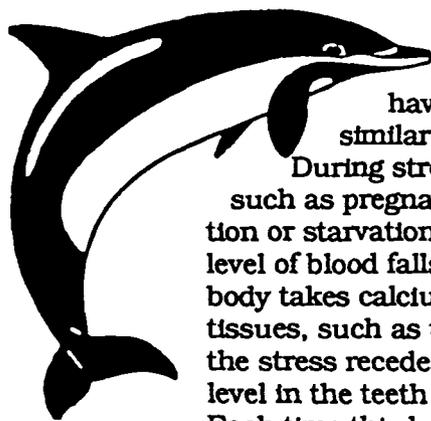


November 26, 1990

Stressed-Out Dolphins Have Bad Teeth, Scientists Find

Dolphins are routinely put under stress evading tuna nets in the Pacific. Now, NOAA scientists are measuring just how much stress by looking at dolphin teeth.

A research team at NOAA's Southwest Fisheries Science Center in La Jolla, Calif., has found that dolphins which had been inadvertently caught and killed in the eastern tropical Pacific tuna fishery had distinctly higher rates of



irregular "tunneling" patterns in their teeth than those not in the fishery. The team studied over 3,000 dolphins over the past decade.

Similar Results in Mammals

Previous studies on mammals have shown similar results.

During stressful events, such as pregnancy, hibernation or starvation, the calcium level of blood falls, and the body takes calcium from other tissues, such as teeth. After the stress recedes, the calcium level in the teeth is restored. Each time this happens, dark

lines form on the teeth. By counting these lines, scientists can measure the level of stress the animal has experienced.

Since dolphins have few natural stresses, the scientists believe it is possible that the tooth deformities reflect chronic stress caused by repeated evasion of and eventual capture by the tuna fishery.

Treatment for Zoo Animals?

These studies may also lead to a better understanding of stress in marine mammals in captivity, as well as new calcium treatments for zoo animals suffering from travel-induced stress. ☺

NOAA-Operated Satellite Aids Downed Flyers Near Seattle

A NOAA-operated satellite triggered the rescue of two survivors of a crash landing at the Bremerton, Wash., National Airport Monday, Nov. 19.

James Boss and a passenger, Greg Young, from the Boeing Field Aero Club, Seattle, went down in an aerobatic aircraft, suffering multiple injuries and severe hypothermia.

Airport Had No Control Tower

Although the landing was only 200 feet from the runway, the airport has no control tower, and the crash victims were difficult to find. The impact automatically triggered the plane's Emergency Locator Transmitter (ELT), which sent a

distress signal to overflying aircraft and polar-orbiting satellites equipped to receive the international distress frequency.

Several aircraft relayed reports to the Federal Aviation Administration's Air Route Traffic Control Center in Seattle, but the downed plane's location still could not be immediately determined.

National and Local Effort

The FAA called the Air Force Rescue Coordination Center at Scott Air Force Base, Ill., and Washington-based Civil Air Patrol (CAP) craft were dispatched to the area. The CAP pinpointed the scene with the help of hand-held directional equipment. The Kitsap County Sheriff's and Fire Departments

participated in the search.

The search-and-rescue satellite, COSPAS-SARSAT, is operated jointly by NOAA and the Soviet Union. Thus far it has aided in more than 1600 rescues of downed aviators and mariners in distress. ☺

Coming Events

- U.S. IGOSS-IODE Joint Coordination Meeting, in Carmel, Calif., Nov. 27-29.
- Committee for Operating Processing Centers Biannual Meeting in Camp Springs, Md., Nov. 28-29.
- Space Environmental Laboratory Review in Boulder, Colo., Nov. 28-29.

Sea Lion Meat Bound for Taiwan Seized in California

Special agents from NOAA have confiscated nearly 20 tons of Southern sea lion meat destined for a food processing plant in Taiwan.

The sea lion meat was seized at the port of San Francisco, Calif., aboard the MV San Juan. It was shipped from Chile by Camarico Ltd., a Santiago-based company, and

was bound for the Taiwan Foodstuffs Association Inc., in Taipei. The importation of marine mammals or any of their parts into the United States is a violation of the Marine Mammal Protection Act of 1972.

NOAA officials learned of the illegal cargo from information received from the U.S. Customs

Service and sent agents to San Francisco to meet representatives of Ned Lyons Lines Inc., owners of the MV San Juan, who fully cooperated with NOAA agents.

Penalties for violations of the MMPA include forfeiture of the seized cargo and a fine of up to \$20,000, and a year's imprisonment. ☉

NOAA Gets Heavy Media Coverage

National media have shown great interest in two recent NOAA events.

The ceremonial opening of the Science and History Center at NOAA's National Weather Service (NWS) headquarters in Silver Spring, Md., on Nov. 16 drew reporters from the Associated Press, along with local Washington television reporters. Speakers at the opening included NOAA Administrator John Knauss, NWS Assistant Administrator Elbert Friday, NESDIS Assistant Administrator Thomas Pyke Jr., NOAA historian William Stanley, and Brian Foulger, vice president of Pratt-Foulger, the building's developer.

Also, substantial press turnout is expected at NOAA's annual winter weather 90-day outlook press briefing on Wednesday, Nov. 28. Dr. Robert Livezey, principal scientist of NWS's Climate Analysis Center in Suitland, Md., will present the forecast, which will cover every region of the nation. ☉

Anchovy Sightings Improve Estimates

Including the visual aerial sightings of schools of anchovies in existing studies has been shown to improve the precision of anchovy biomass estimates, NOAA scientists have found.

Estimate differentials from NOAA's Southwest Fisheries Science Center were reduced from 10 percent to seven percent when the data supplied by sharp-eyed pilots were included. These results are reported to anchovy managers at various fisheries. ☉

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National Oceanic and Atmospheric Administration

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