Viewpoint

Protect our boreal birds

By Michale Glennon

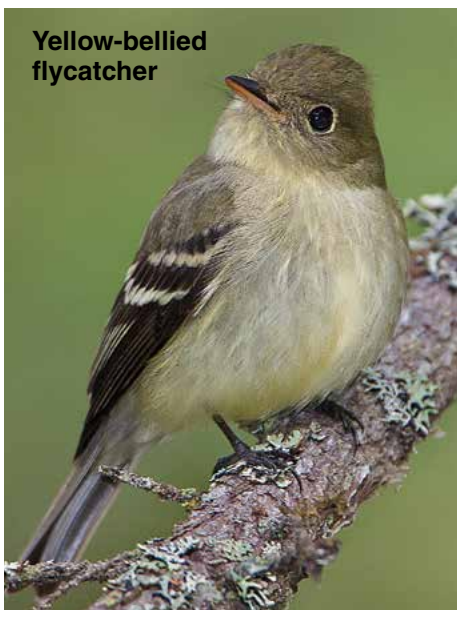
THE ADIRONDACK Park is in the southern edge of the range for several species of boreal forest birds within eastern North America. The haunts of these boreal specialists—cool, wet, sphagnum-draped bogs and swampy woods—are thought to be particularly vulnerable to climate change.

Effects may include encroachment by trees into open bog landscapes, increased competition with southern plant and animal species expanding northward, and altered timing of annual events like insect emergence upon which these birds depend for food.

Adirondack peatlands are deeply significant in this landscape as habitat for iconic species like moose, loon, and marten and as the source of the timber that built the earliest Great Camps. Though these open bogs, peaty river corridors, and conifer swamp woodlands are still often perceived as dismal swamps, these boreal habitats in fact remind us that we live in a truly northern place.

I've been researching Adirondack birds, including boreal species prized by bird-watchers, as a part of the Wildlife Conservation Society's (WCS's) North America program. These birds are scarce and they're getting scarcer.

WCS has been working for more than a decade to understand population trends for these rare species. Most show a pattern of decline. For some, like the boreal chickadee and Lincoln's sparrow, declines are modest. For others—such as the rusty blackbird, gray jay, yellow-bellied flycatcher, olive-sided flycatcher, and black-backed woodpecker—the declines are more troubling. The number of boreal peatlands occupied by those five species has declined by at least 15 percent since 2007. Of the boreal birds, only the palm warbler appears to be increasing in our landscape.



Yellow-bellied flycatcher

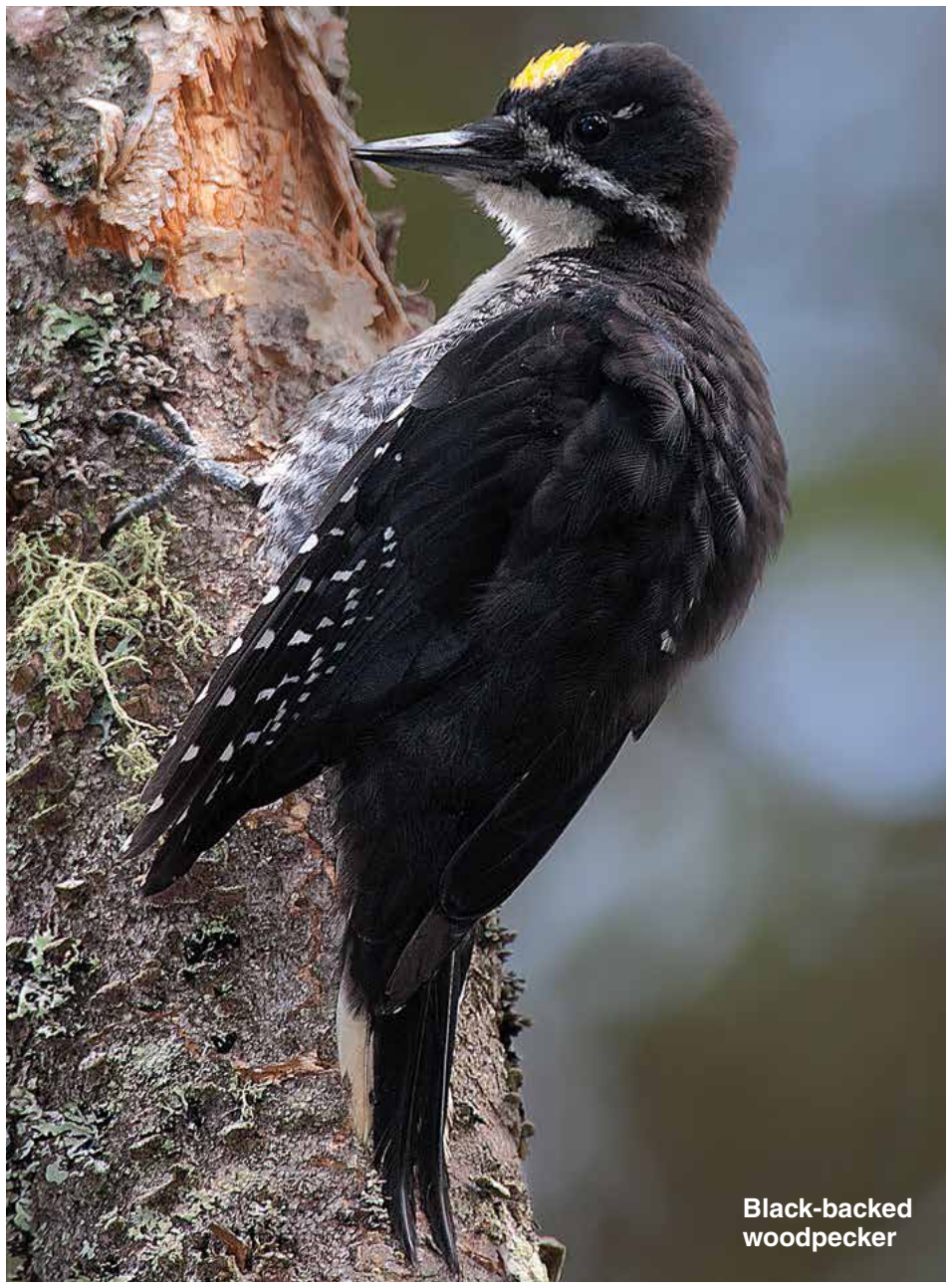
My research has found that boreal birds are much more likely to disappear from smaller, isolated wetlands that are close to roads and residential development. They are sensitive species and may face competition from more cosmopolitan birds like blue jays that hang out where people do. Some species appear to be moving northward or upslope in response to climate change. Ultimately, the declining status of boreal birds in our landscape is likely the result of a combination of these factors.

There are a few things we can do to help these birds. At the local level, individual landowners and town planning boards can protect patches of habitat of all shapes and sizes—not only bogs but the forested connections between them. While state regulations render bogs some protection, ecologically sensitive development practices can help preserve the associated conifer swamps and broader networks of boreal habitat. These practices include conducting a thorough ecological assessment of building sites prior to development, placing houses on areas of least-sensitive habitat, and setting aside a portion of the site as open space. (See WCS's *Make Room for Wildlife* brochure, available on our website, for more details.)

At an intermediate scale, wise logging practices on industrial timberlands can help maintain boreal habitat. These include avoiding heavy machinery on peatlands and maintaining vegetated buffers around them; conducting only partial harvests of timber (and only when the ground is frozen); allowing mature forest characteristics such as large trees, snags, cavity trees, and closed canopies; leaving some wind-throw trees on the ground rather than salvaging them all; and establishing timber rotations of longer than seventy years. Restricting ATVs and other off-road vehicles in and around peatlands and locating trails at least a hundred feet away from them are also recommended.

At a broader scale, the Adirondack Park Agency (APA) and state Department of Environmental Conservation (DEC) can play a big role in preserving boreal habitat. Ideally, the agencies would identify and protect critical boreal areas in jeopardy. Although such a Park-wide approach poses challenges, the agencies can devote special attention to boreal habitat in management plans for Forest Preserve tracts.

Boreal peatlands offer tremendous opportunities for the enjoyment of nature



Black-backed woodpecker

Photos by Jeff Nadler

because of their biodiversity and the habitat they provide for some of New York's rarest birds, yet fostering greater awareness and appreciation for these habitats while preventing activities that will degrade them is a significant challenge. Protective measures in recreational areas can include: constructing raised boardwalks, restricting public access near rare plants, forbidding motorized recreation, and maintaining a three-hundred-foot buffer where development, agriculture, and forestry are not allowed.

Monitoring ecological systems is critical to understanding the health of habitats and how our decisions affect them. This monitoring is hard to fund so scientists are increasingly relying on the collective power of wildlife enthusiasts sharing observations through tools like "eBird." The volunteer monitoring project recently started by the Adirondack Ecological Center and the Center for Biodiversity at Paul Smith's College is a fantastic opportunity to gather information on boreal birds and other species, as well as their wetland habitats. The project is centered on a Boreal Baker's Dozen—thirteen species that citizen scientists will help track in selected wetlands throughout the park.

The ability of individuals to foster conservation is nowhere more apparent than in the effort to address climate change, the greatest threat to our Adirondack boreal habitat and its residents. We've all heard the recommendations before: drive less, bike more, eat local. While we may believe the actions of one person will make no difference, climate change is ultimately a cumulative-impacts problem. Like the protection of our precious boreal forest, it's going to take a cumulative approach to get us through it.

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