

BREEDING DISTRIBUTION OF FORSTER'S TERN IN THE PRAIRIE PROVINCES

by **Jonathon M. Gerrard**, 809 Colony St., and **Douglas W. A. Whitfield**, 415-10th Street E., Saskatoon

On July 17, 1968, during a survey of Bald Eagles in north-central Saskatchewan we noticed several Forster's Terns (*Sterna forsteri*) on territory at Otapanask Bay at the north end of Sled Lake. On July 10 we returned to the site to verify the observation. Sled Lake is a large, shallow lake with a high duck population, located seven miles south of Dore Lake. Otapanask Bay is one of several large, marshy bays containing abundant stands of giant reed grass (*Phragmites*) and bulrush (*Scirpus*). At least eight adults were present in the colony. Three nests, which were platforms of matted reeds 12 to 18 inches in diameter, built up a few inches above the water level, were found in stands of bulrushes. Although the nests were empty, three flightless young were found swimming nearby. One adult specimen was collected to confirm the identification, and is deposited in the museum of the Department of Biology, University of Saskatchewan, Saskatoon.

The following summer, on June 8, 1969, Murray Kyle of Prince Albert showed us a colony of Forster's Terns at Pelican Lake two miles east of Doremy, Saskatchewan. About 80 adults were present and nearly half of them appeared to be sitting on nests. It wasn't possible at the time to approach closely, because of the deep water between the shore and the apparently shallower, reedy area where the birds were sitting. A smaller group of about a dozen birds was found approximately 400 yards from the main colony. Both groups reacted to our presence in a way which suggested defence of breeding areas.

Inasmuch as the Sled Lake colony lies north of the breeding range as shown by Godfrey (1966:189), we

decided to review records of this species, which nests in Canada only in the Prairie Provinces, to see what additional information regarding their breeding status might be available. A list of localities of known or suspected breeding is given and these localities are plotted on the map (Figure 1). Information was obtained from the literature, through personal communication with other observers, and from the Prairie Nest Records Scheme (PNRS). So far as we can determine, only our Sled Lake record (1) and Fawcett Lake in Alberta (19) are outside of the known range. These localities represent range extensions of 50 and 90 miles respectively.

From these records we see that Forster's Tern breeds most commonly in Manitoba and less frequently in Saskatchewan and Alberta, and that it finds suitable habitat for nesting in the grasslands, aspen parkland, and boreal forest regions. Their observed breeding range appears to lie well to the south of the Precambrian Shield and is perhaps related to the availability of marsh habitat. In any case, knowledge of the ecological factor or factors which delimit the range awaits further investigation.

Acknowledgements

Many valuable suggestions, particularly regarding Manitoba records, were made by Martin McNicholl and Robert W. Nero. W. Ray Salt pointed out some additional records for Alberta, and W. Earl Godfrey provided information from records of the National Museum of Canada. James A. Slimmon and Greg O. Michalenko accompanied us on the trip to Sled Lake on July 27, 1968. All of the above persons, and C. Stuart Houston, made suggestions for improvement in the manuscript.

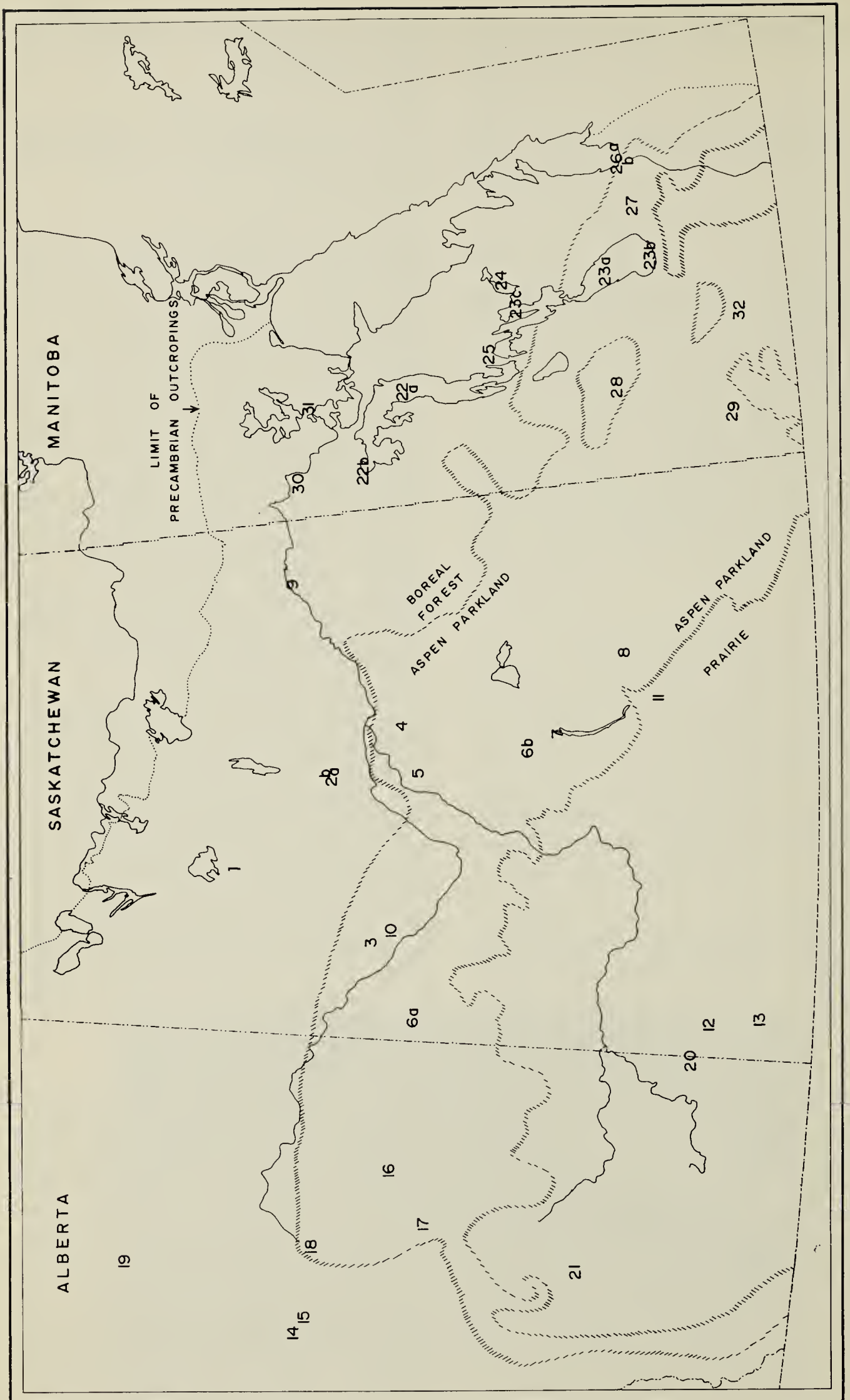


Figure 1. Breeding localities of Forster's Tern in the Prairie Provinces. Numbers refer to records in list of breeding localities. Boundaries of vegetation zones were taken from Bird (1961).

List of Breeding Localities of Forster's Tern in the Prairie Provinces

SASKATCHEWAN

1. Sled Lake in 1968. Refer to the above text. [Definite]

2a. Christopher Lake in 1958. (pers. comm. D. Karasiuk, 1968) [Definite]

2b. Emma Lake, "Two or three individuals occasionally observed . . . On July 3 and 7, 1939 . . . over a marsh at Josie Lake." (Mowat, 1947) [Possible]

3. A marsh 10 miles N. of Meota. Three nests on July 3, 1959. (Spencer Sealy, P.N.R.S.) [Definite]

4. Waterhen Marsh. "very abundant, especially in the neighbourhood of the larger lakes of the region . . . two separate colonies were observed." (Congdon, 1903); "One seen June 14, 1955 and seven on June 15." (Houston and Street, 1959) [Definite]

5. Pelican Lake, in 1969. Refer to the above text. [Definite]

Manito Lake, in 1906. "I authenticated its presence by collecting . . . at Manito Lake, Sask. (Geo. Atkinson)." (Macoun, 1909). This probably refers to the lake near the Alberta border (6a), but Little Manitou Lake (6b) might have been intended. [Possible]

7. Last Mountain Lake. Single specimens were taken at Imperial Beach on May 25 and July 26, 1924. (Mitchell, 1925). Breeding confirmed at the north end of the lake in 1969. (Anweiler, 1970). [Definite]

8. West end of Pasqua Lake. "on June 19, 1966 a nest with three eggs." (E. M. Callin in the MS of the forthcoming publication on the birds of the Qu'Appelle Valley) [Definite]

9. Saskatchewan River "some 10 to 50 miles up river (west) from Cumberland House." This record refers to the type specimen of the species, collected by Thomas Drummond on July 18, 1827. (Houston and Street, 1959.) In view of the Sled Lake observations, this could have been during the breeding period, although it would be very late further south. [Possible]

10. A marsh south of Murray Lake, in 1935. (Dunk, 1936) [Definite]

11. Regina, Wascana Marsh, in 1960. (Fox, 1960) [Definite]

12. Maple Creek dam, in 1948. "Two were identified on June 24." (Godfrey, 1950) [Possible]

13. Cypress Lake. "Five seen . . . on June 25, 1933." (Potter, 1943) [Possible]

In addition to the above, there is a record for Rush Lake. "We waded out to the first island . . . there on the ground were scores of nests of Avocets, Forster's Terns, as well as a few of the Bonaparte's Gull" (Raine, 1892). Judging by the nest locations, and the absence of any reference to Common Terns, this might be a misidentification.

ALBERTA

14. West end of Lake Isle. "Dr. E. W. Rowan mentions . . . seeing a pair of Forster's Terns 'with a partially built nest', on May 22, 1951." (pers. comm. W. R. Salt, 1970) [Definite]

15, 16, 17. Lake Wabamun, Dried Meat Lake and Buffalo Lake are listed as breeding localities by Salt and Wilk (1966). [Definite]

18, 19. Lac la Nonne and Fawcett Lake. Sight records. (Salt and Wilk, 1966) [Possible]

20. Many Island Lake. "A few birds were seen . . . on June 18, 1906 and on July 9 two specimens were taken." (Bent, 1907). [Possible]

Stobart Lake, in 1964. (Jack Shier, PNRS) [Definite]

MANITOBA

In the following John Macoun's records are from a trip he made in 1881 from the south end of Lake Manitoba to Swan Lake House.

22a. Lake Winnipegosis. "Breeding abundantly . . . (Macoun)." (Thompson, 1891) [Definite]

22b. Mouth of the overflowing river on Lake Winnipegosis, where birds were seen July 21, 24 and August 3 in 1951. (Godfrey, 1953). [Definite]

23a. Lake Manitoba. "Breeding abundantly . . . (Macoun)." (Thompson, 1891); eggs in the National Museum of Canada, collected June 22, 1893. (Taverner, 1919) [Definite]

23b. Delta on Lake Manitoba. (Hochbaum, 1944); M. McNicholl (pers. comm. 1970) "found several colonies of this species at Delta in 1968 and 1969." The record from Thompson's paper (1891), "Portage la Prairie . . . probably breeds . . . (Nash)", likely refers to Delta. [Definite]

23c. Mouth of the Fairford River on Lake Manitoba. "It was found to be common . . . four specimens were taken . . . on June 18 and 19, 1921." (Shortt and Waller, 1937) [Probable]

24. Lake St. Martin. "Quite plentiful and apparently breeds in the marshes". (Shortt and Waller, 1937) [Probable]

25. Waterhen River. "Breeding abundantly . . . (Macoun)." (Thompson, 1891) [Definite]

26a. Lake Winnipeg. "Breeding on the borders of Lake Winnipeg in the latter part of May . . . (Dr. Gunn)." (Thompson, 1891). This probably refers only to the southern end of Lake Winnipeg, as Gunn did not travel very far north. [Definite]

26b. Selkirk Settlement. (Thompson, 1891). This is also credited to Donald Gunn, and probably refers to the Netley Marshes. [Possible]

27. Shoal Lake. (Thompson, 1891); eggs in the National Museum of Canada; "In 1917 we found Forster's Tern in company with the Common Tern, but generally scarce." (Taverner, 1919); F. Dippie's record, quoted by Macoun (1909), of "an immense colony . . . breeding on an island" is questionable. [Definite]

28. South Lake, Riding Mountain National Park. "found in 1968 by David Hatch . . . definite breeding colony . . ." (pers. comm. M. K. McNicholl). [Definite]

29. Oak Lake Marshes, "every year". (D. R. M. Hatch, pers. comm. to M. K. McNicholl, 1969) [Definite]

30. Halcrow Lake, near The Pas in

1951. "Three June 15 and 16 . . ." (Godfrey, 1953) [Possible]

31. Moose and Cedar Lakes area. "locally common". (Clarke in MS report covering his observations in the summer of 1929.) [Probable]

32. Glenboro Marshes. Breeding suggested by behaviour of adults. (pers. comm. D. R. M. Hatch to M. K. McNicholl, 1969.) [Probable]

LITERATURE CITED

- Anweiler, Gary G. 1970. The birds of the Last Mountain Lake Wildlife Area, Saskatchewan. Blue Jay, 28:74.
- Bent, A. C. 1907. Summer birds of southwestern Saskatchewan. Auk, 24:407.
- Bird, R. D. 1961. Ecology of the Aspen Parkland of Western Canada. Research Branch, Canada Department of Agriculture, Ottawa. 155pp.
- Congdon, R. T. 1903. Saskatchewan birds. Trans. Wis. Acad. Sciences, Arts and Letters, 14:569.
- Dunk, F. 1936. Report of the Director, Provincial Museum, Department of Natural Resources, for the year ending April 30, 1936 Regina.
- Fox, E. 1960. Forster's Tern and Western Grebe nest at Regina. Blue Jay, 18:156.
- Godfrey W. E. 1950. Birds of the Cypress Hills and Flotten Lake regions, Saskatchewan. Bull. No. 120, Biological Ser. No. 40, Nat. Mus. Can. Ottawa, 96pp.
- Godfrey, W. E. 1953. Notes on birds of the area of intergradation between eastern prairie and forest in Canada. Bull. No. 128. Ann. Rep. Nat. Mus. Can., 1951-52, Ottawa.
- Hochbaum, H. A. 1944. The Canvasback on a prairie marsh/ Stackpole Co., and American Wildlife Institute, Harrisburg and Washington. 201pp.
- Houston, C. S., and M. G. Street. 1959. The birds of the Saskatchewan River, Carlton to Cumberland. Spec. Pub. No. 2, Sask. Nat. Hist. Soc., Regina, 205pp.
- Macoun, J., and J. M. Macoun. 1909. Catalogue of Canadian birds. Geological Survey Branch, Dept. of Mines, Ottawa. 761pp.
- Mitchell, H. H. 1925. Some more notes on Saskatchewan birds. Condor, 27:94.
- Mowat, F. M. 1947. Notes on the birds of Emma Lake, Saskatchewan. Can. Field-Naturalist. 61:105.
- Potter, L. B. 1943. Bird notes from southwestern Saskatchewan. Can. Field-Naturalist, 57:69.
- Raine, W. 1892. Bird-nesting in North-West Canada. Hunter, Ross & Co., Toronto. 197pp.
- Salt, W. R., and A. L. Wilk. 1966. The birds of Alberta. 2nd Ed. The Queen's Printer, Edmonton. 511pp.
- Shortt, T. M., and S. Waller. 1937. The birds of the Lake St. Martin region, Manitoba. Contrib. Roy. Ont. Mus. Zool., No. 10.
- Taverner, P. A. 1919. The birds of Shoal Lake, Manitoba. Ottawa Naturalist, 32:137.
- Thompson, E. E., (E. T. Seton). 1891. The birds of Manitoba. Proc. U.S. Natl. Mus., 13:557.