

name that will help draw attention to its restricted distribution and to the importance of Algonquin Park in keeping at least a small remnant of this special wolf on the landscape.

To help protect the Algonquin Wolf in its limited range, in 2001 the Ontario Ministry of Natural Resources implemented a moratorium on hunting and trapping wolves in the 42 townships that surround Algonquin Park. In 2016, the protection status of the species was upgraded from Special Concern to Threatened in Ontario due to its small population. Other regions where the Algonquin Wolf occurs and is also now protected from hunting and trapping are Killarney, Queen Elizabeth II Wildlands and Kawartha Highlands Provincial Parks and the areas adjacent to them. This protection extends to coyotes in these regions because it is difficult to tell Eastern Coyotes and Algonquin Wolves apart simply by sight.

Although the overall population is small, it appears to be stable. However, the Algonquin Wolf is rare and has a limited range, making it susceptible to a number of threats, like hunting and trapping, road mortality, habitat loss and genetic swamping by coyotes.

The story of our wolves has changed over the past century, and will likely continue to evolve over time. We now have a proposed new name, "Algonquin Wolf", which sounds a lot like an old name from the 1970s that never stuck! Interestingly, our large protected areas like provincial parks are turning out to be critical for the long term survival of this species. Whatever it is called, and whatever its heritage is eventually determined to be, the most important thing is that we still have wolves on our landscape and they continue to be top predators. In turn, this provides a healthy, naturally-regulated ecosystem with long-term sustainability.

Algonquin Provincial Park's

6th Annual WINTER IN THE WILD

**February 18th, 2017
Family Day Weekend**

All activities are free with the purchase of a valid Park Permit

- Snowshoeing
- Tracking
- Winter Birding
- Photography
- Tours of the Collections Room
- Ice Skating
- Cross-country Skiing
- Winter Camping Demos
- Wolf Howl
- Roasting Marshmallows and more...



ALGONQUIN VISITOR CENTRE

Open Daily 9 am - 4 pm (limited services) **Weekends & Holidays** 9 am - 5 pm (full services)

Museum • Bookstore & Nature Shop • Café **WiFi**

Winter Hours — October 24 to April 21, 2017
Holidays — Christmas (December 27 to January 1, 2017) | **Closed December 24-26** • Family Day (February 20)
March Break (March 11-19) • Easter Weekend (April 14-17, 2017)

Algonquin Logging Museum - Reception Centre is closed. The 1.3 km trail with outdoor exhibits is available year-round.

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Algonquin

The Raven

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A New Wolfian identity?

by David LeGros

Sometimes, a novel idea can get ignored and lost for years, only to return decades later to become the prevalent way of thinking. We may be seeing a great example with our changing views on the wolves of Algonquin Park.

Way back in 1893, when the Park was created and the first rangers were patrolling its lakes and forests, wolves were definitely a natural part of the landscape. But surprisingly, those first Algonquin Park rangers had the mandate to kill bears, loons wolves and other "noxious" animals! For the next six decades wolves were thought of as "bad animals" and were shot, trapped and poisoned whenever possible. Fortunately, despite their best efforts, the rangers did not completely succeed—so we still have wolves today. The deliberate killing

of wolves in Algonquin finally stopped in 1959, not because of changing attitudes towards wolves, but because the Ontario government had chosen the Park as the best place to launch a research program to find out more about wolves in our province.

When the program began, the animal the rangers had been trying to exterminate was generally known as the Timber Wolf. Today it is usually called the "Gray Wolf" but, either way, the wolves in Algonquin Park were thought to be just part of the same wolf species that had once been found all over North America. The only exception was the southeastern US where the by-then extremely rare Red Wolf had once held sway.

This is a young wolf from Algonquin Park, but what should we call it?

PHOTO: LEV FRID



Wolf Howling in Algonquin Provincial Park
Algonquin Park Technical Bulletin No. 3
\$1.00

Publications

Wolf Howling in Algonquin Provincial Park

This booklet outlines how public wolf howls became so popular in the Park as well as discussing why wolves howl. There are some handy tips on how to howl on your own, discussing everything from weather to time of day.

ONLY \$1.00

Available at the Algonquin Visitor Centre Bookstore & Nature Shop, East Gate and West Gate, or online at

algonquinpark.on.ca



Gray Jays in the limelight!

Congratulations to the Gray Jay for being nominated Canada's national bird by the Canadian Geographic Society. The long-term Gray Jay research conducted in Algonquin Park has led to a better understanding of the species' life history. Algonquin Park is at the southern limit of the Gray Jay's range and for many people provides their best opportunity to see one. Here at *The Raven* we are pleased that the Gray Jay has been nominated Canada's national bird, it has always been Algonquin's unofficial park bird.

CONGRATULATIONS!



This had been the standard view for over a century but in the 1970s, when two Ontario wildlife biologists, George Kolenosky and Rod Standfield, started to look more closely, they noticed that wolves here were “different”. Our wolves were smaller than the wolves of northern Ontario, and were generally more uniform in colour. Kolenosky and Standfield referred to them as the “Algonquin type” of wolf based on their examination and measurements of skins harvested by trappers from central Ontario but they couldn’t do much more than that because the modern methods of genetics had not yet been invented. In fact, it wasn’t until the late 1990s when researchers from Trent University in Peterborough Ontario used genetic analyses to confirm that the wolves of Algonquin Park were actually much closer to the southern U.S. Red Wolf than they were to the Gray (“Timber”) Wolf as everybody had believed until then. After analyzing samples from across North America, the researchers determined that wolves with this genetic identity were found throughout the Great Lake region of Ontario, the St Lawrence region of Quebec, Minnesota and southern Manitoba. Basically, the Trent researchers concluded that the animals in this northern range were genetically very close, or even almost identical, to the highly endangered Red Wolves. They didn’t know



The endangered Red Wolf is limited to only a few pockets in the southeastern United States.

for sure, however, so they decided to give the northern animals their own new name, namely “Eastern Wolf”. Here was a whole new species of wolf hiding right under our noses! A picture was now emerging that the Eastern Wolf had once occupied most of eastern North America; from the Great Lakes region to Texas and everywhere east of the Mississippi River. Its range had collapsed due to persecution and habitat loss, and only remained in a few widely separated areas. One was in the southeastern US where the animals had been recognized right from the beginning as a different species and called the Red Wolf. The other area stretched from Quebec to Manitoba, including Algonquin Park and, there too, the wolves had been identified as “somewhat different” at least by Kolenosky and Standfield. But even those insightful biologists failed to realize that the wolves of central Ontario were different enough from their Gray Wolf neighbours to be considered as a different species.

A quite separate but equally important finding from this era of research was that the Eastern Wolf would hybridize with Coyotes. The familiar Coyote of southern Ontario was not always found in the province but instead was an animal of western plains and prairies. Dramatic habitat

changes such as clearing eastern forests for farms, and the widespread persecution of native wolves meant that southern Ontario was now suitable habitat for the coyote. Those trailblazing coyotes were met by the few remaining Eastern Wolves, with whom they hybridized, creating the Eastern Coyote we know today in Ontario.

As technologies and research methods improved and the number of wolf genetic samples increased throughout the early 2000s,

a clearer and more defined picture of the Eastern Wolf began to emerge. Genetic markers of Eastern Wolf had travelled far and wide, leaving signatures throughout the Great Lakes region of Ontario, parts of Quebec, western Great Lakes states and southern Manitoba through hybridization with Coyotes and Gray Wolves. Animals with an Eastern Wolf genetic component were turning out to be fairly common; all Eastern Coyotes have it, and many wolves throughout the Great Lakes region do as well. The Eastern Wolf “component” in a given animal, however, was often

rather diluted through hybridization, so finding “true” or relatively pure Eastern Wolves was much more challenging.

Through continued research in Algonquin Provincial Park and surrounding areas, biologists were able to determine the heritage of individual wolves, and their findings were both worrisome and fascinating. In the Park, Eastern Wolves thrived in prime habitat consisting of largely continuous forests, few roads, and little human habitation. In contrast, it is a very different story outside the Park—where there are more roads, human habitation and a patchwork of forests, fields and urban areas. Inside the Park, protection from harvesting means that family-based packs of

Eastern Wolves are a cohesive unit with no need to adopt unrelated individuals (coyotes or otherwise) into the pack. Outside the Park, conditions are better suited to the adaptable Eastern Coyote and hybrids. Habitat divided by roads is dangerous for both wolves and coyotes (vehicle strikes and greater access for hunters) but coyotes are more resilient and reproduce at a faster rate than wolves so tend to dominate in more human dominated landscapes.

The Eastern Wolf has a limited global distribution that is centralized in Algonquin Provincial Park. Trying to estimate the population size of the Eastern Wolf is rather tricky because of various hybridization scenarios that have occurred. Although the population of Eastern Wolves has been influenced by some level of ancient (approximately 10,000 years ago), more recent (approximately 100 years ago), and ongoing hybridization with coyotes (and to a lesser extent with Gray Wolves), the Eastern Wolf is still considered distinct from both. It is, however, rather unlikely that very many of the



The last stronghold of the Algonquin Wolf is in Ontario Parks. PHOTO: SANDY DOBBYN

remaining Eastern Wolves meet the criteria of being 100% like their ancestors from centuries ago. Despite this, biologists are able to estimate their population size based on surveys and genetic analysis. To qualify as Eastern Wolf, an animal must have at least 80% Eastern Wolf ancestry. With that in mind, here is how the wolf numbers break down according to a 2015 summary: Algonquin Provincial Park and the surrounding townships have about 420 wolves (including all Eastern Wolves, Eastern Coyotes, Gray Wolves and hybrids). Of these about 290 are thought to be Eastern Wolves (including only 132 mature individuals). In the remainder of Ontario, spread out among other subpopulations which are mostly in other large



The Gray Wolf is a large wolf found to the north of Algonquin Park.

provincial parks, there are about 50 Eastern Wolves with 22 mature animals. In addition, there are probably about 170 Eastern Wolves in southwestern Quebec. In total, there were estimated to be as many as 515 Eastern Wolves, with only 236 mature individuals. This figure was not just for Ontario and Quebec, but rather the world population of this species.

Summing up, we now know that Algonquin is home to a fairly rare medium-sized wolf that was recently “discovered” using genetic analysis—and is likely the same species as the very rare Red Wolf. We know also that its range has collapsed to a tiny fraction of the original and that it is now threatened by hybridization with coyotes and Gray Wolves in areas where human-caused mortality is high. What we don’t know is just where the story of our Park wolves will end. There will almost certainly be more twists and turns before it is over—and one such twist just happened. On June 15, 2016 it was renamed by the Committee on the Status of Species at Risk in Ontario (COSSARO) recommended a new name for the wolves of Algonquin Park and neighbouring areas of central Ontario and southern Quebec.

The name they chose? You guessed it—the Algonquin Wolf—not unlike the old name given to it by Kolensky and Standfield in the 1970s! Although there may be few “pure” Eastern Wolves currently in existence, the wolves in Algonquin are still physically,

ecologically and genetically distinguishable from Gray Wolves and coyotes. For this reason, COSSARO felt they merited designation as a distinct wolf with a new and more distinctive

Which Wolf?

The different species of wolves are hard to tell apart. They often overlap in size and coat colour, so genetic analysis is often needed to be sure.

GRAY WOLF – A large wolf, often weighing over 45 kg (100 lbs). Found throughout most of northern Ontario. Can hybridize with Algonquin Wolf.

ALGONQUIN WOLF – A medium sized wolf, typically weighing 32 kg (70 lbs). Found primarily in central Ontario, with the core range in Algonquin Provincial Park. Can hybridize with Gray Wolf and coyote. Formerly known as Eastern Wolf.

RED WOLF – A medium-sized wolf, typically weighing 32 kg (70 lbs). A highly endangered species found in the south-eastern United States. Hybridizes with Eastern Coyote.

EASTERN COYOTE – A small wolf, typically weighing less than 22 kg (50 lbs). Found throughout much of southern and central Ontario. Originates from hybridization with coyote and Eastern Wolf over a century ago.



The Coyote, originally an inhabitant of western North America has taken up residence in the east, shaking up the new neighbours.