurred in November 1977 and the next in mid May 1978, and on the latter occasion Green recorded that the silver deposit, then estimated at around 2m long by 1m wide, had been 'worked In on' i.e. there had been extensive unauthorised looting in the interim. Suspicion rested on the many abalone divers who were then taking up temporary residence along the cliff tops and were regularly accessing the reef platforms in the area. Some also had scant regard for authority and the law.



The Carpet of Silver. Photo Jeremy Green.

Suspicion rested on the many abalone divers who were then taking up temporary residence along the cliff tops and were regularly accessing the reef platforms in the area. Some also had scant regard for authority and the law.

In the course of a six-hour dive Green estimated that he and his team had excavated an area about 1m square down 20cm to bedrock, yielding c. 38kg (c. 5,000) of coins and other objects.



Coin recovered by the Museum. Also showing the 1711 schellingen that led to the identification of the wreck. Photo Pat Baker.

A copper cauldron that was found off the site was a further indication of looting.

In concluding his report Green proposed a watch-keeping system and proceeded with a request to the owner of Murchison House Station, Prince Mukkaram Jah, the former Nizam of Hyderabad, for assistance. Mr Jah (as he preferred to be known) constructed gratis a large ‘flying fox’ system supported by a massive quadrupod (the ‘A Frame’ as it was called) that he erected on the cliff top. He also graded a number of access roads down to the site.



The flying fox and ‘A-Frame’. Photo Jon Carpenter.

Situated well over 50 metres above sea level, the A-frame was attached to a 25mm-diameter wire cable connected to a number of heavy anchors which Mr Jah laid well out to sea, again at no cost. The device was designed to enable the divers and their equipment, all safely housed in a special-purpose reinforced steel crate to enter and exit the water—from the safety of the cliff top, over the reef and beyond the breaking waves. Jah also bulldozed a new bush airstrip alongside one used by the *Daily News* group in the mid 50s and then pushed a track down from there to the site, through impenetrable bush, to finish at the A-frame. The sea soon destroyed the anchoring system with

potentially–fatal results for the first person planning to test the scheme. The wire broke as the system was being tested sending the crate and its test load to crash onto the rocks metres below. Subsequent dives were made from the shore.

It was at this time that the author joined Green’s team at the site. Soon another much smaller A–frame was constructed and secured on the reef platform at the foot of the cliff. It was to be used to winch out equipment and bags of silver, thereby obviating the need for the diver to carry them through breaking waves. Being located very close to the reef edge, soon it too was destroyed by the seas.

Despite all the difficulties the group were successful in the recovery of a large amount of coin and artefacts. In mid 1978 Green also proved successful in also having a watch–keeper established on the cliff–top, despite it being at considerable cost to the Museum. From his well–equipped caravan and equipment store, the watch–keeper radioed the museum’s base twice daily. When the weather was good or on the mend, he called the team up.

Most ensuing excursions by land, including an extremely rough track into the coast resulted in the team invariably arriving in their 4WDs too late to dive, however—for the conditions on the site change very rapidly, sometimes over a matter of just an hour. Eventually air transport became the preferred mode of travel. Thus after receiving a call to come up to work the site, a rapid response team would fly from Perth, land on the airstrip and make ready for a dive using the stores and equipment housed at the watch–keeper’s caravan. Unfortunately conditions were so variable at the site that even using air transport, the group—which often arrived only hours after being called up—invariably found the swell up and the conditions un–diveable.

The dangers were ever present, with continual near misses and Green himself nearly succumbed in the seas on one occasion, necessitating his retrieval by the author, dazed, cut, and bruised— yet still firmly clutching a camera and a bag of coins—after being ‘rolled’ up a sloping reef platform by one particularly violent sea. Without mentioning the incident, in an October 1980 memo to the Director Green blandly reported that ‘we have to work in marginal conditions. We are clearly, I think, adopting the wrong approach, by getting into dangerous situations purely to get a diver into the water.’ The airstrip had also begun to deteriorate by this time. In similar understated terms, Green also described the landing of a twin-engine high-speed aircraft carrying both he and the author—who was at the time also a pilot and well aware of the near disastrous and potentially-fatal nature of the incident— thus: ‘The airstrip; was marginal, the last landing there came very close to a crash landing.’ Despite these near misses, for which, as expedition leader, he saw himself solely responsible, Green still looked to continuing and he examined the best means of repairing the strip with Jah’s help. Eventually realising the on-going dangers on land at sea and in the air had placed him in an untenable position, he later concluded that ‘wind erosion of the airstrip has got worse and it is now unserviceable. I am not prepared to be responsible for landing at the site’ (WA Museum, *Zuytdorp* file 460/71). He then added that given the airstrip was inoperable that it was then an appropriate time to call a halt to operations—the Museum to that point having recovered over 10,000 coins and many small artefacts. Green then proceeded to canvas all the options open. These included getting SAS and other service diving advice, contracting to outside salvage diving groups, constructing a groyne, using mechanical grabs and other remote recovery devices, approaching from the sea,

continuing in the same vein, or abandoning the site permanently, while keeping surveillance.

At this time there also emerged a growing, vocal and often acrimonious global movement that was steadily setting shipwreck salvors and underwater archaeologist poles apart. Many were beginning to question the ethics of anyone, let alone high-profile archaeologists such as he conducting or condoning what were in effect purely salvage operations for non-archaeological reasons.

In this period there had also developed the added risk that Rock lobster fishers—who were by then frequenting the area in relatively fast boats and in comparatively great numbers—would also be tempted to remove coin in exceptionally calm periods. They were often very capable divers and most boats around this time carried SCUBA gear to free snagged lobster pots. Thus the pressure to work the wreck remained.

The matter was effectively brought to a head when, in October 1980 the Museum's watch-keeper was deliberately burnt out by person or persons unknown. After that, it was all considered too difficult and far too dangerous on numerous fronts to warrant the expense and time. Aerial surveillance was established and a part-time warden, a local abalone diver Domenic Lamera—who was resident a few hundred yards from the Museum camp and who was considered a trustworthy replacement—was appointed to police the site.

In looking to a compromise, Dr Ian Crawford Head of the Division of Human Studies at the Museum, also neatly encapsulated the prevailing politics, when he said: 'I understand that ANCODS wants work done on site, so that unless Jeremy [Green] can persuade that body otherwise, I think we are committed to an excavation.'



Ian Field, the Museum's watch-keeper and his burnt out caravan. Photo Pat Baker.

However, our excavations must be at a higher standard archaeologically than ordinary looting. If we concentrate on the coin area, we know that we will recover coinage duplicating the material we already have so that numismatically we will be no better off than at present. I don't think the Museum ought to adopt this approach' (WA Museum, *Zuytdorp* file 460/71).

In order to effect an archaeologically-sustainable recovery and given the inability to predict the required good weather, Crawford canvassed further opinion putting all ideas, to the newly-formed *Zuytdorp Assessment Committee* comprising a number of marine scientists and engineers. These included suction devices, grabs, cranes a 'bubble curtain', blockships and breakwaters, similar to that earlier proposed by Alan Robinson. His advice, as an expert geologist, having also been sought, Dr Phillip Playford again became actively

involved. In examining one scheme designed to use rocks from the cliff face for a protective groyne to seaward of the wreck, Playford became firmly of the opinion that diving was the only solution. Many agreed. Ever fearful that the silver would prove too much of a temptation, he also strongly lobbied for action.

As pressure mounted from both ANCODS and Playford, yet another complicating element began to enter the equation viz., the national *Code of Practice for Scientific Diving*, comprising regulations tethered to the *Australian Standard AS 2299–1979 for Underwater and Air Breathing Operations*. While still in their formative phases, these were threatening to remove choice from the maritime archaeological workforce and to preclude diving in potentially–dangerous conditions anywhere in Australian waters. It was all quite daunting and finally in February 1984, Green concluded thus;

Whilst appreciating the political sensitivity of the site, I seriously question the ethics of conducting a salvage excavation at the site, which with the present technology would inevitably lead to damage of artefacts and material. It would be preferable to leave the site for the future where adequate technology and funds may be available (WA Museum, *Zuytdorp* file 460/71).

Threats to pass control to independent salvage contractors were then made by the Director. With the author and with Geoff Kimpton who were the most qualified divers in the department with considerable experience in the surf both willing to circumvent this by assuming archaeological, curatorial and in–water responsibility for the Museum, Green eventually—but most reluctantly—agreed and the author assumed curatorial responsibility, with Kimpton as chief diver. Thus in November 1986, a new phase was entered into.

First a feasibility study was undertaken and a number of shore–based familiarization dives were made. While the recovery of visible coin and loose artefacts on the wreck and on the

land opposite remained the author's priority; other aims included the production of a site plan delineating both land and sea sites; a clean up of the old Museum's camps, roads and salvage devices; literature searches; oral history programs; an amnesty designed to allow those holding *Zuytdorp* materials to come forward; and a series of academic and popular publications, including a film. The last items saw Phillip Playford invited to join the team with the intention of his producing a scholarly, though popular account. This has since proved a most productive initiative with Playford's ensuing research most productive indeed and his subsequent and deservedly award-winning *Carpet of Silver* (1996) going through numerous editions. After exhaustive inquiries, Playford also relocated the film of the first expeditions mentioned earlier.

Suffice it to say here that on his first dive in 1986 Kimpton advised that, having viewed it on numerous occasions previously, the fabled 'carpet of silver' was gone. Remnants of it appeared in small deposits of schellings lining the bottom of a number of small holes in on the sea floor where the carpet was once located—but they proved almost impossible to remove and were left in situ.

Work continued on the expedition aims nonetheless and as the results began to prove positive and as more specialists proved willing to join the team, the aims were further modified. By 1990 (see below) they were reflective of the modern multi-faceted and multi-disciplinary program that a complex site like *Zuytdorp* warranted. It was to be the same as that implemented at other equally-significant and complex wrecks once the temptations to looters had been reduced to manageable proportions. The two other notable examples in Western Australia are the VOC ship *Batavia* (1628–1629) and SS *Xantho* (1848–1872).

Revised *Zuytdorp* aims, after 1990

- (a) To investigate the wreck and associated land camps of the VOC Ship *Zuytdorp* (1702–1712) in order to help ascertain the causes of the loss of the vessel and the fate of its survivors.
- (b) In so doing, to recover as much as possible of the material that serves to attract divers and collectors to the site such that it will not be lost or destroyed and to help ensure that the site will not be unnecessarily disturbed by others. In this manner the site can be better managed for the sake of the wreck, camp sites, the artefacts themselves and in due course for *bona fide* visitors to the site.
- (c) To compile and make available all the available written, anecdotal, film and other material on the *Zuytdorp* and its survivors.
- (d) To analyse, catalogue, conserve the artefacts found and to display them with appropriate background information in suitable repositories in the region and in provincial centres.
- (e) To conduct on-going research into the *Zuytdorp* and its contents and crew for the purposes of better understanding the vessel, its purposes and its people.
- (f) To publish the findings of the inquiry and activities outlined above at all available levels, through all available media and for all walks of life.
- (g) To establish a site(s) management plan and to ensure that the area is stabilised such that further buried or submerged information or artefacts are not lost and to cater for the growing desire from members of the general public to visit the area.
- (h) To examine Aboriginal sites in the vicinity of the wreck, seeking evidence as to whether the survivors interacted or lived with the local Aborigines.
- (i) To facilitate genealogical–medical research aimed at determining whether survivors interbred with the Aboriginal people.

The successes in pursuing these various aims—though the amnesty did not eventuate until 1993—are partly also due to the continued involvement of Playford, and to the author facilitating the participation of a wider ranging group of specialist pre-historians and historical archaeologists. These were notably archaeologists Professor Sandra Bowdler, Dr Richard Cassells, Dr Kate Morse and Fiona Weaver. Author and metal detector expert Bob Sheppard was also invited to join the team.

The Department of Topographic Services at the Mapping and Survey Division of the Department of Land Administration (DOLA, were also recruited at this time, as was retired surveyor Ross White. They joined to produce a series of aerial photographs, ortho-photographs, contour maps and sections through the land sites, down the cliff and well out

through the wreck-site into the deep. This enabled a comprehensive plan and sections through the wreck to be prepared. To that end, retired architect/draughtsman and artist Stanley Hewitt also joined, as did retired academic and model-maker Dr Cees (Jim) de Heer. Using Hewitt's expertise, sections and a plan of de Heer's model were matched with the site plans being produced underwater by Kimpton and the author. These were then linked to the large-scale plans produced by DOLA and Ross White.



The Museum's site plan with an outline of the ship superimposed. Each square is 10m by 10m. The drying reef is shown in black above the wreck. Breaking reefs appear in red. North is to the left. Artwork Stanley Hewitt.

These plans, all provided essential detail in understanding the site and the break up of the wreck. They also proved essential in critically examining Playford's theory and belief that people could have got off the ship. Equally important was the possibility they then

interacted with the Aborigines as they passed through the region from the major encampments at Billiecuthera well to the south and Wayl (Wale) Well to the north. Linked to the essential development of site plans drawn to scale, another key to unlocking the *Zuytdorp* story presented itself when, under the newly promulgated amnesty, the then former site warden Domenic Lamera, not only submitted 200 high-denomination, high-quality coins, but also other fragments of a bell. These, he had recovered from debris on the sea floor following the use of explosives on the 'carpet' by persons unknown.

The other important clue coming from the amnesty was the observation that Domenic Lamera had recovered the pieces from amidst seabed debris resulting from the use of explosives i.e. the blast had been substantial. He also advised that he had not kept any of the low denomination silver found with the 200 high-quality, high-denomination coins. As these were they normally were found in a ratio of 1 high- to 10 low-denomination coins, Lamera's was clearly a substantial haul. Many, angered by the deceit, sought to have him charged for stealing as a servant, but the author, as instigator of the amnesty and head of the program, resisted and Lamera was not prosecuted. Further, Lamera was adamant that he had obtained the objects before taking on the job as part-time warden for the Museum, i. e. before 1981. Nonetheless many remained angered by the failure to prosecute. Notwithstanding, and as envisaged in requesting the amnesty in the first place, important clues had come from Lamera's actions in declaring his cache—notably the bell which neatly fitted those fragments recovered by Kimpton and Bingham in the early 1970s.

In this cross section through the ship (again) by expedition artist Stanley Hewitt utilising the divers' plans, the DOLA grids and De Heer's model, the proximity of the high poop to



the drying reef (shown above as a dark surface) to the right hand side of the high poop becomes apparent, so too does the reason why the coins (which were carried under guard not far from the Captain's quarters) were located so close to the drying reef platform. Their presence on the reef platform above, where they were found in some quantities in the early years, is also explained by this image in that the distance from the cache to the shore was very small.

A section through the site utilising the de Heer model (top). The location of the bell (as first seen by Geoff Kimpton in the late 60s) is also shown against the drying reef (RHS). The site plan (bottom) shows (in red) a breaking rock with the stern of the ship superimposed. The 'carpet of silver' lay against and under this rock. Artwork Stanley Hewitt.

Most importantly, the section and plan not only show that it was possible for survivor's to have bridged the gap, but it also shows the reef offshore on which the ship would have grounded before swinging bows to the south. Also visible in this image are the seabed contours (produced from depth soundings) showing the hollow in which the wreck came to rest and where the lead ingots that were carried low down in the hold were found.

Fragments of the Zuytdorp bell recovered by Geoff Kimpton and Domenic Lamara rejoined. Photo Pat Baker.

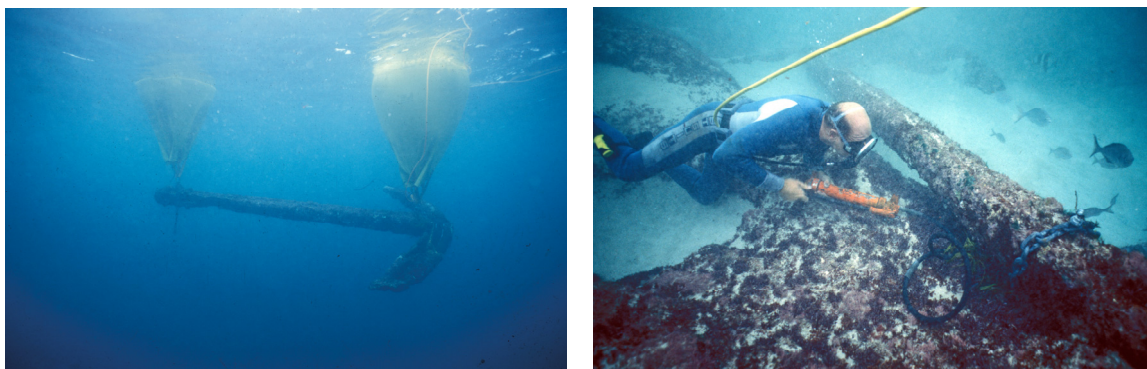


After a number of often difficult trials from shore, the diving regime also changed at this time, first using large rock lobster (crayfishing) boats, raising many lead ingots, navigational dividers and other materials. Then, once it was ascertained it could travel the c. 40NM north from Kalbarri and more importantly back in the prevailing southerlies, the Museum's fast 18-foot (5.5m)

aluminium workboat, was used (albeit with crayboats providing a lookout if the seas got too rough). Other diving specialists were also recruited, notably on-site conservator/video operator Jon Carpenter, photographer Pat Baker, and conservators Dr Ian Godfrey and Dr Ian MacLeod.

Thus the team would travel to Kalbarri using what we had by then realised were reliable weather predictors, i.e. the presence of a cyclone in the far north. By this means we were able to continue working on the site plan, to examine the underwater terrain, to recognise prior disturbances on the seabed—especially noting what appeared to be evidence of blasting to seawards of the coin deposit—and to recover material. The artefacts recovered, using clever rapid recovery methods devised by Kimpton, included an English 8-pounder

cannon and a huge bower anchor. This can be seen today adjacent the welcome desk in the Museum's Shipwreck Galleries. In being so large the anchor projects through and beyond the second floor where the cannon (which carries a British Broad Arrow inscribed on its barrel) and the *Zuytdorp* exhibit are also visible.



Geoff Kimpton recovering the Zuytdorp bower anchor. Photo Jon Carpenter.

A silver deposit visible only as a flash of green copper camouflaged by concretions and weed growth was also seen close to the reef edge. Wedging himself in under a crowbar to prevent his being sucked out by the seas, with an assistant (normally the author) hovering nearby in safer water, Kimpton then opened it with a dumpy and geopick, to find not only high denomination coins, but also items consistent with a ship's armoury. This 'armoury concretion' was to remain our focus for a number of years, for it proved exceedingly rich, producing many coins, a pulley block, fragments of pipes, ceramics, small arms, a large pewter dish containing hundreds of other objects concreted into its surface, such as bone, combs, and an exquisite ornate drinking glass. While on the day this find was made proved the best experienced by the Museum team, resulting in most productive results and the completion of a full video and camera record, conditions soon turned as the prevailing afternoon southerlies set in.

Each time we had to depart due to heavy seas, the ‘face’ of the concretion was unavoidably left open, however. Each time we returned—sometimes months later—it became increasingly evident that the seas themselves had further excavated the remains. Realising we should never have opened it in the first place, that it should have been left undisturbed—and that now it had to be completely removed as quickly as possible—we reluctantly deployed a small explosive charge.



Above: On site conservation specialist Jon Carpenter and chief diver Geoff Kimpton examine the drinking glass. The A Frame is visible on the cliffs behind. Photo Michael McCarthy.

Below, the drinking glass. Photo Pat Baker.

Similar to those set in an archaeological context by Jeremy Green on the *Vergulde Draeck*—the explosive charge was placed on rock adjacent the deposit. In being freed by the detonation, the entire deposit was removed in minutes.

Later Tom Pepper Jr. was to ask whether we had used explosives, for a few days after we had been forced out by heavy seas, he visited the site and had found coins loose on the reef platform adjacent the wreck. Having been there many times before, and with his relatives having recovered coins years earlier from similar locations, he knew they were recent. As the explosion was not the



cause, it being closely monitored from the boat and later the shore, it became evident that the coins had been lifted off the site by the swell, in similar fashion to those found decades before diving commenced. Some would have been forced under the reef platform, which is honeycombed and has a number of forceful ‘blowholes’ and others would have been lifted in very heavy swells and thrown onto the reef platform.



Geoff Kimpton reluctantly follows the author back to the boat as the swell builds. Photo Michael McCarthy.

Thus it was realised how the combination of looters using explosives and the seas breaking over every face the Museum’s teams under Bingham and Green had opened over the years had combined to destroy the carpet. The question remains, in what ratio?

The possibility that the *Zuytdorp* survivors were assisted by local Aborigines was also addressed in this time. Water is very scarce in any season but winter when the *Zuytdorp* was lost, and the

Aborigines stored it in the hotter months in gnamma holes, some with stone lids. Without their aid, the unfortunate Dutch would have died with the onset of the hot weather. Kate Morse has dated the many shell middens found nearby from around 4,000 BP however, posing as yet unanswered questions as to the interaction, if any, between the two races. Another matter addressed in a combined effort involving Museum staff, Bob Sheppard, Sandra Bowdler, Phillip Playford and their assistants, centred on an examination of the

movement of artefactual material from the wreck to wells and soaks in the hinterland, notably Billiecuthera Soak to the south and Wale Well to the north. These were both major Aboriginal encampments in ancient times and at the latter, a tobacco box lid marked showing the town of Leiden was found, along with Aboriginal grindstones taken from rock formations at the Murchison River south of *Zuytdorp*.

Phil Playford, Tony Cockbain (finder) and heritage metal detector specialist Bob Sheppard with the tobacco box lid. Photo Michael McCarthy.



With the aid of experienced bushmen Messrs Cooley, Cukrov and also (before his appointment

was terminated) Lamera, who all had a very keen interest in the fate of the survivors, many other nearby wells and soaks were found and examined for signs of Dutch–Aboriginal interaction.



One key issue remaining completely unattended to, nonetheless, was the problem of examining the deposits lying under dense thickets in the hinterland.

Fiona Weaver leads one of the Museum's excavation teams on the slope beneath the cliffs. This is the breach block area shown in Todge Campbell's 1950s image above. Photo: Jon Carpenter.

Certainly materials had been found in the hinterland during 1970s, but the terrain and the vegetation precluded any systematic search for evidence of survivor's camps, burials or other remains. This will need wait a comprehensive 'burn' in the area, as apparently was common in ancient times, for it is then that a great deal more information about the movement of survivors and their interaction, if any with the Indigenous people will be unearthed.

Sandra Bowdler and Celmara Pocock examine an ancient Aboriginal grave that had been lined with rocks in the 20th century. Photo Michael McCarthy.



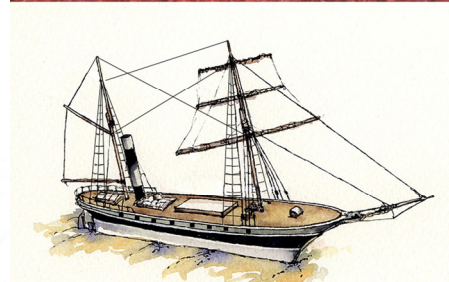
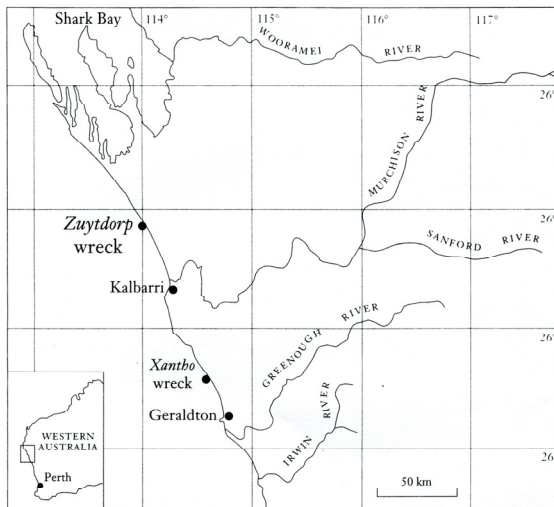
The hinterland adjacent
the wreck is an area also
rich with the

accoutrements and debris from well over a century of combined European–Aboriginal station activity. All the now derelict out–camps, wells, rain sheds and holding yards are inextricably mixed with the remains of ancient Aboriginal encampments, for they sought to use the same land and the same water supplies. All are replete with indigenous artefacts mixed amongst the ruins of station wells, windmills, workshops, sheds, fences and the accoutrements and debris of over a century of station life. All represent a shared European–Aboriginal heritage that began in the 1860s and some also contain Dutch materials taken from the wreck.

The possibility of a genetic link between the Dutchmen on the *Zuytdorp* and the local Aborigines in form of introduced diseases was also examined. One *Porphyria Variegata*, a malady that originated at the Cape of Good Hope in 1688 became manifest in a member of the Mallard family (to which Tom Pepper's wife Lurlie and her sister Ada Drage also belonged. This was intense speculation that a son of the progenitors of the disease may have got on the *Zuytdorp* and Playford became very active in linking geneticists and other specialists to that end. This promising avenue and studies into other genetic maladies related to the Dutch were strongly supported and had the backing of a parliamentary committee led by the Hon. Phillip Pendall, which was then inquiring into the lack of recognition for the finders of the Dutch and other wrecks. It was also to be the focus of a high-powered academic request for ARC funds involving the author, Dr Playford, Professor Bowdler, geneticists and other experts. The notion foundered, firstly on a purely historical basis however when the author's research showed that well over 100 'Malay's (as they were then widely, but incorrectly called) from Dutch East Indies and elsewhere were imported to the Western Australian pearl fishery in the SS *Xantho* and other vessels. Many remained in the Shark Bay area after it sank in 1872 and many become part of the rich Aboriginal-European-Malay mix there. With the Dutch East Indies occupied by the Dutch since the early 1600s and with considerable intermingling with the Indigenous populations from that time on, there is also a distinct possibility that the maladies became evident in the nineteenth-century Shark Bay 'Malay' community via the 'Malay' pearlers. This rendered only those indigenous people having no possible contact with former residents of the Dutch East Indies or their descendants capable of providing indisputable evidence of a Dutch and Indigenous Australian link. It was on that basis that the Museum ceased its inquiry into a possible Dutch-Aboriginal link via the *Zuytdorp*.

Scientific inquiries also found against the possibility, with one article appearing in the Internal Medicine Journal in 2002 finding that the disease in the WA Aboriginal population was 'not inherited from shipwrecked sailors' (Rossi, *et al.*, 2002).

In the course of the *SS Xantho* studies, the identity of the mysterious Walga Rock painting appearing in an ancient indigenous gallery near Cue at the head of the Sanford River was also examined. Often attributed to Dutch survivors, or Aborigines with whom they had come into contact, the image is clearly be a two masted steamship with false gunports (a common decorative feature in the 19th century) and not a three masted East Indiaman with a damaged main mast as once thought. Allied to those of *SS Xantho* appearing at Inthanoona east of Cossack, the Walga Rock painting is now ascribed to Sammy ‘Malay’ who was also known as ‘Sammy Hassan’. He was a Shark Bay identity who travelled to the Walga Rock region and joined the community there around 1917.



*LHS: A map of the region showing the rivers and location of the Zuytdorp and Xantho sites
 RHS: The Walga Rock painting and Ian Warne's impression of the SS Xantho compared.*

Another visit to the *Zuytdorp* wreck in 1997 involved a short dive and a major police action following the report of a possible unauthorised dive at the wreck. This action had a remarkable

effect in Kalbarri and environs attesting to the Museum's resolve and top state and federal police commitment to the site post the Amnesty.

'Call-outs' by our weather watch-keepers at Kalbarri and elsewhere were not actioned after May 1997 however. First a lack of funds precluded entry into the field and second it was realised that the Museum's 4WD could not be used to access the land site without incurring a massive financial penalty under the WA Government's Lease-Plan agreement. A call-out in March 1998 was also not actioned as Kimpton and I were in Shark Bay (with metal detector expert Bob Sheppard) at the place where the French annexed that part of New Holland in 1772. Making it all the more difficult, in May 1998 an opinion was received that the Department's 4WD was unsafe for towing the Museum's workboat, precluding any further work at sea until a solution was found.



The author accessing the site from land. Photo Pat Baker.

In June 1998 a request to replace the vehicle and to provide funds for further work was refused as all staff were required to focus on the coming new maritime museum. In the face of the impasse, in March 2000, a management strategy was produced and promulgated by the author

advising that vast amounts of material remained at the wreck and on land, most of it camouflaged or hidden, that monitoring and recording needed to continue and that if 'flat calms' were encountered, an on-site presence should be maintained and loose visible and attractive objects removed where possible. Re-greening such as the removal of Prince Jah's A Frame and the clean up of the Museum's former occupation and roads was to continue on land. Potential 'call-outs' in April and May of that year were not acted upon, however. In 2001, with the pressures of the new museum nearly resolved, a request to access the site by road to monitor the wreck-site and to continue re-greening on land was again made, only to be refused due to worries that safety issues were yet to be resolved. Concerned at the on-going inactivity Playford continued lobbying and eventually completely disillusioned, he wrote to Graeme Henderson, then the Director of the Maritime Museum and Delegate responsible to the Minister for the operation of the Commonwealth Historic Shipwrecks Act calling for the project to be given to external contractors or the Geraldton branch of the Museum for action. At the same time he also expressed no-confidence in the project leader's management of the amnesty and my decision to leave schellingen visible in the holes on the site. Soon after an extended period of flat calm conditions resulted in a request for permission to return to the site for diving operations, but it too was refused, however, partly due to a lack of funding and also due to what was described as 'the complexity and dangers of working on the site'. The latter became fundamental, for by then the promulgation of the Occupation Health and Safety Act had not only served to prevent willing staff taking the risks Kimpton and I had on many occasions, but it also served to render the entire chain of bureaucracy right up to the Director personally responsible for accident and injury at the site. In essence, despite understanding that Kimpton and I considered the taking of calculated risk a fundamental element of the *Zuytdorp* program, they were all constrained by the provisions of the Health and Safety Act to not allow us into the water, despite the intense lobbying from Phillip Playford that was then occurring. As a result in June 2002 the author offered his resignation as curator

responsible, requesting Jeremy Green to again resume command of the project. In receiving a report of all that had transpired up to that date, ANCODS thanked Kimpton and I and in accepting the need for change, ushered in a new era at the wreck. His work underwater at *Zuytdorp* and above water in the Batavia Gallery—where he had just completed a magnificent, sepulchral reconstruction of both the ship’s wooden hull and Batavia castle’s stone portico—finished, Kimpton left the Department a year or so later.



Another Stanley Hewitt impression of the Zuytdorp (After the Storm)

Zuytdorp website

<http://www.museum.wa.gov.au/collections/maritime/march/shipwrecks/Zuytdorp/Zuytdorp.html>

References

Where not mentioned in text, this work is based on Department of Maritime Archaeology expedition Day Books, 1986 onwards (*Zuytdorp*, vols 1–3), *Zuytdorp* Files, Department of Maritime Archaeology (460/71 1–22) and the following works.

- Bolton, G., 1977. What is ANCODS, In Green, J., Ed., 1977. *Papers from the First Southern Hemisphere Conference on Maritime Archaeology*. Oceans Australia. Melbourne.
- Cramer, M., 1975. The First *Zuytdorp* Dive. In Edwards, H., *Sharks and shipwrecks*, Lansdowne, Melbourne: 114–119.
- Cruthers, J., and Campbell, T., *Zuytdorp Scrapbook*. Department of Maritime Archaeology. WA Museum.
- Edwards, H., 1962. *Gods and Little Fishes*. Davies, London.
- Henderson, G., 1987. *Maritime Archaeology in Australia*. UWA Press, Nedlands.
- Kimpton, G., and McCarthy, M., 1988, *Zuytdorp 1701–1712. Report to the Director and Head of Division on Underwater and Other Work Conducted during the Period April 1986 to April 1988*. Report, Department of Maritime Archaeology. Western Australian Maritime Museum, No. 30.
- McCarthy, M., 1986. *A Report on the Situation to Date and Proposals to Finalise Fieldwork and Fulfil the WA Museum's Obligations Re the Site*. *Zuytdorp* file, 460/71, Department of Maritime Archaeology, WA Maritime Museum.
- McCarthy, M., 1990. *Zuytdorp, A Report on the Situation to Date, (June 1990)* Report, Department of Maritime Archaeology, Western Australian Maritime Museum, No 42.
- McCarthy, M., 1998. Investigations at the *Zuytdorp* sites. In Green, J., Stanbury, M., and Gaastra, F., *The ANCODS Colloquium*. Special Publication No. 3, Australian National Centre of Excellence for Maritime Archaeology, Western Australian Maritime Museum, Fremantle: 41–52.
- McCarthy, M., 1998. Australian Maritime Archaeology: Changes, their antecedents and the path ahead. *Australian Archaeology* 47, December 1998: 33–38.
- McCarthy, M., 1998. *Zuytdorp, Far From Home*. *Bulletin of the Australasian Institute for Maritime Archaeology*, 22: 51–54.
- McCarthy, M., 2000. *Zuytdorp Wreck and Reserve Management Strategy. 2000 onwards*. Report, Department of Maritime Archaeology, Western Australian Maritime Museum, No. 168.
- McCarthy, M., 2001. Australian Maritime Archaeology: Changes, their antecedents and the path ahead. In, Staniforth, M. & Hyde, M., 2001, *Maritime Archaeology in Australia: A reader*: 14–22. First published in *Australian Archaeology* 47 (December 1998): 33–38.
- McCarthy, M. (comp), 2002. *Chronological Précis of Events Occurring in Stage 3 of the WA Museum at the Zuytdorp site(s). For the ANCODS meeting December 2002. Stage 1 – The Bingham/Kimpton era: 1969–71; Stage 2 – The Green era: 1971–1985; Stage 3 – The McCarthy/Kimpton era: 1986–1002. With assistance from many expert practitioners and volunteers, including Prof Sandra Bowdler, Dr Richard Cassells, Mr Stanley Hewitt, Dr Kate Morse, Dr Phillip Playford, Mr Bob Sheppard, Staff of the Department of Land Administration, Mr Ross White, Ms Fiona Weaver*. Report, Department of Maritime Archaeology. Western Australian Maritime Museum, No. 173.
- Morse, K., 1988. The Archaeological Survey of Midden Sites near the *Zuytdorp* Wreck, Western Australia. *Bulletin of the Australasian Institute for Maritime Archaeology* 12: 1, 37–40.
- Pendal, P., August 1994. *Report of the Select Committee on Ancient Shipwrecks*. The Legislative Council of Western Australia, Perth.
- Playford, P.E., 1959. The Wreck of the *Zuytdorp* on the Western Australian Coast in 1712. *Journal and Proceedings of the Western Australian Historical Society* 5(5): 5–41.
- Playford, P.E., 1996. *Carpet of Silver: The wreck of the Zuytdorp*. UWA Press, Nedlands, Western Australia.
- Rossi, E., Chin, CYB., Beilby, J.P., Waso, HFJ., and Warnich, L., Variegated porphyria in Western Australian Aboriginal patients. *Internal Medicine Journal* 32(9–10): 445–450.
- Weaver, F., 1994. *Report of the Excavations of Previously Disturbed Land Sites Associated with the VOC Ship, Zuytdorp Wrecked 1712, Zuytdorp Cliffs Western Australia: A report to the Western Australian Maritime Museum*. Report, Department of Maritime Archaeology, Western Australian Maritime Museum, No. 90.