

NESTING PIPING PLOVER IN SASKATCHEWAN

by WAYNE RENAUD*

The Piping Plover is likely the least known of the plovers that occur regularly in Saskatchewan. The species' centre of abundance lies along the east coast of North America from Virginia to Newfoundland and its numbers decrease westward through Nebraska, South Dakota and southern Ontario to near the mountains in southern Alberta.⁷ Even as far west as Manitoba it occurs commonly along many of the sandy lakes, but in Alberta, at the extremity of its range, there are only eight known breeding localities.¹²

There are few areas in Saskatchewan where the species can be considered common. The Quill Lakes apparently have been a traditional breeding location; Ferry reported numbers of breeding birds there in 1909.⁵ On July 5, 1972, Wayne Harris and the writer found a group of 43 adults in a shallow bay 2 miles northeast of Dafoe and on July 13, 1973, John Rowe and the writer, during an International Biological Program Natural Area survey, found a flock of 13 adults at Middle Quill Lake (10 miles north of Wynyard). Although Bent listed the plover as "abundant" at Big Stick Lake in 1906, the present status of the species there is not known. Like nearby Crane Lake, the drought of the 1930's and the construction of dams on creeks draining into the lake have resulted in low water levels. When visited by Godfrey in 1948 the lake was nearly dry and no plovers were seen,⁶ and as recently as July, 1973,

the lake contained no water (Kerry Finley). With the exception of the Quill Lakes, Big Stick Lake (at least, formerly), and Redberry Lake, where C. S. Houston has banded young in 9 years from 1964 to 1973, the species is uncommon as a breeder in southern Saskatchewan. Most of the other cited localities have only one or two definite breeding records and there are large areas of the south where the species has not even been reported as a migrant.

Although the nests of coastal birds consist of "a slight hollow in the sand . . . (often) lined with bits of shell,"¹⁷ Saskatchewan birds show a decided preference for pebble beaches. Of five nests examined by the writer in 1972 and 1973, all were located on beaches with little or no vegetation and covered to some degree by small stones. Provided with this nesting habitat, the plover will tolerate water conditions ranging from freshwater lakes and reservoirs to excessively alkaline sloughs. A nest near Biggar was built on the edge of a crusted alkaline lake which was dry by late June except for a brackish spring, but the four young were successfully raised. A nest north of Bradwell was in a similar situation but no springs were present and the slough had dried up completely by July.

The nest is among the easiest of the shorebird nests to locate since the birds are tame and easily visible when they return to their nest on the open beach. Wilcox, in a 20-year study on Long Island, New York, was able to find up to 11 nests in one hour:

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Piping Plover

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"The quickest and easiest way to find nests is to retire to a car, or other place of concealment and watch the adults with binoculars. They will soon go back to the nest, if one is at least 300 feet from the nest."¹⁸

In Saskatchewan, the birds at the nests examined were even less wary. Once both adults had been located, I retreated and sat still in complete view of the plovers. The incubating adult would return and settle on the eggs within 5 minutes if I was over 50 yards from the nest. Since the egg shell markings blend well with the surround-

ing beach, the eggs are nearly impossible to find unless the adult is watched to the nest.

This article lists 15 localities for which there is definite evidence of breeding. Five of these have not been previously published. In addition, four suspected breeding localities are mentioned. Although the sources of the June records at Fife and Crane Lakes did not suggest the possibility of breeding, there is at least some circumstantial evidence to suggest it. Likely, more thorough coverage will

establish the species as an occasional breeder throughout the southern third of the province. That the range may soon be extended to include north-eastern Montana is indicated by the presence of suspected breeding birds near Dagmar in 1972 and 1973.¹¹⁻¹⁵ At present, the known breeding range excludes extreme southern Saskatchewan and all of Montana.⁷

I wish to thank Kerry Finley, Wayne Harris and Dr. C. S. Houston who critically read early copies of the manuscript; Dr. Houston also supplied unpublished records. All of the writer's observations, except those near Biggar, were made while employed as a summer student with the Canadian Wildlife Service in 1972 and

1973 and by the Department of Plant Ecology, University of Saskatchewan in 1973.

List of breeding localities of the Piping Plover in Saskatchewan.

1. Jackfish Lake, 25 miles north of North Battleford (definite). Nest with 4 eggs on Common Tern island, July 13, 1963. (C. S. Houston, pers. comm. August, 1972).
2. Redberry Lake (definite). Flightless young banded as follows: 1964 (9), 1965 (2), 1966 (3), 1967 (3), 1968 (3), 1969 (3), 1971 (3), 1972 (2) and 1973 (2). (C. S. Houston, pers. comm. August, 1972, and December, 1973).

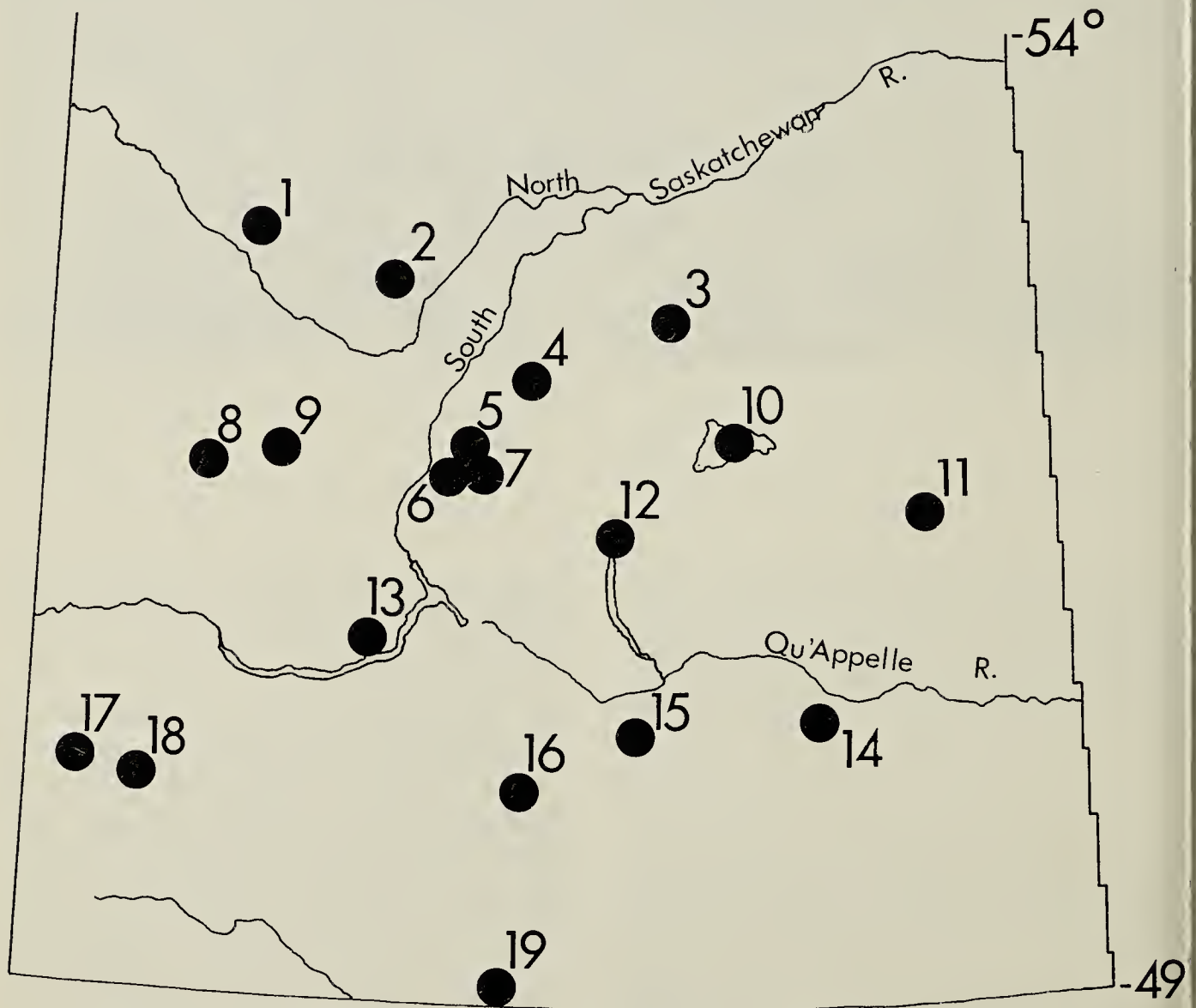


Figure 1. Breeding localities of the Piping Plover in Saskatchewan. Numbers refer to records in list of breeding localities.

3. Ranch Lake, 6 miles east of Lake Lenore (possible). "A rare summer resident (in 1972). They were recorded only on Ranch Lake on a stony stretch of shoreline along the west side. My first date was May 24 (2). They were not seen again until June 7 and were present thereafter. On July 14 a total of 4 was seen at this area, one of which had no neck ring and was taken to be a juvenile. I could not find the nest but I suspect that they did breed here."⁴ (Wayne Harris).
Three were again noted in the same area May 27, 1973. (Wayne Harris, pers. comm., July, 1973).
4. Buffer Lake, 4 miles northeast of Vonda (definite). Nest with 4 eggs, May 25, 1972. The behaviour of at least five adults on a 1/4-mile stretch of shore indicated that there may have been two other nests nearby. (A. Nijssen and W. Renaud).
5. Slough, 5 miles north of Bradwell (definite). Nest with four eggs, May 23, 1972. (W. Renaud).
6. Slough 7 miles north of Dundurn (definite). Nest with one egg on June 5 contained 4 eggs on June 8, 1966.⁸ (J. A. Slimmon).
7. Bradwell Reservoir 2 miles southeast of Bradwell (definite). Nest with four eggs 30 feet from water on gravel dike, May 30, 1973. (W. Renaud).
8. Opuntia Lake, 4 miles east of Plenty (possible). Adult feigning broken wing, July 12, 1972. (R. Isbister, D. Neiman, W. Renaud).
9. Lake, 17 miles south southwest of Biggar (definite). Nest with four eggs, June 3, 1972. (D. and W. Renaud).
10. Quill Lakes (definite). "A nest containing 4 eggs was found on an island on July 4 (1909). Subsequently the species was found distributed along the south shore of Quill Lake in the proportion of about one pair of birds to the mile. At this time, July 4-5, nearly every pair had broods of young varying in size from birds just hatched to those the size of a sparrow. On June 14 Mr. Barnes saw a pair on an island acting as if they were nesting."⁵
Nest with 4 eggs on island in Middle Quill Lake (10 miles north of Wynyard), July 14, 1973. (W. Harris, W. Renaud, J. Rowe).
11. Good Spirit Lake, 9 miles southwest of Canora (definite). "One nesting pair, south shore . . . June 23, 1936."¹⁰
12. Last Mountain Lake (definite). "Rare summer resident (at the north end of the lake in 1969). I found them only at one place, a large alkali slough behind Watertown (at the north end of the lake). I saw one here on June 10, a pair and a single on July 11, a single immature (?) bird, with a broken neck ring, on July 17. Todd found them breeding in this area in 1932. He took a set of 4 eggs on June 2, and records a set of 4 eggs and some downy young on June 22 by Bard, at Imperial Beach."¹¹
13. Clearwater Lake near Beechy (definite). "A female and 2 downy young were seen on August 10, 1967, near an alkaline slough south of Clearwater Lake. The young were collected and are now in the University of Saskatchewan Biology Museum."⁹
14. Deep Lake, south of Indian Head (definite). "This species did not reach Deep Lake . . . until May 16, 1892. In three days they were common. Shortly after they dispersed to breed, only a few pairs remaining at the lake.
"On June 18th, a nest containing three eggs was discovered on a long point extending into Deep Lake. It was in a shallow hole in sand behind a large stone, and no grass or weeds within twenty feet of it."¹⁴ (Spreadborough).
15. Stony Beach Lake, 16 miles west-northwest of Moose Jaw (definite). Nest with eggs May 31, 1959.² (G. Fox and F. Brazier).
16. Old Wives Lake (definite). "Mitchell (1924) found Piping Plovers breeding at the lake."¹³
". . . appeared from their behaviour to be breeding (on the Isle of Bays in 1969)."¹⁷

17. Big Stick Lake (definite). "Abundant . . . breeding on the gravel beaches. No eggs were found but downy young were found on July 21, 1906."³

18. Crane Lake (possible). "In 1948, 3 adults were observed . . . at Crane Lake on June 15."⁶ (S. D. MacDonald and W. E. Godfrey).

19. Fife Lake, 4 miles northeast of Rockglen (possible). "1940: on June 5 and 6 a pair was seen each day."¹⁶

¹ANWEILER, G. G. 1969. *The birds of the Last Mountain Lake Wildlife Area, Saskatchewan*. Canadian Wildlife Service Report.

²BELCHER, M. 1961. *The birds of Regina, Saskatchewan*. Sask. Nat. Hist. Soc., Special Publication No. 3. 76 pp.

³BENT, A. C. 1907. *Summer birds of southwestern Saskatchewan. (part I)*. Auk, 24:407-430.

⁴CALDWELL, R., R. MacLENNAN, W. HARRIS and H. WOLOWSKY. 1972. *An ecological survey of Ranch Lake, Saskatchewan*. Canadian Wildlife Service/Department of Natural Resources joint report.

⁵FERRY, J. 1910. *Birds observed in Saskatchewan during the summer of 1909*. Auk, 27:185-204.

⁶GODFREY, W. E. 1950. *Birds of the Cypress Hills and Flotten Lake regions, Saskatchewan*. Nat. Mus. Canada Bull., No. 120. Biol. Ser. No. 40, 96 pp.

⁷————— 1966. *The birds of Canada*. Nat. Mus. Can., Bull. No. 203, Biol. Ser. No. 73. Queen's Printer, Ottawa. 428 pp.

⁸GOLLOP, J. B. (editor). 1966. *Saskatoon Bird Review* (mimeo.). Saskatoon Natural History Society 1:5.

⁹GOLLOP, M. A., and A. R. SMITH. 1969. *Bird notes for the Elbow region, Saskatchewan*. Blue Jay, 27:80-81.

¹⁰HOUSTON, C. S. 1949. *The birds of the Yorkton district, Saskatchewan*. Can. Field-Nat., 63:215-241.

¹¹————— (editor). 1972. *The nesting season. June 1, 1972, to August 15, 1972. Northern Great Plains region*. American Birds, 26:869-872.

¹²KONDLA, N. G., and H. W. PINEL. 1973. *Breeding records of 19 species of birds in southern Alberta*. Blue Jay, 31:153-157.

¹³KNIGHT, L. M. 1967. *The birds of the Moose Jaw area, Saskatchewan*. Moose Jaw Nat. Hist. Soc. Special Publication.

¹⁴MACOUN, J., and J. M. MACOUN. 1909. *Catalogue of Canadian birds*. Geological Survey Branch, Dept. of Mines, Ottawa.

¹⁵RENAUD, W. E. (editor). 1973. *Spring Migration. April 1, 1973, to May 31, 1973. Northern Great Plains region*. American Birds, 27:785-788.

¹⁶SOPER, J. D. 1970. *Unpublished field notes on the birds observed and collected in the province of Saskatchewan, Canada, in 1914, 1921, 1927 and from July, 1937 to September, 1947*. Zoology Dept., University of Alberta, Edmonton.

¹⁷VERMEER, K. 1970. *Aquatic breeding birds of the Isle of Bays, 1969*. Blue Jay, 28:86-87.

¹⁸WILCOX, L. 1959. *A twenty year banding study of the Piping Plover*. Auk, 76:129-152.



Buff-breasted
Sandpiper

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