

Matinicus

Running a Christmas Bird Count from the Rugged Beauty of a Remote Maine Island

All photos by Jeffrey V. Wells

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“I don’t know if I can do this,” said a tense voice from the back of the plane.

It was a small plane—a Cessna 207, for those who know something about such things—with just enough room for the five of us plus the pilot. Enough room, yes, but by no means roomy. Would claustrophobia signal a loss of one of our team before we even got started?

It was a potentially inauspicious start to what was to be the first-ever Matinicus Island, Maine, Christmas Bird Count three years ago.

Matinicus Island is a small nubbin of an island that stands as a remote western outpost in the wide mouth of mid-coast Maine’s Penobscot Bay. The 10-plus miles of gray, frothy ocean that separate it from the mainland and what were the potentially lethal contacts with the Wabanaki tribes that once summered there made it, like the islands of Monhegan and Damariscove just around the corner, the first places inhabited by Europeans on the North American continent. Fishermen have been hoisting a living from these cold but fertile waters since the 1600s, and some of the people there who can trace their family roots back 200 years still are. Others are relative newcomers, meaning that their families arrived anywhere from a hundred to a few years ago.

But all of them have in common one thing: a desire for, or at least a willingness to endure, isolation. Once there were as many as 300 Maine islands with year-round communities. Now there are only 14. Among the island communities still in existence, Matinicus has the reputation for being the most “lawless” and the least welcoming to outsiders. The island’s small year-round population (20 to 30 people) sometimes swells to over a hundred in the summer, with people-from-away and former residents who must leave in the winter to find work or so their high-school age kids can go to school (there were six kids in the ele-

mentary school in 2006). The island has no store or restaurant, only one small bed-and-breakfast, and an official state-run ferry service that was basically discontinued in the 1970s. The ferry was replaced by an air service that shuttles the mail, residents and their groceries and other supplies, and the occasional visitor. It was our discovery of this reasonably priced air service that prompted the realization that it would be possible to start a new Christmas Bird Count on Matinicus.

Christmas Bird Counts are one of the best-known examples of what is now gelling into its own class of scientific inquiry called citizen science. The citizen science concept—basically the idea that you can enlist and train volunteers to collect vast amounts of data that would be otherwise unattainable—has now been employed in questions as varied as monitoring water chemistry in aquatic ecosystems to tracking the spread of invasive plants.

But it is within the field of ornithology that citizen science has the longest and richest history. The list of ongoing bird citizen science projects in North America is long and varied: breeding bird atlases, seasonal summaries of bird records in *North American Birds* and a multitude of state journals, the Breeding Bird Survey, hawk migration counts,



the International Shorebird Survey, FeederWatch, and, more recently, the Great Backyard Bird Count and eBird. There are hundreds more, especially at the state or regional level, but the Christmas Bird Count is the granddaddy of them all. From its start over a hundred years ago, the CBC now encompasses the involvement of tens of thousands of birders with surveys at more than 2000 locations.

That’s how we found ourselves strapped into a Cessna 207 three years ago for that first Matinicus Island CBC. After switching my seat in the front for my claustrophobic teammate’s seat in the back, Rod the pilot gave us a quick safety briefing (“if you have to throw up, don’t get it on my seat”) and we were off over the icy Atlantic flying to Matinicus Island.

Twelve minutes later, as the plane made a wide arc and began to descend toward the island, the pilot turned toward us again. “When we get down low it may get a little bumpy and it may look as if I am trying to commit suicide by running us into a barn,” he said. “But don’t worry.”



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We were on the ground in no time with nary a scream from any of us. The five of us on that first Matinicus CBC—Cindy, Dave, Louis, Noreen, and me—had only a small pencil-drawn map and a memory from an afternoon visit that I had made to the island 25 years ago. But it's hard to get lost on an island two miles long and a mile wide.

There is something very compelling about the fact that an island, especially a small one, is a clearly defined region within which the birds you are trying to identify and count (at least the land birds) can roam. Not only is there less space in which the birds can hide, but we counters have no choice but to spend lots of time carefully crisscrossing the limited area as we search for more birds. That means that, in general, a higher-than-average percentage of the birds present are more likely to be found.

Islands are also interesting ornithologically because of the fact that they are by definition isolated, some more than others, from the mainland. Migrant land birds that find themselves out over the sea and exhausted will fly to the closest land in sight, which is often an island. Because of this, islands often host a more concentrated sample from a broad segment of the wave of migrants passing over an area than typically occurs on a comparably sized piece of mainland ground. The effect is like a fishing net that covers a wide area but gets smaller

and more concentrated as it is winched in aboard the relatively small boat where the catch ends up. In this analogy the net is the area of sky from which the island can be seen by a migrating bird and the boat is the island. Just like a fisherman sorting through a catch of fish on the deck of his boat, birders love to visit island "migrant traps" to sift through the concentrated sample of birds, especially for the rare and unusual.

And there's more. Oceanic islands are places from which to see seabirds, waterbirds, and shorebirds. There are also the classic questions of island biogeography related to how isolation, island size, and time interrelate to determine what resident birds live on the island at any particular time.

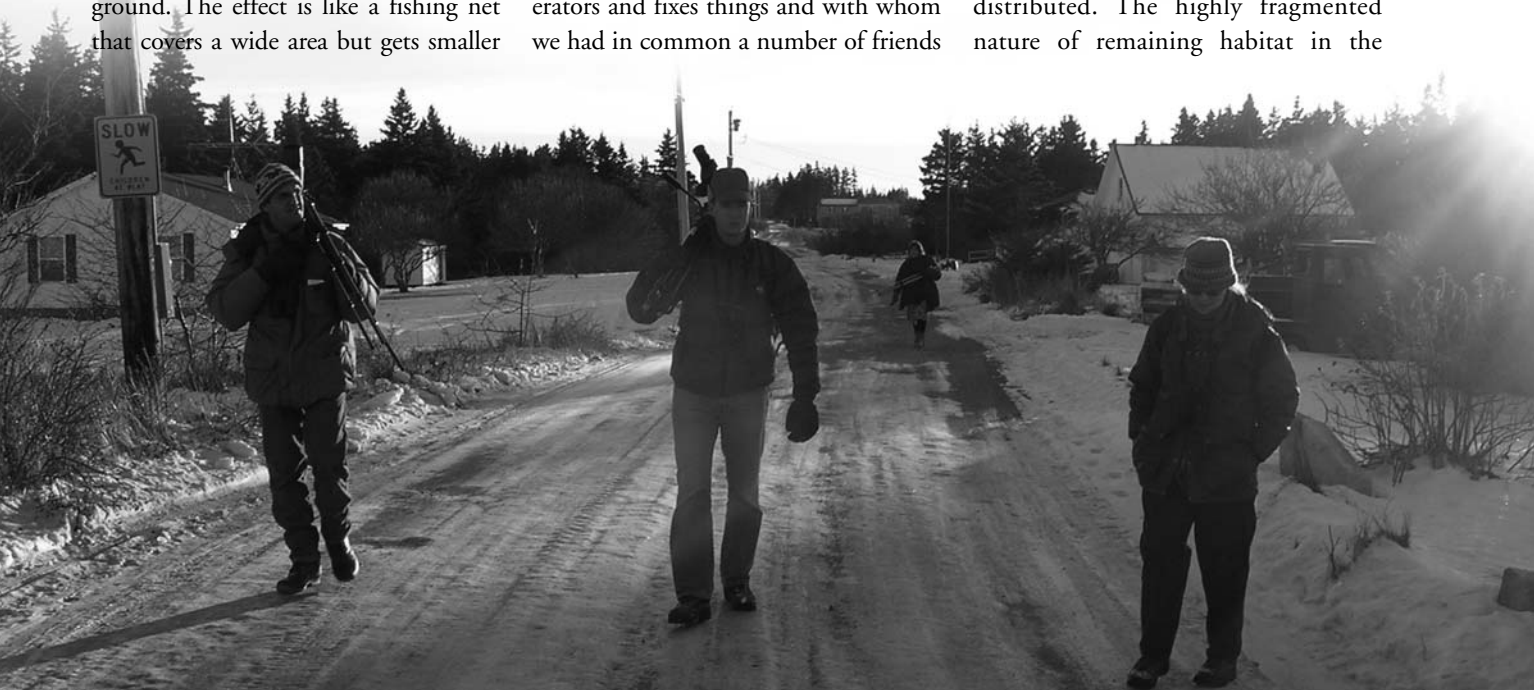
Lots of other reasons exist why islands are fascinating from an avian perspective. For me, I just wanted to know what might be out on a small windy island 10 miles off the Maine coast.

That first Matinicus CBC was particularly memorable. We saw some great birds, 49 species to be exact. We met some great people too. None of them seemed particularly unfriendly or lawless—just a bit curious as to why a bunch of people were walking around the island on a cold winter day with binoculars and telescopes.

There was the man who runs the generators and fixes things and with whom we had in common a number of friends

back on the mainland. Later we met his wife who was flying back to the mainland to pick up her high-school age son for the Christmas break. And the innkeeper who heads up the island's Democratic committee and thinks regularly about moving to a quieter island 400 miles off of New Zealand because it's become too busy on Matinicus for him. There was the lobsterman with the whalebone arch (scavenged from a dead minke whale that washed ashore) over his gate who remembered the days when Great Black-backed Gulls were almost gone from Maine and whose grandmother was an avid birder. And there was the woman we met at the airstrip whom we helped load boxes of groceries into her car from the plane. She was a committed bird-feeding enthusiast and had apparently established a persistent flock of Northern Bobwhite on the island, though we never saw or heard them ourselves.

Citizen science projects like the CBC we started on Matinicus have always been important to furthering our understanding of changes in numbers and distributions of birds, but perhaps never more so than today. Scientists are discovering that the speed and pattern of species range shifts, and ultimately the species' very survival are intimately connected to the ways in which they are distributed. The highly fragmented nature of remaining habitat in the





Approaching the islands and coast of outer Penobscot Bay.

United States and southern Canada, coupled with the rapid northward advance of many species induced by global climate change, makes it especially critical to have survey data from a vast number and geographic spread of sites. The only possible way to get that data is from citizen science projects like the CBC.

Our Matinicus Island count has been underway only three years, but there have already been some great surprises. Like CBCs in much of the United States, we find that our numbers are dominated by species that breed in the boreal regions and come south to winter. Some of these are waterfowl or waterbirds that are present nearly every year: Common Loons, Horned and Red-necked grebes, Red-breasted Mergansers, Bufflehead, and Black, Surf, and White-winged scoters. Others have shown wide swings in abundance related to severity of weather conditions that govern where the northern limit of wintering range may be from year to year. This includes species like Dark-eyed Junco, which went from five in the first year of the count to over a hundred the second year and down to zero again this past season. Winter Wren (5-5-0), Yellow-rumped Warbler (0-29-0), and White-throated Sparrow (1-27-0) are among others that showed a similar pattern. Boreal irruptives have made their way out to the

island as well—Common Redpolls and White-winged Crossbills in one year, Bohemian Waxwings in another, and Northern Shrikes in several.

Scanning out over dark seas from the island into the face of a tear-inducing wind has yielded, in some years, flocks of Northern Gannets, Black-legged Kittiwakes, and Razorbills. The Northern Cardinal, now a resident on the island, is a species that as recently as 60 years ago was a rare visitant in Maine. On the other hand, we have not registered another recent invader to the state—the Tufted Titmouse—despite the fact that it is now common on the mainland. Every year the dark green spruces on the island seem to harbor lots of the thin, high calls of tiny Golden-crowned Kinglets and in some years also lots of Red-breasted Nuthatches. We consistently note the almost complete lack of gulls flying over, which is in stark contrast to nearby Monhegan Island.

One of the biggest surprises for me came during the most recent count. After Kirk, one of my fellow counters, recovered from a tumble down a bank on the north side of the island (he saved his expensive camera gear and himself!), we all sat down to eat lunch. As we gazed out over the sea toward the neighboring island of Criehaven I spotted a large, dark bird flying toward us. I assumed it would be another of the several Bald Eagles we had already seen that day but when I put my binoculars on it I was surprised to see the silvery wing linings and red, naked head of a Turkey Vulture! Kirk quickly picked up his camera and snapped some close-ups of the rather tattered-looking bird as it passed low over us. We wondered if the poor thing was so hungry that it had spied my red jacket in the distance and hoped it was a heap of carrion.

Turkey Vultures began summering and breeding in Maine over the last 30 to 40 years and have spread north fairly quickly, but only in the last few years have a few been wintering here as well. And to make the sighting even more surprising, Turkey Vultures usually seem to

avoid going out over the ocean and, on well-birded islands like nearby Monhegan, are only occasionally seen during migration.

Even in the middle of the normal hubbub of human life, the sounds, behaviors, and presence of these birds tell us about the broader world—the natural world with its never-ending ebb and flow that goes on without concern to whether humans notice it or not. The birds don't try to send us messages to communicate what is happening to them, but we get the messages anyway, and the information we gather from paying attention to them is that much more important. There's no political spin coming from chickadees.

The Turkey Vulture on Matinicus, the chickadees in my backyard, the juncos at your feeder, none of them have the capacity to understand that the humans around them decide whether they will have a place to nest or food to eat. Increases and decreases in their numbers, changes in behavior and timing of life-history events, shifts in diet—there are lots of ways that we can and must use birds as indicators for tracking environmental health, and citizen science projects like the Christmas Bird Count are how we listen to what they have to say.

Each year on the Matinicus Island count, the end-of-the-day scenario seems to repeat itself. Despite assurances from the morning pilot that the plane will arrive before sunset, the sun has set before our plane has arrived to take us home. We stand on the edge of the frozen dirt landing strip, scanning the sky, listening for the whining buzz of an approaching plane and wondering whether we will be tramping in the dark over to the innkeeper's place for the night. But the plane always arrives and we take off over the ocean under a full moon. Huddled into our down parkas and hats, the motor droning in our ears, we gaze out over a band of moonlight, bright and cold on the water stretching away to the edge of the sea. We know we will be back next year to find out what the birds are telling us about Matinicus and our world. 