

Join us for Algonquin Provincial Park's 3rd Annual

Winter in the Wild Festival

February 15-16, 2014 • Family Day Weekend

All activities during the festival are free with the purchase of a valid Park Permit with the exception of food.



Winter in Algonquin is unforgettable and Winter in the Wild highlights the best of what the season has to offer the whole family.



Make memories in Algonquin this Family Day weekend.



Checklist and Seasonal Status of the Birds of Algonquin Provincial Park

This publication features a list of all of the bird species that have been recorded within Algonquin Park, as well as their status (e.g. common, uncommon, rare) and the time of year when they are normally found. There is also information on specific sites to go birding and to find some of Algonquin's specialties.

ONLY \$3.00

Available at the Algonquin Visitor Centre Bookstore, the East Gate and West Gate and online at algonquinpark.on.ca



Join us this Family Day Weekend for

Snowshoeing

Tracking

Winter Bird Walks

Photography Tips

Tours of the Collections Room

Ice Skating

Cross-country Skiing

Winter Camping Demos

Roasting Marshmallows
and more...

Events are subject to change.
Please check online for a current list of events: algonquinpark.on.ca

COME JOIN US IN...

A Celebration of BIRDS OF ALGONQUIN PARK

Featuring

- Ron Tozer's Birds of Algonquin Park exhibit
- Illustrations by Dawn Sherman
- Illustrations by Christine Kerrigan
- Wool Felting by Andrea Kingsley
- Wood Carvings by Ernie Martelle
- Wood Carvings by Dave Standfield
- Photography by Peter Ferguson
- Photography by Michael Runtz



Algonquin Park Visitor Centre (km 43)
THE ALGONQUIN ROOM
November 2, 2013 to June 26, 2014

Presented by The Friends of Algonquin Park. Proceeds to The Friends of Algonquin Park.



The Visitor Centre now offers free WiFi internet access...and while there, don't forget to check out The Friends of Algonquin Park Bookstore and Nature Shop, or enjoy some refreshments at the Sunday Creek Café.

algonquinpark.on.ca

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Algonquin

The Raven

A Natural and Cultural History Digest



Algonquin Birds in Winter

by Ron Tozer, retired Park Naturalist, Algonquin Park

Algonquin is a great place to see birds in winter – just not very many. Relatively few kinds are present in the Park then compared to the rural and urban areas of southern Ontario where most park visitors live. About 25 to 30 species occur here regularly in late December whereas 80 to 100 can be found along the north shores of Lake Erie and Lake Ontario at that time. Features of locations farther south in the province that benefit birds during winter include: frequent lack of snow; agricultural fields with grain, corn and weed seeds; open water; fruit-bearing trees and shrubs; abundant feeders; and regularly warmer temperatures. These things are almost totally absent here. Algonquin's winter birds have special adaptations to cope with the cold temperatures and deep snow, and are able to exploit the limited feeding opportunities that exist. Of course, the commonest avian adaptation to an Algonquin winter is to leave, and most of our birds (and park visitors!) do so by migrating southward.



American Goldfinch has 50% greater feather mass in winter than in summer.

GORD BELEYA

Birds present here in winter have special features that allow them to survive the extremely cold temperatures. After the nesting season, many birds moult (replace feathers) and the new set of body feathers have greater mass. For example, the American Goldfinch has 50% greater feather mass in winter than in summer. The winter feathers have increased ability to retain heat. By fluffing its feathers and trapping air between them, a bird can almost double its insulative value and reduce heat loss by as much as one

third. A half inch (13 mm) of feathers on a Black-capped Chickadee can result in nearly 50°C (122°F) difference in temperature between the bird's skin and the outer surface of its feathers.

Fat reserves are used by birds to generate heat to maintain body temperature. One extremely cold winter night can result in the depletion of nearly all of a chickadee's fat reserves. Birds often feed heavily just before going to roost





A Black-capped Chickadee can lower its body temperature at night by as much as 12°C (22° F).

together in the same tree cavity when roosting, helping each other to keep warm. Snow provides good insulation and Ruffed Grouse, Snow Buntings and Common Redpolls often burrow into it to roost.

Many winter birds in Algonquin travel and feed in flocks. Each flock member can spend more time feeding and less time watching for predators than if foraging alone because some members of the group are constantly vigilant. Their alarm calls alert all flock members. "Single-species foraging flocks" are formed by birds whose food is available in large, easily shared quantities, and so there is little competition among flock members even though they feed in the same way. An example is a flock of White-winged Crossbills feeding on abundant spruce cones. "Mixed-species foraging flocks" form in winter to search for food such as dormant invertebrates



Gray Jays begin storing food in late summer for use during winter in Algonquin Park.

and food is held in the crop and gradually digested throughout the night to supplement the burning of fat to keep warm. Heavy feeding again in early morning is undertaken to rebuild fat reserves. Most of the energy from fat is used to contract the massive breast (flight) muscles as birds "shiver" to generate heat. A bird may shiver constantly throughout a very cold night. Some birds are able to utilize less energy to cope with cold temperatures by undergoing "controlled hypothermia." A Black-capped Chickadee can lower its body temperature at night by as much as 12°C (22° F). When the temperature falls to 0°C (32°F) at night, almost 25% of the energy needed to maintain a chickadee's normal temperature is conserved by this state of torpor.

The coldest temperatures occur during long winter nights when most birds are roosting. Many birds roost in coniferous trees where the dense foliage and snow on branches block heat-stealing wind and also trap some of the heat escaping from the birds. Most birds roost singly but Golden-crowned Kinglets spend the night in small groups within thick conifer foliage, huddling tightly together with their chests pointing inward, their tails pointing outward, and their heads tucked into their back feathers. In this way, they are able to conserve heat and survive cold winter nights despite their small body mass. Other birds such as woodpeckers, nuthatches and chickadees roost in tree cavities which help to reduce heat loss. Several Black-capped Chickadees may cluster

summer for use during winter in Algonquin Park and Black-capped Chickadees are heavily engaged in this activity during October and November. These "scatterhoarders" hide food items in widely separated sites which minimizes the amount of their stored food lost to other birds and mammals that find it by chance as they forage. Research indicates birds that store food can accurately relocate their caches through spatial memory rather than randomly searching. The hippocampus region of the brain governs spatial memory in birds, and that area of the Black-capped Chickadee's brain is enlarged in October, just when food storing is occurring.



Spruce Grouse selectively feed on conifer needles with higher protein and ash content.

and their eggs that occur in small, scattered patches. Individuals in these flocks experience reduced competition for food due to slightly different foraging methods among member species, while benefitting from sharing food resources located by the flock and shared vigilance. Black-capped Chickadees, Boreal Chickadees, Brown Creepers, Red-breasted Nuthatches, Golden-crowned Kinglets and Downy Woodpeckers form mixed-species flocks in Algonquin during winter.

Some birds depend on stored food to survive in winter. Gray Jays begin storing food in late

summer for use during winter in Algonquin Park and Black-capped Chickadees are heavily engaged in this activity during October and November. These "scatterhoarders" hide food items in widely separated sites which minimizes the amount of their stored food lost to other birds and mammals that find it by chance as they forage. Research indicates birds that store food can accurately relocate their caches through spatial memory rather than randomly searching. The hippocampus region of the brain governs spatial memory in birds, and that area of the Black-capped Chickadee's brain is enlarged in October, just when food storing is occurring.

Algonquin winter by scavenging, especially at wolf kills. Vagrant ravens (first year and non-breeding birds) may fly over a huge area of up to 1,800 square kilometres looking for carcasses. When one of these scarce food resources is found, there is competition among ravens for it. A resident pair of ravens can successfully "defend" a carcass located on their territory at first. But vagrants gain access to a carcass defended by territory holders through "recruiting" other vagrants. The first vagrants at a defended carcass give "begging calls" similar to those given by young in the nest, which reduce aggression by the resident pair and also attract any nearby vagrants. Later, vagrants give loud "yell calls" to attract even more vagrants to the carcass. When the number of vagrant ravens reaches eight to 10 birds, the territorial pair is "overwhelmed" and the vagrants get to feed.

Some birds actually come to Algonquin Park during the winter. Large numbers of finches such as Red Crossbills, White-winged Crossbills and Pine Siskins may be present when bumper cone crops provide abundant seed for them to eat. The crossbills may even nest here in late winter when conifer seeds are available in large quantities. The Great Gray Owl, Boreal Owl and Northern Hawk Owl irrupt irregularly into southern Ontario and beyond when small mammal populations crash in their Boreal Forest breeding range. Some of these owls pass through Algonquin Park in late fall and early winter and occasionally linger here in winter when there are enough small mammals to sustain them. Great Gray Owls were observed regularly along the Highway 60 Corridor throughout the winter of 2012-2013, for example.

The bottom line for Algonquin's winter birds is that they can usually survive the cold temperatures and deep snow as long as there is an adequate supply of accessible food. Perhaps surprisingly to us, there is a remarkable diversity in the things that birds find



Common Raven
Mark Peck

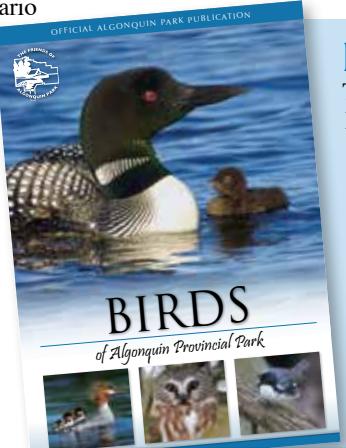
to eat here in winter. This is demonstrated by the following examples of food resources and species that feed on them: tree buds (Ruffed Grouse, Pine Grosbeak); carrion (Bald Eagle, Golden Eagle, Common Raven); conifer needles (Spruce Grouse); herbaceous plants, fern fronds and moss capsules exposed by digging in the snow (Wild Turkey); grouse and snowshoe hares (Northern Goshawk); small mammals (Barred Owl); invertebrates and their eggs on tree bark (Brown Creeper); wood-dwelling ants and beetles (Pileated Woodpecker); wood-boring beetle larvae under conifer bark (Black-backed Woodpecker); soft-bodied invertebrates on conifers, including geometrid moth caterpillars (Golden-crowned Kinglet); conifer seeds (Red Crossbill, White-winged Crossbill); seeds of birch, alder and weeds (Common Redpoll); and conifer



Evening Grosbeaks at the Algonquin Visitor Centre feeder.

and deciduous tree seeds (Evening Grosbeak).

Park visitors encounter birds in winter all along the Highway 60 Corridor but there are some areas that are particularly good for seeing them. Feeders at the Visitor Centre often provide excellent opportunities for closely observing and photographing birds such as Common Redpoll and Evening Grosbeak. Birders come here in winter to look for Algonquin's boreal specialties –Spruce Grouse, Black-backed Woodpecker, Gray Jay and Boreal Chickadee– along Spruce Bog Boardwalk and the Opeongo Road. Winter finches are frequently attracted to sand and salt on the highway, so be sure to slow down and blow your horn when you see birds on the road to avoid killing them with your vehicle. Enjoy Algonquin's winter birds!



Available at the Algonquin Visitor Centre Bookstore, the East Gate and West Gate and online at www.algonquinpark.on.ca

ONLY \$4.95

Birds of Algonquin Provincial Park

The long-awaited revised edition of the Birds of Algonquin Provincial Park hit shelves this fall. Despite its seemingly endless expanses of thick forest, Algonquin is a can't-miss destination for bird enthusiasts as it is a stronghold for species that have travelled north from Tropical America to raise their young during the summer months. It is also one of the best places in south-central Ontario to see Boreal Forest specialties such as Spruce Grouse, Gray Jay, Black-backed Woodpecker and Boreal Chickadee.

Over 50 years of careful data-keeping on the 279 bird species that have been recorded in Algonquin has uncovered some significant ecological trends in Algonquin's bird populations, resulting in a special 5-page section in this new edition.