PROJECT SUMMER BIRD COUNT — HELP WANTED

BERNIE GOLLOP, Canadian Wildlife Service, 115 Perimeter Road, Saskatoon, Saskatchewan. S7N 0X4

Next to Christmas Bird Counts, Breeding Bird Surveys are the most extensive systematic annual monitoring of North American bird populations that we have. As a contribution to the only long-term continental check on our breeding birds, 183 surveys were run in Canada and 1619 in the United States in 1986. In Canada the average number of species per route was 58 and, while American Robin appeared on every route, the most common species was European Starling with 8853 birds. In the United States there were 53 species per route. Morning Doves were found on more routes than any other species, but Red-winged Blackbirds were most abundant with 108,000. The highest number of species was on a Wisconsin survey at 94 and the lowest was in Nevada with 8 species.[1]

The results of the first 15 years of Breeding Bird Surveys, from 1965 to 1979, have been published.[2] Information was presented on population trends and on the varying densities of species across their breeding ranges. Saskatchewan, North Dakota and Alberta had the highest numbers of Northern Harriers per route. The best routes on average for Killdeer were in South and North Dakota and Manitoba. Common Snipe increased significantly in the Aspen Parklands. After Delaware, the largest densities of Willets were in Alberta and Saskatchewan. There was a significant downward trend for Franklin's Gulls in Alberta. Manitoba had the greatest concentrations of Black-billed Cuckoos.

Northern Flickers and Black-billed Magpies decreased in Alberta. Saskat-

Young Black-billed Magpie *Lorne Scott*

chewan showed an increase in Cliff Swallows and had the highest density of American Crows. Least Flycatchers increased in the two western prairie provinces. Loggerhead Shrikes decreased significantly in Canada as a whole and in Saskatchewan in particular (where they may recently have made a comeback). Common Yellowthroats, Bobolinks, Redwinged Blackbirds and Northern Orioles increased in Saskatchewan while Western Meadowlarks, Lark Buntings and Baird's Sparrows decreased there and in Alberta. Saskatchewan and Manitoba were the leading provinces for Vesper Sparrows per route as was Alberta for Le Conte's Sparrows.

In a report comparing 1985 and 1986, 4% of 52 breeding species in Alberta increased and 12% decreased. Of 23 species in Saskatchewan, 9% increased and 13% decreased between the two years.[1]

A Breeding Bird Survey is done once a year, preferably in June, and takes 4 to 4.5 hours. The route is 29.2 km (24.5 mi.) long, usually on an all-weather road but not on a highway. Starting point and direction of travel are randomly selected by computer to avoid the bias of someone deliberately selecting the best areas. Theoretically a large sample of such transects in a region will result in the appropriate mixture of high, low and average counts.

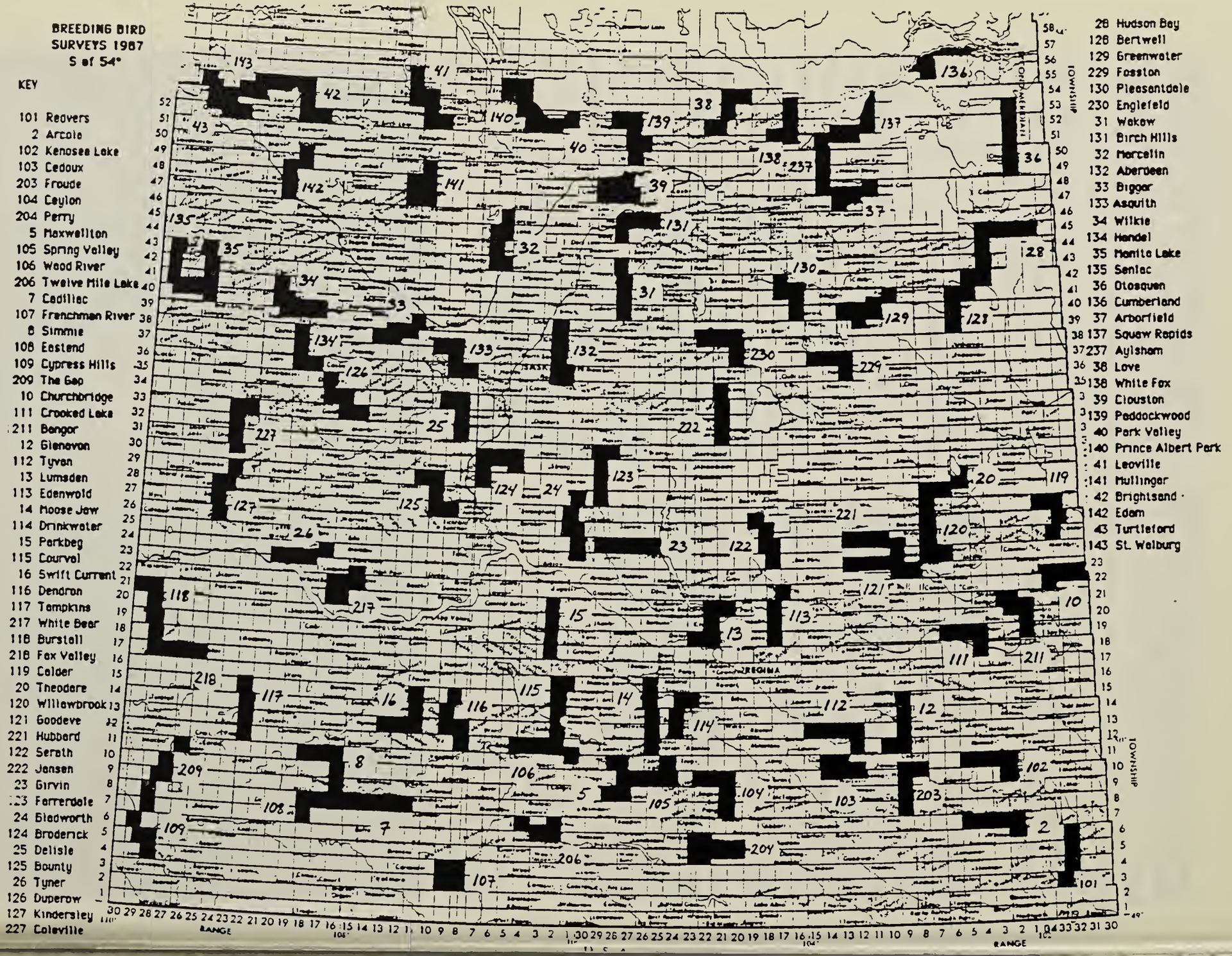
Normally there is one route per degree block of latitude and longitude, e.g. within the block 52°-53°N x 106°-107°W. However, in Saskatchewan in 1986, only 13 routes were done. In an experiment aimed at increasing participation a second route was added to each degree block in 1987, giving 85 routes south of 54°N or Township 58. This doubling will probably also occur in Manitoba and Alberta within a year or two. The locations of current routes in the prairie provinces are shown on the accompanying maps.

A route has 50 stops spaced 0.8 km (0.5 mi.) apart. Starting time is half an hour before sunrise, which often means around 4:00 a.m. During each 3-minute stop, all the birds seen and heard within 0.4 km (0.25 mi.) are counted. Two people are involved. One does the observing and reports results to the other who records them on the forms provided. A detailed map, set of instructions and forms are provided to each observer.

The observer has to be able to identify at least all the more common birds along a route by song as well as by sight because most records are based on singing or calling birds. Some counted species are never actually seen during a survey. The second person does not have to know birds but does have to become familiar with the sequence of names on the form so that numbers for 3 to 30 species per stop can be entered quickly in the appropriate column. A count is considered comparable from year to year only if it is done by the same person because there is so much variability between people no matter how experienced they are.

Anyone who wants more information about this project should contact their provincial coordinator (listed below) about participating as an observer, recorder or just a rider, going along to find out how a survey is done, with the possibility of taking part in some capacity in the future. If you want to try a transect north of those shown on the maps let the provincial coordinator know at least two weeks beforehand and one can probably be set up. It is better to have one year's data for an area than none at all. And if you are interested, but expect to be in another province in June, please let the appropriate coordinator know and you may be able to help there.

Before doing a route for the first time, it is a good idea to drive all of it to see if there are problems with the road or


BREEDING BIRD
SURVEYS 1987
S of 54°
KEY
101 Reavers
2 Arcola
102 Kenosee Lake
103 Cedoux
203 Froude
104 Ceylon
204 Perry
5 Maxwellton
105 Spring Valley
106 Wood River
206 Twelve Mile Lake
7 Cadillac
107 Frenchman River
8 Simmie
108 Eastend
109 Cypress Hills
209 The Gap
10 Churchbridge
111 Crooked Lake
211 Bengor
12 Glenavon
112 Tyvan
13 Lumsden
113 Edenwold
14 Moose Jaw
114 Drinkwater
15 Parkbeg
115 Courval
16 Swift Current
116 Dendron
117 Tompkins
217 White Bear
118 Burstall
218 Fox Valley
119 Calder
20 Theodore
120 Willowbrook
121 Goodeve
221 Hubbard
122 Semth
222 Jensen
23 Girvin
123 Ferrerdale
24 Bladworth
124 Broderick
25 Delisle
125 Bounty
26 Tyner
126 Duperow
127 Kindersley
227 Coleville
28 Hudson Bay
128 Bertwell
129 Greenwater
229 Fosston
130 Pleasantdale
230 Englefeld
31 Wakaw
131 Birch Hills
32 Marcelin
132 Aberdeen
33 Bigger
133 Asquith
34 Wilkie
134 Handel
35 Manito Lake
135 Senlac
36 Otosquen
136 Cumberland
37 Arborfield
137 Squaw Rapids
237 Aylsham
38 Love
138 White Fox
39 Clouston
139 Paddockwood
40 Park Valley
140 Prince Albert Park
41 Leoville
141 Mullinger
42 Brightsand
142 Edam
43 Turtleford
143 St. Walburg
REGINA
SASK
TOWNSHIP
RANGE

some of the stops. (There are rules for adjusting stops, including calling the provincial coordinator about big problems.) If it is your first survey, it would also be worthwhile to do a practise run of at least part of the route, even if at a more convenient time of day than sunrise.

A few months after the survey, you will receive a computerized copy of your data for checking. Later you will get a summary of the previous year's continental results and a newsletter with additional analysis and unusual experiences along the Breeding Bird Survey trail.

So if you want to have a fun time — getting up between 2:00 and 3:00 a.m., having the wind come up or the rain come down during a survey so that you have to quit, being frustrated by songs you can't identify, climbing in and out of a car 50 times — why not give it a try? You'll be hearing a chorus of bird song that makes your discomfort all worthwhile, and you'll be contributing to a project aimed at measuring the welfare of our breeding birds provincially, nationally and internationally.

Provincial Coordinators are:

Alberta
Jack Park
10236 - 70 Street
Edmonton, Alberta T6A 2T4
(403) **469-8127** (residence)

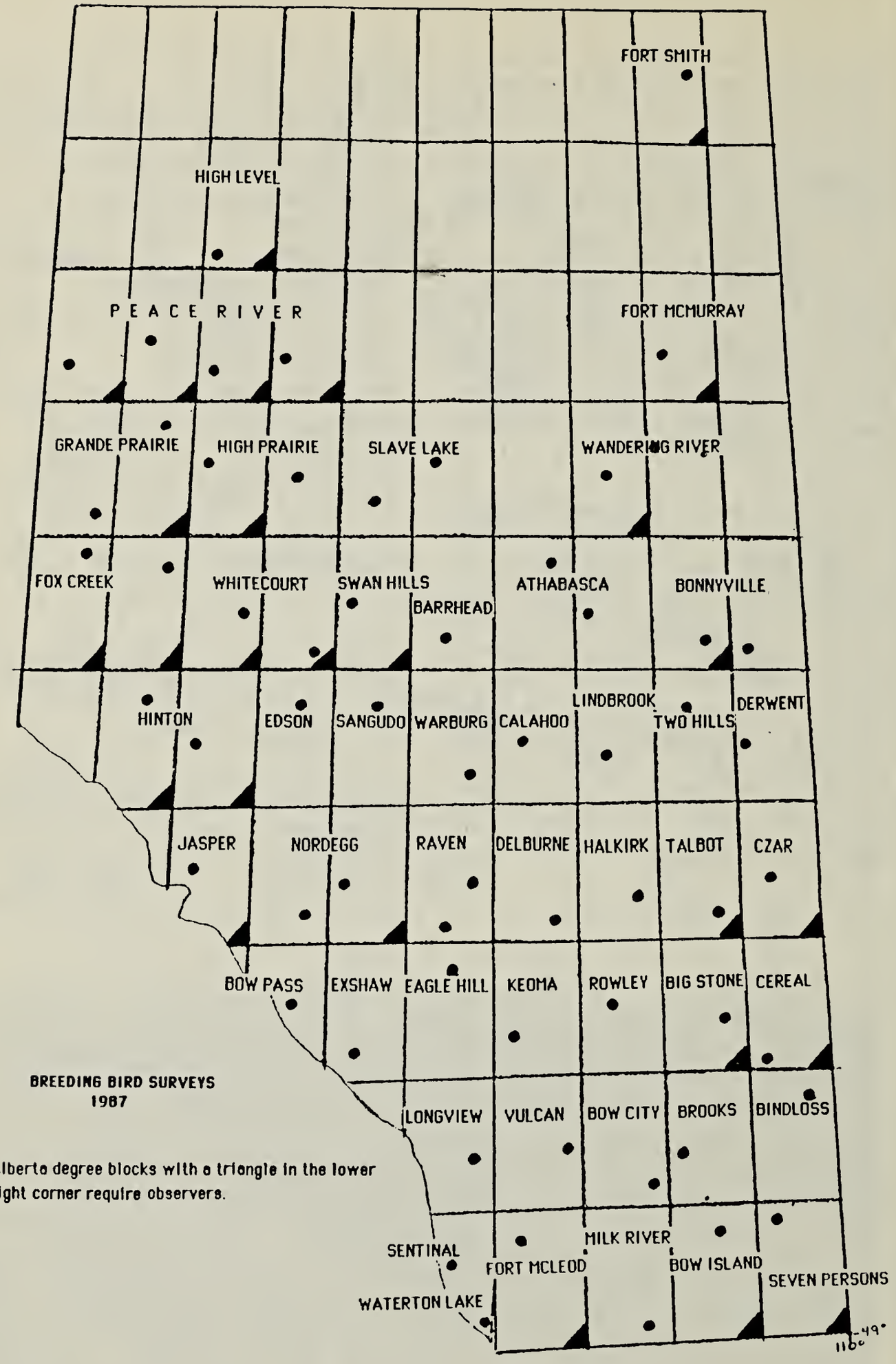
Saskatchewan
Brian Johns
Canadian Wildlife Service
115 Perimeter Road
Saskatoon, Saskatchewan S7N 0X4
(306) **975-4109** OR
975-5595 (Whooping Crane Hot Line)

Manitoba
Herb Copland
Manitoba Museum of Man and Nature
190 Rupert Avenue
Winnipeg, Manitoba R3B 0N2
(204) **956-2830** (office) OR
(204) 667-8266 (residence)

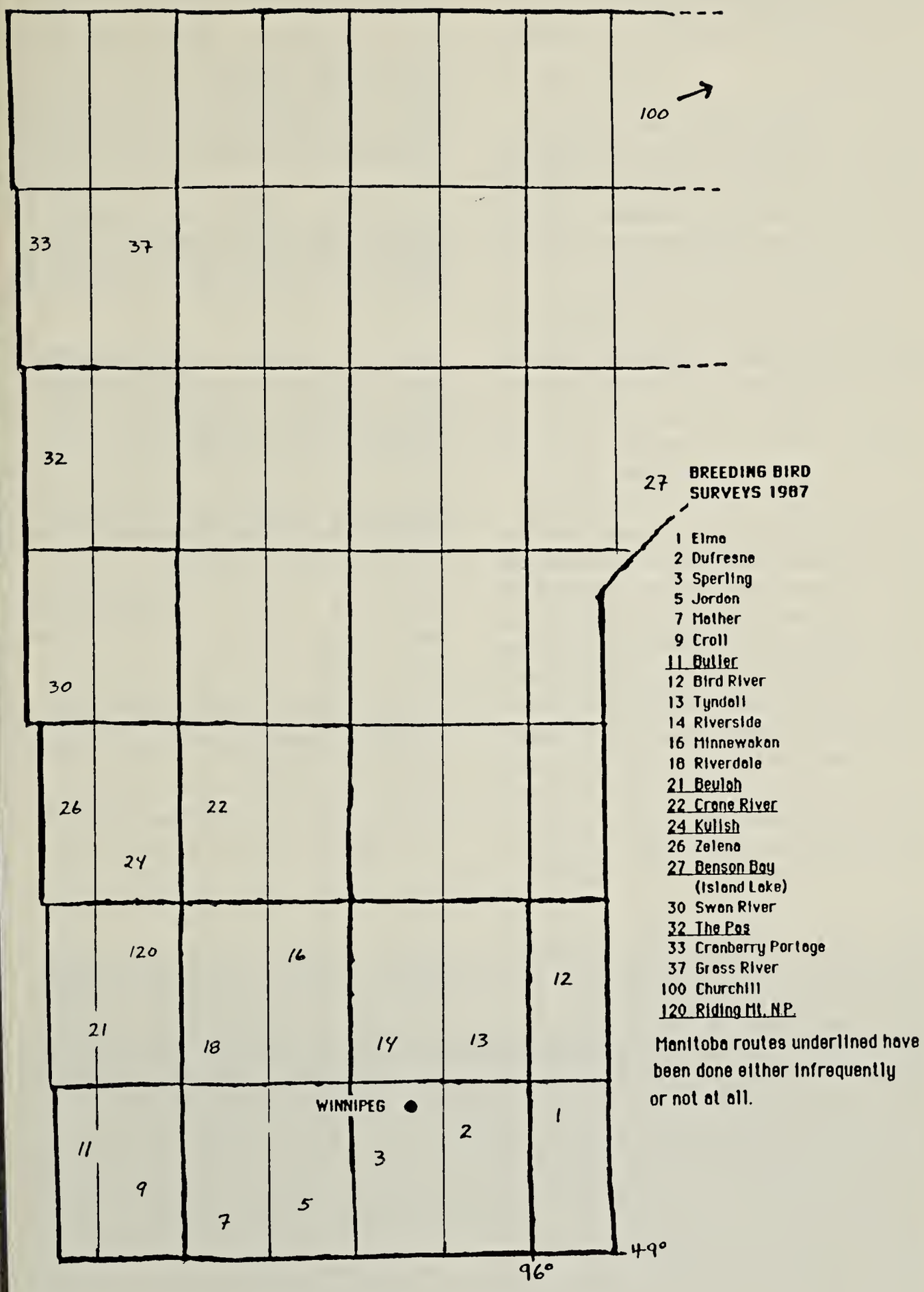
[1] DROEGE, SAM and J.R. SAUER 1986. Breeding bird survey — annual summary, 1986. U.S. Fish and Wildlife Service, Laurel, Md. 20 pp. Unpublished.

[2] ROBBINS, C.S., DANNY BYSTRAK and P.H. GEISSLER 1986. The breeding bird survey: its first fifteen years, 1965-1979. Resource Publ. 157. U.S. Fish and Wildlife Service, Wash. 196 pp.

Red-winged Blackbird *Fred Lahrman*



Alberta Breeding Bird Survey routes.



Manitoba Breeding Bird Survey routes.

FEMALE MERLIN KILLS AMERICAN CROWS IN NEST DEFENCE

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While it is generally acknowledged that Merlins are vigorous defenders of their nests the following noteworthy account of a female killing one and perhaps two American Crows was related to us by Charlie Cowan of Saskatoon.[1] [2] [3] [5]

These observations were made during the first week of May 1986, at a Merlin nest site in Saskatoon. Cowan was sitting in his garden where the Merlins were nesting when a crow flew past the nest tree. The female immediately left her nest and struck the crow in mid-flight. It fell to the ground and was dead when picked up. Unfortunately the crow was not retained so that the precise cause of death could be determined. However, given its almost instantaneous death, it is likely that she broke its neck. Two days prior to this Cowan had picked up a second dead crow in the garden. Again, it was not examined closely but it is possible that the Merlin was also responsible for its demise.

While Merlins have been seen striking American Crows in nest defence, a previously published account of the attack resulting in the death of the crow was not found.[4] That it did in this particular instance is quite remarkable, given the considerable size discrepancy between the two species. The average weight of five American Crows in the Saskatchewan Museum of Natural History is 427 g and the average weight of 37 female Merlins caught by us breeding in Saskatoon is 256 g.

We thank NSERC for supporting the Merlin research in Saskatoon with a Postdoctoral Fellowship to James and an Operating Grant to Oliphant.

[1] BEEBE, F.L. 1974. Field studies of the Falconiformes of British Columbia. Occ. Pap. B.C. Prov. Mus. 17, Victoria.

[2] BROWN, L.H. and D. AMADON 1968. Eagles, hawks and falcons of the world. McGraw-Hill, N.Y.

[3] CRAMP, S. and K.E.L. SIMMONS 1980. The birds of the western Palearctic. Vol. 2, Oxford Univ. Press., Oxford.

[4] FOX, G.A. 1964. Notes on the western race of the Pigeon hawk. *Blue Jay* 22:140-147.

[5] FOX, G.A. and T. DONALD 1980. Organochlorine pollutants, nest-defense behavior and reproductive success in Merlins. *Condor* 82:81-84.

Merlin

THREE ODDITIES OF BIRD BEHAVIOUR

WILLIAM A.S. SARJEANT, Department of Geological Sciences, University of Saskatchewan, Saskatoon, Saskatchewan. S7N 0W0

These three observations are related only in representing unexpected behaviour by birds.

Common Raven

About 6 miles east of Prince Albert on 16 February 1974 a raven flew across Highway 302 just above the level of the car windscreen. In its beak was a thin sheet of clear plastic, roughly 30 by 75 cm (1 by 2.5 ft.); the bird held this in the middle of one short side. It flew south until it passed out of view behind trees, still carrying this curious burden.

The date seemed too early for nest building and a sheet of plastic an unlikely material to select. I can only suggest that some fragments of food were adhering to the plastic and that the raven was either taking the sheet and these deliberately, to be fed on, or inadvertently, because the plastic sheet had adhered to a food fragment picked up in its beak. The fashion in which the plastic was held tends not to support the latter hypothesis.

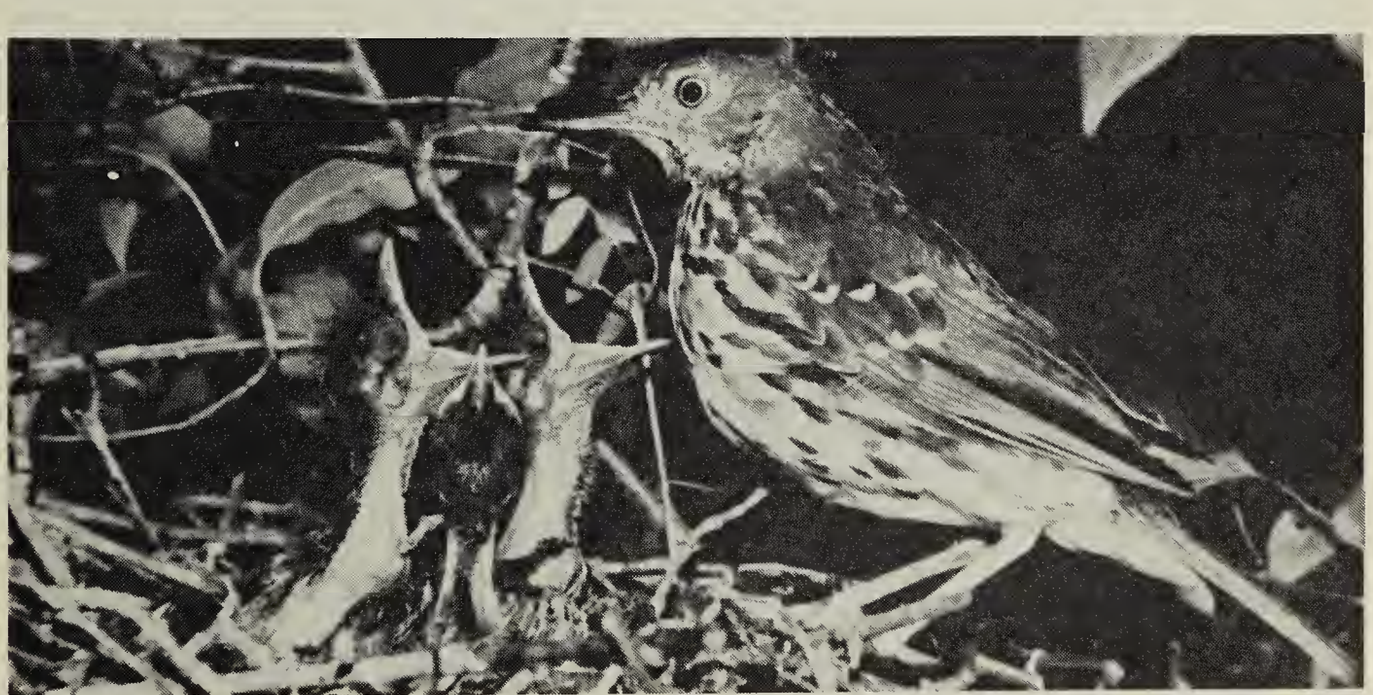
Brown Thrasher

Glimpsed on a tree in the backyard of 670 University Drive, Saskatoon, around 9:00 am 15 May 1987 was a Brown Thrasher clinging to a slender tree trunk, head up, tail down and spread against the trunk as a brace in flicker-like fashion. The bird was merely resting in this position; it did not climb. It flew upward and away at the author's approach. Perhaps this is not unusual, but I was unable to find reports of Brown Thrashers resting in such a position.

American Robin

In the back lane by 674 University Drive around 9:00 am 16 May 1987 a robin's egg fell to the ground and shattered by the foot of a telephone pole. Instead of some egg-stealing bird on the wire there was a female robin which, it can only be supposed, had just laid the egg in that highly inappropriate place! The hen bird may have been driven from her nest by some cat or other predator just when she was about to lay.

EDITOR'S NOTE: Since ravens begin incubating eggs in March, it is conceivable that nest building could be occurring in February.



Brown Thrasher *R.E. Gehlert*