

Sea Lampreys, Chitosan, and an Experimental Oyster Harvester

. . . **Sea lamprey control**, as part of a long-range Lake Ontario salmonid development plan, has been resumed with the toxicant TFM in several New York streams according to that state's Department of Environmental Conservation. Lampreys have been a "serious limiting factor on fish survival" but substantial control results were reported in 1974 when survival and sport fishing of stocked salmonids improved significantly over earlier years. . . .

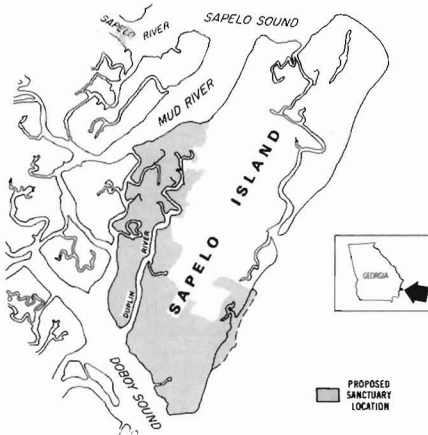
. . . **Chitosan, a derivative of chitin**, has been successfully turned into transparent film which might find use as dye acceptors, food wrappers, and possibly as artificial skin for burn treatment, the Massachusetts Institute of Technology reports. The film is said to be edible, biodegradable, and relatively strong. The MIT Sea Grant study is aimed at finding an economically acceptable alternative to dumping untreated shellfish carcasses. . . .

. . . Commercial applications are predicted for a **new two-man experimental oyster harvester** tested earlier this year by Virginia Institute of Marine Science scientists. A rectangular steel-box harvester head with two steel cylinders holding rows of flexible steel tines has been affixed to a 35-foot escalator system from a conventional Maryland-type soft clam harvester. The unit can lift oysters 15 feet from planted bottoms at rates up to one bushel per minute. As the box slides on steel runners, the tined cylinders, turned by an underwater motor, loosen oysters and shells. They are then washed onto the escalator and carried to the surface. . . .

. . . Considered a nuisance in some countries, the **giant perch, *Lates calcarifer***, is being considered for commercial aquaculture in Australia where it is a popular food and sport fish, according to *Australian Fisheries*. In breeding trials, scheduled by a private company, the fish will be subjected to light, temperature, and salinity stimu-

lation simulating tropical wet season conditions. Various hormone compounds will also be tested. The species is widely distributed through the Indo-West Pacific region and inhabits swamps and rivers. . . .

. . . **The Duplin River Estuary** on the southern end of Sapelo Island off the Georgia coast has been proposed by that state as an estuarine sanctuary the Commerce Department reports. This would permit the area to be maintained in its natural state for scientific and educational purposes. If accepted, Federal funds could be used to help purchase about 5,800 acres of marshland and high ground; the State of Georgia would provide 50 percent or more of the cost of acquisition and development. The estuary is ecologically typical of the Carolinian biogeographical



classification of estuaries along the South Atlantic coast and contains several miles of tidal salt marsh as well as estuarine and tidal creek systems. . . .

. . . That the **green sea turtle's (*Chelonia mydas*) long oceanic migrations** are closely related to ocean current systems has been postulated by Joseph D. Richard, associate professor of biological oceanography at the University of Miami's Rosenstiel School of Marine and Atmospheric Science. Some of these currents, driven by changing wind patterns, are seasonal

and, Richard says, turtles would need only to respond to some aspect of the changing seasons to stop feeding on the shallow grass beds and start drifting. Further research is being conducted to test this passive drift hypothesis. Richard's thesis contradicts the widely-held belief that green sea turtles use a sense of navigation to return to their nesting beaches. . . .

. . . **Nine students of the School of Fisheries**, Escuela Superior Politecnica del litoral, Guayaquil, Ecuador, have been awarded 4- and 6-year fishery scholarships to study in the Soviet Union, the NMFS Office of International Fisheries reports. Five students will study ichthyological engineering and four are studying fishery technology in what is called a beginning program of scholarships. The Ecuadorian Government is reported paying travel expenses and the USSR is paying educational and living expenses. . . .

. . . **Estimated albacore minimum swimming speeds** at various fork lengths are similar to those of yellowfin tuna according to initial results of a study by R. Dotson, biological technician, La Jolla Laboratory, Southwest Fisheries Center, NMFS, NOAA. Pectoral lifting area and albacore buoyancy in sea water were calculated and speed computations showed rates of 57 cm/sec at 50 cm fork length and 44 cm/sec at 80 cm fork length according to the *Tuna Newsletter*. A full report of Dotson's results is now under review. . . .

. . . **A prototype 50-ton, 33-foot buoy**, designed to bolster America's ocean and weather reporting system, has been anchored in the northeast Pacific, the National Oceanic and Atmospheric Administration reports. About 30 such buoys are planned over the next 5 years in areas where weather patterns are formed and storms are often spawned. Sensors on the tall-masted, disk-shaped buoys will measure wind speed and direction, barometric pressure, air temperature, surface wave height and period, and water temperature at seven depths. Data will be funneled into the national weather forecasting system every 6 hours or, in special cases, in a matter of minutes. The buoys will largely compensate for the loss of Ocean Station Vessels which formerly collected such data. . . .