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FROM THE FLORIDA FRONT

Here's the poop: Seabird droppings may heal seagrass

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They leave droppings on our cars.

They make targets of our heads.

The indiscriminate bathroom habits of seabirds can indeed be bothersome — unless it's in the name of science.

Marine scientists are encouraging cormorants, herons, pelicans and terns to defecate atop stakes implanted in shallow Keys waters as part of an innovative method of restoring damaged seagrass beds.

The nutrient input from the bird feces, when dropped into the water, has been shown to speed the recovery of seagrass severely scarred by boat groundings and propellers.

Although the concept is still in the experimental phase, scientists are banking on its long-term success. Recent estimates indicate there are more than 15,000 acres of moderately to severely scarred seagrass beds in Monroe County alone.

Of the 581 vessel groundings in the Keys last year, about 350 occurred on seagrass beds.

"People kind of grimace

when they hear about bird poop, but it's cheap and it really works. The seagrass soaks it up like a sponge," said National Oceanic and Atmospheric Administration research biologist Jud Kenworthy, who pioneered the unique seagrass restoration technique.

Nearly two decades ago, Kenworthy accidentally realized the power of bird poop.

He and several other scientists were in Florida Bay observing seabirds as part of a study. The group had placed stakes in the water in an effort to attract the birds and later noticed a dramatic improvement in the composition of seagrass around the markers.

In the years since Kenworthy's discovery, the NOAA Center for Coastal Fisheries and Habitat Research has been conducting various seagrass studies to learn more about the effects of seabird feces.

Those studies include an ongoing research project at Lignumvitae Key State Botanical Site, near a popular boating area off Islamorada.

Biologists have been planting plugs of Cuban shoal grass into propeller scars there and placing bird roost stakes along

the scars. Treated scars are monitored by aerial photography and by the counting of grass shoots at randomly located sample sites within each scar. The grass shoots are then compared to counts in nearby healthy seagrass beds.

Once the scar has been stabilized by shoal grass, the stakes are removed.

Although some estimates for complete recovery of a scar have been as short as 1½ years, researchers say most damaged seagrass beds, when treated, could take three to seven years to return to normal.

With a large number of boat mishaps in the Keys each year, researchers plan to expand upon the Lignumvitae project with additional seagrass restoration projects throughout Florida Keys National Marine Sanctuary.

Although most restoration efforts are funded through fines collected from vessel groundings and impact fees from dock construction, local marine officials are thankful to be getting something, even if it's only bird poop, for free.

"The birds haven't started charging us yet," said sanctuary spokeswoman Cheva Heck.



ON DUTY: Birds perch atop stakes placed by marine scientists at Lignumvitae Key State Botanical Site.