



Study specifics

Region: Coast Mountains of Yukon and British Columbia (BC)

Study Area: 17,500 km²

Nest Sites: 33

Annual Surveys: 35

Project partners

- Government of British Columbia
- Northern Research Institute

Juvenile gyrfalcon harvest assessment 1982 to 2016

Project objectives

We evaluated the sustainability of juvenile gyrfalcon harvest based on productivity data from the Coast Mountains. This population is shared with BC and there is a limited harvest of juvenile birds for use in falconry in the BC portion of the Coast Mountains.

Project overview

We assessed whether potential harvest rates were sustainable based on recommended thresholds. The Government of Yukon's Department of Environment surveyed gyrfalcon nest sites from 1982 to 2016 to monitor nestlings. We used this productivity data to evaluate potential harvest rates.

Project background

During the month of June from 1982 to 2016, the Department of Environment surveyed a subset of known gyrfalcon nests by helicopter to count nestlings. Gyrfalcons are large, territorial falcons that nest on cliffs. The Coast Mountains population is the most southern of known monitored populations and has shown long-term declines in nest occupancy and production of young. The reasons for the decline have not been established and may be related to climate change or other factors.

At the beginning of this program, the Department of Environment surveyed gyrfalcon nests and shared this information with the Government of BC to inform shared harvest quotas. In 2001, the Yukon no longer permitted the keeping of wildlife in captivity and the capture of wild gyrfalcons. In 2016, the Yukon discontinued annual monitoring of this population.

Key findings

The current practice of allocating harvest opportunities in BC, in absence of annual monitoring, is unsustainable.

No amount of juvenile harvest is within the recommended threshold for gyrfalcons (harvest rates within one per cent of annual production). Given that this threshold is conservative due to a lack of demographic data for the species, we also looked at the threshold recommended for similar species, including peregrine falcons (harvest rates within five per cent of annual production).

Based on this five per cent threshold, the harvest of one juvenile bird was unsustainable for 23 of 35 (66 per cent) years this population was monitored. More than 40 per cent of surveyed nests need to produce offspring to allow a sustainable harvest of one juvenile. The harvest of two juveniles is not sustainable and will cause the population to decline.



For more information, please contact

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