

A rare wild flower is the star of the Florida swamp. But can the ghost orchid survive?

August 23 2023, by Alan Halaly, Miami Herald



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In "The Orchid Thief," author Susan Orlean wrote of a "phantom" flower hidden deep in the swamps of Southwest Florida "so bewitching that it could seduce people to pursue it year after year and mile after

mile."

Her best-seller about an obsessive poacher would help make the once-obscure ghost orchid the most famous wild flower in the sprawling Everglades ecosystem.

Twenty-five years later, the ghost orchid remains a star attraction during its summer bloom at the Audubon Corkscrew Swamp Sanctuary, one of the few places where everyday nature-goers can see one without slogging through muck and chest-high water. But what lies ahead for the flower is less certain than ever.

A coalition of [environmental groups](#) have filed paperwork threatening to sue the [federal government](#) for not moving quickly enough to protect the few ghost orchids that remain—an estimated 1,500. A formal lawsuit could come as early as this month.

Poaching cases—there was a bust as recently as October—remain a threat, but far from the only one. A single hurricane can wipe out dozens. After Hurricane Irma hit in 2017, scientists observed 30% of ghost orchid host trees had died in one area. Climate change is likely to bring stronger storms and increased sea-rise that in the decades ahead could push salt water into the freshwater swamps where the ghost lives. There are fears about encroaching development.

"It's facing a very precarious future," said Melissa Abdo, a conservation biologist with one of the potential plaintiffs, the Institute of Regional Conservation. "Every [single species](#) has its role in an ecosystem. We need bold action now."

A legal quest for endangered listing

A lawsuit would follow a long campaign by environmental groups to

have the rare flower placed on the federal list of threatened and [endangered species](#)—a designation with wide-ranging effects.

"The Endangered Species Act is an incredible tool to prevent extinction," said Elise Bennett, an attorney and Florida director of the Center for Biological Diversity. "There are hundreds of species right now listed that are well on their way to recovery."

The bald eagle is probably the most famous recovery success story; in Florida, the standout example is the alligator, which was nearly wiped out before a listing in 1967. It was removed in 1987 and is now so common that the state permits annual alligator hunts.

Once listed, Bennett said the U.S. Fish and Wildlife Service would have to draw up a recovery plan and designate "critical habitat" areas for the orchid/ That could, for instance, potentially raise the bar of environmental scrutiny for encroaching development and proposals to expand oil drilling in the Big Cypress Preserve. Significantly, it also could lift the price of illegal poaching.

The campaign to list the ghost orchid has been in the works for a while. In January 2022, the groups submitted a 50-page petition making the case for endangered listing.

FWS responded in October, acknowledging the designation was warranted. But when the January 2023 deadline to list it crept up, the agency instead said it would list it by fall 2026. The groups—the Institute for Regional Conservation, the Center for Biological Diversity and the National Parks Conservation Association—responded with a letter of intent to sue.

"The best available science suggests that the threats to the ghost orchid are severe enough to warrant immediate listing," the plaintiffs wrote in

the letter. "Any further delay puts this imperiled species at greater risk of extinction."

FWS declined to comment on the ghost orchid's status over email in July. A spokesperson said the agency wouldn't speculate on proposed litigation.

Already facing an immense backlog of species, critics complain that the FWS stalled new listings under former President Donald Trump. And there is still a hesitation to add more species to the list, Bennett said, in part because Congress and the administration of President Joe Biden haven't expanded the agency's funding or resources.

"We've really lost important time during the Trump administration because of its terrible policy," she said. "And we really haven't seen the Biden administration move with the urgency that's needed to get these species back on the road to recovery."

One of Bennett's colleagues, environmental lawyer Jaclyn Lopez, said the ghost orchid is likely to see its day in court. The overarching problem, she said, is that the federal agency is constantly underfunded.

"The Fish and Wildlife Service has a really heavy lift," Lopez said. "But the answer isn't to forestall and delay. The answer is to make clear to Congress that in order to carry out its mission, we need to fully fund the implementation of the Endangered Species Act."

'Loved to death': Should poaching become a federal crime?

The most immediate threat remains poaching. Stealing orchids from the swamps on the southwestern edge of the Everglades is so common that

the environmental groups' petition refuses to name any specific coordinates or locations of ghost orchids.

It's been going on for decades and historically light state penalties have done little to discourage it.

Florida statues define endangered plants as any "plants native to the state that are in imminent danger of extinction...the survival of which is unlikely if the causes of a decline in the number of plants continue." But most cases end in a relatively small fine.

John Laroache, the real Miami-born collector that was the central character of Orleans' 1998 book, got hit with a fine, court costs and six months of probation. Two Native Americans who helped him were granted near immunity, and weren't charged with possession of an endangered species.

The most recent incident happened in October, when an Florida Fish and Wildlife Commission K-9—aptly named Susan—helped catch a 20-year-old man from Ocala with a bag full of 36 rare air plants and orchids, including a ghost orchid. He was charged with first degree misdemeanors related to harvesting endangered and commercially exploited plants without permission.

A judge later awarded him a deferred prosecution agreement. This means he'll get out of a harsher conviction if he volunteers 100 hours of his time—only at a state park, the judge stipulated—and donates \$500 to the Florida Rare Plant Conservation Endowment.

A federal endangered species designation potentially would bring harsher penalties. In addition to state charges, federal law could mean up to \$50,000 in fines and a year in prison in certain poaching cases, according to the Environmental Protection Agency.

George Gann, executive director for the The Institute for Regional Conservation , said people who journey into the swamp to photograph the ghost also can do unintentional harm, trampling down surrounding and protective plants.

"The orchid is literally being loved to death," Gann said. "Not only do we have to contend with invasive species, hurricanes and [climate change](#), we now have these higher levels of impact to the habitat by humans."

Renewed interest, fervor for conservation

It's much easier to get a glimpse of a ghost orchid at the Audubon Corkscrew Swamp Sanctuary, which boasts a two-mile boardwalk in Naples. Through a telescope, visitors can see a ghost orchid that's 100 feet off of the trail and 150 feet up on a cypress tree.

The sanctuary's director, Keith Laakkonen, said there's usually an uptick in visitors when the ghost orchid is in bloom during the summer. He's honored that Corkscrew can offer a peek into old Florida.

"I think rarity is something that people get excited about," Laakkonen said. "As a Floridian, I think I needed to check that box. And I still check it every time."

The allure of the ghost extends way beyond Florida.

Lawrence Zettler, a professor at Illinois University who runs one of the country's only orchid recovery programs, brings students across the world and into Florida to aid conservation efforts. Some of his students provided key data for the petition to the FWS to consider the ghost orchid for listing.

Zettler even considered presenting a cultivated ghost orchid as a gift for

Queen Elizabeth II during her platinum jubilee ceremony. Though he didn't end up choosing it, it still made a splash earlier this year at the Chelsea Flower Show, where it caught the attention of the British media.

To Zettler, the son of an orchid scientist, the flowers are an emblem of his Florida upbringing. It's gut-wrenching to see ghost orchid numbers drop, he said.

"It really is disturbing when I come back to my home state and I don't see the species I grew up with," Zettler said. "I have a daughter, and it's sad to take her here and say, 'Oh, that's not here anymore.'"

Encroaching development

Corkscrew volunteer Brent Smith, a retiree from Indiana, has hope that the ghost orchid will continue to inspire Corkscrew visitors for years to come. During the pandemic, Smith began taking online ecology courses through his local University of Florida Institute of Food and Agricultural Sciences' extension office to acclimate himself more to the state's unique environmental problems.

Smith has been coming to Corkscrew since the '80s. Each morning he spends there, he hears the rumbling of cars zipping as he talks with visitors on the trail. He hopes the ghost orchid can survive to dazzle the generations to come.

Human hustle and bustle disrupts the sweet, saccharine silence of the swamp.

"You can hear the rumble of humanity, that low roar," Smith said. "That's development on Corkscrew Road, traffic on I-75 heading into Immokalee. Meanwhile, we're just standing here with our arms up, saying, 'Please stop. Please help us keep what we have.'"

Abdo, the conservation biologist, finds hope in securing the ghost orchid's future through the Endangered Species Act.

She can still recall her first glance of a ghost orchid.

Some 20 years ago, Abdo and a team of National Park Service contractors had set out to do what hadn't ever been done: take an official inventory of the flora and fauna that make up Big Cypress Preserve, a 729,000-acre, muggy swath of southwest Florida.

For two years, she hiked dozens of miles to document the preserve's species. Sometimes that meant carefully landing a helicopter among the cypress trees to access its most remote areas.

The ghost orchid wasn't in bloom then, but a lifetime of wading through waist-deep water of the Everglades became worth it in that moment. She marveled at the flower as it hung onto its host tree by a thread, almost like it knew its time in the swamp could be cut short.

"It was out of a fairy tale," Abdo said. "The [orchid](#) was amazing. But it felt very fragile, too."

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Citation: A rare wild flower is the star of the Florida swamp. But can the ghost orchid survive? (2023, August 23) retrieved 28 April 2024 from <https://phys.org/news/2023-08-rare-wild-star-florida-swamp.html>

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