

THE BIRDS OF LAC LA RONGE PROVINCIAL PARK, SUMMER 1995

The authors were stationed in La Ronge from 23 May to 31 July 1995 as part of a project to study the effects of BTK (*Bacillus thuringiensis kurstaki*) insecticide on forest songbirds for Dr. Keith Hobson of the Canadian Wildlife Service. BTK is widely used in forest management to control outbreaks of spruce budworm (*Chrysoneura fumiferana*),¹ but its impact on other forest organisms is poorly understood. This project was

one component of a joint project with Saskatchewan Environment and Resource Management.

The majority of the work was performed in the west-central region of Lac La Ronge Provincial Park along Provincial Highway 102 north of La Ronge and Provincial Road 915 to Stanley Mission. Some censuses were also conducted along Provincial Highway 102 to the northern park boundary, along Nemeiben Lake road, and in the Napatak area of the southern portion of the park. A map of the park is provided in Figure 1.

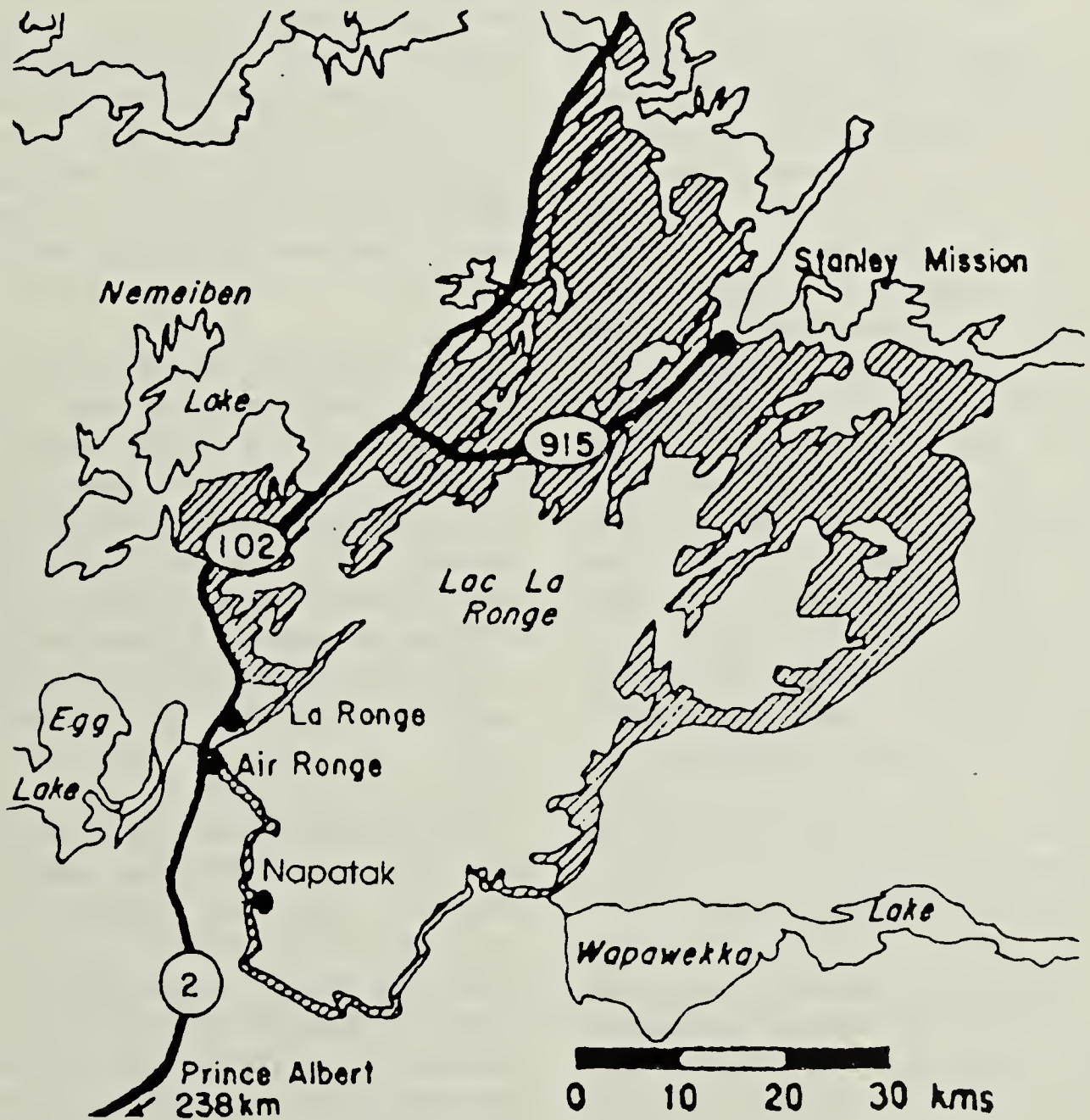


Figure 1. Map of Lac La Ronge Provincial Park.

Most records of forest passerines were recorded via 10-minute point-count surveys conducted during the first four hours of daylight in mature upland mixed-wood forest from early June through to early July. For the remainder of July, other records were obtained via observations of family groups and multi-species foraging flocks. Because of the nature of this project, our observations focussed on neotropical migrant songbirds. This bias resulted in comparatively fewer data being collected on non-passerine species. Therefore most non-passerines were recorded through incidental observations.

We found a total of 126 species of birds within the park boundaries. Of these, 47 were confirmed as breeding species, 68 were designated suspected breeding species, 7 as migrants, 3 as unknown, and 1 as accidental. Breeding species were determined by the location of nests, or by observing fledglings, adults carrying food or adults feeding fledglings. Suspected breeding species were determined by the presence of singing male birds or adults exhibiting territorial behaviour. Migrant species are those that occur in the area during spring and fall migration, but are not believed to breed. Those that could not be distinguished as to whether they were breeding or in migration were designated as unknown. One accidental species was designated based on its occurrence well outside its normal range.

With a few exceptions, most of the species found were not unexpected. This region represents the northern range limit for several species.² These include Black-and-White, Black-throated Green, Chestnut-sided, Blackburnian, Connecticut and Canada Warblers as well as American Redstart and American

Goldfinch. Most observations of these species were made in the southern portion of the park that is not on the Precambrian Shield. Some of these were found to be rare with fewer than five observations made. A single male Black-throated Green Warbler singing on territory on each of several visits near Napatak from early June to mid-July was presumed to be the same individual and represented our only record of this species. A Blackburnian Warbler was observed carrying food on 18 July in the Napatak area. A dead bird (hatch year male based on an unossified skull and plumage characteristics) was found beneath a cabin window at Wadin Bay resort on 28 July. This specimen was donated to the Royal Saskatchewan Museum. In early June, single male Chestnut-sided and Connecticut Warblers were located singing in the vicinity of the junction of Provincial Highway 102 and Provincial Road 915 but were not observed again. A female Canada Warbler was observed carrying food on 18 July near Napatak. American Goldfinches were observed several times in the vicinity of feeders in La Ronge. Black-and-White Warblers and American Redstarts were found to be more widely distributed and more common with five and 10 records of each respectively.

Some species were notably common. The Ovenbird, Yellow-rumped, Magnolia, Cape May, Bay-breasted and Tennessee Warblers were all commonly observed throughout the park. The local abundance of these species, especially the latter three, may have been in response to the heavy spruce budworm outbreak in the La Ronge area.

Other species fell into a variety of categories. A flock of 10 Greater

Scaup observed on 28 May were likely migrating through the area. A Barred Owl heard in the early morning of 8 June 12 km north of La Ronge was likely near the northern range limit of this species.² Observations of the Bohemian Waxwing in the northern area of the park probably represents the southern limit of its breeding range. Several more typically open-country species that were presumably in migration were found along roads and in the heliport fields at the Forest Fire Management Centre in La Ronge during the last week of May. These were Horned Lark, American Pipit, and Lapland Longspur. The irruptive White-winged Crossbill was only recorded on two point count surveys in June but became common in mid-July. Species whose status was designated as unknown were Sandhill Crane, Mourning Dove and Vesper Sparrow.

Despite widespread concern about the northward range expansion of the Brown-headed Cowbird into forested regions of North America, only two observations were made of this species in the La Ronge vicinity during this period. However, many have been recorded at equally far north locations such as Buffalo Narrows (K. Hobson, pers. comm.). House Sparrows were conspicuously absent from the La Ronge area although Godfrey lists them occurring much farther north (Wollaston Lake, Lake Athabasca).²

Our most unusual find came on 24 May at the south end of Lac La Ronge where we (both authors, Keith Hobson, Robert Wright and Cameron Lockerbie) found a group of three American Avocets resting on the ice approximately 500 m offshore in Meeyomoot Bay. Two of the birds were resting with their bills tucked

under their wings while the third stood with its neck upright. Although these birds were obviously far off course, they appeared healthy as we studied them for approximately 15 minutes through binoculars and a spotting scope. We were able to note the characteristic black and white back, orange neck, long bluish legs and upturned bill (on the upright bird). A late spring snowstorm on the following day sent temperatures below freezing. No attempt was made to relocate these birds after the initial observation.

Single observations of three additional species, Horned Grebe, Turkey Vulture and Great Gray Owl, were made just outside of the southern park boundary. All three of these species are expected to occur within the park.

Lac La Ronge Provincial Park has very limited road access with much of it being accessible only by boat or on foot. Because of this, a complete picture of avifauna within the park is difficult to obtain. Therefore it is not surprising that little is known about bird distribution in this area. This makes assessing our findings difficult, as there is little to compare them to, although an extensive study of the nearby Besnard Lake area has confirmed the occurrence of 201 bird species.

In order to gain a more complete picture of bird distribution in Lac La Ronge Provincial Park, one of our goals is to compile and publish an official comprehensive bird checklist of this area. Since our findings alone are not sufficient to publish an official list, we need to supplement them with those of the general public. We urge anyone with unpublished bird records for Lac La Ronge Provincial Park to send them to the following as

soon as possible: Robert Wapple, Box 1153, Biggar, SK. S0K 0M0. Please supply details for any rare or unusual species. Breeding records would be especially useful. General comments on bird life in the park would also be appreciated. A preliminary list of species and their status is available from the authors. Hopefully the cooperation of Nature Saskatchewan members and other *Blue Jay* readers will aid in the publication of a park checklist in the near future. Together with the Nature Saskatchewan publication of the *Birds of The Besnard Lake Area, North-Central Saskatchewan 1968-1994* a much clearer picture of the avifauna in this region of Saskatchewan should emerge.

The authors wish to thank Karen Waters and Dr. Robert Wright of Saskatchewan Environment and Resource Management for technical assistance during our stay in La Ronge. Dr. Keith Hobson of the Canadian Wildlife Service (Saskatoon) gave us the opportunity to work in the Lac La Ronge area and reviewed this article.

1. GOVERNMENT OF CANADA. 1991. The state of Canada's environment. Ottawa, ON.
2. GODFREY, W. E. 1986. The birds of Canada, revised edition. National Museum of Canada. Ottawa, Ontario. 595 p.

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If species composing a particular ecosystem begin to go extinct, at what point will the whole machine sputter and destabilize? We cannot be sure because the requisite natural history of most kinds of organisms does not exist, and experiments on ecosystem failure have been generally lacking. Yet think of how such an experiment *might* unfold. If we were to dismantle an ecosystem gradually, removing one species after another, the exact consequences of each step would be impossible to predict, but one general result seems certain: at some point the ecosystem would suffer a collapse. Most communities of organisms are held together by redundancies in the system. In many cases two or more ecologically similar species live in the same area, and any one can fill the niches of others extinguished, more or less. But inevitably the resiliency would be sapped, efficiency of the food webs would drop, nutrient flow would decline, and eventually one of the elements deleted would prove to be a keystone species. Its extinction would bring down other species with it, possibly so extensively as to alter the physical structure of the habitat itself. Because ecology is still a primitive science, no one is sure of the identity of most keystone species. We are accustomed to thinking of the organisms in this vital category as being large in size—sea otters, elephants, Douglas firs, coral heads—but they might as easily include any of the tiny invertebrates, algae, and microorganisms that teem in the substratum and that also possess most of its protoplasm and move the mass of nutrients. Wilson, E.O. 1992. *The diversity of life*. W.W. Norton and Company, New York. 424 pp.