

T WAS 10:30 on a crisp, cold night in early March. Dana Smith, a 37-year-old Maine construction worker and avid wildlife enthusiast, blew a series of barks on his coyote call and then howled into the wind. After several attempts, coyotes responded.

Smith then imitated the bleat of a young deer. The coyotes stopped howling. What happened next surprised even Smith, who has observed wildlife for years in these woods near his home in Bangor.

"The wind direction was good from my position, and it was a clear, moonlit night," he relates. "I had a sixth sense that something was behind me, and when I slowly turned around, I saw a black form slinking through the bushes."

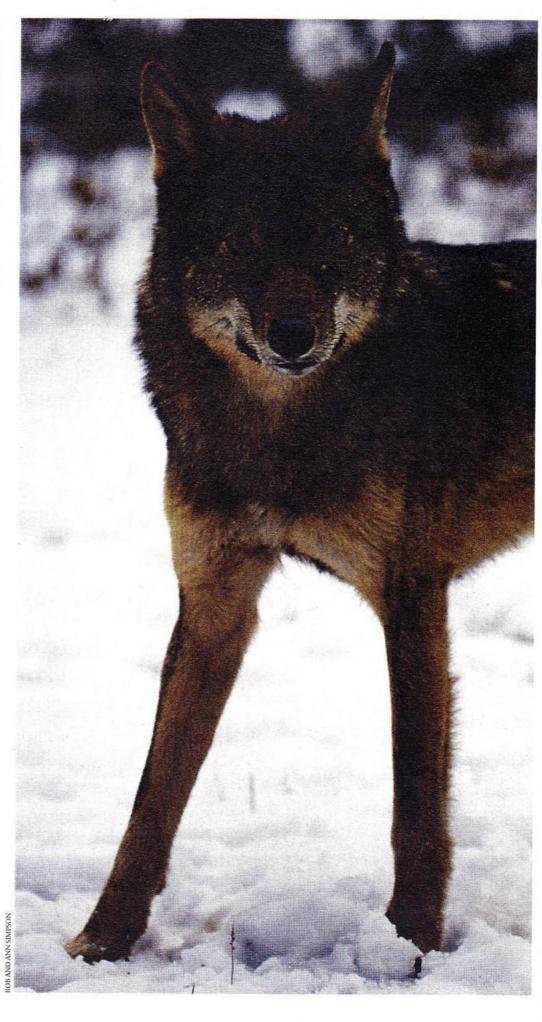
For ten minutes he watched through a spotting scope as the animal worked its way to within 40 yards of where he was sitting. "It was too big for a coyote, well over 100 pounds, and I've never seen an all-black coyote. There was no question in my mind. It was a wolf." In minutes the animal faded back into the frozen alders lining the edge of a bog, unaware of the passion it had triggered in the hidden observer.

Maine's Department of Inland Fisheries and Wildlife cites one recent definite record of a wolf in the state and a second animal that biologists believe was a wolf. The first was a large black female shot by a bear hunter in 1993 near Greenville at the lower end of Moosehead Lake. Genetic testing confirmed that it was a wolf, although physical and behavioral evidence indicated that it might have had a captive history. In 1996 near Aurora, east of Bangor, a coyote trapper caught an 86-pound canid. Although genetic testing proved inconclusive, the animal was too large for a coyote, according to mammal group leader Wally Jakubas.

"Although there may be the occasional solitary dispersing animal, we don't believe we have a population at this time," says Craig McLaughlin, a member of the mammal group.

Officially, the last northeastern wolf was killed in upstate New York in 1897. By the 1930s, wolves had been all but

This wild wolf in Algonquin Provincial Park in Ontario may be related to those that once roamed the northeastern U.S.



extirpated throughout the lower 48 states. The federal government listed eastern timber wolves as endangered in 1967, although in 1978 it downlisted those in Minnesota, the largest Lower 48 wolf population, to threatened. In 1978 the government also developed a plan for northeastern restoration of the eastern timber wolf, which scientists believe originally ranged from Maine to Minnesota. The plan designated New York's Adirondack Park and two areas in Maine as potential recovery sites. These three areas remain in a revised 1992 plan, but because wolves have been doing so well in Minnesota, Michigan and Wisconsin, the government so far has not actively pursued northeastern restoration.

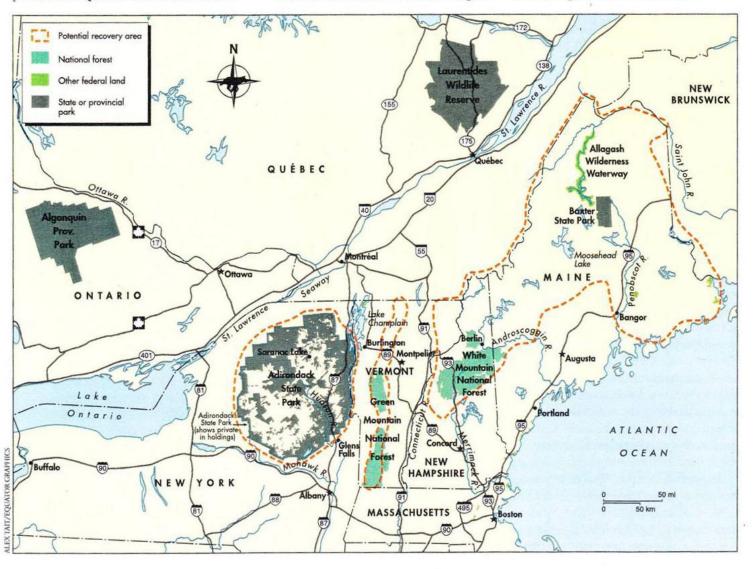
Wolves can be found in Quebec less than 60 miles from the Maine border, but biologists are doubtful that these will recolonize the Northeast in significant numbers. Any wolves attempting to disperse from Quebec would face numerous challenges. The high mortality rate in the Canadian population means that vacant territories are available, so there is little incentive to travel long distances in search of a new home. The occasional wolf that might travel south would encounter extensive roadways and development in the St. Lawrence Valley, legal hunting and trapping and the St. Lawrence Seaway, which is kept from freezing over by shipping companies. The net result, at best, is that few wolves are likely to make it to Maine.

Yet Walt Peppermint of the Maine Wolf Coalition, a nonprofit formed in 1994 to promote eastern wolf restoration, asserts: "People report seeing wolves right there on the New Hampshire-Canada border. How they're getting through that gauntlet, with hunting and all those obstacles in Canada, I don't know. But it's an ingenious, adaptable animal we're talking about."

Scientists and advocates seem to agree

that if wolves did make it across the border, the northeastern states would offer plenty of suitable habitat and prey. One recent study concluded that the Northeast could support as many as 1,800 wolves. From the Adirondacks' Oswegatchie Wilderness Area to Maine's Baxter State Park, the Great North Woods totals nearly 30 million acres of hardwoods and evergreens, unspoiled rivers and lakeshores and abundant wildlife beckoning wolves.

Despite the availability of habitat, without the tolerance of local residents wolves could find much of the Northeast a hostile environment. Unlike the recent wolf reintroduction in Yellowstone National Park and surrounding national forests, the vast majority of potential wolf habitat in the Northeast, especially in Maine, is owned by timber companies whose employees rely on logging for their livelihood. And some North Country residents are suspicious that wolf restoration could bring land-use restrictions.



Some hunters are concerned that wolves could compete for prized prey animals. But L. David Mech of the National Biological Service, one of the world's leading wolf biologists, believes the impact on hunters would be minimal. "The issue of deer and hunters is always a concern when talking about wolves," he says. "But the amount the deer herd is impacted depends more on the severity of winter weather. While there will always be hunters who see wolves as competitors, the amount they actually affect deer is much more conjectural. Wolves can't kill all the deer they want. Deer have to be vulnerable."

Nevertheless, the Sportsman's Alliance of Maine has been a vocal and politically potent opponent of wolf restoration efforts. In 1999 the alliance sought to have a bill introduced in the legislature to bar wolf reintroduction. Although the attempt failed because it came too late in the legislative session, leaders have vowed to try again. A similar New Hampshire bill passed in 1999 and was signed by the governor.

The Sportsman's Alliance probably does not speak for the broader public. Opinion surveys have been sponsored by several groups and institutions. One in 1995 sponsored by Defenders of Wildlife indicated that a majority of northeastern residents favored Adirondack wolf restoration. A recent survey by the University of Maine showed strong support for wolf recovery in Maine, although natural recolonization was preferred to reintroduction.

While wolf experts have always considered social attitudes the main impediment to restoration, a biological question complicates the subject. What wild canid historically lived in the Northeast? For years biologists believed it was the eastern timber wolf, Canis lupus lycaon, the same gray wolf subspecies that today inhabits the Great Lakes states. But recent genetic studies have raised doubts as to whether wolves in southeastern Ontario, presumably the same as those that formerly lived in the northeastern states, are really gray wolves. Paul Wilson, a genetics researcher at the Trent University wildlife

forensic DNA laboratory in Peterborough, Ontario, is blunt: "In six years of searching we've been unable to find any evidence of the presence of gray wolf genes in these eastern Ontario wolves." In fact, he has discovered a genetic trait in southeastern Ontario wolves that was thought to be unique to red wolves reintroduced in 1987 in North Carolina.

The smaller eastern Ontario wolves differ from their western gray wolf counterparts in that they sometimes hybridize with coyotes, a trait also common among red wolves (Canis rufus). If this species turned out to be the most appropriate candidate for restoration in the Northeast, conservationists could face the same hybridization challenge currently plaguing red wolf restoration in northeastern North Carolina. Brian Kelly, former U.S. Fish and Wildlife Service (FWS) red wolf recovery coordinator, says, "The service has a mandate to reintroduce and restore a species that has a genetic standard. We're losing that standard because red wolves are interbreeding with non-red wolf canids, mainly coyotes."

According to Wilson, the key to northeastern wolf restoration may lie in occupied wolf habitat in Canada. "If you're going to restore wolves to the northeastern states, you have to look at models like Algonquin Provincial Park in Ontario to see what the animals are doing," he says. "They're keeping the coyotes out of there. What kind of conditions would you have to recreate in New York or New England to mimic that situation?"

However, Wilson thinks the wolves of the Laurentides Reserve in Quebec may be better candidates for restoration in the moose-dominated north Maine woods. "They appear to eat moose readily and might do well in Maine. Additionally, these 100-pound wolves apparently don't interbreed with coyotes," he points out.

For many northeasterners, the entire debate is academic, for they believe the eastern coyote has already filled the wolf's niche. After all, coyotes sometimes form packs, regularly prey on deer and on at least one occasion were even observed killing a moose. But biologist Dan Harrison at the University of Maine does

not believe that wolves and coyotes are ecological equivalents. "One response I've heard is that we don't need the wolf because eastern coyotes act like wolves," he says. "I strongly disagree with that, because although these eastern canids occasionally form packs, they don't do it for the reason of cooperative foraging. Coyotes focus on fawns, and while they do eat adult deer, there is no evidence that they're foraging in large groups specifically to prey on deer. Historically the Northeast was a moose-caribou system. The animal we have here is quite an ineffective predator on moose. There is certainly an ecological role for a bigger canid. Whether humans should proceed with filling it via reintroduction is not something a university should decide."

Ultimately, federal and state officials will decide whether to restore wolves to the Northeast. Last July, FWS proposed changes in the regulatory status of wolves



The eastern coyote has filled the niche once occupied by the larger gray wolf in the Northeast. Scientists are concerned that returning wolves and coyotes might interbreed.

in the lower 48 states. For the Northeast, it proposed creating a distinct population segment (DPS) for wolves and downlisting wolves in the region from endangered to threatened. "There are a number of reasons to list the DPS," says Paul Nickerson, FWS chief of endangered species for the region. "There's a substantial block of land, 27 to 30 million acres, with an excellent prey base — white-tailed deer, moose and beavers — and possible donor wolf populations in Canada."

Conservationists have applauded the FWS pledge to give further consideration to northeastern restoration, but some are alarmed by the pending downlisting proposal. FWS claims downlisting would encourage support from local citizens by permitting more flexible regulations. But Kristin DeBoer of Restore: The North Woods, an environmental group working for protection of northeastern forests,

declares: "There is no legal or scientific justification for downlisting. It is a purely political compromise designed to appease special-interest groups at the expense of wolf recovery."

Given the relative scarcity of public land in the Northeast, landowners will play a crucial role in the decision-making. A working model for such public involvement has been tested in New York, where Defenders worked with Paul Smith's College of the Adirondacks to create a citizens' advisory committee on wolf restoration. The committee, nearly 20 representatives of diverse stakeholder groups, was instrumental in designing a biological and sociological feasibility study of upstate New York.

This study, however, produced more questions than answers. The biologists who did the study, Paul Paquet and Jim Strittholt of the Conservation Biology Institute in Corvallis, Oregon, concluded

that the Adirondack Park could support a small number of wolves but that hybridization with coyotes and increased development in and adjacent to the park could threaten the long-term viability of a reintroduced population. Although this finding concerned some participants and has been disputed by some other scientists, notably Mech, the process itself won praise as a model of how divergent interests can work together on controversial environmental questions.

Given the challenges, the only current certainty is the need for more research. Todd Fuller, a University of Massachusetts canid expert, asks several key questions. "The conundrum is that people want to return something that was originally there but we don't know what that something was," he declares. "If we put a wolf there, would it survive and would it do what we want it to do? The question is what kind of landscape we



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Moose, at right in Sandy Stream Pond in Maine's Baxter State Park, would be an important prey species for wolves. They are too large for coyotes to hunt effectively. A spruce grouse, above, is part of the area's woodland ecosystem.

want in the Northeast. What do people want, and can we do it?"

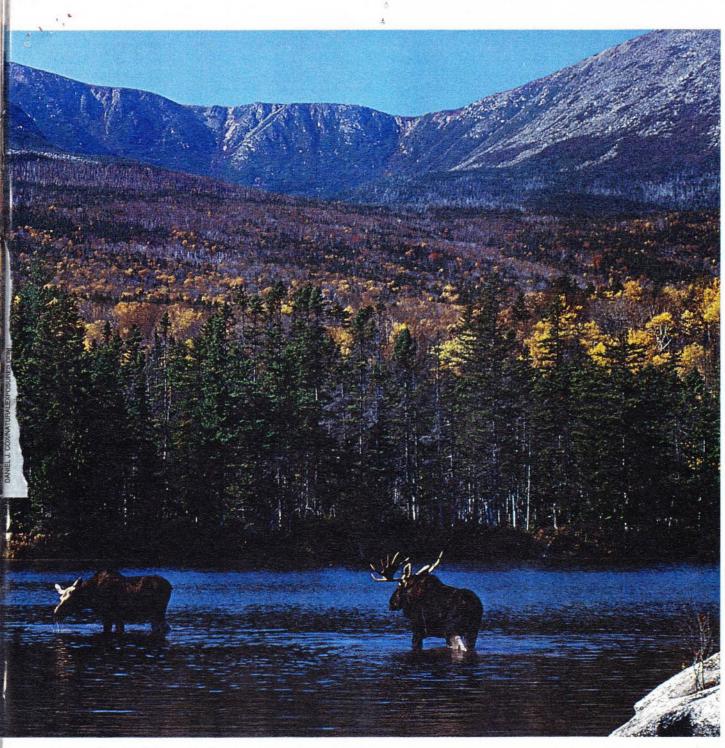
So far, these questions remain unanswered, but with growing attention from conservationists, researchers, managers and others, the effort to provide answers is gaining momentum. More than 30 wolf groups have formed the Coalition to Restore the Eastern Wolf (CREW) to promote public outreach and further study of the wolf-restoration potential. Last summer Defenders and FWS organized a

four-day wolf workshop attended by nearly 50 people from New York, Vermont, New Hampshire and Maine. The workshop resulted in a lengthy report that should prove useful as FWS assesses the potential of wolf recovery in the Northeast.

Since his wolf encounter, Dana Smith has logged hundreds of hours in the field searching for signs of wolves. He has poured plaster casts of tracks,

listened for howls and searched for den sites. With remote photography equipment provided by Defenders of Wildlife, he has set up several bait stations where infrared-triggered cameras wait to capture the Northeast's top carnivore on film. The cameras have not lain dormant. In the last two years they have recorded dozens of creatures, including deer, fishers, rabbits, squirrels, a large black bear, an angry moose and several





coyotes. Yet the holy grail of eastern wilderness has so far evaded the camera's eye. But Smith, with others, remains undaunted in his search for the eastern wolf. He thinks it is just a matter of time.

Nina Fascione is Defenders of Wildlife's director of carnivore conservation. Stephen Kendrot formerly represented Defenders in New York State.

DEFENDERS OF WILDLIFE is supporting research on genetic questions involved in potential northeastern wolf restoration. Defenders is advocating indepth study of the biological, sociological and economic factors in order to support informed decisions about the best way to restore a natural balance to the northeastern ecosystem, complete with its original top predator, the wolf.

Maine residents wishing to report a wolf sighting should write to Maine Wolf Coalition, 190 Water Street, Hallowell, ME 04347, or Maine Department of Inland Fisheries and Wildlife, 284 State St., Station #41, Augusta ME 04333-0041. See Defenders' website, www.defenders.org, for more on wolves.