

BIRDS OF PREY

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Fig. 1 Peregrine Falcon nest on the cliff-top at Bell Bluff. Photo by Cameron Eckert.

Juvenile Snowy Owls or Ukpik (*Bubo scandiaca*). Photo by Cameron Eckert.

Hawks and owls are at the top of the food chain on Herschel Island, and these raptors, or birds of prey, are powerful indicators of the health and productivity of natural communities. Four species nest annually at Qikiqtaryuk, while another eight have been seen there from time to time. Herschel Island's raptors provide some of the best, most reliable wildlife viewing for visitors because the open tundra puts their lives on such clear display. Their nests are on the ground at the edges and on the ledges of creek-side and ocean bluffs and on other prominent landmarks. Some of the nests are perched precariously on eroding ocean cliffs (Fig. 1). Their courting displays, hunting strategies, predator-defence behaviour, and regal presence are almost impossible to miss. The breeding status and success of these birds is recorded annually by park rangers and visiting biologists as part of the island's ecological monitoring program.



Fig. 2 Peregrine Falcon or Kirgavik (*Falco peregrinus*). Photo by Cameron Eckert.

Breeding Pairs

Peregrine Falcon or Kirgavik (*Falco peregrinus*). The Peregrine Falcon, one of the most exciting of all birds, is the flagship species of the modern conservation movement (Fig. 2). It was listed as endangered after populations declined sharply in the 1960s due to pesticide-induced thinning of egg shells. The subsequent North American ban on DDT use, and captive-rearing programs, led to the recovery of populations throughout its range. The numbers are largely recovered, but the species is still listed as of special concern, and it remains high on the most-wanted list of many birdwatchers. Figure 3 illustrates the decline and recovery of this species along the Yukon coast as detected by periodic surveys.



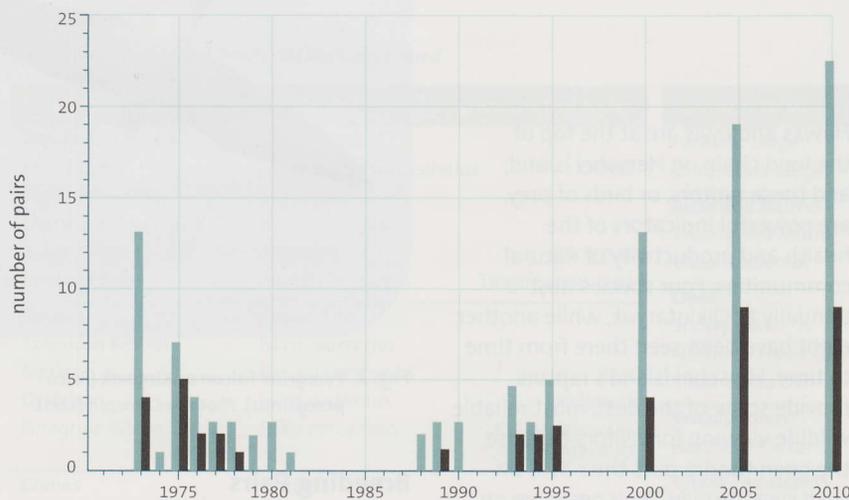


Fig. 4 Rough-legged Hawk or Qilrig (*Buteo lagopus*). Photo by Cameron Eckert.

Fig. 3 Left Summary of the population of Peregrine Falcons in the Yukon coastlands, 1973–2010. The blue bars represent the number of pairs and the brown bars the number of breeding pairs counted during surveys.

Herschel Island is an excellent place to view Peregrine Falcons. The “tundra” form of the species bred on the island until about 1980 when it disappeared. A pair suddenly reappeared in the early 1990s, and, more recently, six or seven pairs have occupied well-spaced nesting sites along cliff and gully tops. Two to four of these pairs use the cliffs northeast of the settlement, where they are monitored by Park staff. From the records collected between 2002 and 2009, it seems that chicks fledge from over half of the nests, and in some years all the nests are successful. The adults return from their South American winter range in mid-May when Herschel Island is mostly snow-covered. They choose an exposed pinnacle that can be easily defended,

lay three or four reddish-brown eggs without the benefit of nest material (Fig. 1), and settle down to a 32-day incubation. Both adults share nest and young duties and are well known for their fierce defence in the face of all intruders. The young are flying by mid-August and are ready to migrate south around the first of September.

With a little perseverance, a visitor hiking along the ocean bluff tops will be rewarded with the “cacking” of its alarm call and defensive aerial displays from this superlative bird. Its long, often back-swept, pointed wings and longish tail, along with its light breast, dark back, and head accentuated by its identifying dark “whisker” marks make it one of the most readily recognized of the birds of prey. Probably the fastest

bird on Earth, its high speed stoops, or dives, and chases during hunting are some of the most thrilling events the field naturalist can see. On Herschel Island, these falcons hunt a variety of other birds, often small shorebirds but also water birds such as the Black Guillemot.

Rough-legged Hawk or Qilrig (*Buteo lagopus*). Without question, this largish, broad-winged, soaring hawk or “buteo” is the signature raptor of Herschel Island (Fig. 4). Its haunting, mewing scream is characteristic of tundra wilderness as few other sounds are. The breeding density of these hawks on the island varies from year to year, apparently in step with the density of the lemmings and voles that are its prime prey. Its talons and hunting style seem superbly adapted for catching small mammals. The population of these hawks on Qikiqtaryuk may be the densest anywhere when prey is abundant, as 37 nests have been located across the entire island (Fig. 5).

In 1986, 24 of these sites were known to be occupied, leading to a breeding density of at least one pair per four square kilometres. The number and success rates of Rough-legged Hawk nests near to Pauline Cove are similar to those of the Peregrine Falcon.

Fig. 5 Rough-legged Hawk young almost ready to fledge from their nest on the north coast of Herschel Island. Photo by Louis Schilder.





Fig. 6 Rough-legged Hawk nest.
Photo by Cameron Eckert.

Rough-legged Hawks build nests of sticks lined with finer grasses at the tops or on ledges of the clay bluffs and cliffs of the island's coasts and interior streams. In early June, the female usually lays four or five beautiful creamy eggs blotched with reddish brown, which are incubated for about a month (Fig. 6). The young are ready to migrate south by early September. Two of the enduring mysteries regarding the behaviour of Rough-legged Hawks are how these birds judge the abundance of prey, and where they disappear to when they decide not to breed.

Snowy Owl or Ukpik (*Bubo scandiaca*).

Two species of owl breed on the island. The Snowy Owl is a well-known resident of the Arctic, and more closely associated with tundra regions than any other bird (Fig. 7). In some years, apparently when the lemming population is near its peak, up to 11 pairs have been found on Herschel Island, but in other years virtually none. These owls lay their clutches of up to six pure white eggs in ground scrapes, usually on top of a hummock, without the addition of nesting material. Snowy Owls nest early on Herschel Island, with the eggs hatching in mid- to late June (Fig. 8). In some years these owls have been found on the island throughout the winter, but individual birds commonly range far and wide. The annual movements of these birds



Fig. 7 Snowy Owl. Photo by Cameron Eckert.



Fig. 8 Snowy Owl chick. Photo by Fritz Mueller.

were studied using radio tags during the International Polar Year, 2007–09. In 2008–09, a radio-tagged owl from Herschel Island travelled across the eastern Beaufort Sea to Banks Island.

Most hikers on Qikiqtaryuk, even in years when the bird isn't breeding, may suddenly find they are being watched by this tundra ghost. The clear white form standing out against the hills from which it hunts is one of the tundra's most memorable sights. The owls' strategies for dealing with poor prey years, especially during winter, remain an intriguing mystery.

Short-eared Owl or Nipaiuktaq (*Asio flammeus*). This bird is another of the island's species listed as of

special concern because it is at risk further south in its range. However, the population on Herschel Island, likely just a small number of pairs, seems relatively secure, although years have gone by without any known breeding effort. Ground nests in sedge or other meadow vegetation have only rarely been found, but the wonderful aerial displays of the male and the strange calls of courtship can be enjoyed most summers (Fig. 9).

The four species described above are known to breed on Herschel Island. Eight other species of raptor have been sighted hunting on the island, although most of them are not regular visitors.



Fig. 9 Short-eared Owl or Nipaituktaq (*Asio flammeus*). Photo by Jukka Jantunen.

Visitors

Bald Eagle or Kilerak (*Haliaeetus leucocephalus*). The closest nesting pairs are in the Mackenzie Delta, about 100 kilometres away. Immature individuals are occasional visitors to the island.

Golden Eagle or Tingmiakpak (*Aquila chrysaetos*). A very large population of this magnificent predator breeds throughout the British Mountains, south of Herschel Island. It's known to hunt mostly arctic ground squirrels but also commonly preys on animals up to the size of young caribou. The closest breeding pair are normally only about 15 kilometres away from Qikiqtaryuk, yet the species has rarely been seen on the island.

Gyrfalcon or Kidjgavik (*Falco rusticolus*). A large population of about 200 pairs of Gyrfalcon breed on the Yukon North Slope, immediately south of

the island. The closest known nesting pair is about 20 kilometres away. The Gyrfalcon is the largest of the falcons and is a must-see species for most visiting birders. Hunting forays by Gyrfalcons onto Qikiqtaryuk seem to occur irregularly, so a sharp-eyed visitor may spot one on the island.

Merlin (*Falco columbarius*). This little falcon also nests on the mainland within about 60 kilometres of the island. It is a regular visitor to Herschel Island in the autumn (Fig. 10).

Northern Hawk Owl or Niaquqtuarfik (*Surnia ulula*). This northern owl has only been seen on the island a few times. It breeds at the tree line further south, so regular excursions onto the open tundra are likely.

Northern Harrier (*Circus cyaneus*). A relatively sparse population of this species, which is also called the Marsh Hawk, breeds on the coastal plain and in Old Crow Flats



Fig. 10 Merlin (*Falco columbarius*). Photo by Cameron Eckert.

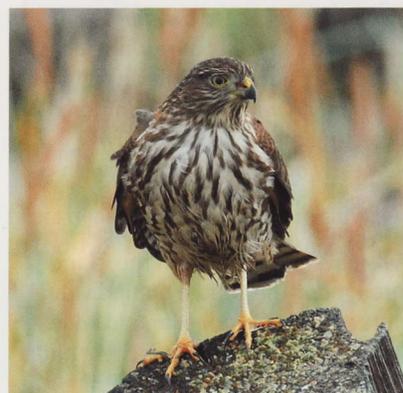
to the south. However, these birds with the characteristic white band on their rump have been seen hunting in the meadows of Herschel Island fairly regularly.

Accidentals

American Kestrel (*Falco sparverius*). The only record of this diminutive falcon on Herschel Island was of a female that appeared at Pauline Cove on August 9–10, 2010, and was later found dead. This species nests as far north as Old Crow Flats and has been seen at various locations across the North Slope.

Sharp-shinned Hawk (*Accipiter striatus*). This small forest-dwelling hawk likely nests as far north as the southern Richardson Mountains and is a rare vagrant to the North Slope. It has been seen on Herschel Island just once: a female at Pauline Cove on August 24, 2010 (Fig. 11).

Fig. 11 Sharp-shinned Hawk (*Accipiter striatus*). This visit on August 24, 2010, established the first island record for this species. Photo by Cameron Eckert.



GETTING ALONG WITH RAPTORS

All the birds of prey and most other bird species nest on the tundra in exposed locations where they are open to disturbance. Nest timing is absolutely critical this far north as these birds need total, concentrated use of time and energy for raising their young. Raptors have developed strategies for dealing with disturbance from natural predators, but human disturbance is often quite different.

Lingering for that perfect photo near a nest, or just ignoring their desperate calls asking you to “move on,” can seriously interfere with critical feeding and incubating. Eggs and young may freeze to death if adults are forced to leave their duties. In short, the right approach is to keep moving. That way the naturalist's behaviour is more like a natural event that these birds can deal with.