Transplanting Trochus In The Eastern Pacific

BY H. VAN PEL*

Trochus shell is a commodity much in demand on the world market and it can be relied on to command a good price. So a good cash income can be earned in many islands of the South Pacific where the shell is found.

In most of the western half of the area where the South Pacific Commission is working, the island reefs are inhabited with Trochus niloticus, but there still remain many other reefs where this useful money-spinner has never been seen. In the island waters east of Fiji (longitude 176°W), there is no record of Trochus niloticus, but we have inspected reefs where the living conditions would be suitable for them.

Accordingly, acting on our advice, the Cook Islands Administration has gone ahead with transplantation of trochus from Fiji to Aitutaki. Two transplantings have now been made, and, although some trochus did not survive the journey, both are reported to have been successful.

The second transplanting was made by two students of the South Pacific Fisheries Training Course, R. Powell and I. Marsters, and they and the Resident Agent from Aitutaki have confirmed that the trochus previously transplanted were alive and had moved out over the reef, some being already beyond the breakers.

The shells of the first transplanting were carried in tins of sea-water; those for the second transplanting were carried dry in crates. Both were made by aircraft. During the second transplanting the aircraft flew at 5,000 feet, where the temperature dropped to 68°F., but with six 24-volt bulbs around the crates the temperature was kept up to 75°-85°F. These shells were planted on the reef, and, from inspections made the following day and three days later, seemed to be settling into their new quarters.

On a visit to French Oceania in March-April last, a number of reefs were found in various islands where trochus could be established with good expectation of success. As a result of some advice given in this regard at the end of our visit, the territory of French Oceania has made plans for a transplantation of 1,000 trochus, to commence in late May.

It is expected that more transplantings of trochus will take place in the South Pacific. However, it would be advisable in each case to have an investigation carried out by a qualified expert before any plans are made for the actual introduction of the shell in order to ensure it will take place under the best possible conditions.

* Fisheries Officer, South Pacific Commission.