

familiar with the species, having seen more cormorant recoveries from all these Saskatchewan lakes than they do today, thereby substantiating the rapid decline in the numbers of cormorants visiting the Illinois valley after 1950 (Mills, Starrett and Bellrose, 1966).

It is therefore likely that the differences among the four maps reproduced here may be due not only to a difference in the lake of origin, but to changes with time; my banding at lakes from which cormorants moved east to the Mississippi was before 1957, and the Crane and Redberry Lakes banding largely since then.

The gradual decline in the percentage of recoveries over the years seems due partially to decreased shooting pressures on this "non-game species." For birds banded before 1830, the percentage of recovered birds reported as "shot" was 80% (70/87), whereas for those banded since 1960 it has been only 27% (12/33). From the maps, one sees that a smaller proportion are now killed in their southward passage, while a relatively larger percentage are recovered on their wintering

grounds in Texas. Since band recoveries result only from an interaction between birds and humans, it may be that as cormorants now migrate further west through areas of lesser human population density, they are less likely to be shot or found dead. The problem is further aggravated by an apparent increase in public apathy resulting in fewer bands being reported.

Acknowledgment: I wish to thank J. B. Gollop, of the Canadian Wildlife Service, Saskatoon, for advice and criticism.

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BARROW'S GOLDENEYE IN MANITOBA

by David R. M. Hatch, Oak Lake, Manitoba

Manitoba is situated midway between the two major breeding areas in North America of Barrow's Goldeneye (*Bucephala islandica*), yet there have been only a few sight records of the species in this province and no specimens have been confirmed as collected in Manitoba. To help substantiate the occurrence of this species in Manitoba, all available records are presented in this article.

According to Godfrey (1966:71), Barrow's Goldeneye breeds "in widely separated areas: from southern Alaska and southern Yukon south to eastern Washington and California . . . also in Labrador, southwestern Greenland, and Iceland", but no reference is made to its presence in Manitoba. The A.O.U. *Check-list* (1957) also omits

reference to its occurrence in Manitoba. In a review of Barrow's Goldeneye in Saskatchewan, Nero (1965:127) indicated that the species may have been overlooked on the eastern prairies. Two "possible records" of Barrow's Goldeneye in Saskatchewan were cited. Both were of adult males: one observed on April 6, 1956, at Morse by John M. Nelson and one shot on October 12, 1964, on Pasqua Lake in the Qu'Appelle River system by Jamie Young. There is no correlation of these reports with the Manitoba records.

Godfrey did not accept the records (pers. corres. to R. W. Nero, April 14, 1967) ascribed to R. H. Hunter by Seton (1886:328) and Thompson (1891:483). Hunter's records from

the latter source stated: "I shot a brace on Lake Manitoba in 1879, and a drake at Shoal Lake in the spring of the following year; and I saw a drake which was killed at the mouth of the Red River" Godfrey also did not accept Nutting's record (1893:20) which follows: "Two immature females secured, which must be referred to this species, although the bills are considerably smaller than the descriptions of adult birds would indicate."

The first record of Barrow's Goldeneye in Manitoba in this century was of a male seen May 14, 1936, at East Bay, a village on the east side of Dauphin Lake and situated 12 miles south and two miles east of Rorketon. The bird was identified by Ed Robinson, then a resident of East Bay and a prominent amateur ornithologist in the province during the 1930's (Mossop, 1960:281; 1962:386). This record was originally accepted by A. G. Lawrence, who quoted Robinson as saying "the crescent-shaped white marking on the forehead was unmistakably noted" (Lawrence, 1936:798).

The species was not reported again until the 1960's when there were six confirmed sight records and one unconfirmed observation. On May 21, 1960, a pair was seen on a large slough near Stonewall by Ken Garner. His detailed account (pers. corres.) follows:

"Windfield Swamp, one mile southeast of the town of Stonewall, is bordered mainly by willows with some poplars and oaks as well as a few lesser trees and bushes. Cultivated fields and pastures form part of the border also. Other vegetation, such as marsh grasses and reeds, is quite sparse. In extremely wet years, there is about 20 acres of land under water, as was the case on May 21, 1960, when I made one of my many visits to the area. There were large numbers of waterfowl present and as I was trying to identify them with the aid of my 7x50 binoculars I came across a pair of goldeneye ducks swimming about 75 yards out. I thought this a little unusual as most Common Goldeneyes have passed through this area by this

time. Both birds were sleeping with their heads under their wings and the first thing that caught my eye was that the drake showed less white on its upper sides than other goldeneyes I had seen. I arose from my hiding spot in the willows and this movement alarmed some of the other ducks present; both goldeneyes then lifted their heads to look around. After a few minutes of careful scrutiny, I was able to see plainly the white crescent-shaped spot between the eye and bill of the drake. The heads of both birds appeared to have a different shape than the Common Goldeneye, but at that range I could not be sure. The hen could not be positively identified . . . but as the drake was definitely a Barrow's Goldeneye I believe it would be quite safe to assume the hen was also of this species. They were well aware of my presence by this time and were beginning to swim farther out. I tried to work my way closer through the willows but they took flight heading straight to the northwest, gaining altitude as they went and were soon out of sight. Other waterfowl present at the time on the water were Mallard, American Widgeon, Pintail, Green-winged Teal, Blue-winged Teal, Red-head, Lesser Scaup, Ruddy Duck, Eared Grebe, and American Coot. The Barrow's Goldeneye, however, kept to themselves while the other species intermingled"

Only two days later, May 23, 1960, a male was identified by members of the Manitoba Natural History Society and verification made by David and Harold Mossop. This bird was also accompanied by a female, which "was quite likely his mate" but positive identification of the female was not confirmed (Mossop, 1960: 280; 1962: 386). The observation was made at Victoria Beach, where the pair was swimming offshore in Lake Winnipeg.

The next report of the species in the province was again by Ken Gardner, who described this sighting as follows:

"While motoring to Grand Rapids on May 19, 1962, we passed one of the many small ponds along the highway (No. 6) a few miles south of the town

(For June/71 "The Blue Jay")

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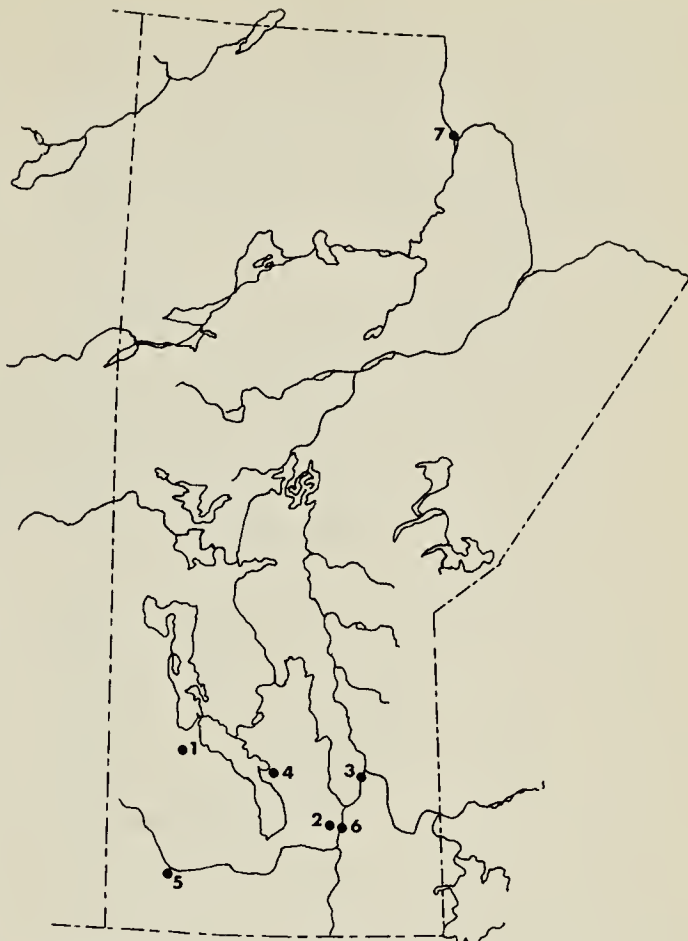
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f Eriksdale. On this particular pond, spotted a pair of goldeneye ducks that didn't look like the expected species so I had the driver back up. These birds were about 30 yards away at the most and all identifying features of Barrow's Goldeneyes were seen on both male and female: male — lesser amount of white on the upper sides than the Common, white crescent-shaped spot between eye and bill, forehead abrupt at bill and crown not as high as the Common, small bill; female — head shaped similarly to the male but not quite as pronounced, small bill; bill was all yellow but apparently this is not always a safe separating feature from the female Common. We studied them for about five minutes and they were still there when we left; on our return trip on May 21, I checked the pond but they were not there. There were three other people with me but unfortunately they were not bird watchers." Shortt (1962) drew special attention to this record in his year-end report.



Sight records of Barrow's Goldeneye as listed in Table 1

The fifth record was a male seen by me at Oak Lake on April 30, 1966. A large marsh, locally known as "Bigeow's Slough", bordering the east edge of Oak Lake, is separated from the lake by a dike. From a road on top of this dike immediately south of the "Island Resort", the goldeneye was spotted in a mixed group of Lesser scaup, Redhead, and Canvasback resting approximately 40 yards away. Using 7x50 binoculars, I studied it for about 10 minutes. I had previously seen this species in Banff National Park and was aware that it was an unusual record for Manitoba. The large, white crescent between the eye

and the bill was distinct. The white on this duck's sides extended only partly up the bird's sides, unlike the Common Goldeneye which shows more white on the sides when sitting on the water because it exhibits far more white in the forewing. The upper part of the sides appeared dark and this was the first thing that drew my attention to the bird.

On April 12, 1967, a male was reported at Reston by David Braddell, but without a confirming description (Mossop, 1967: 644).

Mrs. Grace Keith of Winnipeg reported seeing a male on the Red River near Lockport on May 18, 1967. She is

Table 1. Sight records of Barrow's Goldeneye in Manitoba.

Observation Number	Date	Location	Observers
1.	May 14, 1936	East Bay	Robinson
2.	May 21, 1960	Stonewall	Gardner
3.	May 23, 1960	Victoria Beach	Mossop & M.N.H.S.
4.	May 19, 1962	Eriksdale	Gardner
5.	April 30, 1966	Oak Lake	Hatch
6.	May 18, 1967	Lockport	Keith
7.	June 29, 1968	Churchill	Tremaine & Comer

it frequently in British Columbia and she was "quite satisfied" that the bird was a Barrow's Goldeneye. She noted its crescent-shaped, white face patch and larger appearing head in comparison with the Common Goldeneye (pers. comm., 1969).

The latest sighting of a Barrow's Goldeneye was of a male in a cove off Hudson Bay at Churchill on June 29, 1968. The observation was made by Dr. Mary M. Tremaine and C. W. Cromer. On the basis of this record, it is considered "accidental" at Churchill (Jehl and Smith, 1970). Dr. Tremaine wrote of the incident (pers. corres. to R. W. Nero): "On June 29, (1968), — a blustery, cold, stormy day — I saw a Barrow's Goldeneye and a Common Goldeneye in a small open bay area . . . which offered some protection. They were feeding and loafing together. Both birds showed beginning molt. C. W. Comer (of Kansas, U.S.A.) saw these too. We watched them for almost an hour. They were too far out for a picture. The opportunity to compare the back and flank plumage, as well as the heads, was wonderful . . ." The study verified my previous impression that the best way to spot a Barrow's is a goldeneye that is dark from the distance . . . The back and flank plumage seemed more distinctly different in these two birds and a better mark than the head spot. These birds were gone the next day and not seen again."

To the south of the province of Manitoba, in Minnesota, there have been a score of published sightings of the Barrow's Goldeneye in this century, but many of these lack details. There is no correlation between the Manitoba records and the Minnesota observations since the bulk of the Minnesota reports occurred in December, January, February, and March. All seven Manitoba records fall between April 30 and June 29, inclusive. In fact, six of them fall between April 30 and May 23, a period of less than four weeks, and appear to represent spring migrants.

The seven confirmed Manitoba sight records are widely distributed, with

six in the populated southern quarter of the province and one in the far north. All were single observations and although most locations were visited on subsequent days the birds were never seen again. In Minnesota, where many of the sightings were of wintering birds, it was common to observe Barrow's Goldeneye on more than one day in the same locality and the species appeared on three of four Christmas censuses in St. Paul between 1965 and 1968 inclusive (Glassel, 1966:81 and 1967:141); Janssen, 1969:124).

Table 1 lists seven sightings for which verifying details are available. The locations of these records are shown on the map. On the basis of these records, Barrow's Goldeneye should be considered of irregular occurrence as a visitant in Manitoba. Further verification by a photograph or specimen would be desirable.

I would like to thank Martin K. McNicholl and Dr. Robert W. Nero for their assistance in collecting the data for this article; a special thanks goes to the latter for his critical analysis of the manuscript. I also want to thank Ken Gardner and Mrs. Grace Keith for the use of their records.

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SOME 1970 SOUTHERN ALBERTA BIRD OBSERVATIONS

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The purpose of this article is to record some interesting observations made in the Calgary area, a circle with its centre in downtown Calgary and a radius of 50 miles. For an observation made outside this area the nearest large town is given. The terms common, rare, etc., are used as in the *Check-list of the birds of the Calgary region*, 1969 edition. On a few occasions, one or more of the following people were in the field with us—Stu Alexander, Don Brookes, Bob Owens, Harry Pinel, Connie Sweet, Merrill Wershler, Chip Weseloh. Unless otherwise noted, all observations were made in the presence of at least one of the authors.

During the fall migration, fewer species of vireos, warblers and other passerines appeared, and of those that did there were fewer numbers.

Common Loon (*Gavia immer*): One, possibly two, on Frank Lake, June 8. One pair on Little Fish Lake (about 23 miles ESE of Drumheller) until June 1 (when the observers left). This pair was observed in courtship flight over the dry prairie just southeast of this prairie lake. Loons have not yet been discovered nesting on the prairie, although there have been several summer records in the past few years.

Red-necked Grebe (*Podiceps grise-gena*): Several pairs nested on a large slough just north of Turner Valley. Although, according to published data, this species nests only rarely in the foothills and mountains, it may be a regular foothills breeder.

White Pelican (*Pelecanus erythrorhynchus*): About 75 at Irricana Lake

on the evening of May 31, with 25 still present at 4:30 a.m. on June 1 (Chip Weseloh only). One on Namaka Lake, June 29. Up to 14 recorded several times between June 27 and July 10 at Little Fish Lake (ESE of Drumheller). This species is now only a scarce visitor in our area.

Trumpeter Swan (*Olor buccinator*): One pair on Irricana Lake, April 29. One pair on Glenmore Reservoir (Calgary), June 9 and 10. One pair on Bow River in NW Calgary, October 7 and 8. Considered a rare migrant in our area. Archie Hogg has reported a pair nesting near Longview (about 35 miles SW of Calgary) in 1968 and 1969, and two young were raised to flying stage in 1969.

Cinnamon Teal (*Anas cyanoptera*): One pair near Shepard, May 8. Fifteen (five pairs, four males, one female) on Priddis Slough, May 9. Five pairs on Frank Lake, June 8. This is a repetition of the greater numbers appearing in recent years, such as in 1968.

Wood Duck (*Aix sponsa*): One male in southeast Calgary during the late summer. There was an apparent increase during the five years up to 1968, with breeding occurring at several locations. However, there have been few sightings for the past two years.

Greater Scaup (*Aythya marila*): One adult male at Calgary (Inglewood), April 17. A close and careful study was made, with three competent observers noting all field marks. This is the second sighting for the Calgary area.