

Populations of the threatened black rail may rebound—but don't expect to see one

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Marsh-dwelling black rails are more often heard than seen, and they aren't heard very often. William & Mary's Center for Conservation Biology led a decades-long effort that culminated in the eastern black rail's listing as threatened on the Endangered Species List. Credit: David Seibel

A bird that since John James Audubon's time has scurried under the radar of all but the most attentive ornithologists, conservationists and naturalists has received protection from the U.S. Fish and Wildlife Service.

The bird is *Laterallus jamaicensis*, the eastern black rail. William &

Mary's Center for Conservation Biology led a 20-year effort to rally regulators and the birding community to get behind the bird, an effort that paid off in early November when Fish and Wildlife placed the black rail on the list of threatened animals under the Endangered Species Act.

"We have tried to rally the conservation community to engage with black rails since the early 1990s. We brought them up repeatedly at meetings, gave talks at meetings—but could not get any traction," said Bryan Watts, director of the Center for Conservation Biology. "It was not until we formed the Eastern Black Rail Working Group in 2008 that we started to build some momentum."

Watts explained that the rationale for the black rail's "threatened" listing—and the reason for the decline of the species—boils down to [loss of habitat](#). And the bird's habitat is being lost almost entirely due to sea level rise, he noted.

The black rail presents a perfect storm of challenges to conservationists. It's elusive, almost never taking to the air, and rarely ventures out of its reedy habitat. The species is more often identified by its call, rather than by eye. Most of the time, the black rail is neither seen nor heard.

"The last Virginia occurrence was in 2017, a calling male at Craney Island—the Army Corps of Engineers' spoil site in Portsmouth," Watts said. "That bird was likely an unmated male and has not been detected since then."

In addition to the black rail's secretive habits, the bird's preferred habitat is often found in tidal salt marshes, a narrow band that is just above high tide. Or, in many cases, where high tide used to be, before sea level rise. Watts knew about the black rail's reclusive habits and its preference for out-of-the-way habitat when he compiled an assessment of the status of the species, a document that was instrumental in securing the

"threatened" listing for the bird.

The CCB has done surveys of black rail populations in Virginia, North Carolina, Georgia and Florida. They deployed and perfected a methodology that proved to be effective in compiling a reasonably accurate census of a reclusive and elusive bird.

"We play tapes with a series of calls that have silent periods when we listen for responses," Watts said. "This standardized technique is now being used throughout the range. We will be doing surveys in the Shenandoah Valley this spring and in Central Florida."

The CCB's assessment on black rail populations was finished in 2016 and the results were pretty grim.

"The status assessment demonstrated that the species had experienced a catastrophic decline that included a southward range contraction of 450 kilometers and a steep decline throughout much of the remaining range," Watts related.

Regionally, the report logged an annual rate of decline in the Mid-Atlantic of 9 percent per year since the early 1990s, generating a decline that was greater than 90 percent over a short time period. The rate of decline south of Virginia was 4 to 5 percent per year.

"Throughout the range we were down to an estimated 500-1,300 pairs or so," Watts said. "There is considerable uncertainty due to how secretive this bird is," he added.

The black rail has long been of interest mainly to hardcore birders intent on rounding out a life list. It's just the opposite of dashing, charismatic birds such as the [bald eagle](#) and the peregrine falcon. Watts believes that the low profile of the species added to the challenge of securing listing

for the black rail.

"There is no question that visibility plays a critical role in what the public is willing to save and that has an influence on government funding and the will of agencies," he said. "There is a huge visibility difference between bald eagles and black rails, and so far it has been a tougher fight for black rails."

The CCB participated in the population-restoration actions of a number of birds, notably eastern populations of peregrine falcons and bald eagles. Watts explained that bringing back the population of black rails will be a harder nut to crack.

"Eagles declined due to contaminants and with the banning of DDT, Congress, in one blow, removed the barrier for recovery," he said. "Habitat-based declines are much more complex and so it will be a long grind."

The near certainty of sea-level rise in the near future leaves few options for restoring rail populations in tidal marsh habitats, but Watts pointed out that the future for the eastern black rail is not necessarily dark. Federal listing is an important first step, and conservationists now know a lot more about the bird than they did a decade ago.

For one thing, the black rail has a fairly extensive range and is able to use nontidal wetlands if the conditions are right. Conservationists also have a better handle on the numbers of black rails in the eastern U.S., thanks to the CCB's pioneering surveys.

"It has truly been amazing how biologists from throughout the range have engaged with this bird since 2016," Watts said. "More than 10,000 point counts have been conducted, trying to find where birds may still be found."

Significantly, the biologists have documented a number of inland pockets of black rails within nontidal wetlands where the birds and their habitat are unaffected by sea level rise. Watts noted that the U.S. Department of Agriculture recently awarded a grant to the CCB to begin developing a population management prescription in a relatively [rail](#)-rich habitat in central Florida.

"The reason for working there is that they still have [birds](#)," he said. Watts went on to explain that the idea is to execute a set of habitat manipulations and put together a set of best practices for settling of black rails in similar nontidal ecosystems.

"We are basically taking the approach of 'if we build it they will come.'" If we can test some prescriptions—and prove they work—then we can export that to other parts of the range," he said.

Provided by The College of William & Mary

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