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An update on the Yap Outer Islands Trochus Reseeding Project

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Lamotrek and Elato Trochus Reseeding Project report

At the end of November 1996, a team of four Marine Resources Management Division (MRMD) technicians travelled on the MS Micro Spirit to transplant trochus on two outer islands. The assignment was to harvest 500 Trochus niloticus from Woleai Atoll, as previously arranged by Mike Hasurmai, for the Elato and Lamotrek Trochus Reseeding Project.

Five unemployed members from the Woleai Community had already been appointed to help preparing the 500 pieces of trochus to be transported by the MS Micro Spirit to Lamotrek and Elato Atolls. This was the third time trochus was to be transplanted to Elato and Lamotrek, after one transplant in the early 1980s and one in 1991.

Upon reaching Woleai, we were advised by the Field Trip Officer that the harvest of the 500 trochus could start immediately. We used the MRMD boat that we had brought with us and went to Falalus Island. There we discussed with the Chief and several community members where we could harvest 500 pieces in a short time. We were instructed to proceed to Wotegai, where trochus were known to be abundant. When we arrived there, the Chief of Wotegai suggested that we proceed to Falalop Woleai (our next planned harvest ground), while

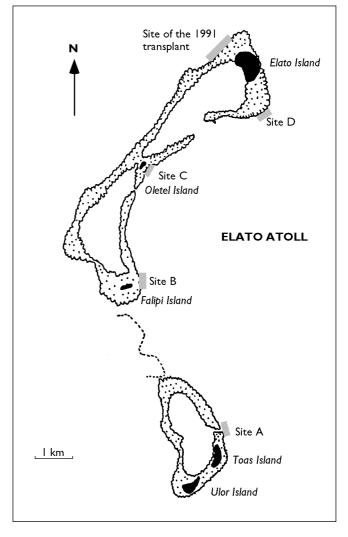


Figure 1 Map of Elato Atoll showing the 4 transplantation sites

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some of his men harvested 200 trochus for us without our help.

It took approximately three and half hours to harvest 300 trochus along Falalop Woleai; most were found on the northern part of the reef. We finally collected the 500 trochus needed for our reseeding sites within about six hours.

Trochus were counted and carefully placed in the eight transplanting tanks on the deck of MS *Micro Spirit*. We also requested permission to use the saltwater fire-pump to maintain a constant flow of clean water in the tanks. Permission was given, but the pump could only be used for one and half hours at a time to avoid over-heating.

It took 98 hours, a little more than four days, to reach our reseeding sites and the harvested stock was monitored regularly. When we reached our final destination, most of our harvested trochus were very weak.

As we approached Elato early in the morning, we made contact with the Field Trip Officer to organise the work plan. He informed us that the Field Trip Party would assist us by letting us use one of their boats for transplanting. As planned, 250 trochus were transplanted to four sites around Elato Atoll.

The first transplants were made at Site A, close to the two southern small islands (Ulor and Toas) of Elato Atoll (see Figure 1). Then we moved to Site B, close to Falipi, and to Sites C and D, closer to Elato Island. The work was completed within two hours.

When we returned to MS *Micro Spirit*, anchored in Elato's lagoon, we were informed by the Field Trip Officer that the ship was not leaving until four hours later. Of the 250 trochus left for transplanting on Lamotrek, 21 were found dead and the rest appeared very weak. They had to be put back in the ocean quickly or they would probably all die.

We therefore decided not to wait for MS *Micro Spirit* but to head for Lamotrek (approximately 13 miles East of Elato) in our own boat. When we reached Site A at Lamotrek (see Figure 2), we transplanted 100 trochus and found 20 more dead. We then proceeded to Site B and transplanted the rest. A total of 41 trochus had died on the trip due to the time limits for use of electric-fire-pump to maintain water circulation.

Two days later, after MS *Micro Spirit* had completed a round trip to Satwal, we had the opportunity to survey Sites A, B and D in Elato. All transplanted trochus were found to be alive and well.

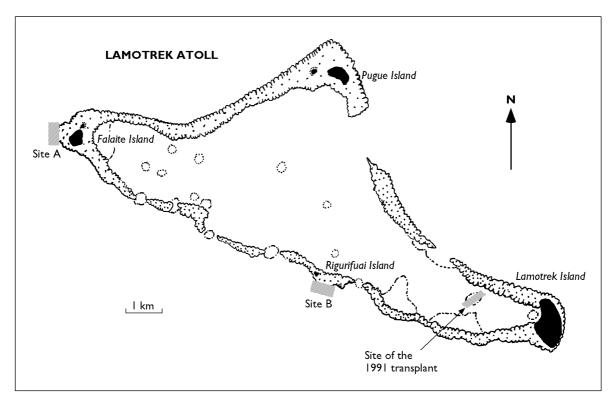


Figure 2
Map of Lamotrek Atoll showing the 2 transplantation sites

Ifalik Trochus Reseeding Project report

A team from MRMD travelled to Ifalik on the MS *Caroline Islands* to transplant trochus (*Trochus niloticus*). Two technicians and a marine research specialist were assigned to carry out the task. This was the second time trochus was to be transplanted to Ifalik.

Harvesting sites were planned and arranged with the chiefs and the community of Woleai before the trip was organised. Woleai was chosen as the only suitable harvesting site for two main reasons:

- 1. It is close to the reseeding site; it would therefore only take 24 hours for the trochus to be carried by boat from the harvesting to the transplanting site, so disturbance would be minimal; and
- 2. *Trochus niloticus* was found in abundance almost all over the reef area surveyed.

Harvesting in Woleai was very difficult as a tropical disturbance was passing through the neighbouring islands at that time. Water visibility was poor and the current was strong. We used the MRMD boat that we had brought with us, to harvest the 500 trochus we needed for the Ifalik Reseeding Project. Several Woleai community

members willingly helped us collect the trochus and we were able to work using our SCUBA tanks to facilitate collection.

The 500 trochus were placed in six $1.2\ m \times 0.6\ m$ water tanks on the deck of MS *Caroline Islands*. The ship's officers supported us by letting us use the seawater pump to maintain constant water flow in the tanks during the 24-hour trip to the transplanting site. All 500 trochus collected were still strong and active when they were transplanted.

Four sites were selected for replanting in Ifalik (see Figure 3). Within each site, a total of 125 trochus were planted. It took approximately three hours to complete transplanting all 500 pieces.

After 24 hours spent on shore we were able to go out with one of the local people to check on the trochus. We found them all active. Later on, we described to the community chiefs and several community members the four sites where trochus had just been transplanted, using maps.

The mission was a success. It is planned to continue checking and monitoring the transplanted trochus stock during the next three years, with the assistance of the community of Ifalik, to make sure that they can survive and reproduce.

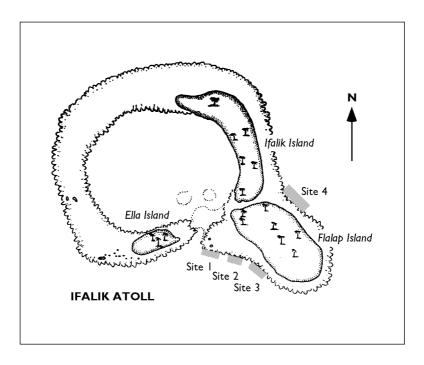


Figure 3
Map of Ifalik Atoll showing the 4 transplantation sites