

White-Tailed Ptarmigan (*Lagopus leucura*)

By Christine



Adult, photo Kelly Hargrove/Shutterstock



Photo © Christian Nunes



Ptarmigan nest with eggs



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A pair of these elusive beautiful birds sporting splendid winter white was recently spotted on high ground in a subalpine region of the Crowsnest Pass!

The white-tailed ptarmigan is a native of the Rocky Mountain Range of the Crowsnest Pass, living year round within the Cordilleran Alpine tundra zone at or above treeline on high elevation plateaux and mountains. Short summers with high winds and intense solar radiation are spent above timberline, on rocky slopes with low-lying vegetation, or damp alpine meadows near streams or snowfields. They also inhabit the stunted growth just below the timberline. In winter they often move slightly lower, to areas where willows and other plants extend above the snow.

These 30-34 cm (11.8-13.4 in) birds are masters of camouflage! Fully confident in their ability to blend in with the natural surroundings, they have no need to fly away and meander about their territory. Matching perfectly with the rock and tundra in the summer in a mottled grey-brown and white feathered coat, the tails and underside remain white. The coat turns pure white and would all but disappear in the snow during the winter if not for the small black beaks and eyes. The males may also develop a black mask or a stripe on their face. The feet are feathered for insulated warmth and protection, while also acting as snowshoes allowing their lightweight (under 1 lb) frame to walk effortlessly on snow. Experts at body heat management, they tunnel into snow drifts to hide from the cold in the winter, huddling in large groups to conserve body warmth.

The Rocky Mountain Range provides a diverse Alpine vegetation diet of small patches of plant communities that consist of low-growing perennial forbs, graminoids, mosses, lichen and dwarf shrubs. This includes the plant genera *Salix* (willow), *Ranunculus* (buttercup) and *Dryas* (mountain-avens). Ptarmigan rely primarily on willow during the winter. Fledglings younger than three weeks consume invertebrates, but these appear to be absent in the diet of adults.

During breeding season, males develop bright red lines above their eyes ("eye combs") which they use for courtship. The females migrate in spring from their winter habitat onto higher elevation territories established by males in order to pair up and breed. Males often occupy the same spot year after year, preferring areas with moderate slopes and some protection from the weather. Mated pairs stay close together during courtship, and males guard the females until incubation, keeping other males away.

As the snow melts in early to mid-June the female builds a nest in a shallow depression, lining it with dry grass, leaves, and feathers. She chooses an open, snow-free area with good visibility and several escape routes. She typically lays one clutch of 4 to 8 pale cinnamon colored eggs with dark brown spots (a later clutch of 2 to 6 eggs is also possible). She broods over the nest during incubation for up to 26 days, keeping her eggs warm and safe from predators. The hatched chicks start off with ragged, poor plumage that develops over the summer. The females lead their young away from the nest to slightly higher-elevation summer habitat where they mix in with other broods and adults forming a larger flock, eventually separating from their mother. The maximum lifespan of white-tailed ptarmigans is three to four years.

The Alpine habitat of the white-tailed ptarmigan is disturbed and altered by recreation such as skiing, off-road vehicles and hiking. Other factors including mining activities, livestock grazing, hunting, disease and predation further threaten this pristine terrain and the well-being of the white-tailed ptarmigan. Population trends vary by region and in some cases are not known. Population extinctions of the bird have already occurred. Climate change is likely to increase the negative impacts affecting the survival of this species locally.

Listen to the White-Tailed Ptarmigan here:

<https://xeno-canto.org/39094>

For more Information please visit these links:

<https://kananaskis.org/white-tailed-ptarmigan/>

<https://www.audubon.org/field-guide/bird/white-tailed-ptarmigan>

https://www.biologicaldiversity.org/species/birds/white-tailed_ptarmigan/natural_history.html

<https://wildlife-species.canada.ca/bird-status/oiseau-bird-eng.aspx?sY=2014&sL=e&sB=WTPT&sM=p>