



HESSEQUA SOCIETY FOR ARCHAEOLOGY

THE FISH TRAPS OF STILBAAI

by Reon Meij and Brian Mathiesen

Stilbaai 2010

Publisher and distributor: Hessequa Society for Archaeology

Copyright © 2010 Hessequa Society for Archaeology

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without prior written permission from the publisher.

Text by Reon Meij Front cover design Brian C Mathiesen Compiled by Brian C Mathiesen

First edition, first impression 2010 This Electronic copy June 2011

Published by Hessequa Society for Archaeology Stilbaai. Contact details: http://www.hesva.co.za

Publication number HSA 002E

TABLE OF CONTENTS

THE FISH TRAPS OF STILBAAT	1
TIDAL FISH TRAPS	2
WHAT ARE TIDAL FISH TRAPS?	4
HISTORY	5
PREHISTORY	6
PRESERVATION AND MAINTENANCE	7
RECENT CULTURAL PRACTICES	9
THE FISH TRAP HARVEST	11
REFERENCES	13

THE FISH TRAPS OF STILBAAI

This book was written by Reon Meij and compiled by Brian Mathiesen, under the auspices of the Hessequa Society for Archaeology.



Reon Meij



Brian Mathiesen

TIDAL FISH TRAPS

Fish traps occur in many locations along the South African coastline. Quite a number of examples of this ancient technology can be found along the Southern Cape coast between Gouritsmond, 30 km east of Stilbaai and Blombos, 20 km to the southwest. The map found on the inside of the front cover indicates where 17 such sites are located.

One of the best preserved and most extensive series of traps in this local group occurs about 2 km southwest of the Stilbaai harbour, between Morris Point and Noorkapperpunt.

During 2008 these traps, which have been afforded National Monument status, were declared a Restricted Zone within the Stilbaai Marine Protected Area.

Until recently, a few Stilbaai fishermen and farmers faithfully maintained the walls of the Noorkapperpunt tidal fish traps to curtail the continual destructive action of the elements. They also harvested the fish caught in the traps.

The declaration of the Noorkapperpunt fish traps as a Restricted Zone has brought this activity to an end and it is believed that it is of utmost importance that a solution be found that will ensure that these fish traps continue to be preserved as one of the oldest working technologies in Southern Africa.

Another series of old fish traps is located adjacent to the Stilbaai harbour to the north and in front of the historic beachfront holiday development. The remains of a very early fish trap can also still be seen amongst the rocks at Morris Point.



Aerial view of fish traps at Noorkapperpunt



Aerial view of fish traps at Stilbaai harbour

WHAT ARE TIDAL FISH TRAPS?

The tidal fish traps found at Stilbaai consist of low walls of boulders and pebbles constructed to create pools within the inter-tidal zone. In places walls were built across natural gullies but the enclosures are largely man made.

A trap site usually comprises a series of contiguous traps ranging in size from appoximately 10 m² to as large as half a football field. Tidal traps operate on the principle that at spring high tide, fish swim over the walls to feed. As the water recedes with the turn of the tide, the fish get trapped in the enclosures.

The most effective time for harvesting fish is during the night of the new moon spring tide when, in the dark, the fish do not notice the receding waters trapping them within the stone wall enclosures. Later, removing the fish from the almost dry trap is an easy matter.



HISTORY

Eyewitness accounts by some of the first European settlers report how Khoi built, maintained and used tidal fish traps.



Khoi harvesting fish at fish traps while Europeans look on

The Stilbaai fish traps are still-working relics from the recent and very distant past. The doyen of Stilbaai archaeology, CHTD Heese (1874-1948), mentions in a letter (as translated from the Afrikaans):

That the fish traps are old, is affirmed in writing by the first Dune Voortrekker to Stilbaai, who told his children that he had found the fish traps there in 1810-20. In those days there still were wild Bushmen living at Windvoëlspunt (later dubbed "Morris Point" by English mariners) and all along the coast at Jongensgat "Caves", Swart-, Groot-, Kleinjongensfontein to the Duiwenhoks River. Whether they had belonged to the Hessequa or Attaqua tribe, can only be determined by linguists, when we start collecting old farm names like Wankou, Kragga etc and preserving them for our offspring - rather than 'rechristening' them.

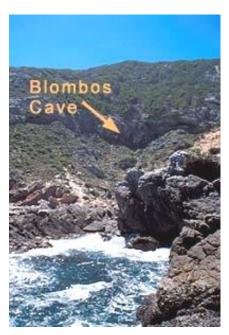
PREHISTORY

While archaeologists calculate that the oldest remaining fish traps could be as old as 3000 years, the evolution of fish traps probably stretches back much further.



It appears from evidence found at

Blombos Cave near Stilbaai, that fish has been part of man's diet for a very long period of time – at least more than 70000 years.



One of the earliest methods of harvesting fish would have been gathering those stranded in natural tidal pools after the turn of the tide. Enhancing the fishtrapping properties of tidal pools by a few well-placed stones would be the logical next step, followed eventually by man-made pools. Exactly when the tradition of building and repacking tidal fish traps originated is, however, unknown.

PRESERVATION AND MAINTENANCE

Traps are only efficient if the stone walls are packed and maintained in a specific manner. The wall must form a virtually solid structure with a horizontal top, built to a level which would be covered by at least 0,5 to 1,0 m of water as the waves come in at spring high tide.

The landward face of the wall is vertical while the seaward face is sloped. This provides subtle access for the fish and less resistance to the action of the sea.

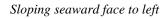
As a certain amount of damage and dislocation of the rock wall occurs through wave action and storms, repacking of the walls is necessary after each spring tide; failing which, successful harvesting of fish becomes impossible and disintegration of the walls inevitable. Until recently, this was done by some local farmers and interested people who also used the traps to catch fish at spring tide.



Close up view of the vertical inside face of a fish trap wall









Flat top of fish trap wall



 $Top\ of\ fish\ trap\ wall\ requiring\ maintenance.\ Wave\ damage\ on\ waterline$

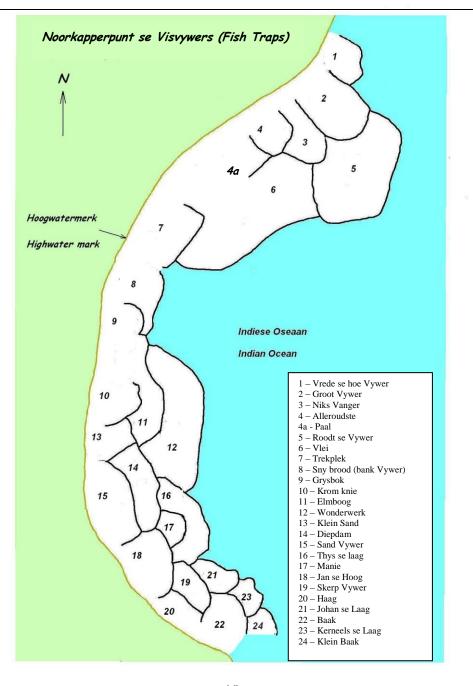
RECENT CULTURAL PRACTICES

Over the past 300 years, many stories have been told and a rich cultural tradition has developed regarding the maintenance and utilisation of the fish traps.

This is perhaps best exemplified by wonderful stories and fisherman's tales told by some of the older people who, until recently, still harvested the traps. Traditional folk names have, over the years, been given to the various individual traps and these are indicated on the diagram on the next page. It is of great importance that this tradition be documented as soon as possible.



A fish trap being harvested early one morning



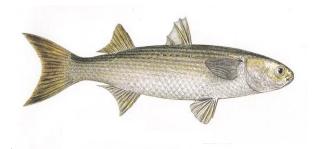
THE FISH TRAP HARVEST

Unlike in the past when the harvest from the fish traps was bountiful, the current depleted state of many line fish has resulted in the number of fish trapped in the Noorkapperpunt fish traps, now being much reduced and rather sporadic.

Some catch records from the past are:

- 26 Musselcracker *Sparodon durbanensis* (4kg 16kg) "Roodt se vywer"
- 98 Elf *Pomatomus saltatrix* "Vlei" 5000 Mullet *Liza richardsonii* "Groot vywer"

Of the many species of fish caught in the fish traps, the most common species are the southern Mullet *Liza richardsonii*, the flathead mullet *Mugil cephalis* and the Blacktail *Diplodus capensis*. Elf are also caught occasionally. Other species are caught only incidentally, sporadically or opportunistically.



Flathead mullet





Listed in the table below are 13 species of fish recorded as having been seen in the Noordkappershoek fish traps in 2005 by Lucy Valeska Kemp and documented in her thesis *Ancient stonewall fish traps on the south coast of South Africa* 2007.

Haarder (Liza richardsonii)

Flathead harder (Mugil cephalus)

Elf/Shad (*Pomatomus saltatrix*)

Caranteen / Strepie (Sarpa sarpa)

White musselcracker (Sparondon durbanensis)

Zebra/wildeperd (Diplodus hottentotus)

Fransmadam (Boopsoidea inornata)

Galjoen (Dichistius capensis)

Dassie/blacktail (Diplodus capensis)

Kabeljou / Kob (Argyrosomus japonicus)

Stumpnose (Rhadosargus spp.)

Baardman / Belman (*Umbrina robinsoni*)

Leopard catshark (Porpderma pantherum)

REFERENCES

- 1. Avery, Graham.1975. "Discussion on the age and use of tidal fish-traps (visvywers)." South African Archaeological Bulletin, Volume 30: pages 105-113.
- 2. Gribble, J. 2005. The ocean baskets. Pre-colonial fish traps on the South African Coast. The Digging Stick 22: 1-4.
- 3. Heese, CHTD. Circa 1930. From letters: Die Vywers van Stilbaai.
- 4. Henshilwood, Christopher. 2009. Unpublished report for the Hessequa Society for *Ar*chaeology
- 5. Kemp, Lucy Valeska. 2007. Ancient stone wall fish traps on the south coast of South Africa: Documentation, current use, ecological effects and management implications. M Thesis, University of Cape Town,
- 6. Rust, Renée. 2005. Fish Trap & Midden survey at Stilbaai, September 2004 April 2005.



NATIONAL HERITAGE SITE

The stone built structures in the intertidal zone, in the foreground at this spot represent a legacy of the indigenous Khoisan inhabitants of the southern Cape coast, who built and used such enclosures as tidal fish traps. For many thousands of years these people lived on this coast, but the traps are probably not older than 2 - 3000 years, as sea levels before then were different to the present. When the first white colonists arrived in the late 1700's and early 1800's the indigenous Khoisan (called "Strandlopers" by the colonists in view of their hunter-gathering life style) were still working the fish traps, and the new settlers quickly adopted their ingenious techniques. Later operation of the fish traps required a permit from the local magistrate. Over the years, the adopted "owners" rebuilt, maintained and added to the Khoisan walling as well as building new traps to create the elaborate system seen before you. A dedicated and knowledgeable group of Stilbaai residents still maintain the tradition of fish trapping during spring tides here at the "Rooikoppe" now declared a national heritage resource site. The traps are a cultural historic heritage of great value and no disturbance of these structures or removal of artefacts is permitted. Please assist us in maintaining this important site unspoilt for future generations