

Dr Maxwell
Franc Schaefer FYI
Community Development Office
Majuro, Marshall Islands 96960

April 2, 1973

Dr. Walter E. Nervik
University of California
Lawrence Livermore Laboratory
Livermore, California 94550

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407880

Dear Walt:

Here are some additional data regarding Enewetak. They include the poison fish (ciguatera) situation on the atoll, and proposed village locations. I suggest that you insert these data where appropriate in my report.

Poison Fish (ciguatera)

Ciguatera is found on Enewetak Atoll (or was when the people lived there) according to reliable informants from that atoll. These include: Man (Red snapper), Idl (mullet), ao (Blue parrot fish), Jawe (Bass), Iikmouj (Pink parrot fish), Utbt (?), swai or Wuran (?), and Wat or Luab (Puffer blowfish), and Drep (Moray eel).

Informants have told me that the poisonous fish on Enewetak Atoll were found on the windward side primarily. They were found on the Enjebi area and islands on the eastern (windward) side of the atoll. It is said that the leeward side, toward the south and west of the atoll was relatively free of fish poisoning. Poisonous fish (Iik karek) are said to live in the lagoon and ocean reef area.

(Identification (English names) are from Report of a Survey of the Fish Poisoning Problem in the Marshall Islands, US DPH&W PHS, Jan. 1969, mimeo. You undoubtedly have data supplied by Dr. Philip Helfrich regarding the ciguatera problem on Enewetak. I picked up a copy of one of his reports while I was on Enewetak last October which outlined the subject as a guide (and warning) to personnel on the atoll. cc attached. He should be able to provide additional identification and data.

Village Settlement Pattern

At the Enewetak rehabilitation Planning Conference held in Honolulu February 21-22, 1973 the following statement regarding future village settlement pattern was made by Magistrate Smith Gibson:

"We /the Enewetak Atoll People / decided what the settlement pattern, village locations would be on Enewetak in the future. They are: one on Enjebi Island, one on Hedren (Parry) Island, and one on Enewetak Island. Japtan (David) will be a temporary location from the beginning of the program. The workers from Ujilang will be housed there. They will wait on Japtan, and will live there until the rest of the atoll is ready for occupancy."

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The Magistrate, and Scribe John Abraham also made it clear that while the village sites would be as indicated, all of the islands (and reefs) of the atoll would be used and exploited after the people have returned to Enewetak.

They also stated that the decision of settlement pattern had been reached by the community on Ujilang following a series of lengthy meetings.

I have sent several memoranda to you containing additional pertinent data, mostly regarding dietary patterns. Have you received them?

I ask that you include all additional data in my revised report. Also I note that I have repeated the sentence " It seems unlikely that significant contacts occurred before the nineteenth century." Please remove this sentence from the next to last paragraph on page 1 of the report. It is redundant.

Sincerely,

Jack A. Tobin

cc District Administrator, Marshalls
Community Development Officer, Marshalls
District Director Public Affairs, Marshalls
Dr. Helfrich
Dr. Barr ✓
File

Attach: As stated

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"THE FOLLOWING ARTICLE WAS PREPARED BY DR. PHILIP HELFRICH OF THE HAWAII INSTITUTE OF MARINE BIOLOGY AND IS PASSED ON FOR YOUR INFORMATION AND GUIDANCE."

DANGEROUS MARINE ANIMALS OF ENIWETOK

" Marine animals dangerous to man at Eniwetok fall into three categories: those that (1) Bit, (2) Sting, and (3) are dangerous to eat.

Sharks are the principal hazard in the first category. Although barracuda and groupers have also been known to attack man. Moray eels can be dangerous and are capable of inflicting debilitating wounds.

A number of animals have stinging apparatus. The dorsal spines (spines on the back) of stonefish, scorpion fish, turkey fish and related species contain a venom sac and can inflict a dangerous and painful wound. All corals and jellyfish contain stinging cells, and contact with them may result in their discharge into the skin of the person touching them; the results vary from mild discomfort to sever shock. Several of the local cone shells contain a venom apparatus that is fired from the narrow end of the shell. Sea urchins, fire worms, rabbit fish and surgeon fish are among the other animals with poisonous spines."

[N.D.] "Fish that are dangerous to eat include pufferfish and those containing ciguatera poison. All pufferfish (also called balloon fish, blowfish, and fugu) have a poisonous gland which if not carefully removed can contaminate the flesh of the fish. It is recommended that personnel avoid eating these fish under any circumstances.

"Ciguatera fish poisoning is perplexing because it affects fish that are normally good food fishes, and the condition waxes and wanes. Ciguatera is believed to start by fish eating a poisonous algae (see plant or limu) and the poison is passed on through the food chain. If the condition occurs (persons have been poisoned by ciguatera at Eniwetok) the following points should be heeded:

- (1) The large fish are more poisonous than smaller fish.
- (2) The liver and guts are much more poisonous than the flesh.
- (3) Freezing, boiling, or processing does not destroy the poison.
- (4) The species most likely to be poisonous are:

RED SHAPPER
BARRACUDA
GROUPERS
BLACK ULUA (OVER 40 LBS)
MORAY EELS " " "

Other species may be poisonous but usually not. OPEN OCEAN FISH SUCH AS TUNA, BONITO, WAHOO, MAHI MAHI, AND BELLFISH ARE NEVER AFFECTED BY CIQUATERA.

As a rule of the thumb the silvery-blue reef fish are not affected by ciguatera.

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Underlining, my own. Note: I obtained the original of this report on Eniwetok in October, 1972. J.A.T.

DUB 2/20/72