

KEEPING TRACK OF SASKATCHEWAN'S BIRDS*

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Are their summer populations increasing or decreasing? This article will not answer that question — because we don't have enough information, yet. But we are trying to find out and we are looking for bird watchers who would like to help by putting in about six hours on a bird count one morning a year in June.

Co-operative bird counting schemes are one way to get around the impossibility of being in more than one place at a time, when you need to know what is happening in the bird world over a wide area. The Christmas Bird Count (CBC) is the best known endeavour of this kind. Less well known, but no less enjoyable to those of us who take part, is the co-operative Breeding Bird Survey (BBS), which seeks to measure trends in summer bird numbers. In 1977 Christmas Bird Counts were done in 68 localities in Saskatchewan; Breeding Bird Surveys in 21.

The BBS was started in the U.S.A. in 1965, and has been operating in Saskatchewan since 1968.¹ It is a much more standardized count than the CBC and, consequently, the figures that emerge from it are more comparable from place to place and from year to year. One of the most important things about these surveys is that they are rather uniformly distributed across the country, one in each degree block of latitude and longitude. Figure 1 shows the 48

routes established in southern Saskatchewan. The 18 routes looking for bird counters are circled.

Observers have to be able to identify at least the common birds readily by song as well as by sight. Most people prefer to go out in pairs, although only one person makes the observations. The second person times the stops, records the data on forms, drives the car, or just goes along for the ride — and frequently tells the primary observer afterwards about all the things he or she missed at the last stop. You can't stop "one-up-man-ship"! The assistant can also act as navigator for locating stops or help to push the car out of mudholes. Most of the routes are on grid roads or better, but even these get muddy.

A route is done once in June, starting one-half hour before sunrise, on any date suitable to the observer with good weather. The starting points and routes have been determined in advance, and the same routes are done each year, preferably by the same observer, around the same date, and under comparable conditions (light winds, no rain). The observer goes to the starting point, counts all the birds seen within a quarter mile and all birds heard during 3 minutes from the prescribed starting time, then drives 0.5 miles (0.8 km) to the next stop and counts again for 3 minutes, and so on to the next stop another half-mile along the way, continuing until 50 stops are completed. This usually takes about 4 to 4.5 hours, and some people take a "seventh-inning stretch" — with

*Alberta and Manitoba bird watchers, please see note at end of this article.

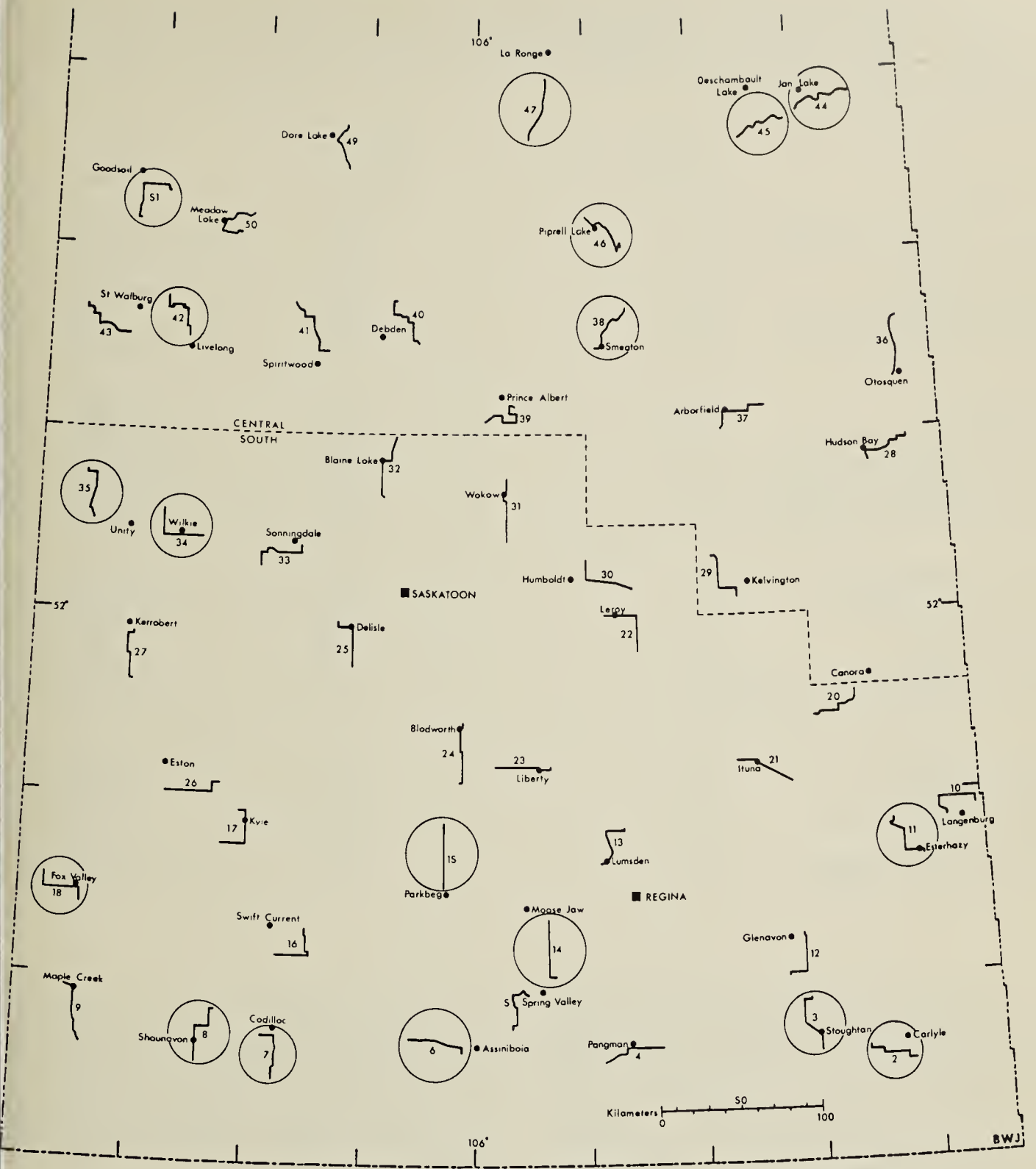


Figure 1: Breeding Bird Survey Routes in Saskatchewan. Circled routes are available for new co-operators.

coffee — partway through in order to keep up their concentration for the entire route. The first hour is the most demanding: in the dark before sunrise with the full tumult of the dawn chorus assailing your ears. But there is a real sense of achievement when you finish. And to most people there is a surprise later on when you add up the results and realize just

how many birds you recorded in that relatively short time. Even a bald prairie or northern forest route may show 40 species and 500 birds, while a good parkland route with lots of sloughs may turn up over 60 species and 1200 or more birds. People who are not exhausted by the end and want to continue have the start of a big day's list already by 9 a.m.

Table 1: The 20 species recorded in greatest numbers in the Breeding Bird Survey, southern Prairie Provinces, 1977; the mean number of each per route; and the percentage of routes on which they were found. Twenty-six routes were surveyed, with a mean of 964 birds noted per route.

Species	Mean no. per route	% of 26 routes
Red-winged Blackbird	138.9	100
Horned Lark	86.2	100
House Sparrow	73.3	100
Western Meadowlark	55.6	100
Common Crow	47.2	100
Mallard	43.1	96
Brewer's Blackbird	32.9	100
Clay-coloured Sparrow	31.3	100
Yellow-headed Blackbird	27.5	81
Brown-headed Cowbird	26.7	100
Savannah Sparrow	20.8	96
Vesper Sparrow	18.3	92
Killdeer	15.8	100
Barn Swallow	15.2	100
Chestnut-collared Longspur	15.1	27
Mourning Dove	14.5	88
House Wren	14.0	81
Blue-winged Teal	13.7	77
Cliff Swallow	12.8	23
Black-billed Magpie	12.1	88

Although the BBS provides a long list in a short time, most of the birds belong to a few species. In the southern Prairies as a whole, birds of the 20 species recorded in greatest numbers make up about 70 percent of all birds detected (Tables 1 and 2).² Most of the other 100-odd species noted have fewer than 10 individuals each on any route.

One example of the trends shown by BBS data thus far is the status of the Red-winged Blackbird. Both in the southern Prairies and in the more northern parkland and forested areas of these provinces, Redwings show a sustained upward trend, similar to that in eastern Canada where the species is becoming a major pest in corn-growing areas.¹ The BBS data

also show things like the highly erratic occurrences of species such as Short-eared Owls and Lark Buntings. At least 7 years' data are necessary before trends start to become convincing.

We would like to hear from anyone interested in surveying a vacant route during June, 1979. Please write or phone Bernie Gollop (Canadian Wildlife Service, 115 Perimeter Road, Saskatoon, Saskatchewan, S7N 0X4; phone 665-4087) for more details, or contact one of the other regular observers in your area: Bill Anaka, Marg Belcher, Wayne Harris, Don Hayward, Stuart Houston, Dale Hjertaas, Brian Irving, Ken Johnson, Jim Jowsey, Pat Kern, Sheila Lamont, George Ledingham, Moe Mareschal,

Table 2: The 20 species recorded in greatest numbers in the Breeding Bird Survey, central Prairie Provinces region, 1977; the mean number of each per route; and the percentage of routes on which they were found. Twenty-eight routes were surveyed, with a mean of 737 birds noted per route.

Species	Mean no. per route	% of 28 routes
Red-winged Blackbird	70.8	96
Common Crow	40.3	93
Clay-coloured Sparrow	31.2	89
Mallard	30.2	64
Brewer's Blackbird	29.9	79
Song Sparrow	26.0	86
Savannah Sparrow	22.8	68
House Sparrow	21.5	75
American Robin	21.1	100
Yellow-headed Blackbird	20.6	46
Red-eyed Vireo	17.6	89
Brown-headed Cowbird	16.4	89
Starling	15.4	79
Barn Swallow	14.5	89
Franklin's Gull	14.0	46
Black-billed Magpie	13.6	79
Cliff Swallow	12.7	43
House Wren	11.9	86
Black Tern	10.8	57
Western Meadowlark	9.9	57

Bob Peart, Dave Robinson, Frank Roy and John Shadick. We would like to thank these faithful co-operators, many of whom have done their surveys for 5 or more years.

Manitoba: Herb Copland, Manitoba Museum of Man and Nature, 190 Rupert Avenue, Winnipeg R3T 2N2.

Alberta and Manitoba Bird Watchers

This article was prepared primarily for Saskatchewan readers. Interested persons in other provinces can obtain information on BBS routes needing coverage from:

Alberta: Jack Park, 10236 - 70 Street, Edmonton T6A 2T4.

¹ERSKINE, A. J. 1978. The first ten years of the co-operative Breeding Bird Survey in Canada. Canadian Wildl. Serv. Res. Ser. No. 42. 59 pp.

²FINNEY, G. H., K. E. FREEMARK and A. J. ERSKINE. 1978. The co-operative Breeding Bird Survey in Canada. Canadian Wildl. Serv. Progress Note 84. 21 pp.