## GENERAL NOTES

A new Gannet colony in Newfoundland.—A colony of approximately two hundred nests of the Gannet (Moris bassana) was found on a cliff on the eastern side of Bacalieu Island, Newfoundland, on June 24, 1941. This rocky island lies several miles offshore from the small fishing village of Bay de Verde, at the northernmost tip of the Avalon peninsula, and in the mouth of Conception Bay. Old residents told me that the Gannets have been there for about forty years, but the colony has not been before recorded. Mr. H. M. Froude and two other employees of the Newfoundland Department of Natural Resources visited this colony with me. As a matter of interest we found about 25,000 Kittiwakes (Rissa tridactyla tridactyla), 10,000 Atlantic Murres (Uria aalge aalge), 5,000 Atlantic Puffins (Fratercula arctica arctica), and about 750 Black Guillemots (Cepphus grylle grylle) also nesting on this island, most of them on the bold eastern side facing the sea.—HAROLD S. PETERS, U. S. Fish and Wildlife Service, R. F. D. No. 1, Charleston, South Carolina.

Cormorants found breeding on Prince Edward Island, Canada.-A mixed colony of Double-crested Cormorants (Phalacrocorax auritus auritus) and European Cormorants (Phalacrocorax carbo carbo) was found at Cape Tryon, Queens County, Prince Edward Island, Canada, on June 11, 1941. About 100 nests, approximately 25 being of European Cormorants, were constructed on a cliff about 110 feet high, and facing the sea, near the lighthouse at the western entrance of New London harbor, as nearly as could be determined in approaching darkness and a very strong wind at the time of my visit. Mr. W. A. Reddin, Prince of Wales College, Charlottetown, Prince Edward Island, and Col. H. H. Ritchie, Chief Game Warden of New Brunswick, accompanied me to this colony. This is believed to be the first record of either species of cormorant nesting on Prince Edward Island. Since the colony was not known when Lewis wrote his paper on the population of European Cormorants in North America (Auk, 58: 360-363, 1941) an additional fifty breeding individuals of this species can be added to his total.-HAROLD S. PETERS, U. S. Fish and Wildlife Service, R. F. D. No. 1, Charleston, South Carolina.

Trumpeter Swans in British Columbia.—Mr. John P. Holman, of Fairfield, Connecticut, President of The Audubon Society of the State of Connecticut, is authority for the statement that a flock of Trumpeter Swans (Cygnus buccinator) spends every winter on the sloughs of a river in British Columbia. Hearing of this flock in 1925 while on a hunting trip around the headwaters of this river, he was instrumental in getting the Canadian authorities to appoint as custodian of the swans the settler who had informed him of their whereabouts. In his book 'Sheep and Bear Trails' (1933), published by Frank Walters, Grand Central Palace, New York City, Mr. Holman devotes 42 pages to publishing letters written by this settler, in which the welfare of the swans is frequently mentioned. In 1925, the flock numbered seventy individuals. They usually arrive in November and depart for the north in April. The custodian has fed the birds during the severe winters. The late Dr. E. W. Nelson, former Chief of the U. S. Biological Survey, and an old friend of Mr. Holman, was greatly interested in this flock. In 1926, there were 150 swans in the locality. Quotations from these letters follow.

February 26, 1926.—"The swan came down in November. They are certainly a beautiful sight rising from the lake airplane-wise, tooting their trumpets as you

might say, snowy white in V-formation. It takes them about 100 yards to get up enough speed to pull in their toes or running gear. Their tracks become less and less until only a toe mark is the last. To start with, their wings mark the snow also."

April 10, 1927.—"Trumpeters are gray the first season and white afterward. After real hard winter sets in the flocks comprise only about 30 to 40 individuals. As the ice conditions become worse they scatter all along the river in every patch of open water, where in the fall they wouldn't think of going. Many flocks consisted of two white ones and about six grey ones flying together and feeding separately from the other groups. Now we see more white with only an occasional grey one. I have noticed during the hard winters that the grey ones fall prey to the eagles and starvation before the white ones. This winter I have seen two cases of eagles killing swan. The eagles do not seem to be able to catch the swan when they are stronger or on a straight-away flight.

"In former years the swan have been almost exterminated on account of persistent ice on the river as well as on the lakes. One year my brother took the swan that had starved until flight was impossible and fed them on cabbage a short while. When their strength returned they flew away. Walter . . . told me he knew of four swan deaths at Stillwater last winter and many more were unable to fly for some time."

June 30, 1930.—"The swan are here from November until April. This year they left a month earlier than usual."

April 16, 1931.—"The swan had things all their own way this year and left for the north unusually early this spring. I noticed no losses in their ranks at all." November 1, 1931.—"The swans, seven of them, flew low over our place two or three days ago, the first we've seen this fall."

May 7, 1932.—"The last swans left April 12th. We had a hard winter for them, apparently, as eleven that we know about died of starvation or disease or eagles. All young ones. In the fall there were some thirty young ones to every thirty old ones. The black bears broke Max...'s cherry trees down this summer. The old bear was up in one of the trees throwing down cherries for the youngsters."

May 6, 1933.—"The swans had a pretty good winter up to January 20th when a long cold spell made them glad of a little grain. I fed four sacks of barley to them, broadcasting it on their natural feeding grounds in about two or three feet of water. They got on to it very quickly. Only two youngsters died that I know of. There were fifty or sixty birds in here last winter including about eighteen young ones."

Letters received from Edwards since the publication of Mr. Holman's book contain the following notes on this flock of Trumpeters.

March 10, 1934.—"Our swans had a wonderful winter; no trappers at the Stillwater to scare them off their feed and very little ice on their lake feeding grounds. I counted 62 on the lake today."

March 10, 1935.—"The swans had a few losses but the weather was mostly favorable to them. There were about seventy at one time on the lake and they certainly made a beautiful sight."

July 3, 1935.—"We are moving 400 pounds of barley up to the Stillwater for swan food. The government buys the grain and I pack it in gratis."

November 28, 1935.—"The swans are feeding on the lake with a lot of geese and ducks."

January 10, 1936.—"We have had an unusually mild winter so far this year. Some sixty or more swan and a lot of geese all wintering with us. The Canadian government is paying me a little to look after the swans and feed them when necessary."

August 7, 1936.—"The Trumpeter Swans gave us a count of 110 last winter on one day of census-taking. They had some fatalities but a good proportion of the cygnets went north in the spring."

April 18, 1937.—"The swans had a very hard time of it this winter in spite of the eight sacks of barley we packed in for them. Of course eight sacks would not go very far for a large number of these birds when they are unable to get other food. There were about fifty of them feeding in little open places at the head of the . . . lake at the beginning of winter, in among the willows and slough grass. Their usual feeding grounds were under water on account of the flood. From about December 15 to February 15, all the creeks and lakes were frozen over. During this time the swans had only fibrous roots and salmon vertebrae to feed on as the river had been swept clean by the big flood of November.

"I went down every two weeks and fed them a half sack of barley or so but it was not often enough to do much good. When warmer weather permitted the river near home to thaw out a little we found a swan sitting on the water unable to fly. We hustled some barley into the river and two more swans came in that evening. Next morning we were there and fed more grain and all three flew up, returning in the afternoon with others. We kept feeding them for about a month until the barley was all gone but by that time enough water had opened up to allow them to feed on natural food. During all this time we were working on an addition to our barn and the swans paid no attention to our pounding. The largest count of any time after the freeze-up was twenty-two, all adults. The cygnets all succumbed. Some of the adults also died or fell prey to eagles and wolves. We found that it took about 10 pounds of barley a day to feed twenty-two swans. At least they cleaned up that much but no doubt they would have eaten more if they had had it. Anyway ten pounds kept them able to fly and move about.

"Trumpeter Swans have a special song that they sing just before they start for the north. They sing all night with a peculiar cadence to rhyme with the words 'going over the river' which they repeat over and over again. The next morning they start away in a body leaving only the weaker ones behind to build up strength to follow."

February 4, 1938.—"We have had a comparatively mild winter so far and the swans are doing finely. The largest count totalled fifty birds. About forty of them stay around. . . . I am feeding them a little grain now as their feeding grounds are still much restricted by high water, but conditions are much better than last year and we have hopes of getting them through without much loss. Time will, to a certain extent, remedy their present difficult position as water flora and fauna take over the inundated areas and Nature restores their natural food."

February 18, 1940.—"The big Trumpeters are here as usual, 49 being the largest count so far. About 14 cygnets. Have not had to feed them so far, but they are getting short of natural food now and they are flying about over the Birches and river looking for barley."

Comment: This series of letters, covering a period of fifteen years, vividly portrays the struggle for existence waged by this species against adverse conditions. Seeking the protection of an isolated and almost inaccessible wilderness for winter

quarters, the swan's chief difficulty is in finding access to food in the few patches of water remaining open during the winter. In any season of unusual severity these openings freeze over and the swan starve. As is usual in all species, the first to succumb are the young, and only the most hardy of these young birds live through to replace the species.

Precariously holding their own against starvation and natural enemies including eagles, wolves and coyotes, the swan were nearly overwhelmed by the effects of the great flood of 1936 which brought down rock slides, dammed the outlet and raised the water level of their lake and thus destroyed their feeding grounds. From 110 in the winter of 1936, the number dropped, as shown, to twenty-two. Yet the species survived, with the loss of all its young, and is again building up to its maximum, limited by food supply, of about one hundred birds. It is needless to point out what the effect on its survival would be if man were added to its list of natural enemies. For this reason the names of localities in the note have been omitted. It is the policy of the Canadian Government not to advertise the whereabouts of rare species threatened with extinction.—H. H. Chapman, 205 Prospect Street, New Haven, Connecticut.

Gadwall in Center County, Pennsylvania.—The status and range of the Gadwall (Chaulelasmus streperus) in Pennsylvania have not been well investigated except in the farthermost western counties of the State (Todd, 'Birds of Western Pennsylvania') and in some few of the eastern counties. For example, in Berks County, Earl L. Poole reports: "An uncommon transient and winter resident at Lake Ontelaunee. I have thirty-two records between Oct. 14, 1932, and May 30, 1939, from single birds to groups of ten." And also from Chester County, Albert E. Conway has published two records of the bird in his 'Check List of Birds of Chester County' (1940): "Rare transient. December 26, 1912, near Kennett Square (Pennock & Thomas) and April 17, 1937, Brandywine (Copes)."

Todd mentions records of the bird in western Pennsylvania, including breeding records at Pymatuning. He states that because of the lack of evidence he does not believe that the bird's range extends into central Pennsylvania.

Therefore, in view of the fact that we know the bird to be an uncommon transient in the vicinity of State College (Center County), we would like to present the several sight records which we have from our own records and from records which have been turned over to us from reliable sources in this vicinity.

All these records were made on a pond which is approximately three acres in area. This is located on the eastern edge of the borough of State College, Pennsylvania, on land belonging to the Pennsylvania State College. This is a protected area, and on this account the ducks which come there may often be closely approached. In some cases the Gadwall was approached within twenty yards, and in none of the following records was the distance greater than sixty yards.

The descriptions made in the field by the different observers, independently, were checked against one another. Three observers (Curry, Holzman, Yerger) are familiar with the bird in the Middle West.

State College, Pennsylvania, March 29, 1939, one male, studied closely with 8-power glasses at 50 yards; black under tail-coverts, white speculum, neck thinner than in Black Ducks with which it was associating; made it fly several times to get wing pattern (Holzman). November 15, 1940, one male (black under tail-coverts seen distinctly) (R. Yerger, W. Currier). November 16, 1940, one male (Yerger and Holzman). November 17, 1940, one female or young male (Curry).