



George Hollan—Photo Researchers

THE PLIGHT OF THE TURTLE

They saw the dinosaurs come and go, and once were so plentiful that galleons lost in the fog could navigate by following their sounds to their nesting grounds. Just a few decades ago, 40,000 of one species splashed ashore on a single night to lay eggs on a Mexican beach. But now the ancient sea turtle—which has survived for 175 million years—faces extinction.

"Few animals are more misused than sea turtles," reported a conference of conservationists from 40 nations that met last month in Washington, D.C. The greatest threat: entrepreneurial greed. Latin American Indians who hunted turtles as their main source of meat began to sell the valuable carcasses. Consequently, green turtles prized for their steaks have dwindled from tens of millions to half a million. Says biologist Archie Carr of the University of Florida: "Turtles aren't feeding protein-poor Indians, but rich gringos in high-rise hotels." Of the seven species of sea turtle, the

Kemp's ridley is the most endangered. Fewer than 1,000 females are believed to remain in the world, largely because dealers collect their eggs by the truckful to sell as aphrodisiacs. Other species have great snob appeal. More than a quarter-million hawksbills are slaughtered annually for tortoise-shell jewelry. And 100,000 olive ridleys were killed in 1978 for turtle leather.

HEAVY TOLLS: Even species with little commercial value may soon disappear. Thousands of loggerheads drown in shrimp nets accidentally, and oil spills take heavy tolls. Condominiums on tropical shores have destroyed turtle breeding grounds in Tortuga, the Cayman Islands and Jamaica,

Hawksbill crossing coral reef (above), green turtle crawling back to sea after laying eggs (bottom right): Facing extinction after 175 million years

and lights from beach developments lure females and young hatchlings out of the water to their death on motel lawns.

Previous attempts to preserve the turtle have floundered. Although the Convention on International Trade in Endangered Species protects all but one turtle species, two large consumers of turtle products—Mexico and Japan—refuse to ratify the agreement, and two other big importers—France and Italy—ignore the provisions on turtles. Establishing turtle farms may have done more harm than good. Conservationists charge that commercial farming threatens wild stocks by encouraging the market in turtle products. Now, green-turtle steak turns up routinely on menus. Says Carr, "Farming keeps alive markets that should be forever closed."

Because turtles are international wanderers, only global cooperation can save

Stuffed young hawksbill: A call for a trade ban

Towle P. Dickinson—Photo Researchers



Dr. Peter Pritchard



Mark Boulton—Photo Researchers

them. Last month's conference highlighted some promising schemes. Nicaragua plans to establish a marine sanctuary where green turtles feed. Costa Rica has designated a nesting ground as a national park. Indonesia and the Philippines are working to develop an international sea-turtle refuge. And the conference recommended a ban on trade in leather, eggs and stuffed turtles.

IMPRINTED: Scientists also hope to encourage breeding programs—but they lack basic information about the animals' habits. Biologists don't know when turtles mature sexually or how often they reproduce. The U.S. National Marine Fisheries Service is nevertheless trying to start a new nesting ground for the Kemp's ridley on Padre Island off Texas. The scientists transplant eggs from the old Mexican nesting grounds and let the hatchlings scurry down the Padre Island beach to become "imprinted" with the memory of their natal shore—essential if they are to return there to lay eggs. The young turtles are then collected and grown in a laboratory until they are big enough to resist predators. If the turtles return to Padre Island, at least one species will have avoided extinction for a little longer.

SHARON BEGLEY with
MARY HAGER in Washington

PRODUCING FUEL WITH SUNBEAMS

One sunny day in 1977, a graduate student at the California Institute of Technology chanced to carry a beaker containing a compound of the rare metal rhodium from one laboratory to another. Crossing the