

birds of prey

Birds of prey, also known as raptors, are birds that eat other animals. Their bills are strong and hooked at the tip and sharp on the edges, making them ideal for tearing at flesh. Their feet have sharp, curved talons good for catching prey, their vision is excellent and they are strong flyers. All these characteristics make them good hunters of other animals.

The Lesser Yellowlegs is the main prey for Peregrine Falcons in the Yukon.



Merlin chick. [JP]



Birds of prey are good indicators of overall ecosystem health. By monitoring these birds, we can detect environmental problems early and take action to correct these problems. Similarly, the presence of thriving populations of birds of prey suggest a productive ecosystem.

Golden Eagles, Bald Eagles, Gyrfalcons and Peregrine Falcons are all birds of prey that occur in the Peel River watershed. Other birds of prey, such as owls and osprey, also occur here but their distributions have not been mapped.

Peregrine Falcons

There are three subspecies (or types) of Peregrine Falcon in North America, two of which breed in the Yukon. One of these two, the anatum subspecies (*Falco peregrinus anatum*), breeds in the Peel River watershed as well as the Porcupine and Yukon River drainages. These

Peregrine Falcons can be found below tree line in riparian areas such as shores, marshes and river valleys. There they pursue shorebirds, waterfowl and other small to medium-sized birds, swooping from on high at great speeds (over 200 km/hr) and striking their prey in flight. In the Yukon, their main prey consists of the shorebird called Lesser Yellowlegs.

The anatum Peregrine Falcons are migratory birds, wintering in Central America and returning to the Yukon to breed in summer. They nest on ledges of steep cliffs, close to water and individuals traditionally return to the same cliff year after year.

In the past, Peregrine Falcon populations suffered widespread declines throughout the world, largely due to pesticide use by humans. Peregrine Falcons, like other birds of prey, are at the top of the food chain and can accumulate high levels of pesticides from their prey. The

pesticide accumulation was interfering with breeding behaviour and causing their eggs to have thin shells and break easily, resulting in very low reproductive success.

The Yukon was one of the few places where remnant populations of the anatum subspecies, including the Peel River population, persisted through the catastrophic decline of the 1960's and 70's. Subsequent North American bans on various pesticides, as well as captive breeding programs, helped the Peregrine Falcon recover to some degree.

The Peel River Peregrine Falcon population did decline in the 1960's but a small number managed to survive. The population slowly increased again, then doubled by 1995 when it reached approximately 48 pairs. Since 1995, the population increase has slowed and results from the 2000 survey indicate that the population performance has faltered significantly. More



Bald Eagles can be seen hunting for fish in the Peel River watershed. [JS]

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known nest sites were unoccupied in 2000 than in 1995. As well, fewer pairs were successful in producing young (only 23% of pairs produced young). Compared to the other populations of the Porcupine and Yukon River drainages in 2000, the Peel River population was the lowest (Mossop, 2000).

Gyrfalcons

Unlike Peregrine Falcons, which are found along the main stem of the Peel River and some of the lower reaches of its tributaries, Gyrfalcons are found higher up in the Wernecke, Ogilvie and Richardson Mountains (see map).

Gyrfalcons do not build nests but merely lay their eggs on narrow cliff ledges or use the abandoned stick nest of other bird species such as Common Ravens and Golden Eagles (Mossop and Hayes, 1994). They often use the same

nesting ledge in successive years, or alternate among several nearby nesting ledges. Gyrfalcons mainly feed on ptarmigan in the winter, then broaden their diet to include ground squirrels and other birds in summer.

Gyrfalcons tend to be non-migratory and in general are present year-round. In winter, many adult Gyrfalcon remain close to the area where they nested in summer. Juveniles may move south into the boreal forest looking for better food sources. In years when ptarmigan are scarce, Gyrfalcon may leave their breeding grounds to hunt waterfowl that are resting in staging areas (Sinclair et al, 2003).

In Canada, the Gyrfalcon is not recorded as endangered, threatened or a species of special concern. Population levels across the country are believed to be fairly constant. Also, because they do not migrate to areas of the world where pesticides are still heavily used, pesticide

poisoning is less of a concern with this bird. An estimated 750 pairs breed in the Yukon (Mossop and Hayes, 1994).

Bald Eagles

Bald Eagles are found in lowland areas throughout the Yukon. They are not as common in the Peel River watershed as they are further south, but there are records of them nesting along the Peel, Snake, Hart and Wind Rivers (Sinclair et al, 2003). They are scarce breeders along the Dempster Highway (Frisch, 1987).

Bald Eagle nests, consisting of large sticks usually built in large live or dead trees near water, are reused for many years. Bald Eagles tend to hunt for fish and are commonly seen along rivers or near lakes and wetlands. They may also scavenge from large mammal carcasses, roadkills and garbage dumps.

Juvenile Bald Eagle. [KW]



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Boreal Owls are birds of prey known to occur in the watershed and have been observed nesting along the Dempster Highway. [JS]



The Great Gray Owl is a year-round bird of prey found throughout the Yukon. It has been observed breeding in the upper Peel River watershed. [JS]



Few Bald Eagles overwinter in the Yukon. The majority migrate south in fall, leaving central Yukon by mid October and returning in late April or early May (Frisch, 1987).

In the 1970's, the Bald Eagle all but disappeared from parts of southern Canada and the United States. For many years they were persecuted by farmers who considered the Bald Eagle a threat to their livestock. Then, with the dramatic increase in the use of chemicals such as DDT, dieldrin, and PCBs, as well as increased exposure to lead, some Bald Eagle populations suffered dramatic declines and were even extirpated from some regions. These poisons damaged their reproductive systems and threatened the ability of their young to survive (World Wildlife Fund Canada, 1996). As a result of the great declines, in the United States, the Bald Eagle was listed as "endangered" under the Endangered Species Act until the mid 1990's when its status was downgraded to

"threatened". The Bald Eagle is not considered threatened or endangered in the Yukon.

Golden Eagle

The Golden Eagle is one of the most common birds of prey in the Yukon and can be found in alpine and tundra areas. It feeds mainly on arctic ground squirrels so is likely to be found wherever the squirrels are abundant. They have also been known to prey on young sheep and even caribou calves (Sinclair et al, 2003).

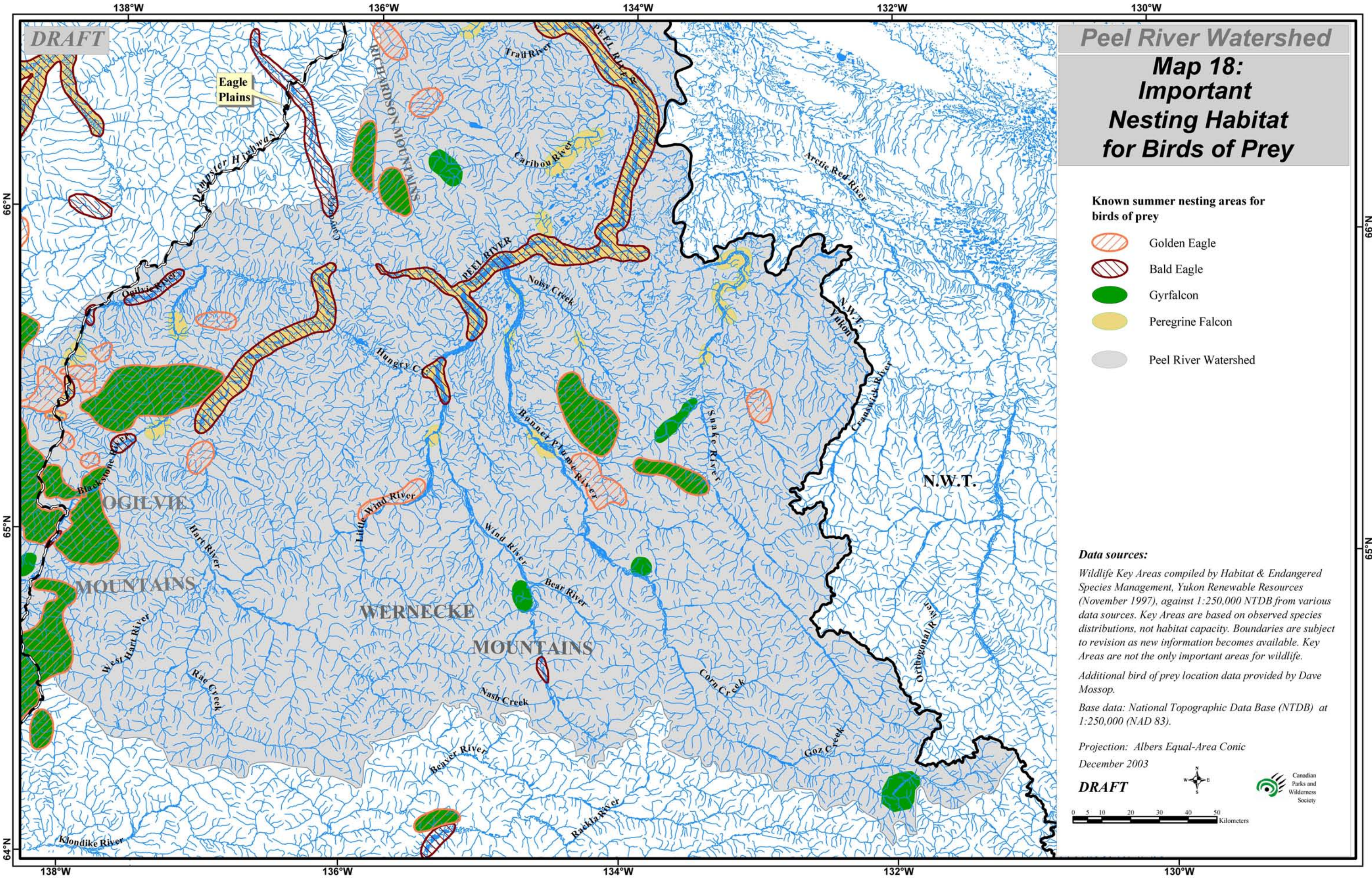
There are very few records of Golden Eagles in the Peel Plateau, which is likely due to a lack of observers in the region. They have been observed in the mountainous areas to the south of the Peel Plateau and are known to breed here (Sinclair et al, 2003).

Golden Eagles nest in remote mountainous

areas on cliff faces. The nests are often large and made of sticks and may be reused in subsequent years. Sometimes several nests in a pair's territory will be used in different years. They are easily disturbed when humans approach their nest sites (Sinclair et al, 2003).

Most Golden Eagles leave the Yukon Territory in winter, generally leaving central Yukon by the end of September. They winter in central British Columbia, Alberta and Saskatchewan as well as the United States. They usually return to the Peel River watershed in late March or April (Sinclair et al., 2003).

Golden Eagles are considered common in Canada and the United States and their status is not currently threatened.



Peel River Watershed
Map 18:
Important
Nesting Habitat
for Birds of Prey

Known summer nesting areas for birds of prey

-  Golden Eagle
-  Bald Eagle
-  Gyrfalcon
-  Peregrine Falcon
-  Peel River Watershed

Data sources:

Wildlife Key Areas compiled by Habitat & Endangered Species Management, Yukon Renewable Resources (November 1997), against 1:250,000 NTDB from various data sources. Key Areas are based on observed species distributions, not habitat capacity. Boundaries are subject to revision as new information becomes available. Key Areas are not the only important areas for wildlife.

Additional bird of prey location data provided by Dave Mossop.

Base data: National Topographic Data Base (NTDB) at 1:250,000 (NAD 83).

Projection: Albers Equal-Area Conic
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