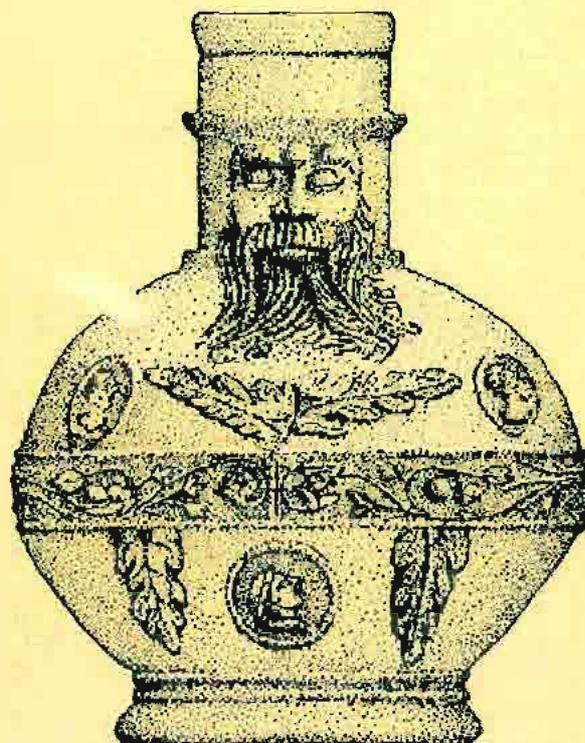


ANCODS Catalogue



1982

ANCODS 1982

Catalogue

Myra Stanbury

**Special Publication—Department of Maritime Archaeology,
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CONTENTS

PAGE

MM-1000
p 103 '82

Compiler's note	1
Maritime Archaeological Report on V.O.C. Wrecksites Conservation Report	2 3
Publications	5
<u>BATAVIA</u>	
Batavia Reconstruction: Progress Report	6
Abrolhos Expeditions 1980-81	7
Survey of Morning Reef, Wallabi Group, Houtman Abrolhos, by: W.F. Jeffery	7
Beacon Island Excavation (Extract from report by Lea Kirkham, 1980)	10
Artefacts Recovered from the <u>Batavia</u> , 1980-81	11
Material previously deferred pending conservation treatment	17
<u>VERGULDE DRAECK</u>	
<u>Vergulde Draeck</u> excavation 1981, by Jeremy Green	19
Material raised from inspection trip, February 1981	20
Material raised from April-May 1981 expedition	21
Material previously deferred pending conservation treatment	39
<u>ZEEWIJK</u>	
Material raised from 1979 expedition	41
Material previously deferred pending conservation treatment	42
Artefacts assigned to the Netherlands, September 1979 (ANCODS N4)	43
Artefacts assigned to the Commonwealth, September 1979 (ANCODS A4)	44
Amendments to 1979 Catalogue	46

Compiler's Note:

This catalogue has been prepared for the meeting of the Australia/Netherlands Committee on Old Dutch Shipwrecks (ANCODS) to be held at the Maritime Museum, Cliff Street, Fremantle, Western Australia, in March 1982.

It is a working document and includes new material, raised from the various Dutch wrecks since the Committee last met in September 1979, together with material previously deferred pending the completion of conservation treatment. Also included are brief reports concerning work carried out on the wrecksites and ongoing research projects.

I would like to thank Fairlie Sawday for her work in organizing the collection of artefacts; Ian Field, for assistance in collating the catalogue; Patrick Baker and Brian Richards for photographing the drawings; and Sue Cox for typing the manuscript.

Myra Stanbury
Assistant Curator,
Dept. Maritime Archaeology,
W.A. Museum,
FREMANBLE
February, 1982

1. BATAVIA

No major excavation work has been carried out on the site during the past two years, although visits have been made to the site for inspection purposes and in anticipation of being able to explore the areas around the wrecksite. In March 1980, Mr. Green dived on the site and noted that one cannon had been stripped of concretion, thereby subjecting it to corrosive deterioration. This was evidence that in the long term, cannons should not be left on the site. No other damage was reported and no further signs of interference noted when the site was visited in December 1980. A four week expedition was in progress at this time but prevailing weather conditions limited work to collections on the inside reef area.

The acquisition, by means of Commonwealth funds, of additional 'Floppy discs' for the department computer has enabled work to commence on the computerization of the Dutch wreck collection. Data relating to the Batavia photographic collection and part of the Verquilde Draeck artefact collection has already been filed and preparations are in progress for filing the Batavia coinage.

Progress continues with the reconstruction of the vessel (see later report) and further funding for the project has been supplied by the A.R.G.C.

2. VERGULDE DRAECK

In February 1981, it became apparent that the wrecksite was being actively interfered with. An inspection dive confirmed this, revealing newly excavated areas and broken artefacts. After consideration of a number of possible options, it was decided to launch an immediate excavation, to secure material still on the site. The re-allocation of a Commonwealth grant made this possible and will assist in future work to be carried out in 1982. It is probable, however, that another season's work in 1983 will be needed to completely excavate the site (see later report).

3. ZEEWIJK

The fourth and final season of work on this site funded by the A.R.G.C. was carried out in December 1979. No further work on this site is presently planned as there is a considerable backlog of recording and research to be carried out on the collection in hand.

4. ZUYTDORP

Active work on this site continues to be restricted by difficult conditions, both of an operational and climatic nature. In October 1980, the watchkeeper's campsite was vandalized and destroyed by fire, resulting in a considerable loss of equipment. In view of the salvage nature of the work and the high costs involved in maintaining a permanent watchkeeper, an alternative program of surveillance was devised and approved by the Department of Home Affairs. Surveillance is now jointly maintained by Museum staff and an honorary part-time warden who is an abalone diver in the area.

CONSERVATION REPORTCurrent Treatment Methods being used on Dutch Wreck Material:1. Iron:

All remaining iron from these wrecks is in the form of either cast iron cannons or cast iron cannonballs.

All cannons are currently undergoing electrolysis in 2% sodium hydroxide solution. Based on previous experience with other cannons from these wrecks, it is expected to be another 2 to 3 years before treatment is completed.

The cannonballs are being treated in hydrogen atmosphere at 400°C followed by washing in 2% sodium hydroxide to remove the residual chlorides. A new and larger hydrogen furnace has just been constructed and it is hoped to have cannonball treatment completed within 12 months.

2. Silver:

The remaining silver coins were being treated by the following method:

- (i) deconcretion in dilute HCl followed by mechanical deconcretion where necessary;
- (ii) consolidation and reduction of corrosion products to metallic silver using alkaline sodium dithionite solution;
- (iii) mechanical polishing using a modified tumbling machine.

Good progress is being made to treat the backlog of accumulated coins but it will still be some time before this is completed.

3. Wood:

All wooden artefacts were soaked in polyethylene glycol 1500 solutions with concentration gradually raised to 60% over a period of not less than 2 years. One of the problems associated with PEG impregnation is that it imparts a dark waxy appearance of the treated wood. This problem has been overcome by dipping the PEG - soaked wood into a solution of warm water, followed by warm water, followed by warm EDTA (4%) + Oxalic acid (5%) mixture and finally 10 volume hydrogen peroxide, prior to drying.

The treated wooden artefacts were dried in a specially designed freeze-dryer.

4. Ropes:

All rope or related material were carefully cleaned using regulated vacuum suction water pump.

Ropes were impregnated with 6% polyvinylpyrrolidone with 0.005% panacide. They were freeze-dried.

The freeze-dried ropes may be re-arranged by placing them in an environment with a relative humidity greater than 75%.

5. Leather:

These are in storage at the moment. Cleaning of leather artefacts has been

4.

initiated a few months ago. Chemical treatment and drying will be taking place shortly.

Neil North & James Panq

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1. Two composite guns',
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11.1: |

BATAVIA RECONSTRUCTION : PROGRESS REPORT

In December 1980, Paul Hundley was appointed as a Research Officer to assist with the reconstruction of the Batavia timbers. Mr. Hundley was formerly a Research Assistant at Texas A & M University, Texas, U.S.A. where he gained experience in ship reconstruction under the direction of Richard Steffy.

During 1981, one of the main tasks was to produce accurate photographs and full size tracings of each piece of timber as it came out of the conservation laboratory. A 5m steel gibbet was constructed to act as a vertical camera mount, enabling perfectly horizontal photographs to be taken of treated timbers. Another steel tripod wall mount, extending from the Batavia Gallery wall, allowed timber tracings up to 5m long to be photographed with a 5" x 4" format Toya View Camera with FS. 6-150mm lens. The tracings were produced by placing each piece of timber underneath a specially designed glass light box. Outlines and details of the timbers could then be transferred to clear acetate drafting film.

The information gathered from the timbers was then transferred to a 1:10 scale model which will be assembled to produce an exact replica of the Batavia hull section. This model will be essential in predicting the final size and shape of the Batavia timber display.

In consultation with Museum staff, engineers of the Public Works Department are in the process of designing the steel supporting structure, but as yet, plans have not been finalized. An overhead gantry, however, has been constructed in the Batavia Gallery to facilitate the lifting and movement of timbers.

The most important timber from the Batavia to be conserved thus far, is the fashion piece. This 1 ton timber, hewn from a single tree trunk is the keystone around which the remaining planking and frames will be positioned. To facilitate safe storage and mobility, the fashion piece has been sandwiched between steel templates. In addition to this timber, a number of transom beams and stern knees have completed the conservation process.

The timbers from the 1973 excavation which constitute the foremost section of hull remains has been reassembled in the Batavia Gallery. This portion of the Batavia will be used to test various methods of supporting and fastening the timbers.

Timbers from the 1975 excavation are in the final stages of dehumidification but cannot be removed from the chamber yet awhile owing to problems with the airconditioning units in the Gallery. As soon as they can safely be transferred, the remaining frames and planking will start the dehumidification process, leaving one final batch of timber to be conserved. This should be completed sometime in 1983.

ABROLHOS EXPEDITIONS 1980-81

During November-December 1980, staff of the Maritime Archaeology Department accompanied the students of the Postgraduate Diploma Course, on a field expedition to the Wallabi Group of the Houtman Abrolhos.

Based on Beacon Island, the students undertook a number of different projects under staff supervision. Those relevant to the Batavia were a survey of Morning Reef (W.F. Jeffery, 1981 - see attached); a swimline search of the inside reef area; a small trench excavation on Beacon Island (L. Kirman, 1980 - see attached extract) and, a re-examination of the stone structures on West Wallabi.

Due to unfavourable weather conditions, diving on the main Batavia site was virtually impossible. Thus, no substantial work could be attempted. Most of the artefacts from this expedition, therefore, were recovered from the inside reef area and the land site at Beacon Island.

A few artefacts were raised from the main site in September 1981 by a team from the Maritime Archaeological Association of W.A. these being loose surface finds. A small quantity of material was also recovered at this time from the inside reef.

Survey of Morning Reef, Wallabi Group, Houtman Abrolhos

by: W.F. Jeffery

Introduction:

Morning Reef is part of the Wallabi Group of the Houtman Abrolhos, situated off the coast of Western Australia, 85 kilometres north-west of Geraldton. "The reefs and islands are in fact the southern most coral islands of the Indian Ocean" (Drake-Brockman and Drok, 1963). Morning Reef covers an area approximately 5km and consists of dead and live coral and limestone shallows of 1-2 metres with a honey combed arrangement of deep water holes to 20 metres.

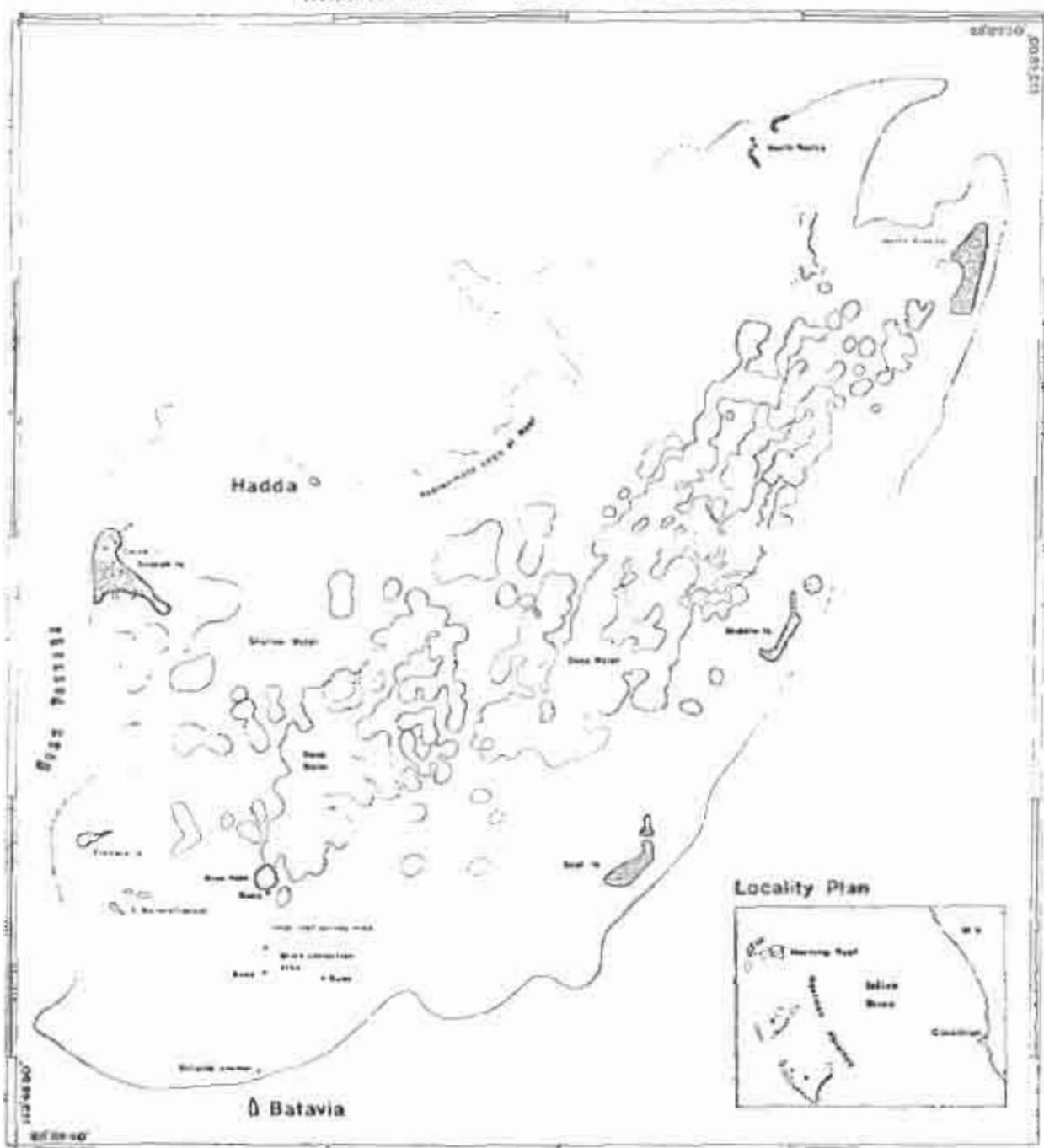
The reef is the location for two wrecks; the *Batavia* (1629) (Green, 1975) and the *Hakda* (1877) (Spooner & Vickery, 1981), which provided the work for the projects associated with the Maritime Archaeology Graduate Diploma Course. Associated with these projects were a number of service type projects, such as a survey of the reef area; the accurate positioning of the wrecks and associated work; and the production of a large scale map showing this information. Small scale maps of the Wallabi Group and large scale plans of the wrecks existed but there did not exist an accurate large scale map of the Morning Reef area. The whole area is significant in the events that occurred at the time of the *Batavia* wrecking and to a lesser degree during the wrecking of the *Hakda*.

Survey of Morning Reef

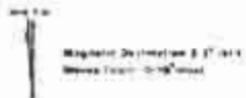
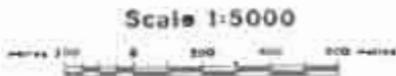
In December 1980 the survey of Morning Reef was carried out so as to produce an accurate map at a scale large enough to enable wrecksites and any other work to be marked onto it. The majority of the reef is always under 1-2 metres of water but 6 islands and a few large rocks rise to approximately 5-6 metres above low water (Beacon Island). "The tidal range is negligible, being diurnal with a mean range of about 1m" (Green, 1975).

The surveying equipment consisted of a 20 second direct reading theodolite, staff, compass, sextants and tapes. A small scale chart of the area helped to plan the

MORNING REEF
WALLABI GROUP HOUTMAN ABROLHOS



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survey and later on a large scale a photomosaic helped even more. We started the survey work by marking 3 stations on the extremities of Beacon Island and placing cairns on all of the islands we wished to map together with cane poles, topped with flags. From the 3 stations on Beacon Island, horizontal angles were taken to the other islands, using the Cairn (Monument) on Beacon Island as the datum.

The small base lines used to triangulate to the other islands meant errors were inevitable in their positions. One of the islands (Seal) checked reasonably well and this was used to triangulate to the other islands and fix their positions more accurately. As other islands became more accurately positioned they were used to set up a network of triangulation. We, therefore, started from small base line triangles mooring to the larger base lines (island to island) as their positions became accurate. The larger base line triangulation positioned the island to an accuracy of 1:200.

Once we obtained this relative accurate positioning of the islands, a detailed stadia survey commenced on each island so as to give the low water shape of each island. Other projects were well underway and their marker buoys were fixed. Some difficulties were encountered in fixing these buoys especially on the *Batavia* site where the marker buoys were difficult to distinguish in the white water. A further check on these positions was made using sextants.

The information from the survey was plotted and checked for accuracy and consistency.

During the compilation of the map from the theodolite and sextant angles, the reef information that could not be surveyed by these methods, was transferred from the small scale chart to the compilation map. The compilation map was drawn up at 1:500 scale and the reef information was very approximate but more detail was taken from an aerial mosaic which was at much the same scale as the map.

The final map is shown in Fig.4., the accuracy of the method used during the expedition was around 1:200.

References:

- | | | |
|----------------------------------|------|---|
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| GREEN, J.N. | 1975 | 'The V.O.C. ship <i>Batavia</i> wrecked in 1629 on the Houtman Abrolhos, Western Australia'. <i>International Journal Nautical Archaeology</i> . 4.:43-63 |
| SPOONER, I., AND VICKERY, L., | 1981 | 'A report on the 1980 excavation of the <i>Hadda</i> site in the Houtman Abrolhos' <i>Bulletin, Australian Institute Maritime Archaeology Bulletin</i> |

BEACON ISLAND EXCAVATION (Extract from report by Lea Kirkham, 1980)TRENCH NO. 2

On December 14, 15 and 16 of 1980 an area designated Trench No.2. was excavated in the centre of Beacon Island. This trench consisted of six 1m square grids (numbered 7 - 12). This area was selected in order to extend the area excavated in 1974. The area to be excavated was under a dense growth of shrubs, in soil approximately 30cms deep. The natural stratigraphy of the area consisted of a layer of loose white sand and humus, a layer of brown, compact sand mixed with guano, and a sterile underlying layer of coral debris and sandfill. These natural layers are constantly disturbed by burrowing mutton birds (*Puffinus pacificus*). These layers were additionally disrupted during the clearing of the covering shrubs. For these reasons the site was not excavated according to the natural stratigraphy but in arbitrary levels. Almost all artefacts were to be found in the layer of brown, compact sand, several centimetres above the coral rubble.

ARTEFACTS

Below is a discussion of the sections of artefacts excavated from the Beacon Island site. Excluded from this discussion are severely corroded fragments from which little relevant information can be divulged. Also excluded are those animal finds that cannot be conclusively assessed as remains left by Batavia survivors.

FERROUS

Most of the iron artefacts consisted of handmade nails and tacks or fragments of these, several of the large nails were complete and were bent so that they resembled a 'J' in shape. Other iron objects consisted of barrel hoop fragments and a fitting possibly from a chest. One fragment was unusual in that it had a rim along one side, the fragment was possibly part of a dish or bowl.

NON-FERROUS

A variety of non-ferrous artefacts were excavated, these consisted almost entirely of copper or copper alloy objects, examples of these are, an ornate fitting cast from brass, there is a broken pin at the back, which would have fastened it to the hinge of a book, possibly a bible. A small brass nail, 2cm long, was found to be in almost perfect condition still retaining the marks obtained during it's manufacture. A small fragmented box was formed out of copper sheeting, probably by one of the survivors.

A lead square measuring 16 x 17mm was found, this thin, flat square of lead was probably used as a weight in measuring small quantities on a balancing scale.

Another brass object was a shoulder strap hook, used on the shoulder straps of sword scabbards. It was cast in two sections, the separate back piece joined at the neck of the object and at the bottom by a brass pin. Possibly worn by one of the soldiers.

CERAMICS

All ceramic artefacts consisted of shards from majolica drug jars or albarellos. Wheelmade, white glazed with the blue and yellow brushed design that was common of the time, one fragment was part of the neck of such a jar and shows the shape of the unglazed rim. Originally the jar would have had a parchment cover fastened with string.

GLASS

Two types of glass fragments were found, these consisted of a clear, uncoloured glass and several fragments of thin dark green glass from a case bottle. All fragments are very heavily patinated.

BONE

Although many fish and mammal bones were excavated from the site, few can be related to the Dutch survivors, these are bones that have been charred or exhibit butchering marks, such as a large mammal bone that has been almost cut through and then broken. Another type of bone artefact was a small round bead.

LITHIC

The only lithic artefact found was a small piece of black flint or chert. Probably a gun flint.

PAPER

A very small, thin, fragile fragment of white paper.

APPENDIX

<u>Reg. No.</u>	<u>Description</u>	<u>Location</u>
1149	gun flint	grid 7
20427	2 majolica shards	grid 7
80323	chest fitting?	grid 7
80326	8 iron fragments	grid 7
3852	brass nail	grid 7
3848	book clasp?	grid 8
3849	copper box	grid 8
3850	non-ferrous fragment	grid 8
3847	square buckle	grid 8
4589	paper fragment	grid 8
4590	bone bead	grid 8
4594	2 case bottle fragments	grid 8
80321	3 barrel hoop fragments	grid 8
3846	patch box fragment	grid 8
3845	bronze object	grid 8
20426	3 majolica shards	grid 8
3851	non-ferrous fragments	grid 8
4595	glass fragment	grid 8
80325	7 iron fragments	grid 8
20445	2 majolica shards	grid 9
3853	lead square	grid 9
4597	2 case bottle fragments	grid 9
80331	5 iron fragments	grid 9
20428	1 majolica shard	grid 10
4596	2 glass fragments	grid 10
80327	5 iron fragments	grid 10
80328	6 nail fragments	grid 10
20389	14 majolica shards	dump lot
80322	11 nail and tack fragments	dump lot
4591	fish bones	dump lot
4592	mammal bones	dump lot
4593	oyster shell	dump lot
4593	sea urchin spine	dump lot

ARTEFACTS RECOVERED FROM THE BATAVIA, 1930-811. STONE1.0 Building blocks

BAT 1146 Building block, small piece of

1.1 Slate

BAT 1150 Slate, fragment of
 BAT 1153 Slate, piece of

1.2 Coal

BAT 1147 Coal, pieces of (2)
 BAT 1152 Coal, pieces of

1.5 Flint

BAT 1149* Gunflint

1.7 Unspecified

BAT 1151 Stone, unidentified

2. CERAMICS2.1 Stoneware

A variety of Rhinish stoneware sherds including Seigburg ware, Westervald ware, Frechen and Cologne ware, were raised from the inside reef area. Many of these sherds fit with partially restored vessels in the collection. A few fragments of Thai ceramic ware were also recovered and several black glaze stoneware sherds.

2.2 Earthenware

Approximately 61 sherds were recovered from the inside reef area.

2.3 Majolica

Approximately 36 sherds were recovered from the inside reef area comprising of ointment jar bases, plate fragments and other miscellaneous sherds.

2.5 Bricks

BAT 1148 Brick, piece of
 BAT 20496 Ballast bricks (25)

2.9 Porcelain

BAT 20367 Chinese, blue/white sherd

3. NON FERROUS3.1 Bronze

BAT 3859 Bronze door pintle
 BAT 3860 Bronze door pintle
 BAT 3861 Bronze door pintle

3.2 BRASS

BAT 3843 Belt slide
 BAT 3845* Shoulder belt pendant
 BAT 3846* Patch box, fragment of
 BAT 3847* Buckle, square, 24mm x 24mm
 BAT 3848* Ornate fitting (probably from belt or book)
 BAT 3863 Wire - 2 strand, twisted, circling 3 pieces
 of rope (BAT 4424)
 BAT 3864 Candlestick

3.2 Copper

BAT 3849* Fragmented object, possibly dish made
 from copper sheet.
 BAT 3851* Copper fragments
 BAT 3852* Handmade nail - 2cm
 BAT 3866 Copper fragments
 BAT 3867 Copper fragments and 3 bullet shells.

3.3. Pewter

BAT 3841 Jar or vase, part of
 BAT 3850* Bottle cap(?), fragment of
 BAT 3865 Fragments (3)

3.4 Lead

BAT 3842) Fragments
 BAT 3854) Fragments
 BAT 3844 Musket ball (1)
 BAT 3855 Musket balls (2)
 BAT 3856 Musket balls (2) and 1 fragment
 BAT 3857 Musket balls (7)
 BAT 3858 Wired musket balls (11)
 BAT 3853* Lead square 16mm x 17mm
 BAT 3862 Lead tubing 57cm x 9cm

4. MISCELLANEOUS4.1 Animal

BAT 4590* Bone head
 BAT 4591* Fish bones (2)
 BAT 4592* Mammal bones (39) + small fragment (possibly
 engraved with letters WM)
 BAT 4600 Base of seal skull (1)
 BAT 4601 Animal bones
 BAT 4603 Seal bones
 BAT 4605 Animal bones

4.1 Animal cont.

BAT 4606 * Animal bones
 BAT 4611 Vertebrae
 BAT 4612 Bone frags.

4.2 Fruits, seeds etc.

BAT 4614 Date seed (1)

4.4. Class

BAT 4588 Bead
 BAT 4587)
 BAT 4594) *
 BAT 4595) *
 BAT 4596) * Case bottle fragments
 BAT 4597) *
 BAT 4607)
 BAT 4608)
 BAT 4609)
 BAT 4610 Dark bottle fragments

4.6 Rope/Leather

BAT 4586 Rope samples (3)
 BAT 4598 Leather breast plate fragments

4.8 Marine

BAT 4593 * Oyster shell (1) and sea urchin spine (1)
 BAT 4602 * Mixed shells
 BAT 4604 * Shells (3)
 BAT 4613 Shells

4.9 Miscellaneous

BAT 4589 * Paper, fragment of

5. COINS5.1 Silver

BAT 50602 Thaler
 BAT 50603 Thaler - Brunswick
 BAT 50604 Thaler - Danish
 BAT 50605 Unidentified fragments (6)
 BAT 50606 Unidentified fragments (2)
 BAT 50607 Thaler (Ferdinand) fragment (1)
 BAT 50608 Rijks Dollar (1625?) West Friesland
 BAT 50609 Rijks Dollar - West Friesland
 BAT 50610 Rijks Dollar (1624) Zeeland
 BAT 50611 Imperial Thaler (Ferdinand II)
 BAT 50612 Imperial Thaler
 BAT 50613 Imperial Thaler
 BAT 50614 Unidentified

5.1 Silver continued

BAT 50616 Unidentified fragments (4)
BAT 50617 Unidentified coins (2)
BAT 50618 Eroded - unidentified

6. TIMBER

6.7 Miscellaneous

BAT 4599 Charcoal
BAT 6466 Wood fragment

8. FERROUS

8.1 Armament

BAT 80312 Cannon ball (1)
BAT 80330 Cannon ball fragments
BAT 80332 Cannon ball fragments

8.2 Ship's Fittings

BAT 80313 Bolts (2)
BAT 80314 Bolts, concretion (2)
BAT 80319 Nail (1)
BAT 80322 + Nails and tacks, fragments of (11)
BAT 80324 Nail (1)
BAT 80325 + Fragments (7)
BAT 80326 + Nails, large (2), fragments
BAT 80328 * Nails (2) fragments
BAT 80331 Nails, large (1)
 small (1) and fragments
BAT 80335 Nail and fragments

8.4 Cargo

BAT 80318 Concretion of barrel hoop (?)
BAT 80320 Concretion of barrel hoop
BAT 80321 * Fragments of barrel hoop
BAT 80323 * Fitting, possibly from chest

BAT 80315; 80313; 80317; 80327; * 80329;
80333; 80334.

* *Beacon Island Landsite*

BATAVIAMaterial previously deferred pending conservation treatment

The following items are now available for consideration:

1. NON-FERROUS3.1 Bronze

BAT 3826) Door pintles
 BAT 3834)
 BAT 3794)

3.2 Brass

BAT 3840 Dividers

4. MISCELLANEOUS4.2 Fruit seeds

BAT 4076

4.6 Rope, leather etc.

BAT 4039 Rope with loop and sliding
 BAT 4047 Fragments of rope
 BAT 4072 Fragments of rope
 BAT 4087 Rope/string (with reed)
 BAT 4168 Fragments of rope
 BAT 4244 Fragments of rope
 BAT 4399 Large quantity of rope
 BAT 4424 Rope - 3 types, 1.5cm diam, 0.3cm diam & massed
 BAT 4451 Fragments of rope
 BAT 4458 Fragments of rope
 BAT 4466 Fragments of rope
 BAT 4569 Fragments of rope
 BAT 4579 Fragments of rope
 BAT 4574 Wadding from behind charge in bore of cannon No.2 (BAT 8721)
 BAT 4575 Wadding from before charge in bore of cannon No.2.
 BAT 4123 Horse hair from between timbers

4.7 FABRIC

BAT 4027 Wick from brass oil lamp (BAT 3079)
 BAT 4460 Coarse canvas
 BAT 3131A Fabric from patch box (BAT 3131)
 BAT 8410 Knitted fabric
 BAT 4447 Knitted fabric
 BAT 4572 Cloth from around wooden plug found inside cannon 2.

6. TIMBER6.2 Armament

BAT 6384 Wooden canister - approx. one quarter in 12 fragments
 BAT 4571 Wooden plug from cannon No. 2. (BAT 8721)
 BAT 6465 Wooden plug from cannon ball
 BAT 8534 Wooden cup from grenade
 BAT 6383 Wooden handle, rod-shaped, possibly part of ramrod.

6.3 Cargo

BAT 6381)
 BAT 6385) Barrel staves
 BAT 6443)
 BAT 4399)

6.4 Fittings

BAT 4088 Single pulley block
 BAT 4361 Pulley block
 BAT 4404 Pulley block
 BAT 3693 Unidentified object
 BAT 4113 Piece of wood peg, 11cm long
 BAT 4167 Wooden wedge
 BAT 6464 Dowels (used for experiments)

6.5 Tools

BAT 4040 Wooden handle with square bore
 BAT 4082 Piece of wooden handle
 BAT 4083 Wooden handle
 BAT 4224 Wooden handle (part of)
 BAT 4425 Wooden handle with graduation marks

6.6 Bark, cork

BAT 6282 Small piece of bark
 BAT 6467A & B Corks

6.7 Miscellaneous

BAT 6281 Drum stick
 BAT 6446 Wooden bowl
 BAT 6463 Cotton reel
 BAT 4032 Button
 BAT 4005 Wood fragment

8. FERROUS8.1 Armament

BAT 8404)
 BAT 8475)
 BAT 8484)
 BAT 8495) Bomb shot
 BAT 8497)
 BAT 8501)
 BAT 8513)
 BAT 8524)
 BAT 8570)
 BAT 8585)

Cannon Balls x 48

Vergulde Draak excavation 1981

by: Jeremy Green

During early 1981, a brief excavation of the *Vergulde Draak* wrecksite was carried out. This excavation was intended to investigate areas not looked at during the 1971-72 excavation (see Green, 1973 and 1977). The department's 13m steel workboat *Henrietta* was used as a work platform, together with a fast 6m aluminium craft. Overnight accommodation was in a rented expedition house at Ledge Point.

Once the facilities were established, a watchkeeper was based at Ledge Point. He phoned through at first light if the weather conditions were suitable for diving. If this was the case, a Toyota Land Cruiser was used to collect each team member early in the morning and the team then drove to Ledge Point. There, the 6m craft was collected from base and launched, with food, cameras, fuel and excavation equipment. This equipment was then off loaded onto *Henrietta* which was anchored on a mooring (there being no jetty at Ledge Point). The team proceeded to the site towing the aluminium boat. Usually, we could be diving on the site by 0900 hours.

A permanent mooring was set up on the site and the work boat was moored about 60m out from the site. The fast aluminium boat was taken for emergencies, or for ferrying staff or working on the inside of the reef. Two 100m airlifts were set up on the site, one to work the old excavation area, the other to work the new northern area. Excavation proceeded usually till about 1600 hours when work was terminated, and the boats returned to Ledge Point. The aluminium boat was beached, put on a trailer and returned to base camp. Provided the weather conditions looked reasonable, the team would stay on overnight and work the next day, otherwise they returned to Perth and awaited a weather change.

This system worked reasonably well, particularly as it did not require members of staff to remain long periods of time in the field during periods of undiveable weather. During the period 31st March to 2nd July, a total of 93 days diving took place on 12 days.

During the 1972 season, excavation concentrated in the southwestern part of the site. At the end of the season, a large area of concretion was left unexcavated. This area and the northern end of the site were the main objectives of the 1981 season. The southwestern lump was uncovered using an airlift and the concretion broken up using geological hammers and a short handled sledge-hammer. In the northern area, a number of large boulders were noted, these seemed to have been broken away from the surrounding reef, possibly by explosives, and in one case, had clearly broken the chase of an iron gun. In this area, the large limestone boulders were broken into manageable pieces, raised with lifting bags and floated over the reef and dumped.

During the excavation period, it was not possible to totally excavate either area. However, in the southwest, the concretion lump was significantly reduced in size. A number of fine stoneware jugs and a pipe bowl were found together with many other of the more typical items. In the northern area, a new iron gun was found, together with a small hoard of reals of eight and a set of white tinglazed albarelli.

Some investigations were carried out on the inside reef but these were inconclusive. It is hoped to continue this excavation work next year.

VERGULDE DRAECK

Material raised from inspection trip, February 1981

2. Ceramics

2.1 Stoneware

GT 1520 Mask fragments - Type
GT 1521 Medallion sherd
GT 1522 Stoneware sherds
GT 1523 Stoneware neck sherd

2.2 Earthenware

GT 1518 Terracotta sherd
GT 1519 Earthenware cup, part of

2.7 Clay pipes

GT 1524 Clay pipe fragment

3. Non-Ferrous

3.2 Brass/Copper

GT 1530 Brass tapered object 11.5cm
(possibly instrument pointer)
GT 1531 Brass instrument pointer?
GT 1532 Brass wire
GT 1533 Copper fragments

3.3 Pewter

GT 1527 Base of pewter vessel, Diam:13.5cms & fragments
GT 1528 Lid
GT 1529 Vessel lip

4. Miscellaneous

4.4 Glass

GT 1525 Case bottle, base of
GT 1526 Flat glass fragments

5. Coins

GT 1534 Coins - 1 piece of eight and 1 fragment

VERGULDE DRAECKMaterial raised from April-May 1931 expedition1. STONE

- 1.5 GT 1535 Flint fragment
 1.1 GT 1536 Slate pencil
 1.7 GT 1538 Smooth stone



GT 1536

2. CERAMICS2.1 Stoneware

Scale 1:2

Stoneware jugs

GT 2016

Stoneware jug - complete

Origin: Cologne

Type B mark; central band with floral scrolls; small medallions and acanthus leaves on upper and lower body.

Remains of pewter hinge attached to handle.

Ht. 133mm; Base diam: 65mm; Neck diam: 33.5mm; Belly diam: 100mm; Volume: 320ml.

GT 2109

Stoneware jug - restored from fragments

Origin: Westerwald, Grenzau. Whitish Grey saltglazed, cobalt blue splashes.

3 medallions - Amsterdam Coat of Arms; cordon neck. Remains of pewter hinge from lid attached to handle. Ht. 203mm; Base diam: 57.7mm; Neck diam: 33mm; Belly diam: 109mm.



GT 2016

Scale 1:3



GT 2109

Scale 1:2

GT 2110. Stoneware jug - in fragments.
Mask Type E; 1 medallion fragment:
rose/heart/crown design.

Mask fragments

GT 2027
GT 2034 Lower part of beard only
GT 2047
GT 2049 Middle section only
GT 2060 Part only - Type E
GT 2091 Type B
GT 2101 Type A

Medallion fragments

GT 2004 5 fragments - Floral (cf GT 870 & 871)
GT 2013 1 fragment - Cross/Stars/Heart (cf GT218)
GT 2031 1 fragment - Floral (cf GT 870)
GT 2021 3 fragments - Floral (cf GT 870)
- Rose/Crown/Heart (cf GT 87)
GT 2035 1 fragment
GT 2040 1 fragment - Floral (cf GT 870)
GT 2042 1 fragment - Part of Rose/Crown/Heart
GT 2061 1 fragment - Floral (cf GT 870)
GT 2068 1 fragment - Edge only
GT 2082 2 fragments - Floral (cf GT 870) & edge
GT 2090 3 fragments - Floral (cf GT 872 & 757A)
GT 2104 1 fragment - Edge only
GT 2107 1 fragment

WESTERWALD WARE

GT 2067) 10 Sherds, including part of medallion.
GT 2072) Whitish-grey, saltglazed, cobalt blue
GT 2074) decoration. Heart design on most sherds
Medallion marked 47 on one side.

BASE, NECK, HANDLE & WALL SHERDS

Bases:

GT 2002; 2011; 2019; 2026; 2032; 2038; 2041;
2045; 2051; 2080; 2103; 2108;
Total No. of Sherds = 19

Neck:

GT 2003; 2031; 2059; 2092;
Total No. of Sherds = 10

Handle:

GT 2001; 2022; 2093; 2094; 2100; 2115
Total No. of Sherds = 8

Wall:

GT 2005; 2012; 2018; 2020; 2028; 2033; 2039; 2043; 2044;
2046; 2048; 2052; 2069; 2075; 2079; 2089; 2095; 2097;
2099; 2105; 2109; 2110; 2111.
Total No. of Sherds = 165

2.2 EARTHENWAREVessels:

- GT 2010 Plate or dish - complete; restored. Undersurface is convex, unglazed and has 4 crescent shaped feet. Top surface is concave with wide rim and glazed. Colour of glaze varies from clear through to yellow and dark green.
Diam: 30cm.
- GT 2054 Jug - incomplete; in concretion. 3 feet, handle and pouring lip. Light brown glaze on inside and partially on outside.
- GT 2055 Cup - incomplete; in concretion.
Rimmed base as GT 2062
Light brown inner glaze.
- GT 2062 Cup - incomplete.
Rimmed base, vertical pinched handle.
Light brown glaze on inside.
cf GT 81B.

Sherds

GT 2013; 2017; 2029; 2053; 2054; 2055; 2062; 2063;
2064; 2065; 2066; 2070; 2071; 2073; 2076; 2077;
2078; 2083; 2084; 2098; 2102; 2106; 2112;

Total No. = 84

2.3 MAJOLICADrug jars (Albarellio)

- GT 2007 Drug jar - complete
White tin-glazed
Ht. 57.5mm; Base diam: 47mm; Top diam: 49mm
- GT 2008 Drug jar - rim eroded
White tin-glazed
Ht. 56mm; Base diam: 48mm; Top diam: 49mm
- GT 2009 Drug jar - almost complete
White tin-glazed
Ht. 55.5mm; Base diam 48mm

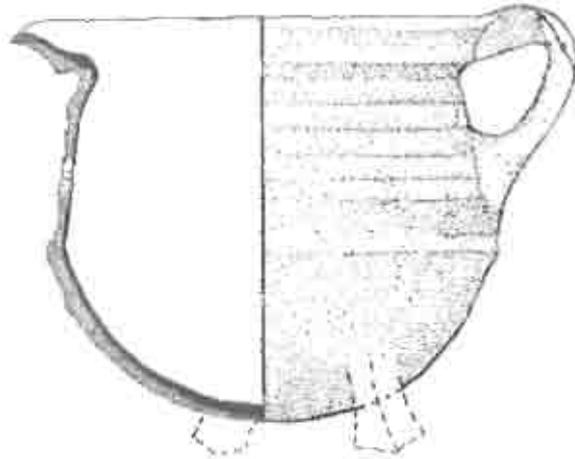
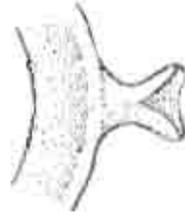
Sherds

GT 2006; 2023; 2036; 2088;

Total No. = 12

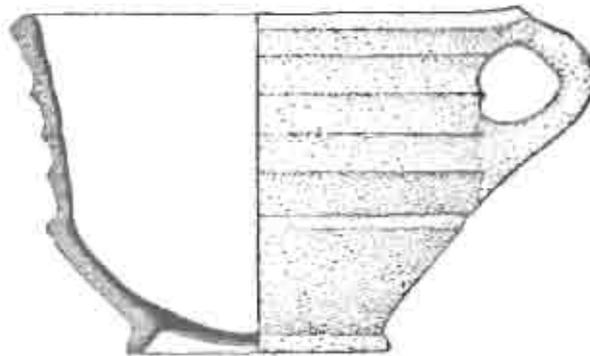
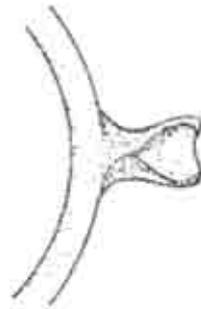
2.5 BRICKS

- GT 2015 Whole bricks - 410
Half and broken bricks - 284
Some bricks found cemented together - possibly from stove.



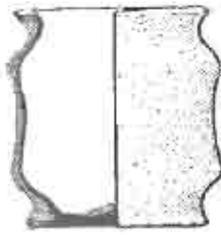
GT 2054

Scale 1:2

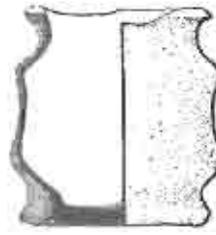


GT 2062

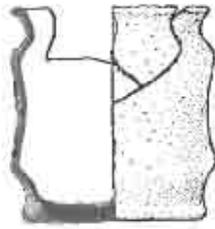
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GT 2007

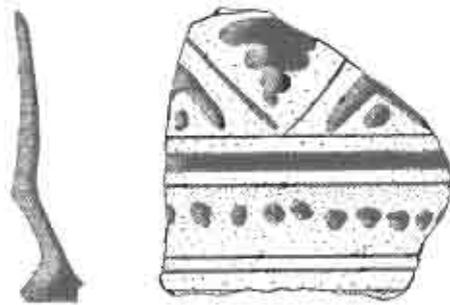


GT 2008

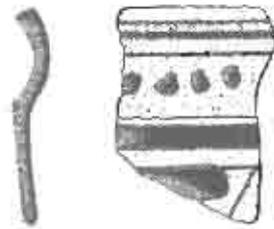


GT 2009

Scale 1:2



GT 2023

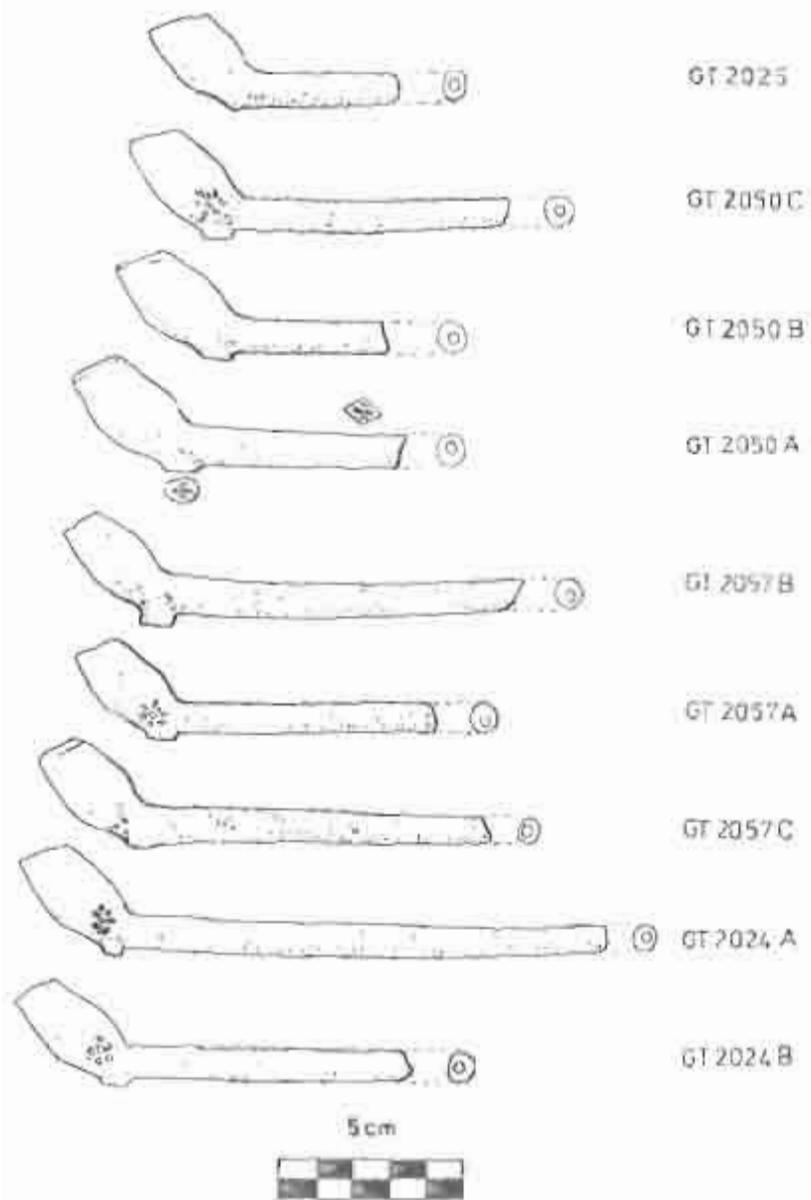
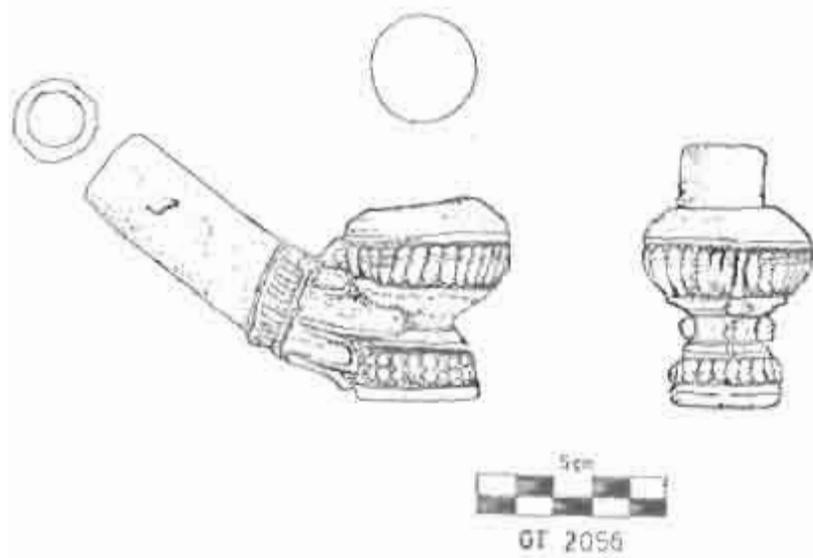


GT 2006

Scale 1:2

2.7 CLAY PIPES

GT 2000	Fragment
GT 2014	Bowl (broken) - Plain & stem fragment
GT 2024A	Bowl and stem (broken) - Tudor Rose with sepals in relief on either side of bowl.
GT 2024B	Bowl and stem (broken) - stylised Tudor Rose with no sepals in relief on either side of bowl.
GT 2025	Bowl - Plain - dark coloured clay.
GT 2030	1 plain bowl and 1 part bowl and stem
GT 2050A	Bowl - Plain with rouletting around rim, Fleur de Lis on base of spur.
GT 2050B	Bowl - Plain with rouletting around rim,
GT 2050C	Bowl - Tudor Rose with sepals on either side of bowl.
GT 2056	Large, ornate pipe. Dark grey clay
GT 2057A	Bowl and stem (broken) - Tudor Rose with sepals in relief on either side of bowl
GT 2057B	Bowl and stem (broken) - Plain
GT 2057C	Bowl and stem (broken) - Plain, with roulette around rim and 4 stem fragments.
GT 2081	Thick stem fragments (3), one with maker's initials on base of spur (2R)
GT 2085	Fragments of stems and bowls
GT 2086	Part of bowl - Plain with rouletting around rim
GT 2087	Bowls and stem (broken) - Tudor Rose with sepals on either side of bowl. Brownish clay.
GT 2096	Bowl - Plain
GT 2113	Thick stem fragment
GT 2114	Thick stem fragment
<u>Unidentified</u>	
GT 2037	Small round marble. (1)
GT 4000	Small round marble. (1) Diam: 1.5cm
GT 4009	Small round marbles. (2)



3. NON-FERROUS3.2 Brass/Copper

GT 3035 Brass button with shank
 GT 3042 Brass buckle - fragment of
 GT 3052 Brass fish hook
 GT 3053 Brass barber's bowl
 GT 3057 Brass and copper container with
 hinge inside. No lid. cf GT 891

GT 3006 Copper powder canister
 GT 3016 Copper powder canister fragments
 GT 3039A Copper powder canister, parts of
 GT 3020 Copper nail

GT 3007)
 GT 3008)
 GT 3018)
 GT 3024)
 GT 3027)
 GT 3030)
 GT 3041)
 GT 3051)
 GT 3055)

Copper fragments

GT 3033
 GT 3039
 GT 3054

Copper sheeting

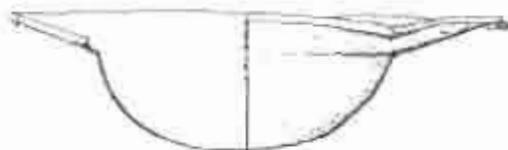
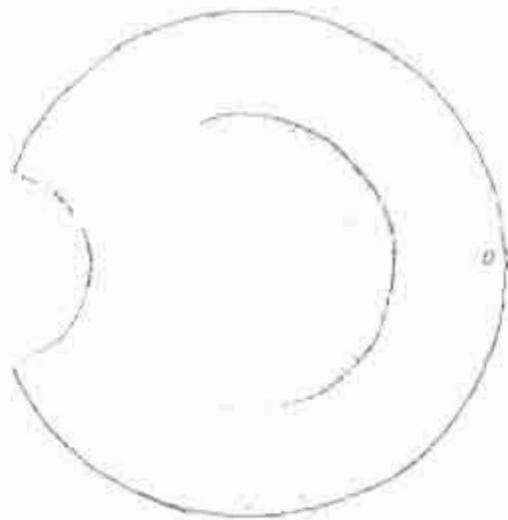
3.3. PEWTERBottle tops

GT 3000 Bottle top with glass
 GT 3001 Bottle top, rim squashed
 GT 3002 Half bottle top rim
 GT 3009 Bottle top
 GT 3011 Bottle top
 GT 3012 Bottle top, fragments of
 GT 3013 Bottle top, part of
 GT 3014 Bottle top, fragments of
 GT 3022 Bottle tops (2), fragments of rims and
 top section (1)
 GT 3044 Bottle top with glass
 GT 3045 Bottle top
 GT 3046 Bottle top
 GT 3047 Bottle top
 GT 3048 Bottle tops (2) fragments of

Spoons

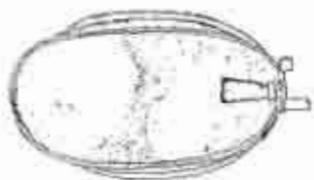
GT 3019 Spoon with twisted handle. Maker's mark:
 Tudor Rose and Crown, X marked on end of handle

GT 3038 Spoon bowl, part of



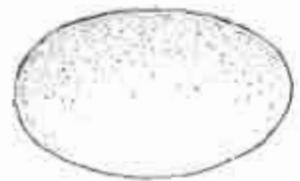
GT 3053

Scale 1:4

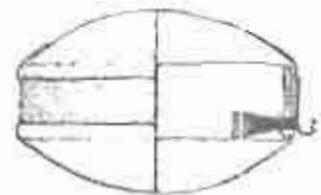


GT 3057

Scale 1:2



891Gt



Possible reconstructed appearance

Vessels/Handles

GT 3003 Vessel, fragments of
 GT 3037 Small drinking vessel with etched decoration
 Ht. 57.5mm; Base diam: 36mm; Top diam: 46mm
 GT 3049 Handle from stein lid

Fragments

GT 3015; 3021; 3022

Total = 8 fragments

3.4 LEADMusket Balls

GT 3005(1); 3026(6); 3031(1); 3043(2);

Total = 10

Scrap

GT 3004; 3010; 3017; 3025; 3036;

4. MISCELLANEOUS4.1 Animal Bones

GT 4005(24); 4011(2); 4014(9); 4026(20); 4027(20);
 4033(27); 4041(1); 4045(12); 4046(2); 4059(1);

GT 4030 Bird skull

Ivory

GT 4021 Fragment (1)
 GT 4022 Elephant tusk, eroded
 GT 4052 Elephant tusk

4.2 FRUITS, SEEDS

GT 4032; 4036; 4047; 4062

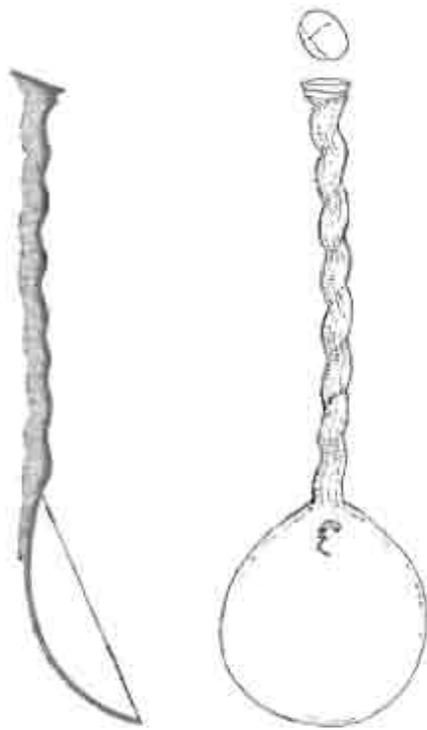
4.3 RESIN

GT 4025(13); 4028(1); 4034(5); 4038(4); 4043(1);
 4043(1); 4044(2); 4048(3); 4049(6); 4058(1);

4.4 GLASS

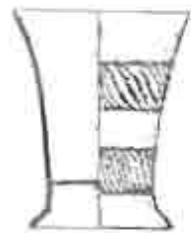
Green glass fragments - mainly case bottles

GT 4002(10); 4006(1); 4007(34); 4016(37); 4017(2);
 4019(1); 4020(2); 4023(1); 4024(5); 4029(2);
 4035(1); 4050(7); 4051(22); 4054(1); 4055(2);
 4056(9);



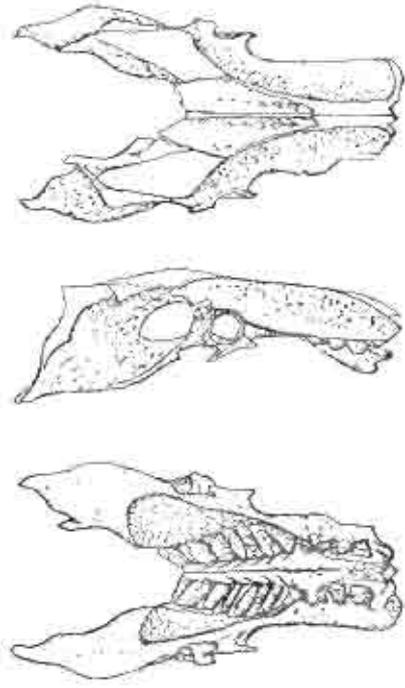
GT 3019

Scale 1:2



GT 3037

Scale 1:2



GT 4030

Scale 1:2

Clear Glass

GT 4003 Clear glass tumbler base, Diam 5cm.
 GT 4008 1 1/2 clear glass bases.

4.5 PITCH, TAR

GT 4039(1); 4040(1); 4057 (with timber attached);
 4061 (on curved piece of timber).

4.6 ROPE, LEATHER ETC.

GT 4031 Sole of leather shoe with wood nails in heel
 GT 4037 Leather shoe upper
 GT 4060 Leather heel of shoe
 GT 4053 Rope, piece of in concretion
 GT 4063 Rope, fragments of

5. COINS

GT 5000 to 5016 -

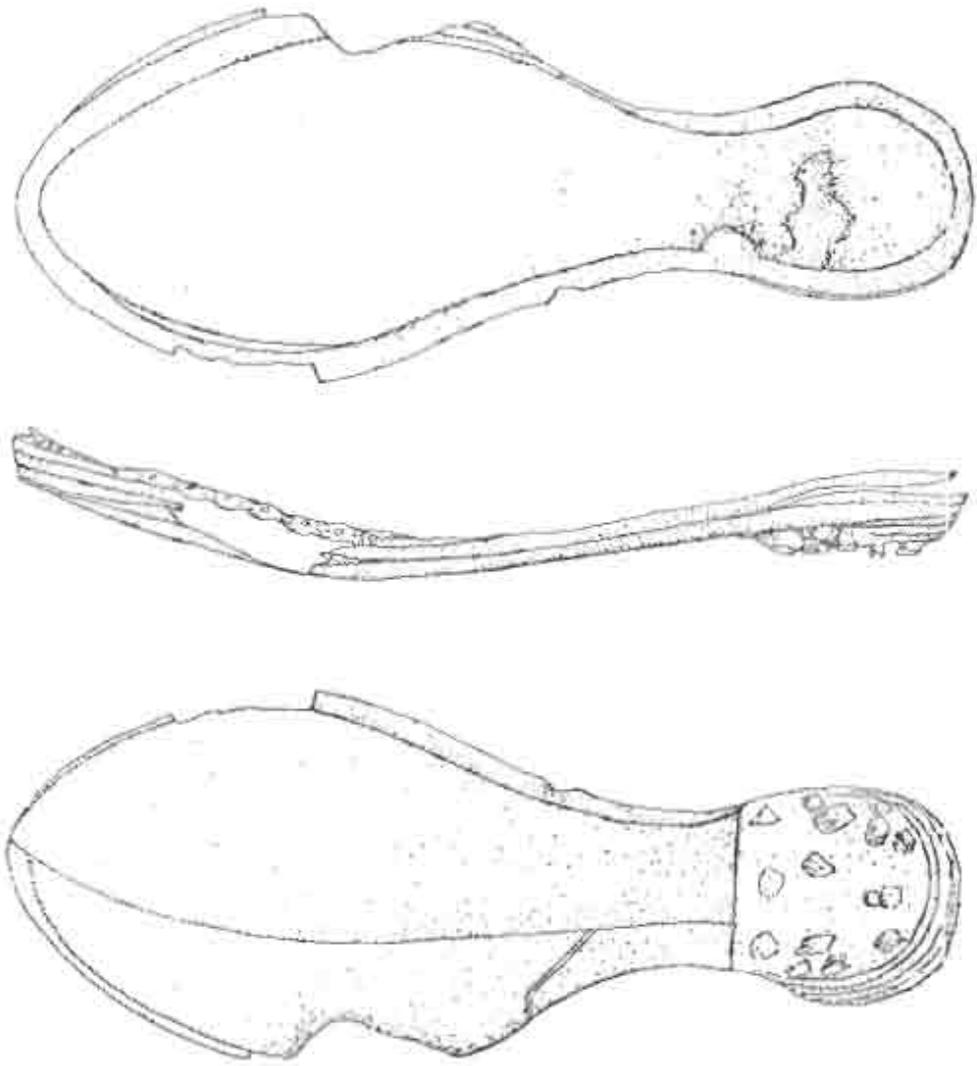
Total 873 silver coins

6. TIMBER6.1 SHIP'S MAIN TIMBERS

GT 6004 Small pieces of wood (3)
 GT 6006 Timber with nail holes, possibly outer sheathing with diamond positioned nail holes. (Nail: 5mm square, head diam: 15mm) Cow hair attached to inside.
 GT 6008 Rib, piece of, with treenail
 GT 6009 Rib, piece of, with treenails
 GT 6010 Timber, with treenail (unidentified)
 GT 6011 Timber (unidentified)
 GT 6012 Shaped timber with treenail - possibly part of rib.
 GT 6013 Shaped timber with treenail
 GT 6016 Rib, piece of, with treenail
 GT 6017 Rib, (1 treenail, 2 holes, 1 square nail hole)
 GT 6018 Timber (unidentified)
 GT 6019 Timber, pieces of, broken from one piece with treenail between
 GT 6020 Timber with diagonal lining of tack holes.
 GT 6023 Rib, piece of, with treenails
 GT 6024 Rib, piece of, with treenails
 GT 6025 Chock of timber with treenail holes
 GT 6026 Timber with nail holes, possibly outer sheathing

6.3 CARGOBarrel

GT 6000 Section of wooden barrel top (not retained)
 GT 6002 Bamboo and cane from barrel
 GT 6014 Base of barrel, pieces of (3)



GT 4031



GT 4037

Scale 1:2

Barrel (cont.)

GT 6015 Barrel, staves, pieces of (11)
GT 6021 Barrel staves indented at end, pieces of (2)
GT 6007 Piece of timber (corresponds w/GT6000)

6.4 FITTINGS

GT 6003 Treenail
GT 6030 Treenails (3)

6.5 TOOLS

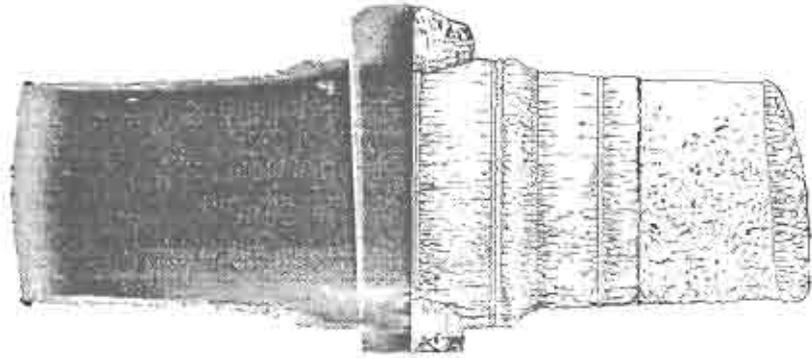
GT 6001 Caulking mallet
GT 6027 Awl, wood with brass ferrule
GT 6029 Handle, parts of
GT 6033 Caulking mallet

6.6 BARK

GT 6022 Birch bark, pieces of (7)
GT 6031 Birch bark, piece of (1)

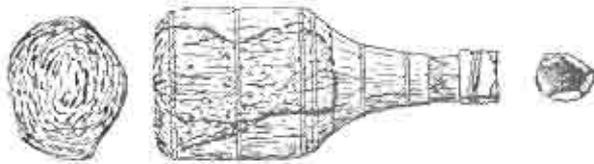
6.7 MISCELLANEOUS

GT 6028 Wooden button, hole in centre
GT 6005 Wooden bung, pieces of
GT 6032 Knot out of timber and seeds



GT 6001

Scale 1:2



GT 6027

Scale 1:2

8. FERROUS8.1 ARMAMENT

GT 8000	Cannon ball (1)
GT 8001	Cannon ball (1) de-mineralized
GT 8003	Cannon ball (3) de-mineralized
GT 8007	Cannon ball (1) Diam: 59mm
GT 8008	Bar shot - 2 halves, broken, with bar. Diam: 88mm

8.6 CONCRETIONS

GT 8002	Iron concretion
GT 8005	Iron concretion with impression of barrel hoop (6014 & 6015) and impression of copper (J033)
GT 8006	Iron concretion with impression of knife or tool
GT 8009	Concretion with nail hole, 5mm square
GT 8010	Iron concretion containing possible iron rods, square section or billet
GT 8011	Iron concretion with holes, 50mm, 40mm & 30mm
GT 8012	Iron concretion
GT 8013	Iron concretion around wood
GT 8014	Iron concretion

VERGULDE DRAECKMaterial previously deferred pending conservation treatment

The following items are now available for consideration:

3. NON-FERROUS3.1 Bronze

GT 6 Bronze mortar

4. MISCELLANEOUS4.2 Fruit seeds etc

GT 1058 2 Fruit seeds

4.6 Rope, Leather etc

GT 686 Rope fragments
 GT 1062 Rope fragments
 GT 1086 Rope fragments
 GT 1109 Rope fragments
 GT 1111 Rope fragments
 GT 1119 Rope fragments
 GT 1294 Tuiks head knot
 GT 1355 Large quantity of rope
 GT 1090 Matting

4.7 Fabric

GT 1076 3 pieces of fabric

6. TIMBER6.1 Ship's timber

GT 804 Fragments of wood
 GT 1055 Small pieces of wood

6.2 Armament

GT 1036 Powder flask
 GT 1037 Powder flask
 GT 1040 Powder flask
 GT 1051 Powder flask
 GT 1088 Powder flask cap
 GT 1089 Powder flask cap
 GT 1091 Powder flask cap
 GT 1126 Wood from scabbard

6.3 Cargo

GT 1140 Barrel stove fragments

6.4 Fittings

GT 1054A Wooden dowel
 GT 1054B Wooden wedge
 GT 1068 Wooden wedge
 GT 6035 Treennail

6.5 Tools

GT 1041	Wooden handle	
GT 1044	Wooden handle with wire whipping	
GT 1069	Wooden handle	
GT 1072	Wooden handle	
GT 1287	Large wooden handle)
GT 1288	Wooden handle, finely patterned	) From tool box
GT 1289	Wooden handle)
GT 1291	Wooden handle, eroded)
GT 1292	Wooden handle, small, eroded)

6.6 Bark

GT 1050)	
GT 1060)	
GT 1097	)	Wood bark
GT 1135)	
GT 6034)	

6.7 Miscellaneous

GT 1131	Wooden comb
GT 1038	Wooden bobbin
GT 1117	Wooden bung
GT 1121	Stick fragments

8. FERROUS8.1 Armament

GT 1486	Cannon ball
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ZEEWIJKMaterial raised from 1979 expedition1. STONE1.2 Coal

ZW 5560 Coal (2)

2. CERAMICS2.1 Stoneware

ZW 5543 Stoneware jug sherd (1) (Middle Island)
 ZW 5548 Stoneware sherds
 ZW 5552 Stoneware sherds (2)
 ZW 5554 Stoneware sherd (Gun Island Jetty)
 ZW 5557 Stoneware sherds (6)
 ZW 5562 Stoneware sherds (1) (Middle Island)
 ZW 5564 Stoneware sherds (3)

2.7 Clay Pipes

ZW 5556 Clay pipe fragments (5)
 ZW 5563 (Clay pipe stem fragments (34)
 (Pipe bowl frags (one with SVS heelmark) (6)

2.7) Porcelain

ZW 5550 Base sherd from cup - blue/white oriental

3. NON-FERROUS3.2 Copper

ZW 5553 Copper sheeting (3)
 ZW 5567 Copper eye bolt

3.4 Lead

ZW 5558 Musket ball (1)

4. MISCELLANEOUS4.4 Glass

ZW 5549 Mauve bases (16), Green glass frag (1), Wine glass stems (2)
 ZW 5551 Mauve base of tumbler
 ZW 5555 Fragments (9)
 ZW 5559 Onion bottle fragments (2)
 ZW 5565 Case bottle base fragments (3)
 ZW 5566 Onion bottle fragments including one neck
 ZW 5570 Case bottle bases (3) & wall fragment (1)
 ZW 5571 Onion bottle fragments (18)

6. TIMBER6.4 Fittings

ZW 5547 Pulley sheave

8. FERROUS8.1 Armament

ZW 5572	Iron cannon, fair condition
ZW 5573	Eroded cannon
ZW 5574	Eroded cannon
ZW 5575	Eroded cannon

8.2 Fittings

ZW 5546	Pintle
ZW 5561	Nail concretion

8.6 Concretions

ZW 5568	Concretions (5)
ZW 5569	Iron fragment (1)

ZEEWIJKMaterial previously deferred pending conservation treatment

The following items are now available for consideration:

3. NON-FERROUS3.2 Copper

ZW 1954	Copper Lid
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6. TIMBER6.4 Fittings

ZW 829)	Pulley sheaves from Gun Island	
ZW 837)		
ZW 4742)		Excellent Condition
ZW 5344	)		Fair condition
ZW 5345	)		Poor condition
ZW 2009A	)	Pulley sheave	
ZW 2009B	)	Pulley sheave	
ZW 3029	)	Pulley sheave with bearing	
ZW 3051A	)	Pulley sheave	
ZW 3051B	)	Pulley sheave	
ZW 3051C	)	Pulley sheave	From underwater sites
ZW 3065A	)	Pulley sheave	
ZW 3065B	)	Pulley sheave	
ZW 3065C	)	Pulley sheave	
ZW 5547	)	Pulley sheave	

ARTEFACTS ASSIGNED TO THE NETHERLANDS, SEPTEMBER 1979BATAVIA

Sharpening stone	BAT 4001
Half a piece of stone (quartzite) with coal	BAT 4182
Brass three wick oil lamp	BAT 372
Copper powder canister	BAT 406
Powder canister lid	BAT 370
Ivory handle inlaid with amber	BAT 4121
Resinous beads	BAT 4046 (1)
Leather gorgette	BAT 4495 (1)
3 Rope test samples	BAT 4586
Cannon ball	BAT 80308
Brass pins	BAT 3690
Brass wire coil	BAT 36838
Gilded cherub replicas	BAT 3603
Black glass button	BAT 4552
Coral beads	BAT 4505 (4)
Lace bobbin	BAT 6461

VERGULDE DRAECK

Ivory handle	GT 1034
Fruit seeds	GT 1042
Pieces of wood	GT 803B
Drum stick replica	GT 1143
Pump valve	GT 1397
Elephant tusk	GT 1384
Nails from barrel (340)	GT 1471B
Buckwheat sample	GT 1033

ZEEWIJK

Flint stones	ZW 4451
Breech block	ZW 280
Coake (pulley bearing)	ZW 836A
Brass buckle	ZW 4559
Brass Scissor handles	ZW 202A
Musket back plate marked 'CAMER ZEELAND'	ZW 4634
Bone beads	ZW 4244
Green glass base, decorated	ZW 2030
Assorted iron	<u>Selection 1</u>
Iron nails of assorted sizes	ZW 4439; ZW 4386; ZW 5226; ZW 5226; ZW 4939; ZW 4918; ZW 5236; ZW 2545; ZW 4903; ZW 4527; ZW 5237
Iron knife fragment	ZW 4662
Iron barrel hoop fragments (samples)	ZW 4446; ZW 4687; ZW 4989; ZW 4919; ZW 4982
Part of iron ring	ZW 4906

ZUYTDORP

Brass upholstery tacks (10)	ZT 2313 (6)
	ZT 1823 (4)

ARTEFACTS ASSIGNED TO THE COMMONWEALTH, SEPTEMBER 1979BATAVIA

Sharpening stone	BAT 4001
Copper powder canister	BAT 510
Powder canister lid	BAT 572
Bone handle	BAT 4051
Resinous beads	BAT 4046 (2)
Leather gorgette	BAT 4495 (1)
Wooden handle with metal thread	BAT 4028
Nail concretion	BAT 4114 (1)
Brass scopp strainer	BAT 3816
Brass button	BAT 3697
Brass pins	BAT 3690
Brass wire	BAT 3683A
Copper handle from lid	BAT 3731
Copper sheeting from cauldron	BAT 3805
Lead seal	BAT 3824
Gilded cherub replica	BAT 3603
Ivory knife handle	BAT 4559
Amber beads	BAT 4523 (1)
Black glass button	BAT 4542
Rope - 2 pieces	BAT 4513
Coral beads	BAT 4505 (4)
Lace bobbin	BAT 6363

VERGULDE DRAECK

Ivory handle	GT 1039
Part of bone comb	GT 1129
Rat skull	GT 1101
Fruit seeds	GT 1043*
Pieces of wood	GT 003A
Wood nail	GT 1061
Graduated wooden rod	GT 1133
Wooden handle	GT 1052
Drumstick replica	GT 1143R
Pump valve replica	GT 1397R
Nails from barrel (340)	GT 1471B

ZEEWIJK

Flint stones	ZW 2171
Breech block	ZW 3082
Fish hook	ZW 4251
Scissor handles	ZW 4436 & ZW 4470
Copper nail	ZE 5490
Musket back plate marked 'CAMER ZEELAND'	ZW 2518
Bone beads	ZW 2964 (2)
Wine glass stems	ZW 3113
Onion bottle	ZW 3017
Bases of purple tumblers	ZW 3009 (1) ZW 3087 (1)
Assorted iron	<u>Selection 2</u>
Iron nails of assorted sizes	ZW 4906; ZW 4939; ZW 5236; ZW 4932; ZW 5236; ZW 4932; ZW 4911; ZW 5226; ZW 5219; ZW 4445
Parts of iron ring	ZW 5228
Iron knife fragment	ZW 4514

Barrel hoop fragments	ZW 4687; ZW 4919; ZW 4641;
	ZW 5042; ZW 4712

ZUYTDORP

Clay pipe fragments	ZT 558 (6)
Brass upholstery tacks (10)	ZT 2313 & ZT 1823
Bone knife handle	ZT 547

* Denotes amendment

AMMENDMENTS

Please note the following amendments to the 1979 catalogue:

Page No.

- 12 Add BAT 373A - Base and stem of pewter goblet
 13 Add BAT 4159 - Bone handle
 16 Add BAY 4070 - Bone handle
 98 ZW 4633 becomes ZW 4634 - musket backplate
 100 Add ZW 837 - Pulley sheave
 100 ZW 4872 becomes ZW 4742 - Pulley sheave
 120 Add ZT 556 Flintstone
 121 ZT 2313 Brass pin becomes ZT 2312 Brass Pin
 ZT 2312 Brass upholstery tacks becomes ZT 2313

142 ANCOB A2:i

Buttons BAT 3592A becomes BAT 3529A
 BAT 3589 becomes BAT 3589A
 Lead seals BAT 3073A becomes BAT 3037A
 Add: Copper hinge plate BAT 3134

144 ANCOB A3

Wine glass stem ZW 1806 becomes ZW 1860
 Pulley bearing ZW 1469 becomes ZW 1469A
 ZW 1469R becomes ZW 1469B(R)
 Lead sinkers ZW 190 becomes ZW 190C & ZW 190D
 Add: Clear glass tumbler with etched design (part of) ZW 1073

146 ANCOB N2:1

Lead seals Add: BAT 3037B
 (Note: this may have been omitted from gazetted list)

148 ANCOB B3

Wine glass stems Add ZW 2147 (5 stem fragments)
 Mauve glass bases delete ZW 2147
 Pulley bearing ZW 1469R becomes ZW 1469A(R)
 ZW 1469 becomes ZW 1469B
 ZW 836R becomes ZW 836A
 Onion bottle ZW 104 becomes ZW 111
 Delete ZW 109
 Case bottle Add: ZW 130 (formerly ZW 109 Field No.)
 Lead sinkers ZW 190 becomes ZW 190A & ZW 190E
 Buttons ZW 205R becomes ZW 205A
 small flat button
 Add: 205B small round button
 Case & Onion ZW 98 (field No.) becomes ZW 105
 bottles