

ATOMIC MOSQUITOES



STUDY MAP. Dr. Maurice Provost outlines to biologist R. Shepperd, left, problems to be faced in experiment.



TRAP. Dr. Maurice Provost, director of the "atomic" mosquito experiment, finds a mosquito "light" trap is working satisfactorily.



"HOT." Mosquito larvae are marked with a radioactive tracer so that they might be tracked as part of study.

Sanibel Island, off Florida's West Coast, has something new in insect life this summer—atomic mosquitoes—a million and a half of them. It's all part of an experiment staged by the Florida State Board of Health to find out how far—and fast—a salt-marsh mosquito will travel from the warm, slightly saline puddle which hatched him to his final destination.

The mosquitoes are hatched from eggs in a specially-prepared and carefully tended bed in a drainage ditch. During their larval stage in the water, the mosquitoes are made radioactive by material released especially for the experiment by the Atomic Energy Commission at Oak Ridge, Tenn. The material, radioactive phosphorus, is strong enough to leave an atomic trace on the insects without hurting them.

After the radioactive mosquitoes reach maturity and fly away, as many as possible are caught. They're readily identifiable by the use of a Geiger counter. Devices for snaring the mosquitoes include a number of "light traps" which have an electric bulb to attract the night-flying insects, rotary net "scoop" traps and box traps "baited" with live goats.

"We are confident the experiment will add considerably to our knowledge of the mosquito's travel habits, life-span and other significant information to improve our mosquito control program," says Dr. Maurice Provost, biologist with the Florida State Board of Health Division of Entomology, and director of the experiment. Up to now the test has shown that mosquitoes can travel up to at least 25 miles from the point of birth in search of food and for mating purposes, he added.

Sanibel Island's "hot" mosquito experiment is pictured here.



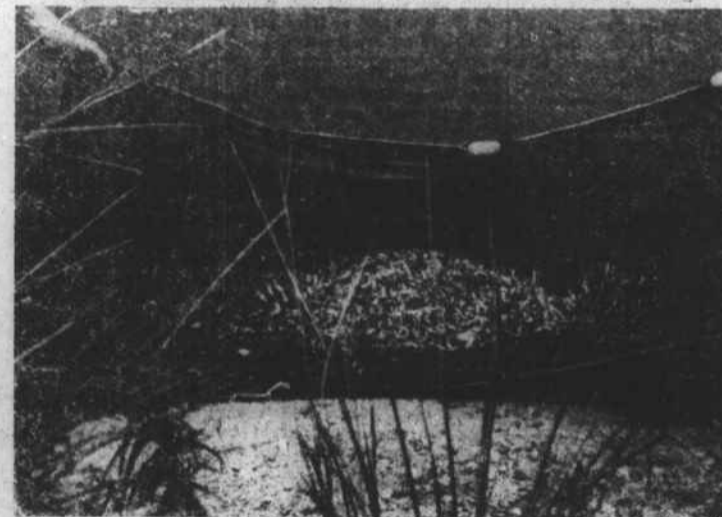
INCUBATOR BED. Marsh grass containing millions of mosquito eggs is placed in a special "incubator bed" on Sanibel Island.



BUILDING TRAPS. Everybody takes a hand in helping to build traps to snare mosquitoes made radioactive for tracing purposes.



DETECTION. Dr. Provost uses Geiger counter to spot "hot" mosquitoes as division director John Mulrennan looks on.



REMOVE THREAT. Mosquito larvae-eating minnows, are seined out of incubation bed before start of experiment.



WARNING. A ditch where radioactive mosquitoes are being bred is marked "danger" to keep curious folks away.