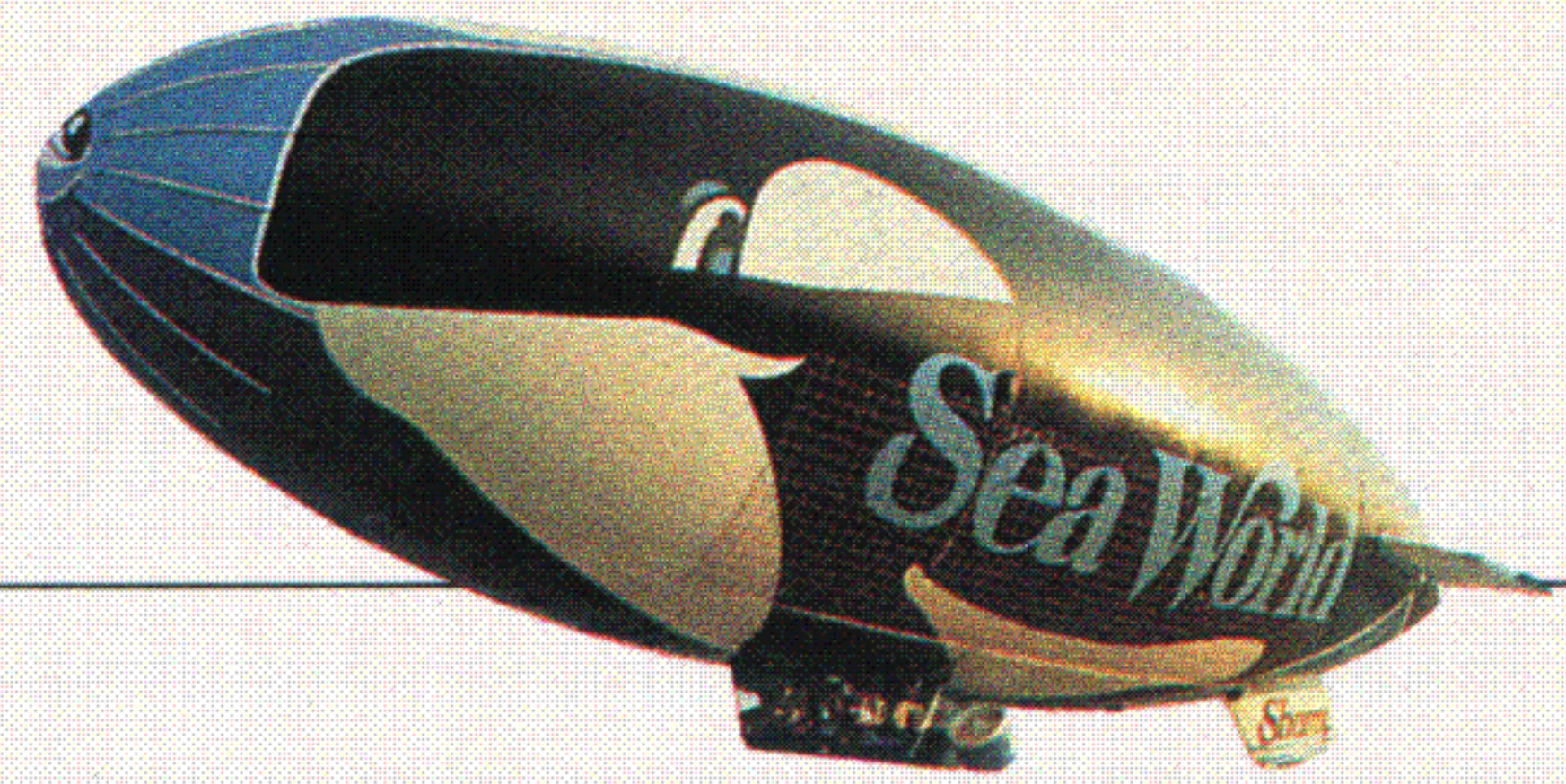


ANIMALS



SAVING MANATEES:

Researchers take to the air to preserve a threatened species

By Kathleen McAuliffe

Cruising in a blimp at 1,000 feet, I marvel at pelicans flapping their wings in unison across the emerald waters of Tampa Bay. Below them, stingrays stroke the waves at a gentler pace. Like herds migrating across a plain, fish swarm in great schools corralled by circling dolphins.

From the sky, one's sense of scale shifts. Grand and small—

never hear me. So I watch helplessly as its motor cuts a swathe between the animals, clearing them by a close margin.

Such near collisions are scarcely rare occurrences in this part of the world. According to my companion on the blimp, marine-mammal biologist Brad Weigle, the modern speedboat is fast bringing manatees to the brink of extinction. Only 2,000 of these placid animals presently inhabit Florida's coastal region, and last year alone, boat collisions accounted for about one quarter of all manatee deaths in the area.

There's a tragic irony to the manatee's predicament. One of the most ancient orders of marine mammals, manatees evolved more than 50 million years ago from land animals. (Although manatees are also known as sea cows, researchers believe their closest living relatives on terra firma are elephants, not cows.) They've survived largely because of an absence of predators. Despite their docile behavior, the massive size of these ten-foot-long bundles of blubber has proved a major deterrent to would-be attackers. "Not even alligators will bother adult manatees," reports Weigle, whose post at Florida Marine Research Institute in St. Petersburg has afforded him many opportunities to study the local manatee population.

Alas, sheer bulk proved an excellent defense strategy until the arrival of the 300-horsepower speedboat, which can crush the animal's skull or carve it up with its propeller, leaving the animal to slowly bleed to death. Hence, Weigle's mission: He has taken to the air not so much to document the carnage as to prevent it.

From the passenger compartment of the seven-story-tall blimp, dubbed the Airship Shamu after the popular killer whale it re-

sembles, he is charting the behavior and migratory patterns of the manatees with the goal of helping the state establish protection zones where traffic will be restricted. The blimp, which is loaned to Weigle and other researchers by Florida's Sea World, is proving an extraordinary tool in this effort.

"We'd be lucky to see a single group of manatees from a boat in an afternoon," Weigle explains. "And we can't study them very well in a small plane, flying round and round in a loop at 80 miles per hour." By contrast, the blimp offers a stationary research platform that can zoom in for a close-up view when researchers spot something of interest.

That's just what the airship does when its on-board radio antennae pick up the frequency of Zephyr, a radio-tagged female who measures a mighty 11 feet. As we approach, a battle-weary figure comes into view. Twenty blade cuts traverse her back, the last scar a skeg mark from the bottom of the propeller. Later in the day, we spot still more boat-battered victims, including amputees. "Upward of 80 percent of all manatees have at least one set of propeller marks on them," laments Weigle.

For all their misfortune, however, these big-schnozzed giants look as happy as Holsteins chowing down on spring grasses. Since they can't tolerate cold water, during winter they often hang out in the warm discharges of a power plant, which is where we make the biggest number of sightings for the day. Like humans in a Jacuzzi, the manatees bask in the foaming jets—insouciant that their survival is imperiled.

As we pull away on our final ascent, the wakes of two intersecting boats etch a fleeting cross in the water. A sign of hope? I wonder. Or a cemetery marker? ☐

Using a Sea World blimp, scientists are studying the behavior of the giant sea mammal. The goal: to reduce the growing threat to manatees from Florida's careless boaters.



the mighty and the microscopic—share a peculiar symmetry. So, paradoxically, as I ascend in the air, the ecological plight of the manatees, now little more than shadowy specks beneath the waves, comes into stark focus. Among the largest aquatic herbivores, they contentedly graze in the shallows while unbeknownst to them, a yellow speedboat tears through the narrow channel at a 40-mile-per-hour clip.

"Not that way!" I want to scream, but the boat's pilot will