

Can timber wolves come back to the Northeast?

Way of the Wolf

The stunning success of the U.S. Fish and Wildlife Service’s reintroduction of 31 wolves to Yellowstone National Park in 1995 created a wave of optimism that buoyed the spirits of wildlife advocates across the country. Word from the Midwest, where there has been a steady natural expansion of wolves from Minnesota into Wisconsin and northern Michigan, was also encouraging. As old barriers come tumbling down, new opportunities are appearing. The most remarkable possibility is that eastern wolves—hunted to extinction at the end of the nineteenth century—might once again roam the forests and woodlands of the Northeast.

Soon after the Yellowstone reintroduction, I was invited, as director of North America programs for WCS, to a discussion among groups interested in wolf recovery in the Northeast. That meeting generated many useful ideas, and several questions. From the



outset, a major issue has divided participants: One side favors natural wolf recovery via migration from Canada; the other prefers an organized translocation.

Advocates of migration-based recovery cite its lower cost, “naturalness,” and greater likelihood of public acceptance. Those arguing for human-assisted reintroduction rally around the proven

success of Yellowstone. A second difference arose between those favoring the Adirondacks as the recovery site and a pro-Maine contingent. In either case, uncertainty about prey availability and potential problems with resident coyotes has further muddied the waters.

Our first step was to identify suitable wolf habitat in the eastern U.S., from New York to Maine, and in Canada. I met with carnivore biologists Todd Fuller from the University of Massachusetts and Dan Harrison from the University of Maine. We agreed on a simple, yet robust, attack. Using criteria that Fuller and others had developed based on wolf movements in the Great Lakes region, Harrison made a computer analysis of the area. The resulting geographic information system (GIS) combined data on existing forest cover, road densities, and human population densities to produce a series of maps.

The GIS analysis identified two potential core areas for wolves: One in the Adirondacks consists of roughly 6,000 square miles; the other, nearly 27,000 square miles, is concentrated in Maine. But the data also revealed a daunting array of manmade

barriers—especially roads and settlements—that cut off the Adirondack region from Canadian wolf populations. Northern Maine and New Hampshire, on the other hand, are tenuously connected to prime wolf habitat in Québec by two possible migration corridors straddling Québec City. Local concerns about wolf recovery had to be resolved, however, before we could test whether these computer-generated corridors offer potential for wolf movement in the real world.

“Alors, Monsieur Weber, vous voulez que nos loups traversent la vallée du St. Laurent pour arriver chez vous?” Hélène Jolicoeur, chief wolf biologist for the provincial government of Québec, is agitated. She has a deep appreciation of wolves but does not share what she calls the “almost religious belief” of some advocates in the potential for natural recovery. She also knows that natural wolf migration is a political minefield. I reassure her that we do not necessarily want her wolves to walk across the St. Lawrence valley. We would simply like to see if migration is possible.

Jolicoeur’s apprehensions about migrating wolves are shared by many of her colleagues and compatriots. Unlike their U.S. neighbors, the Québécois have found a way to co-exist with wolves: These ancient predators live north of



the St. Lawrence River, and most of the human population dwells in the valley or to the south. Enter les américains, who propose not only the return of the native, but that wolves be allowed safe passage through the heart of Canadian communities.

WCS, Jolicoeur, and other wildlife experts arrange to meet within the corridor zone in southern Québec. The atmosphere is amicable. Everyone agrees that natural corridors should be protected to permit free movement of many species, from migratory birds to lynx and moose. But there is no evidence of wolves trying to cross the St. Lawrence in recent years, nor are there confirmed sightings to the south of that natural barrier that would support a migration-based recovery plan. Government data provide a likely explanation: In each of the preceding ten years, an average of 523 wolves have been trapped or killed in Québec, an annual loss equivalent to roughly 10 percent of the Québec Province wolf population. Presumably, this group includes a disproportionate number of southbound migrants. It is also certain that eliminating those 523 wolves opens up new territories north of the river.

Southward migrating wolves have to negotiate a formidable obstacle course. Any wolf that makes it to the St. Lawrence must first cross that powerful river, kept open throughout the winter by ice-breakers. On the southern shore, the animal would provide a tantalizing target to the intensive hunting and trapping culture that dominates southern Québec. Finally, should a lone wolf survive this imposing gauntlet, it might wind up in Maine, but without another wolf in sight. Interbreeding with the large population of resident coyotes would be an option, but not one that would produce true wolves—just

ever-larger, hybridized coyotes. Our colleagues also note that wolf recovery in New England by any means would constitute a “backdoor” reintroduction of wolves to Québec south of the St. Lawrence and to neighboring New Brunswick.

The WCS-sponsored meeting in Québec exposed the severe limits to natural wolf migration into the northeastern U.S. And it revealed heightened political sensitivity to the issue on the part of the Québécois, sensitivity that could intensify under pressure from U.S. wolf advocates.

If recovery becomes a reality, the Québécois prefer an active reintroduction in which wolves would be captured from an appropriate population north of the St. Lawrence, then transported over or through their towns and villages by truck or plane. This founder group would then be translocated to one or more selected sites, habituated to local conditions, and allowed to bond over several weeks prior to release. The resulting concentrated population would contain many wolves that had formed pair bonds and, perhaps, even mated, thereby avoiding the problem of interbreeding with coyotes.

In Yellowstone, this approach has succeeded beyond all expectations. Wolves there, however, were released in a predator paradise teeming with elk, moose, and mule deer by the tens of thousands, all concentrated in open valleys. Does the Northern Forest of New York or New England offer such a bounteous feast?

Adirondack State Park has a tremendous advantage in that almost half of this 10,000-square-mile reserve is protected as “forever wild” under the New York State constitution.



The result is a fabulous forest that increasingly resembles never-disturbed old-growth wilderness. But a drawback of old-growth forest is scant secondary vegetation to attract deer and other browsers. Adirondack public lands generally support three to five deer per square mile, compared with the five to ten deer per

square mile found on neighboring private lands. WCS has estimated that with such low deer densities and with an individual wolf typically consuming about 20 deer per year, the Adirondack ecosystem would at most sustain 150 wolves. This is below the minimum viable population of 200 animals suggested by most experts.

The picture in Maine is considerably brighter. Here, moose and deer thrive on secondary vegetation produced by the state’s hyperactive logging economy. This abundant supply of prey, ranging across an area of prime habitat that is more than four times larger than that of the Adirondacks, could support a population of at least 575 wolves.

Direct reintroduction via translocation, therefore, appears to offer the best chance of establishing a breeding population of wolves and avoiding genetic swamping in a sea of coyotes. We are awaiting the results of studies that will enable us to better understand the genetics of eastern wolves, which some experts believe to be more closely related to the red wolf, *Canis rufus*, than to the gray wolf, *Canis lupus*. If that is the case, the eastern wolf already may be an ancient breed of wolf–coyote hybrid.

Public opinion is perhaps the most critical issue. Failure to address concerns of Western ranchers blocked the Yellowstone reintroduction for more than 20 years. Premature proposals to reintroduce wolves in the Northeast could cause similar problems. Politicians in New Hampshire and at least one New York county have already voted to ban wolves from their jurisdictions. A WCS-funded study is under way to determine how attitudes in the Adirondacks are forming around the wolf issue.

The biological feasibility of wolf recovery in the Northeast is no longer in question. If we are willing to listen to others, acknowledge their concerns, and seek solutions that accommodate multiple interests—perhaps including a higher degree of local control than the Endangered Species Act might currently permit—we can break through remaining cultural and political barriers. In the process, we will improve the ecological health of our forests and the spiritual health of our lives. We will also keep faith with millions of others around the world who are working to preserve our common wildlife heritage. After all, if we expect people in India to live with tigers, why can't we live with wolves?

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