



Researchers: Rising Seas Threaten Rare Everglades Plants

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Rising sea levels and invasive species increasingly threaten rare plants in Everglades National Park that have not yet recovered from damage caused by orchid collectors long ago or attempts to drain the swamps, according to a 10-year survey released Monday.



This photo taken by Roger Hammer in 2011 at Everglades National Park in Florida shows a cyrtopodium punctatum orchid, also known as the cowhorn orchid, which is considered endangered. The park commissioned the Delray Beach-based Institute for Regional Conservation for a 10-year study of 59 endangered plant species

Credit AP Photo/Roger Hammer

The report by the Institute for Regional Conservation concludes that the unique plants native to South Florida may be lost despite multibillion-dollar efforts to restore the wetlands. Other studies of the Everglades' natural resources have reached similar conclusions.

Plant biodiversity needs to be prioritized as highly as natural water flows and controlling exotic animals such as Burmese pythons, researchers said.

"In fact, achieving the goal of protecting this unique and diverse ecosystem requires it," the report says.

The park commissioned the private, Delray Beach-based nonprofit for the study of 59 plant species to help adjust management plans for the park, said Tylan Dean, the park's chief of biological resources.

The trees, shrubs, vines, ferns, orchids and herbs studied represent about 8 percent of the park's native plants. Sixteen of the species studied may have already vanished from the park, researchers said.

Seven species of orchids, grasses and shrubs were found to be doing better than previously documented. However, researchers discovered they had previously overestimated the number of cowhorn orchids in the park and now consider that plant to be critically imperiled.

Collectors in the early 1900s badly depleted Florida's orchid populations, and that threat may be revived because of the Internet. Social media posts with geographic data lead more people to specific blooms, according to the report. Researchers frequently found orchid enthusiasts along trails that developed during the flowering season.

"We want to point out that this kind of technology is available now. Will people abuse that info? So far, the evidence is they are not, but we should pay attention," said George Gann, the institute's chief conservation strategist.

Rising seas along the park's extensive coastline and competition from invasive species such as Brazilian pepper are complicating the recovery of plant populations still suffering from decades-old damage in a complex, remote ecosystem, according to the report.

Funding and legal challenges have long stalled the progress of Everglades restoration. Some environmental advocates fear that by the time water flows are fixed in the wetlands, the Everglades will have lost the attributes that make them unique.

A congressionally mandated progress report published last year by the National Research Council recommended adjusting Everglades restoration projects to account for climate change and invasive species management.

The rare plants report will help the park prioritize the most vulnerable species, not just the charismatic blooms like the popular orchids, said park botanist Jimi Sadle.

"Any of the species that have coastal distribution entirely or in part are going to be a priority in the face of imminent sea level rise," Sadle said.

One plant that rises to the top of his list: the big sandbur, a pale green grass found only in the park on islands in Florida Bay. The report recommends long-term seed storage for the sandbur, based on its limited range in the park.

"Those island populations are under 50 centimeters (19.6 inches) in elevation," Sadle said. "If we're going to focus on something, it's going to be a species that's that vulnerable."