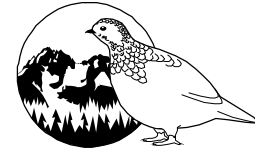


Where are the White-tailed Ptarmigan on Vancouver Island?

A summary of observations by hikers and naturalists



The Vancouver Island White-tailed Ptarmigan (*Lagopus leucurus saxatilis*) is found exclusively on Vancouver Island. This small, pigeon-sized bird is one of the few that can survive in the alpine throughout the year. While they always have a distinctive white tail and wings, their body feathers change from white in the winter to a mottled brown in summer and fall. They are sometimes confused with blue grouse, which move up into the alpine in late summer. Blue grouse have a gray-blue band on their dark tail.

In 1938, Ian McTaggart-Cowan published a paper designating the Vancouver Island White-tailed Ptarmigan as a separate subspecies based on birds from 3 locations (Figure 1). Nothing has been published since. The Vancouver Island White-tailed Ptarmigan is on the "Blue List" of British Columbia which means that they are legally designated as vulnerable to declines from either human activities or natural events (CDC 1997).

In 1995 we started an inventory project to estimate the distribution, abundance and ecology of Vancouver Island White-tailed Ptarmigan. As part of this work, we posted notices and wrote letters asking where people have seen ptarmigan. Over 45 hikers, naturalists, and industry and agency personnel have contributed locations of birds (Table 1). We have received

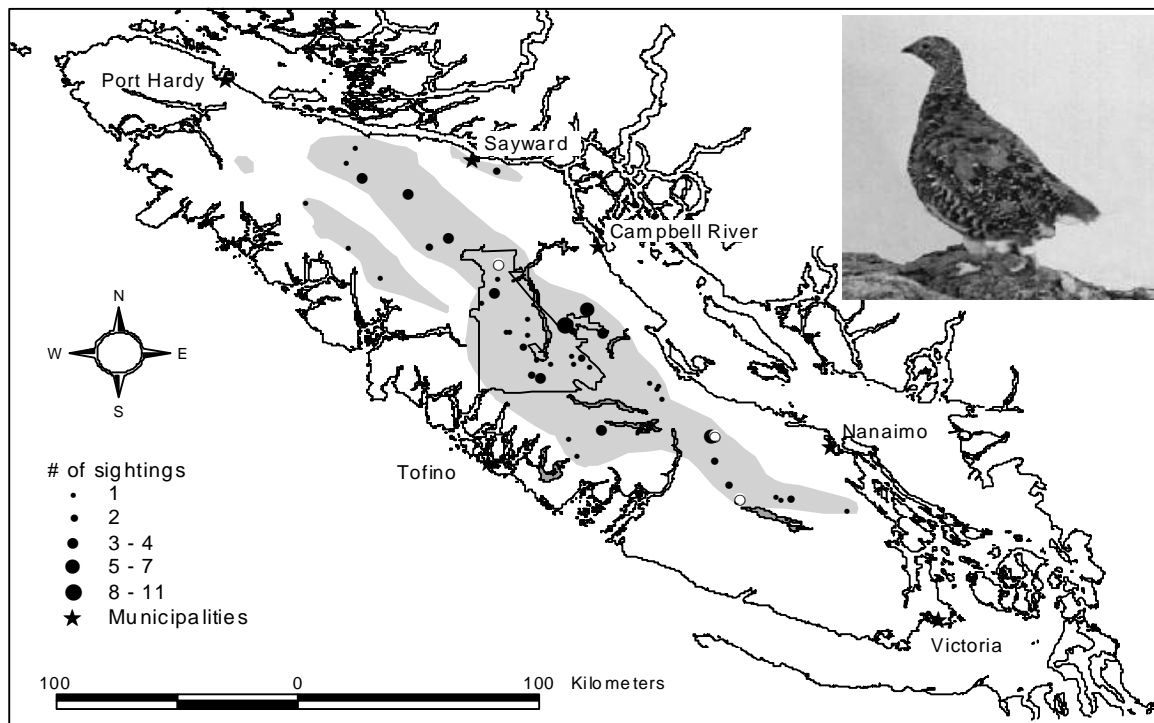


Figure 1. Shaded areas reflect the predicted distribution of White-tailed Ptarmigan on Vancouver Island based on availability of suitable habitat. Open circles are the 3 locations published by McTaggart-Cowan (1938). Closed circles are locations of sightings that have been reported to us for our study on distribution. The inset photo is a female white-tailed ptarmigan on Mt. Stubbs in the Beaufort Range.

<i>Season</i>	<i>Region</i>			<i>Total</i>
	<i>South</i>	<i>Central</i>	<i>North</i>	
Spring (Mar-May)	3	5	1	9
Summer (Jun-	17	35	17	69
Fall (Sep-Nov)	4	3	1	8
Winter (Dec-Feb)	0	4	1	5
Total	24	47	20	91

Table 1 Summary of reported observations of white-tailed ptarmigan on Vancouver Island. The Central region is Strathcona Park. The South and North regions are defined relative to the Central region.

field work and winter surveys to relocate radio-collared birds. The winter work is particularly important because almost nothing is known about winter distribution and habitat use. We are also examining body size, feather colouration and genetics that will help us determine how different the Vancouver Island White-tailed Ptarmigan are from mainland populations of ptarmigan.

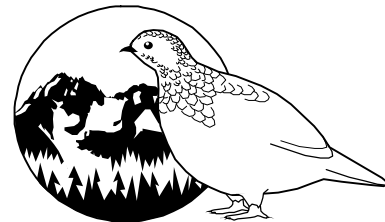
Our observations show that ptarmigan, fortunately, are more widely distributed on Vancouver Island than was previously believed. They mainly use true alpine habitat during summer, but during winter they also use subalpine parkland (open areas dotted with isolated trees) and montane forest. Subalpine habitat is also used by birds in the south island during the summer, probably because there is very little true alpine available to them. Possible human impacts include cutting of high elevation forest which may limit ptarmigan winter habitat, and recreational use and development of alpine breeding habitat. Our research continues to estimate the abundance and success of ptarmigan populations across Vancouver Island in both the core of their range (north and central) and the small, fragmented patches of alpine in the south island and the extreme north.

References

- McTaggart-Cowan, I. 1938. White-tailed ptarmigan of Vancouver Island. *Condor* 41:82-83.
 CDC. 1997. B.C. Conservation Data Centre: Rare Vertebrate Animal Tracking List.

For more information (or to add to our list of sightings) write to:

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Also, see our new website for more information on the Vancouver Island white-tailed ptarmigan and other alpine species at <http://sustain.forestry.ubc.ca/cacb/alpine/index.htm>

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100 observations to date, 91 of which provide information about season and location. Thanks to these observations, we now know that white-tailed ptarmigan range from Mount Brenton in the south to Tsitika Mountain in the north (Figure 1). The core of the population appears to be in Strathcona Provincial Park.

Our field study of the abundance and distribution of white-tailed ptarmigan on Vancouver Island includes both summer