

## Ptarmigan

Ptarmigan, close relatives of forest and prairie grouse, live in alpine and arctic tundras throughout the northern hemisphere. There are three kinds of ptarmigan, and all are found in Alaska. Willow ptarmigan (*Lagopus lagopus*) are found nearly everywhere in Alaska's high, treeless country. They occupy a broad range throughout Canada, Scandinavia, Finland and Russia. The famous red grouse of Scotland is a race of the willow ptarmigan. Rock ptarmigan (*Lagopus muta*) also live in Canada, Scandinavia, Scotland, and northern Eurasia. They range through most of Greenland and Iceland and have scattered southern outposts in Japan, Switzerland, and Spain. In Alaska, rock ptarmigan live in all major treeless areas except the flat tundras of the western and northern coasts. White-tailed ptarmigan (*Lagopus leucura*) are strictly North American. They occupy rugged uplands from the Alaska Range and central Yukon southward to Washington and northern New Mexico.

**General description:** Ptarmigan look just like small grouse, weighing from 10 1/2 ounces to 1 1/2 pounds (0.3-0.7 kg) except that their toes are feathered, their wings are white all year, and they have pure white body plumage in winter.

**Life history:** In early spring, male ptarmigan become intolerant of other males and establish territories that they defend vigorously with aerial chases and a variety of gargling, croaking, and screaming noises. Sometimes the three species are found on a single mountain, and often two kinds breed close together. In such cases there is usually a clear altitudinal separation of the various kinds, with willow ptarmigan living closest to timberline.



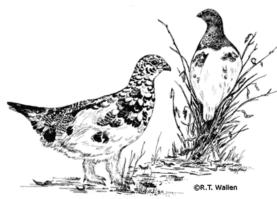
altitudinal separation of the various kinds, with willow ptarmigan living closest to timberline, rock ptarmigan on middle slopes and low ridges, and white-tails high among rough rocky screes and boulder-strewn ridges close to glaciers or snowfields.

All ptarmigan nest on the ground soon after the snow melts. Hens usually lay six to ten eggs which are incubated for three weeks. Hatching takes place in late June and early July throughout Alaska. The male willow ptarmigan stays with the family and doesn't hesitate to defend the brood, but male white-tails and rock ptarmigan leave the care of chicks entirely to hens. The chicks grow with amazing speed. They can get off the ground only nine to 10 days after hatching and fly well when they get their first full set of flight feathers at eight to 10 weeks of age.

Autumn is a time of restlessness. Flocks form and disperse and form again, and the birds move around into unfamiliar alpine areas. In October the wandering takes on a pattern; females tend to form their own flocks and drift lower down into brushy forest openings while cocks stay close to timberline. The extent of the fall movements varies from place to place, but migrations of 100 to 150 miles (160-240 km) one way probably are the longest undertaken by any ptarmigans in Alaska.

Ptarmigan are nomadic in winter, moving erratically from one sheltered slope or patch of food to another from November to March. The birds are quite sociable in winter and usually feed and roost in the snow close together. In April and early May, flocks of ptarmigan numbering several thousand sometimes appear in purposeful movement back to their breeding grounds. These huge flocks, perhaps created by the funneling effect of river valleys and narrow mountain passes, rapidly disintegrate when the summering areas are reached, as each cock demands his share of elbow room in the vast stretches of white and brown tundra.

**Foods:** When snow covers the ground, willow ptarmigan eat willow buds, willow twigs, and a little birch. Rock ptarmigan nip off birch catkins, birch buds, and a little willow. White-tails mix buds and catkins of willow, birch, and alder in varying amounts. This diet lasts until well along in the courtship period of spring, giving way as snow melts to a blend of insects, overwintered berries, new leaves, and flowers. The birds eat a potpourri of vegetable matter in summer and occasionally take advantage of a particularly abundant crop of caterpillars or beetles. Gradually, as insects disappear and plants become dormant, the diet turns increasingly to berries, seeds, and buds. By mid-October most ptarmigan (except in coastal areas of Southcentral Alaska) are back to their winter menu.



**Populations:** Ptarmigan are notorious for their here-today, gone-tomorrow populations, pulsing between superabundance and virtual absence in just a few years.

The causes of the rapid population changes remain a mystery. Many people think that ptarmigan numbers fluctuate rhythmically, with peaks once every nine or 10 years. Although there is good evidence for these cycles in Iceland, cycles are more legend than proven fact in Alaska. As with many other grouse, the population depends very heavily on each year's production of chicks, since this year's chicks will be next year's breeding stock. Under these conditions, one or two years of poor reproduction, a cold wet spring, or high winter losses can cause drastic declines in abundance. Conversely, one or two good years might result in more ptarmigan than you could swing a shotgun at.

**Hunting:** Ptarmigan hunting is fun. You never know what to expect from one trip to the next. On opening day you tramp through colorful thickets of willow and dwarf birch, your dog nosing coveys of brown birds out of the brush while you mop your brow and wish you hadn't put on a sweater. Late in September, after facing a strong, cold wind for several fruitless hours, you top out on a rocky ridge and suddenly find yourself surrounded by several hundred stretch-necked, pinto-patterned ptarmigan. You hang up your shotgun for five months, only to be tolled into the hills again by the bright blue days of March. Warmly clad in parka and mukluks, you snowshoe across narrow alpine valleys following meandering

trails of three-pronged ptarmigan tracks across the brilliant snow.

Ptarmigan hunting can be a serious business, especially if you live in Alaska's vast hinterland and caribou have been scarce. Then is the time to go after ptarmigan in earnest, using all the tricks at your command. Snares are very effective when used by those who know the birds well. A favorite method is to build a thin fence of close-set willow branches, leaving small openings where the snares are set. Another technique takes advantage of the fact that ptarmigan drag their feet in soft snow. A series of snare loops are tied into a long line, and the loops are placed flat on the ground around a favorite thicket of willows. Birds step into the loops, drag their feet forward--and are caught.

Text: Robert B. Weeden Illustration: R.T. Wallen Revised by Tom Paragi and reprinted 2008