

A flooded Everglades: Boon for birds but high waters threaten some species

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A record-breaking rainy season has left the River of Grass looking like a real river.

Shark Valley, a popular Everglades National Park tourist stop off Tamiami Trail, is temporarily closed and mostly underwater. The looping road leading to its signature observation tower looks like a canal in an aerial image taken by a staffer. Farther south, on the road to Flamingo on the southern mainland coast of Florida Bay, marshes normally draining down in South Florida's dry season shimmer like lakes in the sun. At least one [water](#) gauge in the park reached its highest level since 1962.

Water is the lifeblood of the sprawling Everglades ecosystem, but its wetlands, prairies, forests and hammocks thrive on a seasonal cycle of rainy springs and summers and dryer falls and winters. Extremes either way can create major ripple effects, good for some species but damaging for others. And 2020 has definitely been extreme, topped by late season Tropical Storm Eta dumping up to 16 inches of rain in some spots in South Florida.

State wildlife managers and the Miccosukee Tribe, who live in the Everglades, worry the most about tree islands—scattered areas of higher ground that dot the Everglades and provide habitat for many land species—shrinking and decaying if they stay submerged for too long. State surveys have spotted deer and other mammals already crowding onto canal banks and flood control levees that provide little shelter or forage.

But wildlife managers say the [high water](#) also is benefiting wading birds, increasing the amount of fish they feed on, and also freshening up [coastal areas](#) in Florida Bay, which has been hammered by seagrass die-offs and algae blooms worsened by high salinity levels.

"There is concern that parts of the Everglades are too deep for some species to survive, and that flooding could hurt tree islands; but there is also some good news: flooding is creating good conditions for wading

bird nesting in areas where we want them to be," said Mark Cook, the lead scientist for the Everglades systems assessment section of The South Florida Water Management District. "The Everglades is a mosaic of different habitat types where things never work perfectly for everybody."

A wild storm season that started with record-breaking rainfall in May and ended with a double landfall by a very wet Tropical Storm Eta filled up canals and conservation areas to the brim. Even before the storm hit, water managers and the U.S. Army Corps of Engineers were trying to figure out how to make room for the expected deluge in canals and water retention areas already swollen from months of regular rains.

So far, the most significant impact may be on visitors. State-managed conservation areas were shut down as early as August and Everglades National Park closed the Shark Valley visitor area last month. Further south, along the main road of the park, a few of the tourist trails were also shut down late last month because of flooded access roads—including the Pay-Ha-Okee Overlook, a popular boardwalk with a scenic view of the marsh.

Still, the park, which for decades has been starved of its historic water flow by flood control systems, is one of the winners. Water is now flowing south unrestricted through Taylor and Shark River sloughs all the way to Florida Bay. While water levels are higher than what would be ideal for the health of tree islands, the park will benefit from the overall hydration as long as it doesn't take too long for flooding to recede, said spokeswoman Michelle Collier.

"There is nothing holding our water. And the animals are adapted to a seasonally flooded ecosystem, so they know what to do when the water is high," Collier said. "We have mapped 378 tree islands in the park, and not a single one of those have been fully flooded."

Wading birds foraging in and around the park are happy and will likely have a good nesting season, Cook said. Flooding in nesting areas before nesting begins means that the ecosystem will have water long enough to produce an abundance of fish, which will become concentrated as the dry season kicks in. This year, that delicate balance of water and timing is looking good, he said.

"There are tens of thousands of birds now feeding in Big Cypress, there are large foraging flocks in the marl prairies at Everglades National Park, there are many thousands of birds along the coastal mangrove regions," said Cook, who has posted stunning photos of his weekly surveys on social media.

Outside of the park, in state water conservation areas north of Tamiami Trail, things are not so pretty.

The man-made system of hundreds of miles of canals and levees that made development and agriculture possible in South Florida created an unnatural flow of freshwater that more often than not leaves the Glades parched.

But during the [rainy season](#), the flood controls block water from draining, leaving areas like Everglades and Francis S. Taylor Wildlife Management Area and Water Conservation Area 3A too deep. That creates serious survival challenges for many wildlife species.

During a recent nighttime spotlight survey along the L5 levee in WCA 3A, Thomas Reinert, regional director of the Florida Fish and Wildlife Conservation Commission, said he counted almost 270 deer and dozens of rabbits and possums.

"Our metric is 10 deer or fewer," Reinert said. "If we see that many deer on the levees, then we know they are really crowding the tree islands,

and that increases pressure on that vegetation because there are no swamp lilies left, so the animals start eating the leaves."

Reinert said water levels at two key gauges at 3A rose to "well over 13 feet" last month, a record, and are still around those levels. Back in August, those gauges had already risen above an 11.6 feet threshold, above which FWC considers may put wildlife in jeopardy.

The U.S. Army Corps of Engineers, which manages the flood system along with the South Florida Water Management District, started an emergency deviation last month in the area to lower water levels to protect wildlife. It is still full, said Col. Andrew Kelly, the Corps commander for Florida. And it will take time for the area to recede, he said, perhaps a month or more.

"Everything in the southern part of the system is just totally full. We and our partners are doing everything we can to mitigate the effects of a very, very large amount of water that came in October and November," Kelly said in a Thursday media briefing.

Jacqui Thurlow-Lippisch, a water management district governing board member, posted videos of seemingly stressed deer on the L5 levee after accompanying FWC staff on a survey last month.

"I was blown away. On the banks of the levee I saw little rabbits running all over the place, possums, raccoons," she said. "It is immoral to have these animals drowning or starving or dying" because South Florida water managers and residents are worried about their own needs, she said.

The Miccosukee Tribe also voiced disappointment at current water management policies.

"I understand that this was an unusually high amount of rainfall that we got, but people are responsible for a good share of this situation," said Miccosukee Indian Tribe member Betty Osceola. "The animals out here are suffering. There is no place for them to go, all the tree islands are flooded, some under two feet of water."

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