

Discovering bobolinks in a precarious world



Vermont biologist Rosalind Renfrew (photographed here in Vermont) makes an important bird discovery in the fields of South America.

By Bryan Pfeiffer

In that gentle hour before dawn, before the South American heat and humidity would descend, before the daily convoy of trucks would rumble away the quiet, Rosalind Renfrew stood beside one of the region's few paved roads and waited for an explosion of birds.

A biologist with the Vermont Institute of Natural Science (VINS), Renfrew was in Bolivia chasing a black, white and golden songbird with an electronic song that sounds oddly like R2D2 from Star Wars. Besides the oppressive heat, Renfrew had conquered an assortment of tropical perils to get here – gastrointestinal adventures, rutted roads that make Vermont's mud season laughable by comparison, and a furry (even cute) caterpillar that sent her promptly to the hospital.

But none of that mattered anymore. What mattered on this morning to Renfrew was the huge field before her, an ocean of reeds – and that bird with the silly song, the Bobolink. As her mind wandered that morning, as she pondered her long journey from Vermont, where the Bobolink is a star performer on farms back home, Renfrew was yanked back into the moment when one of her colleagues, Ana Maria, noticed the field before them began to tremble.

"They're leaving," Maria shouted. Renfrew grasped her binoculars and went to work.

In rhythmic pulses, thousands of Bobolinks began rising from the reeds and flying to a rice field nearby. Renfrew and her team began to count them. So massive was this river of

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birds the biologists would count clusters of hundreds or thousands passing by a fixed reference point. The sound was overwhelming, a metallic, chattering symphony. Renfrew recalled how it made the annual uproar of spring peepers back home seem like a whisper. And

as suddenly as it had begun, Renfrew and her team had counted at least 80,000 Bobolinks. Additional flocks nearby brought the day's total to about 150,000. It was, they knew, the largest assemblage of Bobolinks ever counted. Renfrew was elated. But she was wor-

just when the biologists would think the river had run dry, when there was no way this flock could be any larger, more and more Bobolinks, thousands more, would erupt from the field. The team kept counting.

For 25 minutes they counted Bobolinks. And when the torrent of birds had finally stopped,

ried as well.

It turns out that Bobolinks, welcomed back each spring to the meadows and pastures across Vermont, aren't as well received in South America. There they inhabit rice fields, where rice farmers dismiss them as pests. And those huge wintering flocks in South America make Bobolinks particularly vulnerable to eradication efforts by farmers. It's a lot easier to kill birds when they hang out in assemblies of 80,000 or more.

"Seeing this enormous mass of birds took me back in time," Renfrew recalled. "I imagined this was what migration looked like thousands of year ago – Milky Ways of birds crossing the sky. But I also realized that so many Bobolinks, concentrated like this in a potentially inhospitable landscape, posed a threat to this species as well."

The Bobolink's rather unpronounceable scientific name, *Dolichonyx oryzivorus*, basically means a bird with a long claw that likes to eat rice. But it's got more cachet than its name implies.

Bobolinks are birds of open country. And in and above those wide open fields, for anyone to see, Bobolinks perform a spring mating ritual that can shake any remnant of winter from the bones of a Vermonter. Each May, like clockwork, Bobolinks arrive from South America to do what birds do in spring – make more birds.

The male takes whatever perch he might find – a fencepost, an isolated tree or shrub, or even a lofty cow patty – launches skyward, issues his energetic, bubbly song, and stutter-flutters his black and white wings in flights across the field. It's a major turn-on for female Bobolinks (and for farmers or birdwatchers who witness the event).

"I have such an upbeat feeling when I see or hear Bobolinks," said bird-watcher Paula Gills of Northfield, Vt.

To get here from South America for their courtships and breeding, Bobolinks fly about 6,000 miles. It's an extraordinary feat for a bird that weighs only an ounce, which means you could mail a Bobolink anywhere

One of six biologists for Vermont science institute

Rosalind Renfrew, 39, grew up in Connecticut but began to shift her activities to Vermont during college years. She has an undergraduate degree from the University of Vermont, and a Ph.D. in wildlife ecology from the University of Wisconsin. As one of a half dozen conservation biologists employed by Vermont Institute of Natural Sciences (VINS), she has lately been working on updating material for the *Vermont Breeding Bird Atlas*, which is published every 25 years.

Recently, she has made three trips over the past three winters to different South American locations in search of winter habitat of the bobolink. Each trip is from six to 10 weeks, she said. Her trips, she said, are a combination of field camping, occasional rests in hotels and otherwise a life on the move. "Bobolinks are highly mobil by nature, so any biologists who are in pursuit of them have to be fairly mobil as well," she said. In addition to her work on bobolinks, she has conducted research on the winter ecology of hooded warblers in Mexico, and the breeding ecology of grasshopper sparrows in Florida. When home in Vermont, she enjoys working around her home and gardening.

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in the country for a mere 39 cents. But Bobolinks hardly need postage to get around. One female, known by researchers to be at least nine years old, making the round-trip annually, presumably flew a total of 110,000 miles,

which is the equivalent of circling Earth four-and-a-half times.

Despite that aerial prowess, Bobolinks have been declining across North America for at least 40 years. Bobolinks need grassy fields. But for

and set them free. Those blood samples are now being tested for pesticides.

Renfrew suspects that South American rice fields present Bobolinks with opportunity and risk alike. In one sense, a rice field is like a buffet for a Bobolink. Perhaps the rice even helps Bobolinks by supplying them with a reliable source of food for the winter. It is no secret that when birds discover agriculture – even landfills for that matter – their populations can increase. But rice could potentially be too much of a good thing.

“Bobolinks may be benefiting from this all-you-can-eat extravaganza that rice farmers are providing,” Renfrew said. “But it could also be a kind of ecological trap.”

So now that she’s found a Mother Lode of Bobolinks, Renfrew’s next steps include the protection of these wintering populations. But first, she must find where the rest of the birds are hiding.

“Simple awareness about Bobolink Meccas will be a huge step forward for us,” said Renfrew. “Bobolinks had been completely overlooked in South America, but now they’re actually becoming quite fashionable among biologists. When I saw a Paraguayan colleague of mine in South America this past winter, he told me: ‘Roz, it used to be that nobody here even noticed Bobolinks. Now they’re a fad.’”

Another fad in South America – this one not so popular – is deforestation. Bolivia, for example, has lost forest acreage during the past decade roughly equal to the acreage of

Vermont, Renfrew said. In one sense, the agriculture, especially rice, that replaces those trees is providing a breadbasket for species like the Bobolink. Yet, in the meantime, the natural grasslands where Bobolinks historically thrived are also being lost.

So when she returns, Renfrew intends to protect Bobolinks on two fronts – in those historic grasslands and on the rice farms as well.

“As natural savannahs are converted to rice fields, Bobolinks are losing their home-cooked meals to fast food,” said Renfrew. “So we need to protect that natural habitat and work with farmers to keep these birds away from the fast-food joints.”

For more information, contact the Vermont Institute of Natural Science: www.vinsweb.org. Bryan Pfeiffer is a well-known birder, naturalist, photographer and author based in Vermont. Contact him at Bpfeiffer@vinsweb.org.

‘...We can no longer take for granted the continued presence of Bobolinks on grasslands here in North America without paying attention to what happens to them each winter a continent away.’