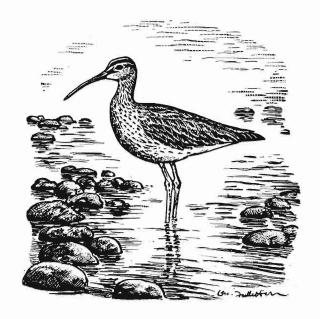
SCOTTISH BIRDS



The Journal of The Scottish Ornithologists' Club

Vol. I

Special Supplement Summer 1961

THE BIRDS OF DUDDINGSTON LOCH **EDINBURGH**

THE SCOTTISH ORNITHOLOGISTS' CLUB

THE Scottish Ornithologists' Club was founded in 1936 and membership is open to all interested in Scottish ornithology. Meetings are held during the winter months in Aberdeen, Dundee, Edinburgh, Glasgow, and St Andrews, at which lectures by prominent ornithologists are given and films exhibited. Excursions are organised in the summer to places of ornithological interest.

The aims and objects of the Club are to (a) encourage and direct the study of Scottish Ornithology in all its branches; (b) co-ordinate the efforts of Scottish Ornithologists and encourage co-operation between field and indoor worker; (c) encourage ornithological research in Scotland in co-operation with other organisations; (d) hold meetings at centres to be arranged at which Lectures are given, films exhibited, and discussions held; and (e) publish or arrange for the publication of statistics and information with regard to Scottish ornithology.

There are no entry fees for Membership. The Annual subscription is 25/-; or 7/6 in the case of Members under twenty-one years of age or in the case of University undergraduates who satisfy the Council of their status as such at the time at which their subscriptions fall due in any year. Joint membership is available to married couples at an annual subscription of 40/-, "Scottish Birds" is issued free to members, but Joint members will receive only one copy between them.

The affairs of the Club are controlled by a Council composed of the Hon-Presidents, the President, the Vice-President, the (ton. Treasurer, one Representative of each Branch Committee appointed annually by the Branch, and ten other Members of the Club elected at an Annual General Meeting. Two of the last named retire annually by rotation and shall not be eligible for re-election for one year.

A Scottish Bird Records' Committee, appointed by the Council, produce an annual Report on "Ornithological Changes in Scotland."

An official tie with small white Crested Tits embroidered on it can be obtained in dark green or in navy blue by Members only from Messrs R. W. Forsyth Ltd., Princes Street, Edinburgh, or 5 Renfield Street, Glasgow, C.2 at a cost of 16s 9d post extra, A small brooch in silver and blue can be obtained for the use of Members of the Club. Price 2s 6d each from the Secretary, or from Hon. Branch Secretaries.

Forms of application for Membership, copy of the Club Constitution, and other literature is obtainable from the Club Secretary, Mrs George Waterston, Scottish Centre for Ornithology and Bird Protection, 21 Regent Terrace, Edinburgh 7. (Tel. Waverley 6042).

CLUB-ROOM AND LIBRARY

The Club-room and Library at 21 Regent Terrace, Edinburgh 7, will be available to members during office hours, and on Wednesday evenings from 7 to 10 p.m. (except the Wednesdays of Branch Meetings). Members may use the Reference Library and borrow books from the Duplicate Section. Facilities for making tea or coffee are available at a nominal charge and members may bring guests by arrangement. The Aldis 2" x 2" slide projector and screen may be used for the informal showing of slides at a charge of 2s 6d per night to cover the replacement of bulbs.

NOTICE TO CONTRIBUTORS

All notes dealing with birds in the eastern Lowlands, from Berwick-on-Tweed to Dundee, should be submitted to A. T. Macmillan, 66 Spylaw Bank Road. Edinburgh, 13: all other contributions to M. F. M. Meiklejohn, 16 Athole Gardens, Glasgow, W.2. It would be helpful if notes were typewritten, if possible, and double spaced.

THE BIRDS OF DUDDINGSTON LOCH: CORRECTIONS

We now consider that certain records in our *Check-List* of the Birds of Duddingston Loch (antea 1: 400) are not sufficiently authenticated and recommend that the following species be placed within square-brackets:

ROUGH-LEGGED BUZZARD. Although it is probable that the bird seen on 2nd October 1954 was of this species we feel that there is insufficient evidence to make identification positive.

RED GROUSE. This record refers to an area outwith the boundaries of the Bird Sanctuary; and in any event is of somewhat dubious origin.

QUAIL. Speedy (Baird 1898) does not specifically mention Duddingston Loch in his reference; we feel it is more likely to have occurred "in the neighbourhood."

Spotted Crake. Speedy (1892) is vague about specific locality.

LITTLE CRAKE. This record had already been rejected by the Scottish Bird Records Committee (Scot. Nat. 67: 101), and we apologise for having overlooked this fact.

Chiffchaff. Speedy (Baird 1898) is vague about specific locality.

It should perhaps be noted that J. Kirke Nash (1935) The Birds of Midlothian lists neither William Baird (1898) nor Tom Speedy (1892) in the Bibliography of his book.

D. R. Anderson. George Waterston.

SCOTTISH BIRDS

THE JOURNAL OF THE SCOTTISH ORNITHOLOGISTS' CLUB



Vol. I.

Special Supplement

Summer 1961

Edited by M. F. M. Meiklejohn, with the assistance of D. G. Andrew and A. T. Macmillan. Business Editor, Arthur J. Smith. Cover design (Whimbrel) by Len Fullerton.

Published quarterly.

THE BIRDS OF DUDDINGSTON LOCH, EDINBURGH

Foreword

by SIR CHARLES G. CONNELL

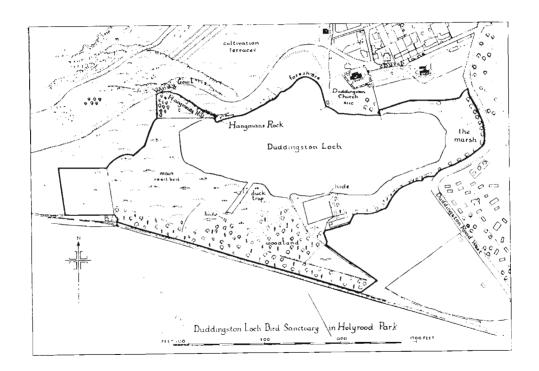
Chairman, The Committee on Bird Sanctuaries in the Royal Parks (Scotland)

I WELCOME the invitation to write a short foreword to this publication. When the Sanctuary was established by H.M. Office (now Ministry) of Works in 1925 notes were kept on the birds by a number of observers and this practice has continued ever since. For some years an annual report containing a record of these observations was published, but as it had a small circulation and a limited value it was discontinued. The Committee has now decided that a Check-List, which it is hoped may be brought up to date from time to time, will be more useful as a record of what can be seen at Duddingston and how the Sanctuary has succeeded in its purpose.

The description of the Sanctuary written by the late Professor James Ritchie of Edinburgh University is of great interest, and this gives me the opportunity of paying tribute to his outstanding work for Natural History in Scotland. He was Chairman of the Committee from 1955 until 1958 and was largely responsible for the developments which have made the Sanctuary so successful. In addition to Professor Ritchie's contribution there is the Check-List of the birds prepared by Mr Duncan R. Anderson and Mr George Waterston which consists of a summary of the published records of birds seen within the Sanctuary area at the Loch and includes all records up to the end of 1960. It is hoped that this will form the basis for further observation and study of the birds of the Loch and its surroundings. The illustrations are designed to show the types of habitat found in the Sanctuary area.

I wish to record here the Committee's appreciation of the grant made available by The Ministry of Works which has enabled the Scottish Ornithologists' Club to publish this Supplement to their journal, "Scottish Birds." Copies may be obtained at a cost of 5s (postage 2d extra) from The Scottish Centre for Ornithology and Bird Protection at 21 Regent Terrace, Edinburgh 7.

CHARLES G. CONNELL.



DUDDINGSTON LOCH BIRD SANCTUARY in the Royal Park of Holyrood, Edinburgh

By the late Professor James Ritchie, C.B.E., M.A., D.Sc.

Introduction

Duddingston Loch and its surroundings, in the Royal Park of Holyrood, has many claims to interest. It is relatively secluded, in spite of its proximity to Edinburgh, within the municipal boundaries of which it lies. Its situation is impressive, at the foot of Arthur's Seat, the relic of a volcano of palaeozoic times, and in view of signs of earlier volcanic activity like the basalt columns of Samson's Ribs and the eminences of the Hangman's Hill and the Lion's Haunch. For the historian it has its own particular interest and for the naturalist the variety of its haunts and of their vegetable and animal inhabitants, and its place as a refuge for summer nesting birds and for great congregations of autumn migrants from the far north, make it a source of unending surprise and pleasure.

The purpose of this account of the Sanctuary is to indicate some of its outstanding interests, for the benefit of the visitor to Edinburgh who might be unaware of its existence, of the youthful naturalist who would find variety and exercise in identifying birds and observing their habits, of the teacher who could find no better place for introducing his pupils to nature's diversity and the seasonal changes in plant and bird life, and of the expert naturalist on the look-out for fresh experience and new knowledge. The "Check-List" also aims at putting on record details of the birds observed within the Sanctuary, in order to aid visitors in the identification of species and to fix a base-line from which future changes in population may be gauged; for we know that in this limited area alterations in the bird population take place with remarkable rapidity whenever a fluctuating water level affects the surroundings of the Loch.

Duddingston Loch

Duddingston Loch is a natural lake formed after the recession of the glaciers of the Ice Age, which have left the marks of their passage, grooves and scratches running west and east, upon a glaciated rock bordering the Queen's Drive nearby. The present Loch is fed by spring water from the Wells o' Wearie near the base of the basalt pillars known as Samson's Ribs, and its outlet flows south-eastward into the Braid Burn near Duddingston Station. Contracted by drainage of the surrounding land and by accumulations of silt from the

hill and organic debris from its own plant life, the Loch is now reduced to some 30 acres, including its reed-bed. Its maximum depth is 10 feet and its average depth slightly over 5 feet. Perhaps the nearest recorded approach to its prehistoric dimensions occurred on September 13th, 1744, when a "water-spout" broke upon the top of Arthur's Seat with such force and volume that one branch of the deluge carried away the gable of the most western cottage in Dudaingston village, "flooded the Loch over the adjacent meadows," and contributed to the silting up of the Loch, while the other branch tore out a rocky channel to the south of the summit, known as the "Gutted Haddie" (Scots for 'disembowelled haddock').

Even a couple of centuries ago the Loch must still have considerably exceeded its present area, for in his mature years Lord Henry Cockburn (1779-1854) recorded that when he was a boy "the reeds were then regularly cut over, by means of short scythes, with very long nandles, close to the ground, and this made Duddingston Loch nearly twice its present size. All between the loch and the house (of Prestonneld) was a sort of Dutch garden, admirably kept."

What the Loch looked like in the days before Scottish history began we do not know, but we know that prehistoric peoples lived in its neighbourhood and may have fished in its waters. When the Queen's Drive was being constructed in 1846 a Bronze Age burial with cinerary urn was unearthed just above Samson's Ribs (that would carry us back some 3,000 years), and almost directly above the Loch bronze swords were found. But the most exciting discovery was made in an odd way in the Loch itself. In 1772 Sir Alexander Dick of Prestonfield, in order to increase the fertility of his fields, commenced to dredge a deposit of marl clay from the bed of the Loch. He used a flat-bottomed boat which dragged after it a weighted leather bag in which the calcareous mud collected. This is how he described the discovery of August 9th, 1775: "In the third year of my progress, in dragging successfully great quantities of marl, now and then I met, in the middle of the Loch, with large fragments of deer's horns of an uncommon magnitude. As my operations were proceeding northward, about 150 yards from the verge of the lake, next to the King's Park, the people employed in dredging in places deeper than usual after having removed the first surfaces of fat blackish mould, got into a bed of shell marl from five to seven feet deep, from which they brought up in the collecting bag a very weighty substance, which when examined, as it was thrown into the marl boat, was found to be a heap of swords, spears, and other lumps of brass, mixed with the purest shell marl."

The greater part of this discovery was presented, along with the letter quoted above, to the newly founded Society of Antiquaries of Scotland in 1780; it was their first donation of 1961 397

relics and it remains "the largest hoard of bronze implements recorded from Scotland." The 49 items still extant were described by Dr J. G. Callander and identified as of late Bronze Age, that is about 2,700 years ago.

Does this remarkable find of broken and battered swords and spear-heads suggest a votive offering to the deities of the Loch or, perhaps more likely, the scrap collected by a prehistoric bronze founder for recasting? Sir Daniel Wilson thought they might indicate the position of a lake-dwelling or crannog, a house or houses raised above the water surface on wooden piles, and built away from the shore for safety. His idea is supported by the fact that at one time piles of some sort projected from the bed of the Loch, for the Rev. John Thomson, the famous Scottish landscape painter, incumbent of the loch-side manse of Duddingston from 1805 to 1840, was accustomed to attach his boat to wooden piles when he was fishing or sketching in the Loch. But if a crannog existed there in the late Bronze Age it would be unique in Scotland because of its early date and in its construction on unusually long piles.

A glimpse of the prehistoric natural history of the loch-side is also given by these marl dredgings. They contained human skulls and "large fragments of deer's horns of an uncommon magnitude." The human skulls were never examined and have disappeared and so have the horns; but we can conclude that large Red Deer (comparable with the great stag whose antlers were found in the Meadows in Edinburgh in a similar bed of marl in 1781) roamed about the Loch in a forest of oak trees and hazel scrub, remains of which were found under deposits of peat and gravel during ditching and draining in the neighbouring fields in the eighteenth century). As well as those of Red Deer the antlers included, according to a contemporary note by Alexander Smellie, a well known Edinburgh naturalist, antlers of the Elk, an imposing deer now confined to northern Europe and Asia, but up to Roman times a native of the Scottish lowlands.

The Loch itself has yielded evidence of the Roman occupation for a copper coin reported as of the Emperor Tacitus (275-276 A.D.) was dredged from marl the year after the bronze hoard was discovered.

This is not the place for tracing the history of the locality, but visitors to the Sanctuary cannot fail to notice the church of Norman architecture, still used as the parish church, which dominates the north-east bank of the Loch. Its main structure dates back to the twelfth century and is modified only by an aisle on the north side added in 1631. Until the Reformation this church was under the patronage of the Abbey of Kelso. Two relics of its more recent past exist at the church gate—an

iron collar (the "jougs") for the church's punishment of misbehaviour, and a "loupin-on-stane" for the convenience, in days before roads and carriages, of the farmer's wife when she rode on horseback behind her husband.

It may also be recalled that on the slope of Arthur's Seat overlooking Duddingston Loch, on September 19th, 1745, part of the army of Prince Charles Edward was encamped before marching to defeat General Cope at the Battle of Prestonpans. Nearly two centuries earlier, on May 10th, 1572, the Windy Gowl was the scene of a battle between the forces of the Earl of Huntly (Queen Mary's men) and those of the Regent, the Earl of Morton.

Duddingston Loch Bird Sanctuary

Duddingston Loch must long have been regarded as a private bird reserve, for as early as 1680 the Duke of Lauderdale placed swans in it, but it was not until December 1923. when W. K. Askew, Esq., of Ladykirk presented the Loch and the land immediately surrounding it to the nation, that the idea of a national sanctuary became practicable. By this gift the area became part of the Royal Park of Holyrood and the then First Commissioner of Works, Viscount Peel, impressed by the success of Bird Sanctuaries established in the Roval Parks in England, decided to set up in Scotland a Committee to consider similar action. This Committee, under the chairmanship of Lord Elphinstone, was formed in 1925, and after examining the two Roval Parks in Scotland considered that while Linlithgow Loch, for several reasons, was unsuitable. Duddingston Loch would make an interesting and attractive Bird Sanctuary. Its merit lav in its considerable extent of fresh water, the richness of its food supply of aquatic vegetation and animals, the variety of its surroundings, its relative shelter from wind, and its proximity to the Firth of Forth, a noted area for winter immigrants.

The Sanctuary having been constituted, steps were at once taken to improve it. A strip of ground 3½ acres in extent, generously given to the nation by His Grace the Duke of Abercorn, was incorporated to give access to the surroundings. Additional cover and nesting sites were provided by the planting of shrubs and trees, berry-bearing shrubs and trees designed to attract winter migrants, and conifers, low willows, alders, poplars and white beam were placed alongside the adjoining railway line partly for shelter and partly to check the damage from live cinders ejected by engines climbing the up-grade, which had previously started considerable fires in the Sanctuary area. A small group of voluntary bird-observers was appointed, to whose expert records made throughout the years is due most of the information in the Bird List which follows. Lastly a Warden was employed during the nesting

season to protect the birds and their eggs from trespassers, and a fence was erected at vulnerable boundaries.

The level of the Loch which lies just below the 150' contour line above sea-level, was subject to changes which affected the surrounding areas, but this has been corrected by the clearing of channels and ditches, and particularly by the construction of a control on the outlet to the Braid burn. Observation of the birds themselves by the official observers has been improved by the erection of "hides" on the border of the reeds, and by the cutting of wide swathes through the reed-bed, which at the same time are potential fire-breaks. Nesting boxes have been placed on some of the trees for the smaller birds.

The Sanctuary falls into several natural or ecological areas, each serving its own particular purposes:—

- (1) The Loch has now about 19 acres of water surface. It contains a food supply of aquatic vegetation and invertebrate animals and fishes which attract surface feeding and diving birds; it offers safe shelter and a resting place; and it is the winter resort of large numbers of winter immigrants, close on 2,000 duck, including 1,550 Pochard, having been counted on a single day.
- (2) The Reed-bed, 11½ acres in area, almost surrounds the water surface but is best developed at the western end. Here in former days it used to be cut regularly for thatching cottage roofs and about 1750 "it supplied about 30 weavers' looms. They were chiefly employed in manufacturing a coarse flaxen stuff, then known by the name of Duddingston hardings, which generally sold for 3½ to 4d a yard." Now the value of the reed-bed lies in the shelter it gives from the prevailing winds, and in its suitability and safety as a nesting place either for birds nesting practically on the water surface or for those which suspend their nests amongst the reeds.
- (3) The Meadow. Continuous with the reed-bed on the west and south-west, but drier, is an area of 6½ acres covered with rough tussocky grass. It is a feeding ground and a nesting place for a variety of ground nesting birds.
- (4) The Marsh. A marshy area of about 3½ acres borders the eastern end of the Loch and is a much frequented feeding ground.
- (5) Scrub and Trees. These occur rather sparsely on the southern border of the Sanctuary and on Hangman's Hill. They offer shelter and nesting sites to an assortment of birds different from the aquatic inhabitants of the Sanctuary.

When the Sanctuary was established in 1925 a survey of the birds within it, made during the first year, showed that it possessed seventeen resident and breeding species, forty reg-

ular visitors and sixteen casual or occasional visitors. As four of these occur both as nesting birds and as regular winter immigrants the total number of different species of birds then recorded from the Sanctuary was sixty-nine—a contrast with the list of birds now recorded in these pages.

Finally it may be said that, although the public are excluded from the Sanctuary itself and trespassing is strictly prohibited, excellent prospects of the Sanctuary may be obtained from many points on the roads in Holyrood Park, and closer inspection of the birds on the Loch may be made from Duddingston Foreshore, where the Loch merges on the Park close to Duddingston Road. Here also occasional anglers may be seen testing their luck in the Loch.

CHECK-LIST OF THE BIRDS OF DUDDINGSTON LOCH

By D. R. Anderson and George Waterston

Arrangement and nomenclature follow the B.O.U. Check-List of the Birds of Great Britain and Ireland, 1952. For References and Contractions see end of List. All notes up to the end of 1960 have been included.

DIVERS AND GREBES

- BLACK-THROATED DIVER Colymbus arcticus L. Rare. The only record is of a single bird seen from 9 to 27 February 1937. (S.N. 1937: 72).
- RED-THROATED DIVER Colymbus stellatus Pontopp. Rare. Two records of single birds seen in March and July 1928 (S.N. 1937: 45); and one record of a single bird seen between 26 September and 15 October 1951 (E.B.B. 2:2).
- Great Crested Grebe *Podiceps cristatus* (L.). Breeds. Originally an occasional winter visitor, but first bred in 1937. Although one or two pairs visit the loch every summer no young were reared between 1953 and 1959. In 1960 however four pairs bred, but between them only reared four young.
- SLAVONIAN GREBE Podiceps auritus (L.). Rare. Three records of single birds—one on 26 December 1927 (S.N. 1928: 27); one in February 1929 (S.N. 1937: 45); and one between 31 January and 4 February 1937 (S.N. 1937: 56).
- BLACK-NECKED GREBE Podiceps caspicus Hablizl. Rare. The only record is of two seen between 31 January and 4 February 1937 (S.N. 1937: 56). [Stated to have bred successfully in 1943. Edinburgh To-day].
- LITTLE GREBE Podiceps ruficollis (Pallas). Breeds annually—



PLATE 1

Duddingston Loch from the Queen's Drive (looking east) showing the extensive recd-bed.



PLATE 2

Looking east at a lower level showing Hangman's Rock (left) and reed-bed behind Sanctuary boundary wall.

- usually up to five or six pairs. Less common in winter. Occasional passage migrant.
- CORMORANT *Phalacrocorax carbo* (L.). Occasional winter visitor. One or more visited and fished on the loch from February to May 1933 and from February to March 1935 and one bird was seen in March 1934. Since then it has apparently been recorded only in January 1948 and October 1949; but in 1959 and 1960 was becoming more frequent.
- Heron Ardea cinerea L. Occasional visitor. Has decreased in numbers during the last ten years. During the great frost in 1947 four frequented the outlet burn for several weeks—two eventually dying of starvation.
- BITTERN Botaurus stellaris (L.). Rare. Four records; one remained for three weeks in February 1947 (E.B.B. 3: 56), one seen in August 1953 (E.B.B. 3: 66), one on 24 February 1955 (E.B.B. 5: 46), and one between 2 and 10 October 1955 (E.B.B. 6: 8). The extensive reed beds which are the typical habitat for this species no doubt provided the attraction.

DUCKS, GEESE AND SWANS

- Mallard Anas platyrhynchos L. Common throughout the year; breeds. 1937—about 25 pairs bred; in 1960—about 30 pairs bred. In winter as many as 300 may be seen (Baxter & Rintoul, 1953, 2:393).
- Teal Anas crecca L. Increasing in numbers as an autumn and winter visitor. Pair bred in 1955 and 1959. In October 1959 89 were seen—the highest number recorded.
- Garganey Anas querquedula L. Rare. Three records; one in July 1950 (E.B.B. 3: 56), one between 11 and 15 October 1952 (E.B.B. 3: 3), and one between 22 and 31 March 1953 (E.B.B. 3: 48).
- Gadwall Anas strepera L. Rare. Three records; a pair on the loch between 6 and 17 April 1951 (E.B.B. 1: 52); a single drake present between 22 March and 3 April 1954 (E.B.B. 4: 51) and a pair on 22 October 1956 (E.B.B. 7: 11). (Recently fairly regular winter visitor to Dunsappie Loch on Arthur's Seat).
- Wigeon Anas penelope L. Regular winter visitor—52 being the highest number seen at one time. The only summer record is of a drake on 10 July 1960.
- PINTAIL Anas acuta L. Occasional winter visitor; seven records since 1928 (two in April 1944).
- Shoveler Spatula clypeata (L.). Seen in small numbers in

- autumn and winter; maximum 27 on 25 September 1960. Does not breed.
- Red-crested Pochard Netta rufina (Pallas.). Two records; a male was seen on 21 December 1924 which remained until 17 February 1925 (S.N. 1925: 21) and a duck was present between 28 October and 3 November 1957 (E.B.B. 8:5).
- Scaup Aythya marila (L.). Occasional winter visitor in small numbers—usually after rough weather. (This species is abundant in winter on the sea between Leith and Portobello).
- TUFTED DUCK Aythya fuligula (L.). Present throughout the year. First bred in 1918 and has bred in small numbers every year. A common winter visitor; maximum numbers 636 on 17 January 1960.
- Pochard Aythya ferina (L.). Present throughout the year. Eight to ten pairs breed annually. In winter is the most numerous duck on the loch—averaging between 600 and 700. A peak of 1,560 was recorded on 12 December 1936 (Baxter & Rintoul, 1953, 2:412).
- Goldeneye *Bucephala clangula* (L.). Now a regular winter visitor in small numbers. Between 1927 and 1931 it was rarely recorded.
- LONG-TAILED DUCK Clangula hyemalis (L.). Rare. One record of a female shot on 15 November 1886 (Nash, 1935, 174), probably the bird referred to by Speedy (1892, 82). One immature bird seen on 28 October 1938 (S.N. 1939: 28).
- VELVET Scoter Melanitta fusca (L.). Rare. A female was recorded on the loch on 24 March 1956 (E.B.B. 6: 38).
- COMMON SCOTER *Melanitta nigra* L. One record of a male on 5 May 1919 (S.N. 1919: 197).
- Red-Breasted Merganser Mergus serrator L. Rare. Six were seen in November 1914 (Baxter & Rintoul, 1953, 240); and Kirke Nash records five on another occasion (Nash, 1935, 181).
- Goosander *Mergus merganser* L. Occasional winter visitor; formerly (1933) appeared more frequently. Only recent records are one on 31 May 1951 (E.B.B. 1: 62) and one on 26 November 1953 (E.B.B. 4: 27). Maximum number of 20 seen on 12 January 1934.
- SMEW Mergus albellus L. Rare. One female was on the loch between 3 February and 24 April 1929 (S.N. 1929: 28); one female was present on 4 January and between 17 and 24 February 1930 (S.N. 1930: 26 and 1937: 40); and one female was seen between 11 February and 25 March 1956 (E.B.B. 6: 26 and 38).

- Sheld-duck Tadorna tadorna (L.). Rare. Three records. On 29 September 1929 a flock of eleven was seen flying westwards overhead (S.N. 1937: 37). One visited the loch for ten minutes on 9 May 1953 (E.B.B. 3: 56); and one was seen on 9 December 1960 (D.R.A.).
- Ruddy Sheld-duck Casarca ferruginea (Pallas.). Rare. One record of a female on the loch from October 1923 to 29 March 1924 (S.N. 1925: 68).
- GREY LAG GOOSE Anser anser (L.). Rare. Writing in 1775, Sir Alexander Dick wrote "woodcock have appeared and wild geese in large numbers" (Baird, 1898, 260). The species however is not defined. The only record of a bird within the sanctuary is of one on 15 December 1955 which was shot in an adjoining field (D.R.A.). (A flock of thirteen birds was introduced to the loch early in 1961).
- PINK-FOOTED GOOSE Anser arvensis brachyrhynchus Baillon. Flocks frequently pass over the loch in winter.
- Barnacle-Goose *Branta leucopsis* (Bechstein). Rare. One was on the loch on 29 April 1956 (E.B.B. 6: 50).
- Canada Goose Branta cadensis (L.). Rare. Used to breed in 1913 and prior to that (Nash, 1935, 154). The only recent record is of two on 13 May 1953 (E.B.B. 3: 56).
- MUTE SWAN Cygnus olor (Gmelin). Introduced by the Duke of Lauderdale about 1678 (Baird, 1898, 259). One to two pairs resident throughout the year; breeds. In 1933 it is recorded (Report 1933) that the cygnets hatched at Duddingston walked up the hill to Dunsappie Loch in September and did not return. It is of interest to record that in 1953 there was the same form of behaviour, but on this occasion three cygnets were lost—probably killed by Carrion Crows as the family walked up to Dunsappie (E.B.B. 4: 70). The movement of the Swan family to Dunsappie is now an annual event.
- WHOOPER SWAN Cygnus cygnus (L.). Irregular winter visitor. The only post-war records are of one in January 1949 (D.R.A) and twelve on 15 November 1953 (R.S.).

HAWKS

- Buzzard Buteo buteo (L.). Rare. Baird (1898, 508) described the Buzzard as "occasional." A bird thought to be this species was seen over the loch on 12 September 1955 (R.S.).
- ROUGH-LEGGED BUZZARD Buteo lagopus (Pontopp). One seen on 2 October 1954 (E.B.B. 5: 8).
- Sparrowhawk Accipiter nisus (L.). Speedy (1892, 104) describ-

- ed it as "frequently seen." It is now rare and does not breed.
- OSPREY Pandion haliaetus (L.). One record of an Osprey "noticed one Sunday evening in the Spring of 1890 circling round Duddingston Loch" (Speedy, 1892, 104).
- Peregrine Falco peregrinus Tunstall. One record of a Peregrine seen over the loch on 19 January 1956 (E.B.B. 6: 26).
- KESTREL Falco tinnunculus L. Usually a pair resident throughout the year; occasionally breeding. In 1955 four pairs bred in Holyrood Park, including one brood on Hangman's Rock (E.B.B. 5: 66).

GAME BIRDS

- RED GROUSE Lagopus scoticus (Latham). Speedy (1892, 109) states "several gentlemen of our acquaintance have seen them on Arthur's Seat." There are no other records.
- Partridge *Perdix perdix* (L.). Present throughout the year and frequently seen in the Sanctuary where a pair bred in 1960; also breeds in the vicinity.
- QUAIL Coturnix coturnix (L.). Speedy is quoted as stating that "the Quail is occasionally found in the district" (Baird, 1898). There is no other record.
- PHEASANT *Phasianus colchicus* L. Seen throughout the year; breeds. The present population in the Sanctuary is believed to be about twenty.

RAILS AND CRAKES

- WATER RAIL Rallus aquaticus L. Speedy (1892, 103) stated that it is "frequently seen at Duddingston Loch." It is a regular winter visitor (fifteen trapped and ringed to date), and one pair bred in 1951 (E.B.B. 1: 62).
- Spotted Crake Porzana porzana (L.). Speedy (1892, 103) stated that "the Spotted Crake is a rare visitor." No other record.
- LITTLE CRAKE Porzana parva (Scopoli). One seen 30 November 1952 (E.B.B. 3: 19).
- CORNCRAKE Crex crex L. Rare summer visitor. Once recorded calling in the Sanctuary for some days in May 1932 (S.N. 1937: 45). Up to 1953 was a regular summer visitor to the fields on the north side of Duddingston village.
- Moorhen Gallinula chloropus (L.). Seen throughout the year in varying numbers subject to weather conditions; breeds. Birds ringed at the loch have been recovered at Lochgelly, Gullane and in Northumberland.
- COOT Fulica atra L. Numerous and breeds. Numbers increase

in winter. Maximum number of 300 recorded in February 1956 (E.B.B. 6: 26).

WADERS

- Oystercatcher *Haematopus ostralegus* L. Regular passage migrant in small numbers. Does not breed.
- Lapwing Vanellus vanellus (L.). Occasionally seen at loch-side and formerly bred in vicinity. Bred in Holyrood Park, 1960.
- Golden Plover *Charadrius apricarius* L. Apparently only two records: seen on 24 September 1933 and a flock of 40 on 27 October 1936 (S.N. 1937: 44).
- Common Snipe Capella gallinago (L.). A regular winter visitor in small numbers, D.R.A. was informed by a local shepherd that it once bred in the marshy ground near the Wells o' Wearie. In 1935 two birds were observed at the breeding season and one of them was drumming over the loch (S.N. 1937: 44).
- JACK SNIPE Lymnocryptes minimus (Brünn.). Frequents the ditches and marshy ground every winter. Up to three have been seen at one time.
- Woodcock Scolopax rusticola L. Regular winter visitor; does not breed.
- Curlew *Numenius arquata* (L.). Regular passage migrant over the loch, and has been seen on the ditches in hard weather.
- Whimbrel Numenius phaeopus (L.). Occasionally heard or seen passing over on migration (S.N. 1937: 44).
- GREEN SANDPIPER Tringa ochropus L. Only one record of one seen on 5 August 1933 (Report 1933).
- COMMON SANDPIPER Tringa hypoleucos L. Regular passage migrant in small numbers.
- Redshank Tringa totanus (L.). Seen occasionally at the loch on passage. Does not breed.
- LITTLE STINT Calidris minuta (Leisler). Only one record of a bird seen on 2 May 1935 (Report 1935).
- Dunlin Calidris alpina (L.). Only three records. Recorded for the first time in 1930 (no date) (Report 1930); on 8 December 1934 a flock of ten flew up the loch low over the water (Report 1935); and one seen on north side of loch on 11 February 1956 (E.B.B. 6: 26).
- Phalarope Phalaropus sp?. One record of a Phalarope (? species) seen on 20 October 1951 (E.B.B. 2; 2).

GULLS AND TERNS

- Greater Black-backed Gull Larus marinus L. Seen throughout the year. Increased numbers in winter.
- Lesser Black-backed Gull Larus fuscus L. Passage migrant and occasional summer visitor. Has been recorded in every month in winter.
- Scandinavian Lesser Black-backed Gull. Larus f. fuscus L. One record of two seen standing on the ice on 7 December 1950 (E.B.B. 1: 43).
- HERRING GULL Larus argentatus Pontopp. Large numbers frequent the loch at all seasons; more numerous in winter.
- COMMON GULL Larus canus L. As Herring Gull.
- GLAUCOUS GULL Larus hyperboreus Gunnerus. One seen on loch on 7 May 1960 (D.R.A.)'.
- ICELAND GULL Larus glaucoides Meyer. One seen on the loch on 3 May 1949, remained for three days (E.B.B. 3: 57).
- BLACK-HEADED GULL Larus ridibundus L. Large numbers frequent the loch in autumn and winter.
- COMMON TERN Sterna hirundo L. Occasional passage migrant.
- ARCTIC TERN Sterna macrura Naumann. One record of a bird identified on 1 June 1952 (E.B.B. 2: 60).
- Sandwich Tern Sterna sandvicensis Latham. Only two records—one seen diving in the loch on 30 May 1931 (Report 1931); and in the summer of 1936 (S.N. 1937: 44).
- LITTLE AUK Plautus alle (L.). One record of one on 17 February 1904 (A.S.N.H. 1904: 127).
- Guillemot *Uria aalge* (Pontopp). One oiled bird on the loch on 15 August 1947 (D.R.A.).
- STOCK DOVE Columba oenas L. Never at any time numerous, but breeds in the vicinity.
- Wood Pigeon Columba palumbus L. Present throughout the year; several pairs breed.
- Cuckoo *Cuculus canorus* L. A regular summer visitor; usually single birds. Not known to breed.
- BARN OWL Tyto alba (Scopoli). Occasionally seen; said to have nos'ed near the Sanctuary in 1936. One roosted in conifers in the Sanctuary in October and November 1945 (B.B. 39: 90).
- TAWNY OWL Strix aluco L. Present throughout the year. Has

1961 411

- bred every year since 1956 in an artificial nestbox.
- LONG-EARED OWL Asio otus (L.). Baird (1898, 508) described this bird as rare, but it is now a regular frequenter of the Sanctuary and breeds in the vicinity. Eight seen roosting in small tree in reed bed on 21 January 1946 (D.R.A.).
- SHORT-EARED OWL Asio flammeus (Pontopp). Three frequented the fields on the north side of Duddingston Village in the winter 1955-56; and two were recorded on various dates in October and November 1958 hunting in the marsh (D.R.A.).
- NIGHTJAR Caprimulgus europaeus L. One was seen near Samson's Ribs in Holyrood Park on 2 June 1913 (S.N. 1913: 234).
- SWIFT *Apus apus* (L.). In summer appears over the loch in large numbers.
- KINGFISHER Alcedo atthis (L.). Recorded regularly at the loch up to 1935. Has now become scarce. Last seen on 26 August 1950 when two birds were present (D.R.A.).
- Green Woodpecker *Picus viridis* L. A recent arrival in the district. First recorded on 5 January 1956 (E.B.B. 6: 24) and seen on several subsequent occasions. Bred in 1959.
- Great Spotted Woodpecker Dendrocopus major (L.). First recorded on 24 July 1946 when two were seen. Is now a regular visitor. In 1954 a nesting hole was excavated but was later abandoned.
- Skylark Alauda arvensis L. Breeds in the vicinity.
- Swallow *Hirundo rustica* L. Summer visitor; does not breed. Large numbers feed over the loch.
- House Martin Delichon urbica (L.). Summer visitor; does not breed.
- SAND MARTIN Riparia riparia (L.). Summer visitor; does not breed.
- RAVEN Corvus Corax L. Macgillivray (1837 1: 510) stated that Ravens formerly bred on Arthur's Seat. The species is now rare and the only recent record is of two flying over the Girnal Craig on 15 February 1947 (S.N. 1948: 50).
- Carrion Crow Corvus corone L. Baird (1898, 508) quotes Speedy as stating "Rare." It has increased greatly in recent years and breeds annually.
- Hooded Crow Corvus cornia L. Occasional winter visitor—mainly hybrid birds.
- ROOK Corvus frugilegus L. Seen throughout the year; breeds in the vicinity.

Jackdaw Corvus monedula L. Numerous throughout the year. At least one pair breeds in the Sanctuary.

- Magpie Pica pica (L.). Baird (1898, 508) quotes Speedy as stating "plentiful." Magpies are not so common on the eastern fringes of the City as they are on the west side. It is normally only an occasional visitor; but in 1960 a pair bred in a garden in Duddingston village and six were seen in the Sanctuary on various dates in September that year.
- Great Tit Parus major L. Common throughout the year; breeds.
- BLUE TIT Parus caeruleus L. Common throughout the year; numbers increase in winter; breeds.
- COAL TIT Parus ater L. A fairly regular winter visitor; does not breed.
- WILLOW OR MARSH TIT Parus sp?. A party of four was seen on 10 October 1957 (E.B.B. 8: 5).
- LONG-TAILED TIT Aegithalos caudatus (L.). A fairly regular winter visitor; does not breed.
- TREECREEPER Certhia familiaris L. Present throughout the year; bred 1957.
- Wren Troglodytes troglodytes (L.). Common throughout the year; breeds.
- DIPPER Cinclus cinclus (L.). One was seen on 18 October 1933 (Report 1934).
- MISTLE THRUSH Turdus viscivorus L. Seen throughout the year; occasionally breeds.
- FIELDFARE Turdus pilaris L. Regular winter visitor—sometimes in large numbers.
- Song Thrush *Turdus ericetorum* Turton. Seen throughout the year; breeds. Numbers decrease in winter.
- REDWING *Turdus musicus* L. Regular winter visitor, appearing in October and November to feed on haws. Latest spring record—one on 6 May 1955 (*E.B.B.* 5: 55).
- RING OUZEL Turdus torquatus L. Occasional autumn passage migrant.
- BLACKBIRD Turdus merula L. Common throughout the year; breeds. Big influx of winter immigrants.
- Wheatear *Oenanthe oenanthe* (L.). Regular summer visitor and the first migrant to arrive in spring. Breeds in the vicinity.

1961 413

Stonechat Saxicola torquata (L.). Formerly resident; bred in the Sanctuary in 1932 (Report 1932). After being scarce for a number of years, is beginning to re-establish itself and bred near Dunsappie Loch in 1954 (E.B.B. 4: 68).

- WHINCHAT Saxicola rubetra (L.). Occasional summer visitor; breeds in the vicinity.
- REDSTART Phoenicurus phoenicurus (L.). Occasional passage migrant.
- ROBIN Erithacus rubecula (L.). Seen throughout the year; breeds. Numbers increase in winter.
- Grasshopper Warbler Locustella naevia (Bodd.). One record of a bird seen on 11 May 1957 (E.B.B. 7: 71).
- Sedge Warbler Acrocephalus schoenobaenus (L.). Summer visitor; many pairs breed in the reed bed.
- BLACKCAP Sylvia atricapilla (L.). Rare. One at Curling Pond on 10 May 1925 (Report 1926); one from 1 to 7 July 1952 (E.B.B. 3: 3) and one singing 19 June, 16 to 18 July 1953 (E.B.B. 3: 66).
- Garden Warbler Sylvia borin (Bodd.). Rare. One on 12 May 1947 (D.R.A.); and one on 26 May 1951 (E.B.B. 1: 62).
- WHITETHROAT Sylvia communis Latham. Regular summer visitor; several pairs breed.
- Lesser Whitethroat Sylvia curruca (L.). Rare. One on 10 May 1930 (Report 1930).
- WILLOW WARBLER *Phylloscopus trochilus* (L.). Common summer visitor; many pairs breed. Earliest arrival date—8 April.
- CHIFFCHAFF *Phylloscopus collybita* (Vieillot). Baird (1898) quotes Speedy as stating "occasionally seen." There is no recent record.
- Wood Warbler *Phylloscopus sibilatrix* (Bechstein). Baird (1898, 509) quotes Speedy as stating "fairly plentiful." We know of only one definite record—a male on 7 May 1955 (*E.B.B.* 5: 54).
- Goldcrest Regulus regulus (L.). Occasional winter visitor in small numbers.
- Spotted Flycatcher Muscicapa striata (Pallas). Common summer visitor; four or five pairs breed every year.
- HEDGE SPARROW Prunella modularis (L.). Seen throughout the year; breeds.

MEADOW PIPIT Anthus pratensis (L.). Common summer visitor and occasionally seen in winter; breeds.

- TREE PIPIT Anthus trivialis (L.). Rare. Four were seen on 23 April 1953 (E.B.B. 3: 67).
- PIED WAGTAIL Motacilla alba yarrelli Gould. Seen throughout the year. Occasionally roosts in large numbers in the reed bed (300 counted in October 1936, S.N. 1937: 41). Breeds in the vicinity.
- WHITE WAGTAIL Motacilla a. alba L. Eight or nine were identified on 6 May 1927 (Report 1928).
- GREY WAGTAIL Motacilla cinerea Tunstall. Regular passage migrant.
- YELLOW WAGTAIL Motacilla flava L. Evans (A.S.N.H. 1896: 252) stated "seen about Duddingston now and then." The last record was of a female seen from 26 April to 4 May 1924 (Report 1924).
- BLUE-HEADED WAGTAIL Motacilla f. flava L. Rare. A male was seen on 14 May 1955 (E.B.B. 5: 54).
- Waxwing Bombycilla garrulus (L.). Rare. One seen on 11 April 1937 (Report 1937); and three seen on 11 November 1946 (D.R.A.).
- Great Grey Shrike Lanius excubitor L. Rare. One on 29 January 1954 which remained two days (E.B.B. 4: 36) and another, possibly the same bird, arrived on 11 January 1955. It was caught and ringed on 30 March and was last seen on 2 April (E.B.B. 5: 30 and 46).
- STARLING *Sturnus vulgaris* L. Seen throughout the year; breeds. Occasionally very large numbers roost in the reed beds and up to 10,000 have been recorded (*E.B.B.* 2: 2).
- Hawfinch Coccothraustes coccothraustes (L.). Rare. One was seen on 29 April 1953 which remained for three weeks in the Sanctuary (E.B.B. 3: 58); also two on 29 to 30 April 1955 (E.B.B. 5: 55).
- Greenfinch Chloris chloris (L.). Seen throughout the year; breeds. Flocks of up to 50 have been seen.
- Goldfinch Carduelis carduelis (L.). Occasional winter visitor. Fourteen seen on 23 November 1950 (D.R.A.).
- Siskin Carduelis spinus (L.). Rare. Four seen on 19 November 1949 (E.B.B. 3: 45); three on 27 October 1950 (D.R.A.); and

- three on 19 January 1960 (D.R.A.).
- LINNET Carduelis cannabina (L.). Seen throughout the year; breeds. Flocks of up to 200 have been seen in winter.
- Lesser Redpoll Carduelis flammea cabaret (P. L. S. Muller). Formerly uncommon. Now a regular winter visitor; first bred in 1935. Flock of sixteen seen on 22 November 1955 (E.B.B. 6: 8).
- Bullfinch Pyrrhula pyrrhula (L.). Seen throughout the year; more frequent in winter. Not known to breed.
- Chaffinch Fringilla coelebs L. Common throughout the year; breeds.
- Brambling Fringilla montifringilla L. Occasional winter visitor
- YELLOWHAMMER Emberiza citrinella L. Seen throughout the year; breeds. Up to 75 have been recorded roosting in the reeds.
- Corn Bunting *Emberiza calandra* L. This species breeds in the vicinity and large numbers roost in the reeds in winter—up to 300 being counted on one occasion (*E.B.B.* 6: 26).
- REED BUNTING Emberiza schoeniclus (L.). Although described by Speedy (1898) as "not numerous," it is now a common breeding bird and flocks in the adjoining fields in winter.
- Snow Bunting *Plectrophenax nivalis* (L.). Regular winter visitor to Holyrood Park. Notably abundant in 1929 and 1932.
- House Sparrow Passer domesticus (L.). Common resident bird; breeds.
- TREE Sparrow Passer montanus (L.). Seen throughout the year. Has bred in the vicinity. Flocks of between 20 and 50 have been seen in winter (E.B.B. 7: 18).

REFERENCES AND CONTRACTIONS USED

Anderson, Duncan R. (D.R.A.).

- 1892-1911. Annals of Scottish Natural History (A.S.N.H.).
- 1898. Baird, William: "Annals of Duddingston and Portobello." Andrew Elliot, Edinburgh. (Contains abbreviated list by Tom Speedy).
- 1953. Baxter, E. V. and Rintoul, L. J.: "The Birds of Scotland," 2 vols. Oliver & Boyd, Edinburgh.
- 1946. British Birds Magazine (B.B.).
- 1950-1957. Edinburgh Bird Bulletin (E.B.B.).
- 1954. Edinburgh To-day (a quarterly magazine), June 1954, p. 22. The Albyn Press, Edinburgh.
- 1926-1938. H.M.S.O. Reports on Bird Sanctuaries in Royal Parks in Scotland (*Report*).
- 1837. Macgillivray, W.: "A History of British Birds," 5 vols. Scott, Webster & Geary, London.
- 1935. Nash, J. Kirke: "The Birds of Midlothian." H. F. & G. Witherby, London.
- 1935. Rintoul, L. J. and Baxter, E. V.: "A Vertebrate Fauna of Forth." Oliver & Boyd, Edinburgh.
- 1912-1939:
- 1948-1957. The Scottish Naturalist (S.N.).

Smith, R. (R.S.).

1892. Speedy, Tom: "Craigmillar and its Environs." George Lewis & Son, Selkirk.

The Committee on Bird Sanctuaries in the Royal Parks (Scotland)

Sir CHARLES G. CONNELL, W.S., "Thurmure), DUNCAN R. ANDERSON, JOHN BERRY, PH.D., T.R.S.E., Major The Hon, HENRY DOUGLAS-HOME, M.R.E., CHARLES E, PALMAR, COMECTOR BRUCE L. P. RUSSELL, GEORGE WATERSTON, T.R.S.E., M.R.O, F. M. D. KING (Secretary).

THE ISLE OF MAY

A Scottish Nature Reserve

W J EGGELING

Foreword by V. C. Wynne-Edwards

"Conveys admirably the charm and appeal of this tiny isle. The book is of outstanding interest to every naturalist and ornithologist."

The Weekly Scotsman

276 pages

35 half-tone plates, line drawings

Price 30s

OLIVER & BOYD

FAIR ISLE BIRD OBSERVATORY



The HOSTEL is open between April and October with Comfortable Accommodation for 14 Visitors.

TERMS: from Six Guineas per week. (Reduced Rates for Parties from Schools and Universities).

FIELD WORK, in which Visitors take part, includes Trapping, Ringing, and Laboratory Examination of Migrant Birds; also Studies of Breeding Biology of Great and Arctic Skuas.

PROSPECTUS obtainable from the Hon. Secretary, Mr George Waterston, 21 Regent Terrace, Edinburgh 7.

Applications for Bookings

should be made to Mr Peter Davis, Warden, Fair Isle Bird Observatory, Fair Isle, Shetland. (Telephone Fair Isle 8).



Binoculars, Telescopes and Navigational Equipment