

## TRAPPING OF THE QUEEN'S TRUMPETER SWANS IN BRITISH COLUMBIA

By R. H. Mackay

Canadian Wildlife Service, Vancouver, B.C.

*(A brief account, by Dr Harrison F. Lewis, of the capture of these swans for Her Majesty was included in the Fifth Annual Report. This is a more detailed account by the Wild Life Officer in charge of the project.—ED.)*

THE visit of Queen Elizabeth II, as the Princess Elizabeth, to Canada in 1951 was commemorated by the presentation at Charlottetown, P.E.I., of five Trumpeter Swans—the gift of the Federal Department of Resources and Development and the British Columbia Government. The swans were to be shipped, after capture, to the Severn Wildfowl Trust, Gloucestershire, England.

The task of trapping these large white birds, which winter in British Columbia, rested with the Canadian Wildlife Service. No previous attempt had ever been made to capture Trumpeter Swans in Canada and it was the problem of the author and D. A. Munro, of that Service, to select a trapping site, devise a trap, catch the swans and supervise their shipment to England.

### Wintering Areas

During the winter months the Trumpeter Swans remain as far north in British Columbia as they can find suitable feeding grounds, which in the interior of the province are limited to small unfrozen areas on swift-flowing streams or at points of turbulence where streams flow into lakes. The number of birds supported by each of these areas is limited by the amount of food available, and for that reason the wintering Trumpeter Swan population is made up of small, widely-scattered flocks—family groups of five or six swans in most instances. Other flocks of Trumpeter Swans make their way to the coastal region of British Columbia at the onset of winter, and scattered groups are recorded each year at Vancouver Island, the Queen Charlotte Islands, and at other points along the coast. The largest flock, which varies from 75 to 120 birds from year to year, winters at Lonesome Lake and along the Atnarko River, some 70 miles up the Bella Coola Valley from Bella Coola, B.C. Another flock of 14 to 20 birds winters quite regularly at Lakelse Lake near Terrace, B.C.

### Selection of Trapping Site

Many of the natural feeding areas in British Columbia freeze up during periods of extreme cold. When these cold periods are prolonged the Trumpeter Swans gradually become weaker and many die of starvation. In order to alleviate this situation, the Canadian Wildlife Service distributes grain supplies to several of its wardens and other co-operators for feeding purposes during critical periods. As the most extensive feeding operations are carried out at Lonesome Lake and as a large number of the swans become quite tame during these operations, it was felt that this area offered the best possibilities for capturing the rare birds.

The author made a visit to Lonesome Lake from 11 to 14 July 1951 in order to investigate the opportunities available for capturing the swans. Mr R. A. Edwards, Migratory Bird Warden for the Canadian Wildlife Service, his wife,



and their daughter Trudy, who reside near the head of Lonesome Lake, were interviewed at that time. It is pertinent to point out here that 'The Birches,' the Edwards's farmstead, is remote from civilisation and almost inaccessible except by airplane. Some twenty-one miles of arduous mountain footpath lie between it and Atnarko, B.C., on the telegraph line. This path is impassable for extended periods during the winter months, when there is virtually no contact with the outside world except by air. Hagensborg, B.C., about seventy miles down the Bella Coola Valley, is the nearest sizeable community.

When it is necessary to feed the swans, it is done for the most part by Miss Edwards. She has found that the least wasteful method of feeding is to throw the grain into an open stretch of water where it is quickly gobbled up by the hungry swans. When the temperature drops to  $-40^{\circ}\text{F}$ . or lower, and even the swiftest parts of the river freeze over, it is an everyday occurrence for Trudy to take axe and saw to cut holes in the ice for feeding places while the swans eagerly wait on the ice nearby. The swans have thus come to recognise their benefactor, and the bolder ones eat out of her hand.

The Edwards family thought at first that the trapping operations might frighten the whole flock from their region, and did not take too kindly to the proposal for capturing six of their white winter friends. However, their fears were allayed by the writer—not without a little misgiving on both sides—and trapping plans were discussed. It was assumed that, as usual, feeding operations would be carried out at certain periods of the winter on the Atnarko River about 250 yards from the Edwards's home. A small creek which enters the Atnarko at this point offers an ideal feeding site for short periods each year, depending on weather conditions. This site appeared well suited for the erection of a trap and offered the best possibilities for capturing the birds.

### **Trap Construction**

Materials for constructing the trap were transported by airplane to Lonesome Lake on 9 November 1951. The author and D. A. Munro went in at the same time to assist with the construction. Mr R. A. Edwards and Trudy also took part in setting up the trap.

Locally hewn rough cedar posts and poles were used in order to make the trap as inconspicuous as possible. The posts were embedded about 6 feet apart, on each bank of the creek near its mouth, and extended approximately 45 feet upstream. Poles about 19 feet long were then nailed on the tops of the posts to form the trap framework. The height of the poles above the level of the stream was close to 9 feet. Thirty-eight fathoms of 30-thread tarred-cotton fishing netting,  $3\frac{1}{2}$ -inch mesh by 100 meshes deep, were used to enclose the framework. This netting was stretched over the poles and stapled securely. A sliding door, 12 feet wide and 9 feet high, which could be dropped by means of a trip wire, was erected at the mouth of the trap. A small catching pen 10 feet long, 7 feet wide and 6 feet high was erected on the bank of the creek behind a willow clump and was connected to the main trap by means of a net funnel.

### **Capturing the Swans**

The establishment of regular communication with Lonesome Lake was a very important aspect of the capture. The British Columbia Forest Service kindly lent an S.P.F. radio set which was set up at Lonesome Lake at the time of the November visit. It was therefore possible to make contact with Mr Edwards directly from the Forest Service radio station in Vancouver. A weekly



schedule was arranged, and conditions at Lonesome Lake were reported regularly throughout the winter.

On 31 January 1952 information was received from Mr Edwards that several swans had been feeding in the trap and that weather conditions were suitable for the trapping attempt. As a ski-equipped aircraft was not available at Vancouver, it was necessary for D. A. Munro and the author to proceed to Prince George, B.C., where a ski-equipped Junkers airplane was available. Attempts to fly into Lonesome Lake were made on 3 and 4 February, but snowstorms in the vicinity of the Itcha Mountains forced returns to Burns Lake and Prince George respectively. Weather conditions grounded all aircraft on 5 February, but they cleared on the 6th and a landing was made on Lonesome Lake at 12.30 p.m.

Mortar-net equipment, lent by the United States Fish and Wildlife Service was test-fired in the afternoon. It was decided to use this equipment only as a last resort, if the box trap should fail.

Miss Edwards, who had been feeding a flock of up to 98 swans, 18 of which were cygnets, was asked to try to feed the swans into the trap on the morning of 7 February. She was successful in enticing 7 cygnets and 1 adult into the trap, but the adult and 2 cygnets escaped when the gate was dropped. The remainder of the flock were frightened by the attempts of the 5 trapped birds to escape and left the feeding area. They settled on the lake about a mile away.

The cygnets in the trap were then caught, sexed, and banded with coloured plastic bands. It was found that 3 males weighing 18, 19½ and 20 pounds and 2 females weighing 14½ and 15 pounds had been captured. These birds were then transferred to a small holding pen near the Edwards's home and the large trap was rebaited and set.

In view of the delay encountered in getting into Lonesome Lake, it was considered expedient to have the aircraft return as soon as weather conditions would permit. It did not seem advisable to keep the captured birds in the small pen for an extended period and, in any event, attempts to trap an additional cygnet might be made while awaiting the arrival of the airplane. The swans, however, did not return to the feeding area at the mouth of the trap on 8 February and the aircraft arrived in a gusty snowstorm in the late afternoon.

### Transportation of the Swans

Travelling crates for the swans were constructed immediately upon their capture. Five crates, 42 inches long, 18 inches wide, and 28 inches high were designed and built by Mr Edwards with the unskilled help of D. A. Munro and the author. The lumber used was local cedar, cut and dressed by Mr Edwards in his home-constructed sawmill. Remnants of the fish net used in the construction of the trap were utilised to enclose the crates, while half-inch-mesh galvanised wire served as cage flooring 2 inches above a bottom drop board. The top and three sides of the crates were then covered loosely with gunny sacks.

On loading the Junkers it was found that only four of the crates could be accommodated. Two of the male swans had therefore to be placed in one crate, but they reached their destination with no apparent ill effects.

Trumpeters were carried from Lonesome Lake to England by air transport. Leaving Lonesome Lake at 10.30 a.m. on 9 February the swans arrived in Vancouver, via Prince George, at 6.00 p.m. on the same day, and were given food and water there. R. D. Harris and W. D. Taylor of the Canadian Wildlife Service, Ottawa, cared for the swans during their stay in Montreal from 2.10 p.m. on



10 February until noon on 11 February. The birds were in good condition and ate well. The last leg of the journey across the Atlantic was accomplished without incident, and the swans arrived in England on 12 February.

Reports received recently from the Severn Wildfowl Trust indicate that the swans have become quite tame in captivity, and will even feed from the hand.

*The following is an extract from a letter from Mr Ralph A. Edwards of 'The Birches,' Lonesome Lake, dated 30 January 1954.*

'Our swans here have had a very mild fall so that we did not have to start feeding them until mid-December and then only to a few; but as the winter advanced colder weather sealed off their food supplies and more and more came to our feeding station until now we are feeding 106 besides a lot of mallard hangers-on.

'Last year we had only a few cygnets (16) but this year nearly a third of the flock are cygnets (35), more than ever before, which pleases us greatly.

'The 106 figure does not represent the total number of Trumpeter Swans in this area, some staying at nearby lakes and there is a certain amount of rotation. . . .

'February 14. This letter has been waiting for a chance to be flown out, but weather has hindered. At this date the swan count is 146—of which 48 are cygnets.'

*It will be recalled that the most recent estimates of the total population of Trumpeter Swans indicate that not more than 1300 exist. We too are greatly pleased by the numbers of cygnets reported by Mr Edwards.—ED.*

