



Peregrine Falcon chicks

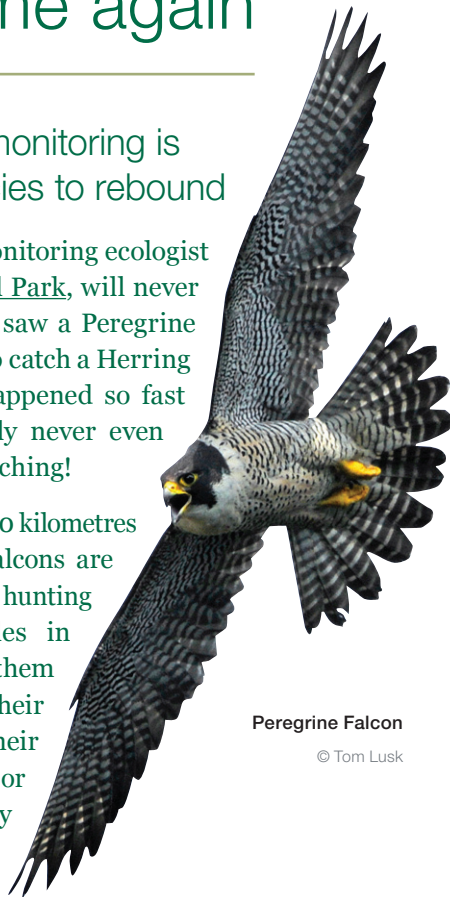
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Peregrine Falcons make Pukaskwa their home again

Diligent annual monitoring is helping the species to rebound

Christine Drake, a monitoring ecologist at [Pukaskwa National Park](#), will never forget when she first saw a Peregrine Falcon swoop down to catch a Herring Gull in mid-air. It happened so fast that the gull probably never even saw the falcon approaching!

At speeds exceeding 300 kilometres an hour, Peregrine Falcons are known for their aerial hunting agility. Special baffles in their nostrils enable them to breathe during their high-speed dives. Their prey is usually killed or disabled in the air by a single swipe from clutching talons.



Peregrine Falcon

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The park's staff has been on falcon patrol ever since it was first noticed the birds had returned to Pukaskwa National Park in 1998. The presence of two adults from [the Peregrine Falcon - anatum subspecies](#) (*Falco peregrinus anatum*) stirred excitement. The birds had not been seen in the park since the subspecies had been extirpated from Ontario in the mid-1960s.

Constant vigilance

Peregrine Falcons throughout North America have suffered dramatic population declines because of the widespread use of DDT as an insecticide during the latter half of the 20th century. The DDT ingested from their prey disrupted their breeding and caused them to produce thinner eggshells. The anatum subspecies endured the greatest population collapse. By 1975, only 35 nesting pairs remained in Canada.

All three subspecies have made somewhat of a comeback since North America has banned DDT. The anatum subspecies remains most fragile. Its recovery is being substantially helped by the monitoring ecologists at Pukaskwa National Park. In addition to sharing information that fills knowledge gaps about how to help this species at risk, the ecologists regularly collaborate with conservation partners on public education and other efforts to return these birds to healthy populations.





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Peregrine Falcon chick

Good data = good results

The information being gathered over many years is helping to accurately determine the number of birds in existence, their locations, and state of health. Such data is crucial to plan for species recovery, habitat conservation and, if necessary, species reintroduction.

Detailed records of all sightings of the Peregrine Falcons are kept to establish whether the populations within the park are increasing or declining, as well as the variations from year to year. When new birds arrive, the ecologists want to know about them. That's why the park is now asking visitors to participate as "citizen scientists" by informing the park when they see a Peregrine Falcon.

If a visitor reports seeing a bird, the location and date are entered into the park's database. If a falcon is observed during breeding season, the staff will investigate the location to find out whether it can confirm breeding activity by locating a nest, another adult (establishing a pair), or fledged young.

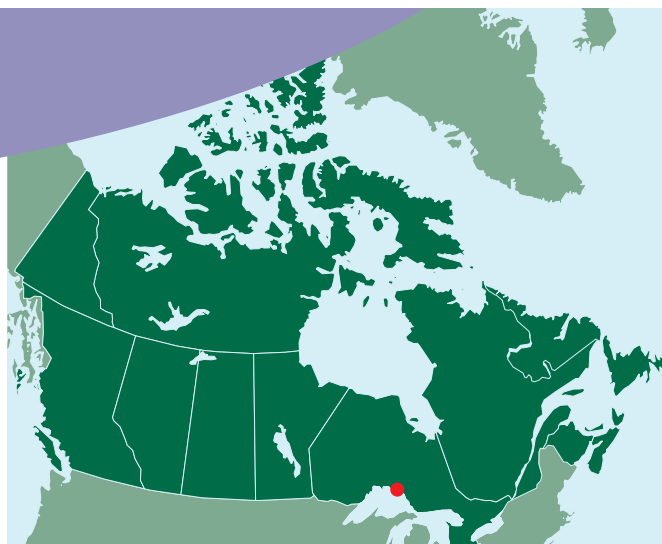
The staff also works with Project Peregrine, an umbrella organization that annually monitors the breeding status of approximately 72 territories across the Canadian side of Lake Superior. During certain years, the park collaborates with Project Peregrine to band nestlings in order to determine how far they fly to establish their own territory and how long they remain in an established territory.

Behavioural insights

Nest locations are noted to determine each breeding pair's territory. While Peregrine Falcons will reuse a nest location over years, a pair often has two or three choices within its territory – usually a few hundred metres apart. Knowing more about breeding behaviour, territory size and fidelity helps the park to determine how best to protect habitat within a breeding season and across the years.

The anatum subspecies requires cliffs as natural habitat. The limited number of cliffs within Pukaskwa National Park are a monitoring priority. Fortunately, these mostly remote locations are well-guarded against undue noise or other disturbances.

During the park's annual monitoring, all potential threats are considered. Blowfly infestations in chick ear cavities have been detected but only in chicks from one nest so far. The park's ecologists remain vigilant for signs of this infestation, as well as other health concerns, such as elevated levels of flame retardants, PBDE and PCBs in nestlings. While the birds are doing better, they remain vulnerable to environmental toxins that can accumulate in their food chain.



Pukaskwa National Park of Canada

Sharing the good news

The good news is that all three territories in use by Peregrine Falcons within the park since 2000 have been consistent in producing fledglings.

Sharing the news about these new arrivals with the media is one of several ways that park staff is educating the public about this subspecies. Park literature and website updates also help to make people aware of the Peregrine Falcon's progress towards recovery.



Peregrine Falcons

The park's monitoring program has significantly helped to more accurately assess the Peregrine Falcon's status in Pukaskwa and throughout Ontario. Fourteen years after first observing the return of the Peregrine Falcon - anatum subspecies to Pukaskwa National Park, the monitoring ecologists have determined that the status of the subspecies within the park has improved from "imperiled" to "vulnerable". Continued monitoring, along with measures to remove or minimize threats, could enable the Peregrine Falcon's population to soar to new heights.

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