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FISH AND WILDLIFE SERVICE

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RED TIDE RESEARCH VESSEL DELIVERED TO FLORIDA

Secretary of the Interior Douglas McKay has announced that a new research vessel was delivered to Ft. Myers, Florida, on May 14 for use in studying ocean conditions which cause red tides, a marine plague that kills millions of fish in west coast Florida waters.

The new vessel, now partially equipped, will be used immediately for limited operations until it is fully outfitted with instruments to measure water temperatures and to obtain water samples for tracing occurrences of the microorganism which cause red tides. Final outfitting will be completed in early June.

The vessel will be used to make routine surveys to locate concentrations of microorganisms and to experiment with control chemicals and to pursue studies of ocean currents along the Florida coast.

Red tides result from rapid reproduction of a microbe called Gymnodinium brevis, which is so small that it is invisible to the human eye. Billions of these microscopic creatures color the sea water red or amber because of pigment granules contained in each one.

Poisons, which are deadly to fish and other marine animals, are also produced. These are sometimes carried inland in tiny droplets and wind-borne spray causing persons in areas near the beaches to develop symptoms similar to a cold or severe respiratory irritation.

After a large outbreak in 1946-47 the Fish and Wildlife Service commenced biological studies to learn the principles underlying causes of red tides, with the aim of developing control or preventive measures. The studies to date indicate that they seem to occur after periods of heavy rain followed by light winds blowing toward the shore. The water, enriched by land drainage, is held along the coast, thus developing conditions suitable for rapid reproduction of the microorganisms. As fish are killed, their decaying bodies are believed to release nutrients to the waters. These nutrients may nourish the bloom and serve to intensify it.

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