Sea Turtle Tracked By Satellite

A satellite traditionally used to detect ship movements has successfully tracked the 800-mile odyssey of a sea turtle dubbed "Dianne."

The National Oceanic and Atmospheric Administration (NOAA) said a 212-pound loggerhead was tracked via transmitter from its release point south of Gulfport, Miss., southward around the mouth of the Mississippi River, westward, offshore from Louisiana into Texas, and southward to an area in the Gulf of Mexico offshore from Brownsville, Tex.

After a brief break in transmission, officials of the Commerce Department agency reported, a mystery developed when the signal from the transmitter started anew and inexplicably began moving inland, finally stopping in landlocked Kansas far from Dianne's ocean and rivermouth habitat.

The "mystery" proved to be a fisherman who found the 7-pound transmitter on a beach 30 miles west of Port Arthur, Tex. He took it home to Kansas where he was using the \$5,000 device as a doorstop!

The tracking of Dianne lasted from 16 October 1979 to 15 June 1980 when the turtle apparently shed the transmitter. Electronic engineer Robert Timko of NOAA's National Marine Fisheries Service laboratory in Galveston, Tex., called the unusual use of the Nimbus satellite an unqualified success.

"Satellite tracking has great poten-

tial because of the inaccessible nature of the animal (turtles)," Timko said. "No other technology is capable of following a wide-ranging mammal over so large an area." He said learning the routes the turtle took will better enable the NMFS to identify feeding, nesting, and mating areas. This information can be used to develop strategies for managing the stock of sea turtles.

The signals from the tracking device attached to Dianne's shell were beamed at 4-day intervals to NASA's Goddard Space Center near Washington, D.C., where they were processed by computer. Satellite tracking of turtles was inspired by a previous experiment with polar bears. The bears were tracked from 60 to 90 days.

A loggerhead, a threatened species, was chosen initially for the project because of its size and availability. However, the success of the experiment prompted the bugging of a smaller Kemp Ridley turtle with a similar satellite transmitter in early June. Signals from the second turtle indicate that it has not moved far from where it was originally tagged off a Mexican beach.



FOUR NMFS LABS GET SOLAR GRANTS

The Northeast Fisheries Center's Woods Hole Laboratory, Woods Hole, Mass., has received a grant of \$113,829 from the Department of Energy to install a solar power heating and water heating system. The Grant is one of four awarded to National Marine Fisheries Service laboratories. Other facilities receiving grants are located at Gloucester, Mass.; La Jolla, Calif.; and Narrangansett, R.I.

The Woods Hole system, to be completed in 18 months, is expected to provide approximately 18 percent of the building's energy requirements. The project is one of 843 totaling \$31 million funded by the Department of Energy.