

THE NATURAL HISTORY OF SLAPTON LEY NATURE RESERVE

XII: BIRDS

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THE purpose of a general paper on birds covering such a specific area should be two-fold: to provide an observer with an insight into the habitats and vegetation characteristics such that he may come to his own conclusions about what the area can offer, and secondly to provide the detailed background history of the bird population which will put his own observations into perspective.

The climate of the Reserve has been described by Ratsey (1975) and the morphology by Mercer (1966), but the sources for ornithological records are less easily listed. Any member of the Devon Bird Watching and Preservation Society (D.B.W.P.S.) or of a Slapton Ley Field Centre Bird Course who has watched birds at Slapton has contributed in some degree and earned our thanks. Past Field Centre staff, from boatmen to Wardens, have provided valuable records, and our own continuing observations provide a basic record of the common bird community.

Both authors, however, would like to thank particularly Maurice Edmonds for his aid and advice during the compilation of this paper. He has known Slapton Ley and its birds for the last thirty years and his wealth of notes and prodigious memory have eased our task immensely.

The focus of attention for the authors and readers of this paper is, naturally, Slapton Ley Nature Reserve; it is, however, necessary to consider it in its bird context. This context varies with the group of birds under consideration. Local populations of residents—small birds and predators—clearly spread outside the Reserve boundaries, and thus the farmland slopes around the Reserve, the short valley containing Slapton village, and the lower reaches of the Stokeley, Start and Gara valleys are considered, with the Reserve, as a single bird environment. Its boundaries are not sharp, however: gulls and starlings from winter roosts in the Reserve feed up to five miles away. Migrating birds in spring and autumn use the beach and the Ley. In spring, passage seems to be through the south-west coastline on a broad front, and Slapton Sands will collect a small proportion of the total. In autumn—and throughout hard winters—passage has a westerly component, and the coastline from Exmouth to Start Point provides a deflecting guideline towards the Channel crossing. Thus autumn sees a more concentrated migration effect on bird populations. Hard winters in the Low Countries and Northern Europe send flocks of starlings, coot and duck further west and this east-facing coastline catches them. The Start Bay shore is therefore regarded as a “migrating context” in this paper.

Throughout the year bird traffic exists between Slapton Ley and the nearest



FIG. 1.

The main bird migration routes in western Europe to show the importance of Slapton Ley (marked with the "S"). The arrow indicates the direction of the autumn migration. Spring migration follows similar routes but on a broader front (after Jean Dorst (1961) *The migrations of birds*, Heinemann, London).

estuaries. In winter there is morning and evening movement of duck between the Kingsbridge Estuary and Stokeley Bay, and in summer non-breeding swans resort to Dartmouth. Gulls and cormorants which breed on cliff sites at Start Point, Hallsands, and from Pilchard Cove north-east to Dartmouth, use Slapton Ley for fishing, washing, drinking and roosting. Finally, just as the air-space above the Reserve is essential for any comprehensive consideration of bird life at Slapton, so the sea-space off Slapton Sands is included here. A six-foot man at sea level can see some three miles on a clear, calm day—which makes a convenient bird horizon.

BIRD HABITATS

(i) *The Sea.* Start Bay faces east, and has the great advantage to sea birds of shelter from the south-west. Records show that on 180 days in a year the Start Bay shore offers some shelter. It is also a shallow bay with a varied substrate and thus provides a relatively rich food supply for gulls, cormorants and shags. Offshore, gannets can be seen throughout the year, and a flock of scoter is often present in winter. Inshore, a range of birds is observable taking temporary advantage of rest and shelter in the spring and autumn, and most years produce divers and mergansers. Easterly winds, strong to gale force, cancel the sheltering quality, but bring a contribution of flotsam, jetsam and organic rubbish to Slapton Sands which is not without interest for the gull population.

(ii) *The Beach.* In practical terms the seaward face and the crest of the beach can be considered together. Human visitor pressure has terminated nesting, which was confined to the crest: the last ringed plover nested in 1963. These long narrow strips of bare shingle, sparse maritime vegetation and short turf now provide only feeding and roosting sites for birds. Substantial flocks of gulls rest along the beach for many hours a day. A number of species may constitute one flock, though usually in distinct groups: largest birds towards the sea, smallest towards the crest. The fly population of the beach and crest in late summer attracts wagtails in large numbers, wheatears pause for the same reason and the close turf regularly entertains starlings, pipits, and blackheaded gulls. The wrack of numerous tidelines attracts scavenging crows in large numbers to join the odd energetic herring gull, and in the hardest winters ravens are tempted to what may be the only unfrozen waste in the landscape.

The backslope of Slapton Sands falls into three distinct areas on the broadest scale. The southern quarter is a strip of coarse, tussocky grassland running right down to the lake edge. The central area has similar vegetation against the road, and in odd other patches, but is characterized by a belt of low gorse and bramble merging into elder, blackthorn and sycamore scrub. A patch of bracken, bluebells and ivy at one place contrasting with a patch of *Clematis* in another, only add to the richness which attracts a high bird population. The soil is a very immature shingle-and-humus mixture, enriched by quantities of broken shell in places, and the organic debris of a fluctuating lake shoreline in others. Both soil and vegetation support a high invertebrate population, which in turn adds to the quality of the whole for birds. North of the Slapton road, the gorse is leggier, and the blackthorn/elder scrub more dense, until near the north end of the Reserve and beyond there is a reversion to the tussocky grassland of the southern extremity.

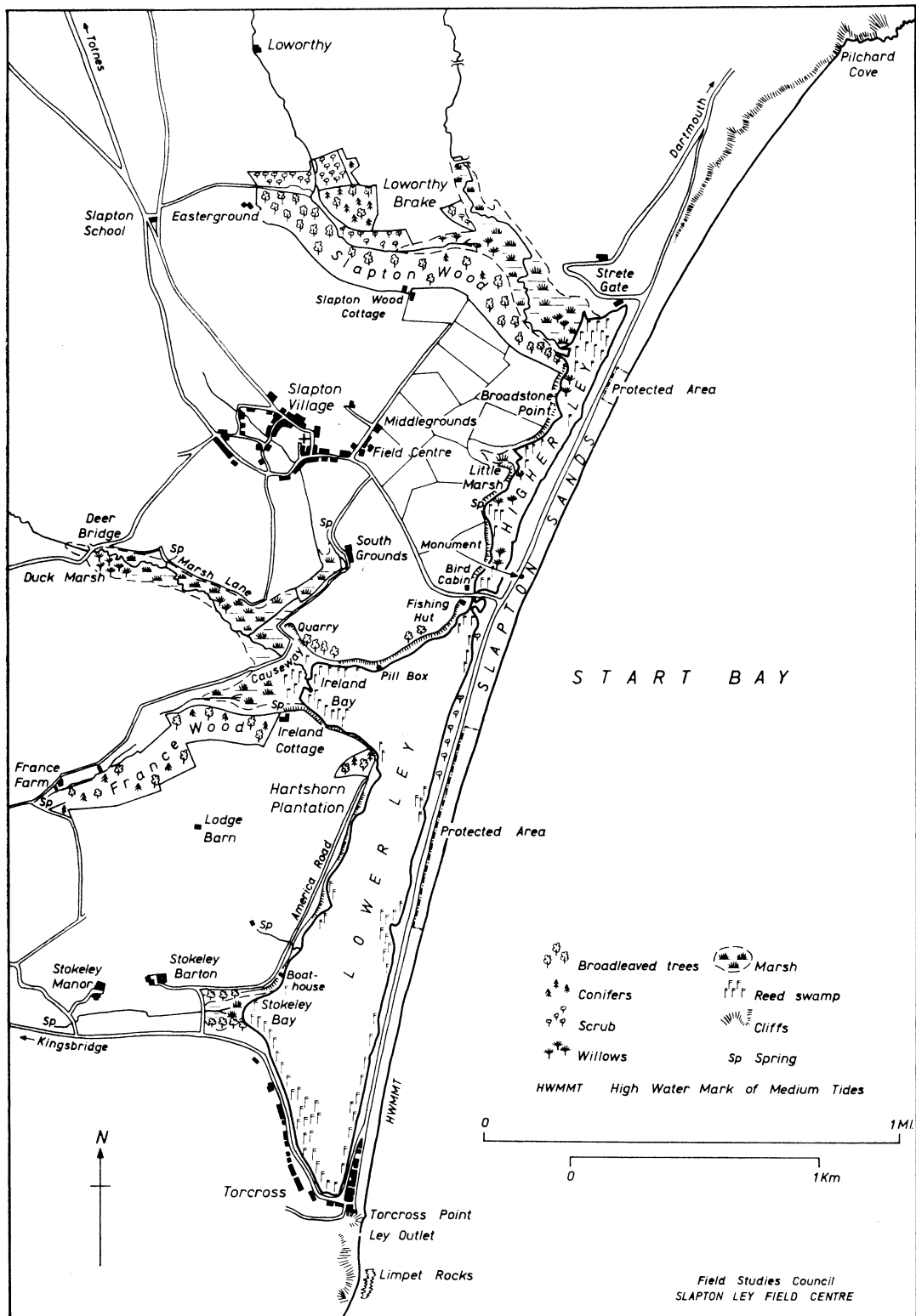


FIG. 2.
Slapton Ley Nature Reserve.

Many passage birds feed and shelter on this backslope and the breeding population is dominated by dunnocks, stonechats and sedge warblers. Blackbirds and robins are inevitably present, and pipits and skylarks nest in the lower areas. Kestrel and barn owl hunt the grassland small mammal and slug populations regularly. Grasshopper warblers call here every year, and breed in some; a Dartford warbler and numerous nightingales have been seen passing through. Mallard find nest sites here, and once a garganey successfully hatched a brood within three feet of the road.

(iii) *The Lake* (Slapton Ley). Like the beach the lake provides a number of facilities for a varied group of birds. As a body of water 107 hectares in area, up to 3 metres deep, and of which more than a third carries emergent vegetation, it offers many possibilities. It is a nutrient-rich lake, containing a huge population of invertebrates, and very large numbers of smallish fish. Rudd, roach, perch, pike, and eels are sought by anglers, kingfishers, cormorants, great crested grebes and herons. They have been joined by osprey, all three divers and goosanders at appropriate times in the last twenty years. Coot, moorhen, mallard and the grebes breed, and a number of species of duck join them in the winter. The relative hardness of the winter controls the numbers from year to year, and coot, duck, and geese on occasion, are quite crowded in the Lower Ley during cold spells up-country. Gulls roost and wash in flocks on the Ley surface, whilst cormorants rest in a particular tree overlooking it. The Lower Ley has extensive reed beds in its two inland bays, Stokeley and Ireland, and elsewhere an intermittent fringe of reeds, reedmace and *Scirpus*. The outer edges of the beds and the fringes offer nesting sites for coot, moorhen, grebe and swans. Reedwarblers nest, singly and in groups within the beds and thicker fringes. This tall, emergent vegetation shelters and feeds other warbler species, and provides roosting sites for starlings and wagtails in winter, and, briefly, for swallows and martins in autumn. The inner edges of the beds grade into marsh and carr, and here the more shy water birds—teal, garganey and water rail—are seen and heard.

The few stretches of open shore—longest along the public footpath from Slapton Bridge—offer little to the birds. They vary from silt through slaty gravel to bare rock; ducks and otters haul out for preening and sleep, herons spend much time waiting, and the busier wagtail is joined now and then by the odd sandpiper and dunlin. When more mud is exposed in the driest late summers single waders such as spotted redshank occur more often.

The Higher Ley has very little open water, limited to a few still, sheltered pools. It is virtually a continuous reed bed with many islands of reed peat carrying willow carr with bramble, ferns, and tussock sedge beneath the trees. Sheltered from the beach by the linear blackthorn thicket, and inland by fossil cliffs and scrub, the Higher Ley is a bird sanctuary in all senses. Penetration is difficult for various reasons, and so it should remain. It is a place to listen to in the spring from its edges. Here Cetti's warbler bred in 1976, and bitterns, little bitterns and a purple heron have sought shelter in the last decade. Bearded tits used to breed, and still revisit when populations explode elsewhere.

(iv) *Marshes*. Beyond the reed beds in Stokeley Bay, Ireland Bay and the Higher Ley there are marshes of varying extent. They are limited by a road in the Stokeley valley, by the abruptness of the valleyside/valley floor relationship in the France and Slapton Wood valleys, and the closeness of cultivation around the Little Marsh.

They stretch for more than a mile up the Start and Gara Valleys though their bird support potential is still limited by their narrowness and the overlooking quality of the steep valley sides.

Like the back slope of the beach larger marshes are not uniform, nor do they exhibit a gentle gradation from one end to the other. The seaward gradient is so low that patchiness is the rule. Standing water, with bog bean, water mint, water dock and sedges gives way to reed swamp with scattered willows, and recurs in a few hundred yards. The history of human occupancy and use, and man's interference with water levels, have all helped to bring about this patchiness. Field boundaries can be found in the marsh and carr areas, and grazing, osier bed management and even hay-making went on within living memory in "platts" which are now simply parts of the valley floor marsh. Where willows and alders turn marsh into carr, then the true marsh birds are joined by small insectivorous birds, especially tits and warblers. Bullfinches seem always to be present in the carr, snipe are flushed regularly from the edges, and up to three barn owls at the same time have quartered the Start valley marsh in the late evening.

(v) *The Leyside Fringes*. The inland edges of the lake between valley entrances, consist of low, degraded but still abrupt, fossil cliffs, with a strip of gentler slope of varying width above them. Both cliff and cliff top carry blackthorn, bramble and gorse scrub in places, and a linear scatter of trees—sycamore, ash and oak in the main, but elm becomes significant in a tighter taller belt round Stokeley Bay. The scrub offers a corridor for many common birds, as does any good hedge, and shelter for resting migrants in times of easterly wind. The trees, spaced as they are, present the only local version of the parkland habitat, and offer opportunities to both bird and observer—treecreeper, nuthatch and all the British woodpeckers have been seen here. Protected tree planting between the America Road and the cliff top has produced a coarse grassland reminiscent as a habitat of the beach backslope, sheltered from the east. A single ash some 150 metres south of Hartshorn Plantation has been taken over as roosting/digesting tree by cormorants—up to twenty-five at once contribute to the strange sight of black birds in a white tree with few leaves left.

(vi) *Woodland*. Hartshorn Plantation and France Wood do not appear on the first edition maps of the Ordnance Survey, and were almost certainly planted by Sir Lydston Newman who held the Stokeley Estate through a major part of the nineteenth century.

Hartshorn is a tiny triangular copse, probably planted because the steep rocky "headland" sticking out into the Lower Ley had little agricultural value. It had already been quarried a little and a small cottage called "Gibraltar" built on it. Scots and Corsican Pine give Hartshorn its dominant characteristic. Beech and sycamore provide the body of the little wood. Bramble and bluebell cover the lower slopes, bramble and bracken the top flat. This, the apex of the triangle, has been burnt through twice, thinning the overstorey and leaving large dead tree skeletons. Pines have been replanted and are now (1977) four or five feet high. Ravens and herons have begun to nest here in the last few years, a little nervously, especially of each other.

France Wood—named after the farm at its western end, occupies a set of erstwhile steep fields—presumably those which could best be spared for Sir Lydston's sporting, estate timber, and whimsical needs. It is long and narrow, and faces north-west,

with a single ride, all that was necessary for management, from one end to the other. An intriguing “dislocation” in plan creates right angles in both long boundaries, and brings the ride to the wood’s edge at one point—giving three original extractive accesses. Observers now usually approach the wood on a timber walk-way across Ireland Bay marsh. A 100-year management plan for the Wood, begun in 1963, demands periodic felling of groups of trees, and replanting of the spaces created. The effect is to enliven the wood from the birds’ point of view, with numerous clearings and thus extension of the “edge-effect” most popular with them. Ash, oak and chestnut dominate the Wood, though hornbeam and sycamore were also planted originally. There is evidence that the older field boundaries carried odd beeches, scots pines and some elms, which provided shelter for the new trees, and still dominate their own sites. Gooseberries, privet and snowdrops demonstrate the closeness of humans at either end of the Wood, and the game husbandry that played a part in its management at some stage. Buzzards have nested at the seaward end for twenty years at least; woodpeckers, nuthatches and the inevitable tits enjoy all parts of it. The ruins of Ireland farmstead at the east end enhance the place: a tawny owl regularly used them until the last thatch fell in. This end of the Wood is the annual haunt of at least one pair of blackcaps.

Slapton Wood is larger and older than either of the others, both as a single unit and as a complex including Loworthy and Square Brakes, and other smaller compartments. Woodland is recorded in Slapton Manor in Domesday Book, and this is the likeliest site. Steeper than any other land near the village, named as it is, and as extensive as it is, it must have long been important to the whole community. A saw pit worked in the Wood in living memory, and the complex network of rides suggests long and continuous use. The road to it is called Wood Lane.

The ancillary compartments were added in the nineteenth century and offer predictable contrasts in tree age and soil—the bulk of them also face south. As with all the woods of the Reserve—indeed of the South Hams—long recent neglect is a major contributor to the present state. Fallen timber of perhaps thirty years litters the wood. American shrapnel (from “D” Day practices) precludes commercial cutting—even for firewood—which thus slows up rehabilitation. Bramble, inspired by the light from holes in the canopy, combines with the trees which fell to make the holes into an impenetrable cat’s cradle in some places. In others, under mature holly, say, the steep ground is bare. Oak, ash and chestnut dominate again—construction, firewood and fencing being the original needs. Beech and larch, however, recur in high numbers throughout the wood, locally dominating the scene. The valley-side, which the wood covers, changes direction twice in its mile-long run, facing in turn NE, N and NE again, from West to East. The significance of this is that early morning sun in spring and summer strikes the floor of the wood for longer in two sections and here bluebells dominate. The north-facing slope carries woodrush and dog’s mercury, and hardly any bluebells.

The Slapton Wood stream runs at the bottom of the main wood with a narrow strip of very wet ground carrying golden saxifrage. Towards the Gara Valley marsh, the stream meanders across a small floor of clay with meadowsweet, willowherb, alder and sallows.

The woodpeckers are all here, buzzards, tawny owls and ravens have nested in Loworthy Brake, sparrowhawks use the rides, pigeons and mistle thrushes the edges all round. The normal quota of dead branches in any broadleaved wood is

increased by the wartime damage, especially to the seaward end, and the scope for dead-wood feeders and hole-nesting birds is thus enhanced.

(vii) *Hedges*. Hedges are extensions of the woodland habitat—indeed of its optimum characteristics as far as favouring the birds is concerned. The Reserve carries some hedges, continuous around the Little Marsh, but normally as short lengths crossing the strips of field at the top of the Ley cliff. These continue on into the farmland around the Reserve and provide ornithological links with the roads, farmsteads and the village. In the whole landscape the consistently rewarding hedges for the birds, and thus the bird-watchers, are alongside Wood Lane, on South-grounds drive, where circl buntings breed, and up the hill to the old school.

(viii) *The Centre and the Village*. The Centre garden, as it matures, has increased its bird stock. House martins still come to the main building, but circl buntings no longer sing in the *Macrocarpa*. Tree sparrows appear regularly in the hedge beyond the village hall, but no evidence of breeding has been found.

The village is a rich, sheltered environment for little birds, though the Chantry Tower houses jackdaws and tawny owls, and more than once a kestrel has nested there. Spotted flycatchers, pied wagtails and house martins recur in appropriate places, and swifts use thatched and slated roofs. There are always bullfinches in Carr Lane, and a colony of greenfinches at South Parks Cross. Until the 1962–3 winter, wood larks sang over the village and Centre every morning. The Chantry Wood houses tawny owls and blackcaps, and its dawn chorus is as good as most.

(ix). This has been a contemporary account of the bird habitats around Slapton. They have changed over the last thirty years, though perhaps not much for a hundred before that. They are still changing. Hedges disappear, trees die and are felled, water tables rise and fall. New farmers bring new practices, so that plough and grass change proportions on the surface. People crowd into the landscape in increasing numbers, and for longer seasons. Still, this is a rich place full of opportunity and excitement for the patient, quiet, observant seeker after knowledge. This short account, and its accompanying list may help the search.

Systematic Checklist

The following abbreviations have been used:

- w.v. —Winter visitor. Arriving in autumn or winter, staying for a short or long period and leaving by spring.
- s.v. —Summer visitor. Arriving in spring, breeding, and leaving in autumn.
- p.m. —Passage migrant.

Resident indicates presence throughout the year and breeding.

Where a season is written Mar.–Apr. then the whole period March 1st–April 30th is indicated; where it is written Mar./Apr. then the period is only the last week in March and the first week in April.

If the species has occurred fewer than six times then the occasions are listed. Also listed are the dates of unusually high numbers or visits at abnormal times of year.

When a season alone is written (e.g. common on spring passage) then the months are as follows:

Summer: June–July.

Autumn: Aug.–Oct.

Winter: Nov.–Feb.

Spring: Mar.–May.

The period covered by the survey is 1945 to 1977.

Nomenclature follows “A Species list of British and Irish birds”, British Trust for Ornithology guide No. 13, published in 1971 by the B.T.O.

Order: GAVIIFORMES

Family: GAVIIDAE

Black-throated Diver *Gavia arctica*

The rarest of the three diver species seen in Start Bay. W.v. and p.m. from Nov.–Apr., infrequently present in ones and twos. Particularly noted in Jan. and Mar./Apr.

Great Northern Diver *Gavia immer*

Regular w.v. from Oct./May in Start Bay. Usually in small groups of two or three, but eight seen together in the winter of 1966. Commonest in Jan. and Feb. One seen July 4th 1966 in full summer plumage.

Red-throated Diver *Gavia stellata*

Regular w.v. and p.m. to the Ley and Start Bay from Sept./May. Often those on the Ley appear unhealthy and can be approached quite closely. Numbers vary from single individuals to eleven on Jan. 23rd 1965. One bird in summer plumage Jun. 23rd 1976.

PODICIPEDIFORMES

PODICIPITIDAE

Great Crested Grebe *Podiceps cristatus*

Bred on the Ley up to 1945 and present in 1946 and 1947 after which they disappeared as residents, becoming w.v. only. Eventually in 1971 a pair remained throughout the breeding season and produced three young in 1973. Three to five pairs now seem to be firmly established.

Red-necked Grebe *Podiceps griseigena*

W.v. and p.m. No records until 1968, since when single birds and small groups (up to five) have been recorded Oct.–Mar. in Start Bay.

Slavonian Grebe *Podiceps auritus*

Single birds w.v. up to 1970, with a small spring and autumn passage noted in 1962. Recently the numbers have increased to an average of four or five birds from Nov.–Mar. Maximum of six together Feb. 1973.

Black-necked Grebe *Podiceps nigricollis*

Similar pattern to Slavonian grebe. Ones and twos w.v. before 1970, over double the numbers this decade. Often a lot of Slavonian grebe sightings in a winter coincides with low numbers of Black-necked, and vice-versa.

Little Grebe *Tachybaptus ruficollis*

Regular w.v. and p.m. Sept.–May. Sometimes individuals stay well into the breeding season but no signs of breeding as yet. Possibly the size of the lake and the high amount of human disturbance have so far acted against it. If this is so then the small reedy pools of the Higher Ley are possible future nesting sites.

PROCELLARIIFORMES

PROCELLARIIDAE

Fulmar *Fulmarus glacialis*

Seen sporadically Mar.–Sept. until 1966. Now a local breeding bird (although not on the Reserve) and many are noted flying past. This recent population increase follows the countrywide trend started earlier in the century.

Balearic Shearwater *Procellaria puffinus mauretanicus*

Five isolated sightings—2 Sept. 22nd 1956, 1 Oct. 23rd 1960, 1 July 1961, 1 Sept. 1961, 2 Aug. 21st 1968.

Manx Shearwater *Procellaria puffinus puffinus*

First records in 1961 when 50 were recorded between Jul.–Oct. Since then large movements, varying between 12 and 145 (July 8th 1964) have been recorded over the same months. A few spring records in April and May.

Sooty Shearwater *Procellaria grisea*

Five records—1 Sept. 17th 1965, 1 Sept. 13th 1967, 1 July 1968, 1 Aug. 1968, 1 July 1969.

HYDROBATIDAE

Leach's Petrel *Oceanodroma leucorhoa*

One only, Sept. 25th 1960.

PELECANIFORMES

SULIDAE

Gannet *Sula bassana*

Regular passage and offshore feeding July–Oct. Also more rarely recorded as w.v., but when occurring birds in large flocks—500 Jan. 16th 1953, and 540 Jan. 10th 1976. These flocks occur particularly during westerly gale conditions.

PHALACROCORACIDAE

Cormorant *Phalacrocorax carbo*

Always to be seen perched on an ash tree, Cormorant Tree, on the western shore of the Lower Ley since the mid-sixties. Often 20–30 birds at a time. Breeding birds leave for nearby coastal cliffs Mar./Aug. Maximum of 50 fishing in the Ley Oct. 1962.

Shag *Phalacrocorax aristotelis*

Breeds on local cliffs and regularly feeds in Start Bay at all seasons. Very rarely seen on the Ley.

CICONIIFORMES

ARDEIDAE

Grey Heron *Ardea cinerea*

Commonly seen feeding around the Ley fringes all year round. First observed breeding on the Reserve in 1975, but possibly did so the year before. Two pairs nested at the foot of Hartshorn Plantation in the pine trees in 1976, and eleven seen flying and perching there Aug. 23rd. Chicks taken by Buzzards in 1977.

Purple Heron *Ardea purpurea*

1 Aug. 11–24th 1968, 1 immature Sept. 9–18th 1969, 1 imm. Apr./May 1976.

Little Egret *Egretta garzetta*

1 Apr. 23rd 1965, 1 Apr. 20th 1974, 1 May 19th 1976.

Squacco Heron *Ardeola ralloides*

1 June 1–9th 1958, 1 Sept. 19–30th 1964.

Night Heron *Nycticorax nycticorax*

1 Aug. 8th 1970.

Little Bittern *Ixobrychus minutus*

1 Apr. 25th–Jun. 8th 1970.

Bittern *Botaurus stellaris*

W.v. first recorded in 1960, since when single birds have been seen on several occasions Sept./Mar.

ANSERIFORMES

ANATIDAE

Mallard *Anas platyrhynchos*

Regular breeding bird with a large winter influx increasing the resident population Sept.–Mar. These winter flocks can number several hundred birds; Maximum of 700 Sept. 2nd 1956.

Teal *Anas crecca*

Regular p.m. and w.v. from Aug./May in small flocks with a maximum of 150 on Dec. 21st 1958. One pair possibly bred in 1970 when a female was present in June.

Garganey *Anas querquedula*

Odd birds p.m. Mar./July since 1958. Also small number w.v. Dec.–Jan. One pair bred in 1961 producing two young, and also possibly the following year.

Gadwall *Anas strepera*

Small number w.v. Sept.–Mar. reaching a maximum of 7, Dec. 1964. Often in pairs. Possibly bred in 1969 when a pair were present well into May.

Wigeon *Anas penelope*

Common p.m. and w.v. Sept.–Mar., with a maximum of 3,350 in Nov. 1956. Drop in numbers very marked since 1957, but now stabilized with a few hundred every winter. No flock is resident for the full period.

Pintail *Anas acuta*

Occasional w.v. in small numbers, Sept.–Apr. Maximum of 17, Dec. 1962.

Shoveller *Spatula clypeata*

Regular w.v. Nov.–Apr. in small flocks from 2 to 12. Infrequent visits also in autumn. Larger numbers of birds present between 1953 and 1962, and again over the last five years up to 1977. Maximum of 34, Feb. 1st 1976 after a strong onshore gale.

Red-crested Pochard *Netta rufina*

1 Dec. 21st 1952, 1 Mar. 29–31st 1956.

Scaup *Aythya marila*

Small numbers occasional w.v. Sept./Apr. Maximum of 13, Dec. 24th 1957.

Tufted Duck *Aythya fuligula*

Common w.v. Sept.–Apr., often in flocks of one or two hundred birds. Maximum of 300, Dec. 1961, but numbers generally lower now than ten to fifteen years ago. Can be seen in small flocks, often one male and three or four females, throughout the summer, but no evidence of breeding.

Ring-necked Duck *Aythya collaris*

1 male Mar.–Apr. 1970 and again in 1971.

Pochard *Aythya ferina*

Common w.v. Sept.–Mar. Average numbers over winter have increased in the past decade, between 60 and 120 birds usually staying the whole period. Maximum number 450 Jan. 1962.

Ferruginous Duck *Aythya nyroca*

1 Nov. 14th 1959, 4 females Dec. 1949.

Goldeneye *Bucephala clangula*

Regular w.v. in small groups of 8 to 20 from Oct./Apr. 35 in Jan. 1973.

Long-tailed Duck *Clangula hyemalis*

W.v. in very small numbers from Dec.–Mar. most winters since 1956. Usually on the Ley rather than in Start Bay, although essentially a maritime species.

Velvet Scoter *Melanitta fusca*

W.v. and p.m. in small numbers Oct.–Mar. Always out in Start Bay; maximum of 14, Mar. 1957.

Common Scoter *Melanitta nigra*

Regularly seen in Start Bay at all seasons with largest numbers in winter—up to 100 from Dec.–Feb. Numbers seem to be falling this decade.

Eider *Somateria mollissima*

Occasional w.v. in small numbers (1 to 18) from Nov./Mar. Only out at sea.

Red-breasted Merganser *Mergus serrator*

P.m. Oct. and Apr./May, and w.v. from Nov.–Feb. Rarely on the Ley. Small numbers only with a maximum of 8 on Jan. 7th 1967.

Goosander *Mergus merganser*

Uncommon w.v. to the Ley. Only ever in small parties with a maximum of 7 in Feb. 1959 and Jan. 1963.

Smew *Mergus albellus*

Occasional w.v., usually only single birds. Maximum of 17 on Feb. 25th 1956. Visits seem to coincide with very cold weather further north in Britain.

Shelduck *Tadorna tadorna*

Sporadically recorded until 1969, after which few but regular visitors at all seasons. Maximum of 8 in Apr. 1972. One isolated breeding record in 1973.

Greylag Goose *Anser anser*

Not recorded until 1970 when one visited in Mar. Only other record 5 in Jan. 1973.

White-fronted Goose *Anser albifrons*

First record 18 in Feb. 1954. 130 in Feb. 1963 followed by sporadic visits, small numbers only, in this decade.

Pink-footed Goose *Anser brachyrhynchus*

2 Feb. 1963.

Brent Goose *Branta bernicla*

Infrequent w.v., usually flying past or over the Reserve. Maximum of 23 in Nov. 1972.

Barnacle Goose *Branta leucopsis*

5, flying overhead Nov. 1968.

Canada Goose *Branta canadensis*

Infrequently seen flying over the Reserve in winter. A clipped female arrived Mar. 5th 1975 and was joined by a male on May 1st. Have stayed ever since, but it is doubtful if they could breed due to the bad condition of the female.

Mute Swan *Cygnus olor*

Resident. 6–10 pairs breed around the Lower Ley and in the Higher Ley. Regular Aug.–Sept. influx of between 20 and 125 (Aug. 1951) non-breeding adults. These do not stay the winter, usually leaving by late Oct.

Whooper Swan *Cygnus cygnus*

1 imm. Dec. 2nd 1950, 4 Jan. 1963, 2 Jun. 15th 1974, 1 imm. Nov. 1976–May 1977, 1 adult Dec. 1976.

Bewick's Swan *Cygnus bewickii*

6 Jun. 5th 1967, 3 Nov. 1969, 1 Dec. 1970, 3 Nov. 1971.

FALCONIFORMES

ACCIPITRIDAE

Buzzard *Buteo buteo*

Two pairs breed regularly and are resident on the Reserve. A further pair breeds adjacent to, and often hunts over, the inland fringe of the Lower Ley. 8 birds seen in the air at once over Ireland Bay, Mar. 1975.

Rough-legged Buzzard *Buteo lagopus*

1 circling Torcross Oct. 13th 1976.

Sparrowhawk *Accipiter nisus*

Resident in France and Slapton Woods, probably one pair in each. Regularly hunts over the Higher Ley, and is often netted and ringed.

Honey Buzzard *Pernis apivorus*

1 over Torcross Oct. 1971.

Marsh Harrier *Circus aeruginosus*

First recorded 1958. Infrequent visits in all seasons except Jul.–Aug. Pair (Male imm.) stayed for 6 weeks in the spring of 1977 and exhibited food passing and nest building behaviour, but did not stay to breed.

Hen Harrier *Circus cyaneus*

1 female Dec. 1969, 1 male at Torcross Nov. 14th 1972.

PANDIONIDAE

Osprey *Pandion haliaetus*

1 or 2 birds a year since 1960 on spring and autumn passage, but rarely stay for long. One seen for four days 15th–19th May 1968.

FALCONIDAE

Hobby *Falco subbuteo*

Attracted on autumn passage by Hirundine (swallows and martins) build-up over the Ley. Usually 1 or 2 birds each autumn with a few spring records.

Peregrine *Falco peregrinus*

1 flying past the beach Sept. 1973.

Merlin *Falco columbarius*

Single birds seen infrequently Sept./Nov. One spring record Apr. 25th 1955.

Red-footed Falcon *Falco vespertinus*

1 Aug. 15th 1967

Kestrel *Falco tinnunculus*

Common resident in the area, often hunting over the shingle ridge. Breeds adjacent to, but not in, the Reserve.

GALLIFORMES

PHASIANIDAE

Partridge *Perdix perdix*

A few birds seen since 1972. Breeds in the locality but only in small numbers.

Quail *Coturnix coturnix*

1 May 2nd 1974.

Pheasant *Phasianus colchicus*

Resident. Broods noticed particularly in the tall undergrowth around the western edge of the Higher and Lower Leys, the old cliff line. On more than one occasion has been seen to swim across the Boathouse Channel near Slapton Bridge.

GRUIFORMES

GRUIDAE

Crane *Grus grus*

1 Sept. 23rd 1966.

RALLIDAE

Water Rail *Rallus aquaticus*

Resident and w.v. Breeding was only proved in the spring of 1976, but the birds have been heard in the breeding season for many years previously. From Oct.–Mar. there is a winter influx to swell the resident population; this is particularly noticeable from the increase in “sharming” (squealing and grunting noise) throughout the winter as the birds vie for territory.

Spotted Crane *Porzana porzana*

Infrequent p.m. 1 Sept. 1962, 1 Sept. 1964, 1 Sept. 1966—all ringed. 1 Apr. 1971, 1 Aug. 22nd 1972.

Corncrake *Crex crex*

1 Aug. 1952, 1953 and 1963, 1 Sept. 1965.

Moorhen *Gallinula chloropus*

Common resident. First broods usually seen in Apr. in the more sheltered areas, such as Ireland Bay and the Higher Ley.

Coot *Fulica atra*

Abundant resident (about 50 pairs) with also a high number of w.v. Breed all around the reed fringe of the Lower Ley and the flocks gather here in the winter—maximum of 3,000 Dec. 1961 and Jan. 1962.

CHARADRIIFORMES

HAEMATOPODIDAE

Oystercatcher *Haematopus ostralegus*

Often seen over the Ley and on the beach. Also feeds around the muddy edges of the Ley in dry summers. Recorded at all seasons with a small increase in numbers Oct.–Mar.

CHARADRIIDAE

Lapwing *Vanellus vanellus*

P.m. and w.v. Often seen passing over the Reserve in flocks varying in size from 6 to 170. Feeds on arable land adjacent to the Reserve and also sometimes on the shingle ridge. Hard weather will

occasionally drive large numbers onto the beach: the winter of 1962/63 and again in Feb. 1976 when flocks of over 400 were recorded.

Ringed Plover *Charadrius hiaticula*

Small Aug.–Sept. and Mar.–Apr. passage. Bred Apr. 1950 to 1963 on the shingle ridge with a maximum of 3 pairs. Loss of these probably due to increased visitor pressure.

Little Ringed Plover *Charadrius dubius*

1 recorded Apr. 1976 feeding on the lake shore. Probably more common as an autumn p.m. than this solitary sighting would suggest, but it would never stay for long.

Grey Plover *Pluvialis squatarola*

W.v. to Slapton Beach, Oct./Feb. Flock size usually 20 to 50. Also a small spring passage (Apr./May). Winter flock on the beach seems to coincide with high-water in the Kingsbridge estuary and is probably only a roosting flock.

Golden Plover *Pluvialis apricaria*

W.v. in small numbers. Recorded less frequently than the grey plover—often a flock of the latter will contain 1 or 2 Golden plovers. More common in hard winters.

Turnstone *Arenaria interpres*

Individual birds regularly fly past the Reserve Aug.–Mar. Also flocks occasionally w.v. to the beach.

SCOLOPACIDAE

Snipe *Gallinago gallinago*

Regular sightings, almost always as a w.v. Maximum 26 on Feb. 26th 1960. Exposed mud in Ireland Bay will bring Snipe in earlier e.g. 2 Aug. 17th 1976, and at this time can also be found in the water-meadows upstream of the causeway.

Jack Snipe *Limnocyptes minimus*

Records of single birds each winter since 1968.

Woodcock *Scolopax rusticola*

Two records, Jan. and Oct. 1971.

Curlew *Numenius arquata*

P.m. Ones and twos fly over the Reserve Apr.–Nov.

Whimbrel *Numenius phaeopus*

P.m. Regular records in spring and autumn from 1958 onwards, small flocks of 3 to 70 birds.

Black-tailed Godwit *Limosa limosa*

Infrequently seen p.m., spring and autumn. Maximum of 7, Nov. 1946.

Bar-tailed Godwit *Limosa lapponica*

P.m. at all seasons with most records Aug.–Sept. Birds alone or in small groups of 2 to 5.

Green Sandpiper *Tringa ochropus*

Single birds seen on spring and autumn migration. Feed mainly on the mud in Ireland Bay and behind the causeway.

Wood Sandpiper *Tringa glareola*

Similar pattern to the Green sandpiper. Most sightings Aug.–Sept.

Common Sandpiper *Tringa hypoleucos*

P.m. increasingly regular in recent years. Small flock of 4 to 10 birds present during Jun.–July in 1975 and again in 1976.

Redshank *Tringa totanus*

Small numbers seen in all seasons. Regularly feed on the Ley shore if the mud is exposed.

Spotted Redshank *Tringa erythropus*

Ones and twos each year as p.m. Aug.–Sept. 1, in summer plumage June 29th 1976.

Greenshank *Tringa nebularia*

Regular July/Sept. passage when groups of up to 4 feed around the reed fringes and in Ireland Bay.

Knot *Calidris canutus*

Infrequent visits by small flocks (5 to 40) in all seasons except May–July.

Little Stint *Calidris minuta*

4 records of single birds: Apr. 22nd 1960, Apr. 1st 1964, Aug. 27th 1966, Sept. 1st 1970.

Dunlin *Calidris alpina*

Common p.m. and w.v. As grey plover, movements seem to be linked to the Kingsbridge estuary tidal movements. Flock size greatest Dec.–Feb. Maximum 2,000 Jan. 1975 and 3,000 Dec. 1976.

Curlew Sandpiper *Calidris ferruginea*

3 single birds: Sept. 1946, Sept. 14th 1973, and Aug. 12th 1976.

Sanderling *Calidris alba*

Small spring passage Mar.–May. Numbers in flocks vary from 2 to 24. 2 on the beach Oct. 15th 1976.

Ruff *Philomachus pugnax*

Infrequent p.m. and w.v. Feb. records commonest. 10 on the beach Feb. 7th 1976.

RECURVIROSTRIDAE

Avocet *Recurvirostra avosetta*

1 Mar. 25th 1958, 1 Oct. 30th 1959.

PHALAROPODIDAE

Grey Phalarope *Phalaropus fulicarius*

Remarkable influx in Oct. 1960 due to Atlantic gales. Many thousands of phalaropes were present off the whole of the South Hams coastline, most of them exhausted or dying. 1,000 were seen from Slapton Sands by the Field Centre Bird course. Apart from this only 3 records on passage: Sept.–Nov. 1955, 1957, and 1961.

Red-necked Phalarope *Phalaropus lobatus*

No records except from the above storm and outnumbered by grey phalaropes even then.

STERCORARIIDAE

Great Skua *Stercorarius skua*

Ones and twos in Sept.–Oct. most years. Often in the company of, and usually outnumbered by, arctic skuas.

Pomarine Skua *Stercorarius pomarinus*

1 oiled on beach 1947, 1 Sept. 1st 1970.

Arctic Skua *Stercorarius parasiticus*

Single birds and small parties, up to 6, visit Sept.–Oct. most years. Usually harassing gulls for food in Start Bay. 1 May 1972.

LARIDAE

Great Black-backed Gull *Larus marinus*

Commonly roosting and feeding at all times of year on the Ley or on the beach. Does not breed on the Reserve owing to lack of nesting sites, but does so on nearby cliffs. Maximum winter roost 2,000 Feb. 1953.

Lesser Black-backed Gull *Larus fuscus*

Common spring p.m. Feb./May and breeds locally. Small winter population. 1 Scandinavian form Feb. 1st 1951.

Herring Gull *Larus argentatus*

Common bird at all times of the year but again no suitable nesting sites for breeding. Large flocks rest on the Ley, particularly Sept.–Apr. Maximum of 5,000 on the beach Feb. 1st 1976.

Common Gull *Larus canus*

Fairly regular w.v. with a few passage birds in Aug. and Mar. “At least” 800 on Jan. 8th 1976 roosting on the beach.

Glaucous Gull *Larus hyperboreus*

Single birds Apr. 1st 1950, Mar. 13th 1960 and Jan. 29th 1966.

Iceland Gull *Larus glaucoideus*

1 Mar. 25th 1958, 1 Dec. 1975.

Little Gull *Larus minutus*

Recently a regular p.m. Aug.–Oct., both juvenile and adult birds. Small numbers also p.m. in Mar./May.

Black-headed Gull *Larus ridibundus*

W.v. in large numbers, roosting on the Ley and beach. Move away to breed Mar.–July. Maximum of 5,000 Feb. 1st 1976.

Sabine's Gull *Larus sabini*

1 May 11th 1974, 1 Oct. 17th 1976 in summer plumage.

Kittiwake *Rissa tridactyla*

Regular p.m. in spring as they return to nearby breeding sites. Recently very common on autumn passage, particularly Sept./Nov., when they roost on the Ley and in the adjacent fields.

Black Tern *Chlidonias niger*

Regular autumn p.m. Aug.–Oct. Usually ones and twos but up to 16 have been seen feeding over the Ley at once. Only one spring record, 14 on May 1st 1965.

White-winged Black Tern *Chlidonias leucopterus*

1 imm. Sept. 25th–30th 1973, 1 Oct. 1975.

Whiskered Tern *Chlidonias hybrida*

1 in winter plumage May 5–20th 1974.

Gull-billed Tern *Gelochelidon nilotica*

1 Aug. 9th 1974.

Common Tern *Sterna hirundo*

Common p.m., Mar./May and Aug./Oct. Size of groups varies from single birds to 6 or 8.

Arctic Tern *Sterna paradisaea*

Identification and separation from common tern difficult at long range, particularly in winter plumage. Many records simply refer to "Comic Terns", and some of these may well be arctic. 3 certain records: Sept. 1946, Aug. 1st 1973, and Aug. 1st 1976.

Roseate Tern *Sterna dougallii*

Two records of single birds Aug. 2nd 1973 and May 1974.

Little Tern *Sterna albifrons*

Regular spring p.m. in small flocks of 2 to 10. A few autumn passage records.

Sandwich Tern *Sterna sandwicensis*

Commonest of the terns with a plentiful Mar./Jun. and Aug./Nov. passage. Always seen feeding offshore though will fly over the Ley. Maximum of 90 Apr. 22nd 1976.

ALCIDAEE

Razorbill *Alca torda*

Present in small numbers offshore at all seasons. Larger flocks in winter—150 in Jan. 1953. Regularly found oiled on the beach.

Little Auk *Plautus alle*

Single birds Jan. 1st 1950, Feb. 10th 1965, Dec. 1st 1971, Oct. 20th 1973, Nov. 1974.

Guillemot *Uria aalge*

Present all year in Start Bay, often oiled. 350 on Dec. 18th 1960.

Black Guillemot *Cephus grylle*

1 Oct. 3rd 1958, 1 Apr. 1st 1974.

Puffin *Fratercula arctica*

Few records. Mainly Aug./Oct. with most birds oiled to a greater or lesser extent.

COLUMBIFORMES

COLUMBIDAE

Stock Dove *Columba oenas*

Common resident.

Wood Pigeon *Columba palumbus*

Abundant resident. Pigeon shoots take place regularly in the winter months, entering both Slapton and France Woods. This has had little or no effect on the local numbers.

Turtle Dove *Streptopelia turtur*

Regular p.m. in spring and autumn though never in great numbers. Usually noted on the shingle ridge.

Collared Dove *Streptopelia decaocto*

First record in 1968, now a local resident and increasing in numbers.

CUCULIFORMES

CUCULIDAE

Cuckoo *Cuculus canorus*

Common s.v. Earliest recorded arrival Apr. 30th 1962. It is likely that reed and sedge warblers are parasitized on the Reserve but there is no direct evidence.

STRIGIFORMES

TYTONIDAE

Barn Owl *Tyto alba*

Local resident. Breeds in barns in the area but single birds and pairs only roost on the Reserve, and hunt the shingle ridge and reed margins. Commonly prey on the starling roosts at Torcross in winter and early spring.

STRIGIDAE

Scop's Owl *Otus scops*

One bird May 8th 1955; First Devon record.

Little Owl *Athene noctua*

Resident locally but not often seen on the Reserve.

Tawny Owl *Strix aluco*

Resident. Commonest owl locally with two or three pairs probably nesting on the Reserve. Ireland Cottage is a regular roost.

Long-eared Owl *Asio otus*

Single birds Sept. 7th 1962, Dec. 1971, Mar. 27th 1976. The last of these occurred after a winter noted for the southward movement of these owls, and it may have been at Slapton all winter.

Short-eared Owl *Asio flammeus*

Occasional w.v. Single birds seen hunting over the reed beds Oct./Mar.

CAPRIMULGIFORMES

CAPRIMULGIDAE

Nightjar *Caprimulgus europaeus*

1 May/Jun. 1976, 1 ringed Sept. 10th 1965 from a roost of Swallows 1 found dead Sept. 1971.

APODIFORMES

APODIDAE

Swift *Apus apus*

Common s.v. breeding in local villages though not on the Reserve. Large numbers arrive together from the sea in spring (300 May 6th 1967) but the highest concentrations are in Aug. when thousands gather to feed over the Ley prior to migration.

CORACIIFORMES

ALCEDINIDAE

Kingfisher *Alcedo atthis*

Feeds on the Reserve all year round and possibly breeds. Often ringed especially during Jul.-Aug. when there is a discernible coastal and cross-country movement.

UPUPIDAE

Hoopoe *Upupa-epops*

Regular spring records of single birds, sometimes pairs. Only autumn record Oct. 5th 1960.

PICIFORMES

PICIDAE

Green Woodpecker *Picus viridis*

Resident. Possibly 3 pairs breeding on the Reserve. Often feeds in adjacent arable fields.

Great Spotted Woodpecker *Dendrocopos major*

Resident. Breeding proved in all three woods but total number of pairs not known. Probably similar density as green woodpecker.

Lesser Spotted Woodpecker *Dendrocopos minor*

Resident but most elusive of the three breeding woodpeckers. Nesting proved in Slapton Wood 1969.

Wryneck *Jynx torquilla*

Infrequent autumn p.m.

PASSERIFORMES

ALAUDIDAE

Woodlark *Lullula arborea*

Former local resident, breeding adjacent to the Reserve in 1961/62/63. Last singing birds were heard in 1963 and only once recorded since on Mar. 1st 1970.

Skylark *Alauda arvensis*

Resident on nearby farmland. Also p.m. in large numbers both spring and autumn, and w.v. in large flocks, reaching 300 in Dec. 1950.

HIRUNDINIDAE

Swallow *Hirundo rustica*

Very common s.v. Earliest arrivals Mar. 27th 1970. Large numbers gather over the Ley in autumn and they can reach over a thousand in roosting flocks in the reed-beds. Individual birds can be seen well into Nov. at Torcross in most years.

House Martin *Delichon urbica*

Common s.v. Earliest Mar. 21st 1968. Again large flocks feed over the Ley prior to autumn migration. Latest record (or earliest?) 1 Jan. 30th 1967.

Sand Martin *Riparia riparia*

S.v. but does not breed on the Reserve owing to lack of nest sites. Outnumber all the other hirundines feeding over the Ley Aug./Sept. with as many as 5,000 birds in Ireland Bay alone.

CORVIDAE

Raven *Corvus corax*

Resident in Hartshorn Plantation since 1970 and also probably breed in Slapton Wood. 11 over Hartshorn at once in Mar. 1975.

Carrion Crow *Corvus corone corone*

Common resident.

Rook *Corvus frugilegus*

Resident in surrounding farmland, sometimes feeding on the Reserve, but it does not breed within the Reserve boundary.

Jackdaw *Corvus monedula*

Resident on local cliffs and commonly seen over the Reserve, particularly the beach.

Magpie *Pica pica*

Resident. From 1971 a pair has nested on the edge of the Higher Ley near the monument, but there are probably others breeding on the woodland fringes.

Jay *Garrulus glandarius*

Resident in Slapton and France Woods.

PARIDAE

Great Tit *Parus major*

Common woodland resident. Regular user of nest-boxes. Ringing shows slight passage Jul.-Sept. Joins other tits to form feeding flocks in the woods over winter. These mixed flocks are also joined regularly by goldcrests, tree creepers and nuthatches.

Blue Tit *Parus caeruleus*

Very common woodland resident. Also uses nest-boxes a good deal and shows a significant passage from Jul.-Oct., with 80-100 birds ringed annually.

Coal Tit *Parus ater*

Resident in small numbers, particularly at the top of Loworthy Brake in a copse of Scots Pine and Oak.

Marsh Tit *Parus palustris*

Common resident, especially around the Ley in the willow and elm fringes.

Willow Tit *Parus montanus*

Status uncertain. Problems of separating this bird from the marsh tit, especially outside the breeding season, may explain why it has not been recorded in the past. There is no evidence at the moment for it breeding on the Reserve.

AEGITHALIDAE

Long-tailed Tit *Aegithalos caudatus*

Common resident. Large flocks form in winter, supplemented by migrants from the north.

SITTIDAE

Nuthatch *Sitta europaea*

Resident woodland bird. No recorded use of nest-boxes.

CERTHIIDAE

Treecreeper *Certhia familiaris*

Resident in all the woodlands. Also common around the Ley fringes in the mature elms and oaks.

TROGLODYTIDAE

Wren *Troglodytes troglodytes*

Abundant resident. Population suffered severely in the 1963 winter, but was on the increase again by 1966. Over 100 birds ringed each year.

TIMALIIDAE

Bearded Tit *Panurus biarmicus*

Thought to have bred last century, but almost unknown from then up to 1965 when there was an exceptional "eruption" from Holland. Since then it has been an infrequent p.m. and w.v. Oct.-Jan. usually in small parties of 2-12. A pair stayed until mid-Apr. 1975.

TURDIDAE

Mistle Thrush *Turdus viscivorus*

Small resident population breeding on the Reserve, at least since 1966. Large influx each year Oct.-Nov. for the winter, feeding in the woods, accompanied by song thrushes and blackbirds.

Fieldfare *Turdus pilaris*

W.v. in small flocks. Cold spells can bring in much larger flocks, as it can for redwing. Over 1,500 on the beach on Feb. 1st 1976.

Song Thrush *Turdus philomelos*

Resident. Particularly common around the woodland edges.

Redwing *Turdus iliacus*

P.m. Oct.-Nov. and w.v. Maximum numbers reached during severe onshore gales—over 1,000 in Mar. 1963.

Ring Ousel *Turdus torquatus*

1 Nov. 2nd 1968

Blackbird *Turdus merula*

Abundant resident with a significant number of w.v. Approx. 50 ringed each autumn with a noticeable drop in numbers in 1972.

Wheatear *Oenanthe oenanthe*

Small Mar.-Apr. and Aug.-Sept. passage. Maximum 20 on Mar. 3rd 1966. During the 60s there was also a small number of birds which stayed on the beach all summer, but there was no proof of breeding. 1 only of the Greenland variety, in Oct. 1972.

Stonechat *Saxicola torquata*

One pair breeding on the shingle ridge in 1946, 10 pairs by 1960. Suffered badly in the 1962/63 winter, but recovered to former status by 1966. Numbers supplemented by regular autumn passage.

Whinchat *Saxicola rubetra*

P.m. in ones and twos Apr./May and larger parties of up to 5 Aug.-Oct.

Redstart *Phoenicurus phoenicurus*

Infrequent p.m. commonest Sept./Oct. Maximum of 10 Oct. 1960.

Black Redstart *Phoenicurus ochruros*

P.m. Twos and threes recorded infrequently—all times of year except May-Aug.

Nightingale *Luscinia megarhynchos*

Only 3 passage records. 4 birds spring 1963, 1 Aug. 24th 1965, and 1 mist-netted in Nov. 1970.

Bluethroat *Luscinia svecica*

Autumn p.m. with 9 ringed, both red and white spotted forms. Only 2 sightings apart from those netted.

SYLVIIDAE

All the warblers, apart from the rarities and the resident Cetti's warbler, show a small spring passage and a larger autumn passage.

Cetti's Warbler *Cettia cetti*

Resident. First recorded in 1974, Nov. 2nd–Dec. 19th. Again present in the winter and early spring of 1975. In the winter of 1975/76 there were 8 singing males and at least one stayed on to breed in the spring of 1976. It is hoped that more pairs will stay to breed in the future now that a stable wintering population seems to have been achieved. These records are part of the general northward shift in the range of this species since the early part of the century.

Grasshopper Warbler *Locustella naevia*

Occasional breeding bird arriving in Apr. Fewer seen on passage now than 10 years ago, and this decline is confirmed by a drop in ringing records.

Savi's Warbler *Locustella luscinioides*

1 singing in Ireland Bay, May 1977.

Great Reed Warbler *Acrocephalus arundinaceus*

1 Aug. 7th 1961—First Devon record.

Reed Warbler *Acrocephalus scirpaceus*

Abundant s.v. Earliest arrival Apr. 14th 1971. Estimated breeding population in 1974 of 200 pairs. Temporary decrease in numbers during 1966/68 because of unusually high water levels early in the breeding season.

Sedge Warbler *Acrocephalus schoenobaenus*

Common s.v. Earliest arrival Apr. 4th 1965. Fewer breeding pairs than the reed warbler, but more on passage.

Aquatic Warbler *Acrocephalus paludicola*

Infrequent autumn p.m. First ringed in 1963, now 17 records.

Melodious Warbler *Hippolais polyglotta*

1 Aug. 1964, 1 Nov. 2nd 1968.

Icterine Warbler *Hippolais icterina*

1 Sept. 14th 1974.

Blackcap *Sylvia atricapilla*

Common s.v. with a few individuals staying the winter. Variable numbers on passage, decreasing in the 70s.

Barred Warbler *Sylvia nisoria*

1 ringed Sept. 3rd 1972.

Garden Warbler *Sylvia borin*

Infrequent s.v. Commoner on autumn passage.

Whitethroat *Sylvia communis*

Numerous s.v. breeding on the gorse covered parts of the shingle ridge. Earliest arrival Apr. 4th 1960. Numbers fell off after 1968 when a severe drought hit their African winter quarters, but they are now recovering well.

Lesser Whitethroat *Sylvia curruca*

Uncommon s.v. probably bred 1978. Mainly noted on passage in Sept. and Apr.–May.

Dartford Warbler *Sylvia undata*

First recorded Oct. 9th 1976 after the extremely hot summer and its associated fires on the heathland along the south coast. 1 male present in the gorse of the shingle ridge from Oct. 9th until at least the end of the year. A further sighted over a similar period in 1977.

Willow Warbler *Phylloscopus trochilus*

Extremely common s.v. Breeds in the woods and also in the willow carr of the Higher Ley.

Chiffchaff *Phylloscopus collybita*

Common s.v. with small numbers staying over winter. Not as abundant as willow warbler, except on passage when it outnumbers them 2 to 1.

Wood Warbler *Phylloscopus sibilatrix*

2 passage birds ringed, on Aug. 23rd 1972 and Aug. 1975.

Yellow-browed Warbler *Phylloscopus inornatus*

1 Oct. 8th 1968.

REGULIDAE

Goldcrest *Regulus regulus*

Large resident population with p.m. both spring and autumn.

Firecrest *Regulus ignicapillus*

Records before 1971 sporadic, but now a regular w.v. in increasing numbers.

MUSCICAPIDAE

Spotted Flycatcher *Muscicapa striata*

S.v. arriving late Apr./May. Small spring and autumn passage, but seems scarcer now than 10 years ago.

Pied Flycatcher *Ficedula hypoleuca*

P.m. infrequently in Apr., more common Aug.-Sept.

Red-breasted Flycatcher *Ficedula parva*

1 ringed Sept. 1972.

PRUNELLIDAE

Dunnoek *Prunella modularis*

Abundant resident, especially in the leyside scrub vegetation.

MOTACILLIDAE

Richard's Pipit *Anthus novaeseelandiae*

2 on Oct. 9th 1974.

Tawny Pipit *Anthus campestris*

1 Sept. 6th 1974.

Meadow Pipit *Anthus pratensis*

Resident with large autumn passage Sept./Nov.

Tree Pipit *Anthus trivialis*

3 records of single birds: Apr. 5th 1953, Apr. 14th 1960, and Apr. 10th 1974.

Pied Wagtail *Motacilla alba yarellii*

Resident. Small number of breeding birds with large spring and autumn passage. Reed roosts in the autumn of up to 600 birds (Oct. 5th 1955) with a small proportion of white wagtails (*M. alba alba*).

Grey Wagtail *Motacilla cinerea*

P.m. and w.v. Breeds on the Ley feeder streams and inhabits the Ley shore in winter.

Blue-headed Wagtail *Motacilla flava flava*

1 May/Sept. 1964, 1 May 5th 1965.

Yellow Wagtail *Motacilla flava flavissima*

P.m. in large numbers Aug.-Sept. Unusual after Sept. Small spring passage and infrequent summer individuals. Nest building was started in 1968 but the eggs were never laid.

LANIIDAE

Great Grey Shrike *Lanius excubitor*

1 Oct 1973, 1 Nov. 1975.

Red-backed Shrike *Lanius collurio*

1 male Jun. 1st 1958. A pair Jun. 18th to 27th 1959. Possibly the same pair returned in 1960 and bred until 1963 adjacent to the Reserve near Slapton Village. None have been seen since.

STURNIDAE

Starling *Sturnus vulgaris*

Very common resident and w.v. in large numbers. Winter population can be huge, up to 10,000 were counted in a reed roost on Dec. 4th 1955.

FRINGILLIDAE

Hawfinch *Coccothraustes coccothraustes*

1 Oct. 1971 on the Causeway.

Greenfinch *Carduelis chloris*

Small numbers resident. Larger numbers p.m. and w.v., with flocks of up to 300 on the shingle ridge in Nov.–Feb.

Goldfinch *Carduelis carduelis*

Common resident. Also forms large flocks in winter and on passage in autumn.

Siskin *Carduelis spinus*

P.m. in small numbers Oct./Nov. and Mar./Apr. One ringed in Aug. 1972.

Linnet *Acanthis cannabina*

Common resident on the shingle ridge, also p.m. and w.v. in large numbers, reaching 300 on Sept. 3rd 1967.

Redpoll *Acanthis flammea*

P.m. and w.v. in small numbers, rarely in groups of more than 5 or 6.

Serín *Serinus serinus*

1 Dec. 3rd 1966.

Bullfinch *Pyrrhula pyrrhula*

Small resident population in the Higher Ley willow carr and woodland fringes. Unusual influx noted in 1970.

Crossbill *Loxia curvirostra*

The first record was a small flock in Aug. 1963, followed by 6 by the Higher Ley in July 8th 1966 and 7 in Aug. 1972 during a countrywide “explosion” of Crossbills.

Chaffinch *Fringilla coelebs*

Abundant resident, with large winter flocks—150 on Jan. 14th 1967.

Brambling *Fringilla montifringilla*

W.v. High influx in some winters but most birds stay on adjacent farmland. A very few spring records Mar.–Apr.

EMBERIZIDAE**Corn Bunting** *Emberiza calandra*

1 Apr. 21st 1960.

Yellowhammer *Emberiza citrinella*

Common resident on surrounding farmland and often seen on the Reserve, particularly as a w.v. to the shingle ridge.

Cirl Bunting *Emberiza cirlus*

Adjacent to the Reserve are 3 resident pairs, but there is no evidence for breeding on the Reserve itself.

Red-headed Bunting *Emberiza bruniceps*

1 Jun. 7th–9th 1976 on the shingle ridge. Almost certainly an escaped cage bird.

Reed Bunting *Emberiza schoeniclus*

Common s.v. and p.m. some birds staying all year. Many passage birds ringed.

Snow Bunting *Plectrophenax nivalis*

Infrequent w.v. to the beach. Usually single birds.

PLOCEIDAE**House Sparrow** *Passer domesticus*

Abundant resident, especially as a foraging flock in winter.

Tree Sparrow *Passer montanus*

W.v. in small numbers.

A total of 233 bird species have been recorded on the Reserve. Of these 62 breed or have bred in the last 30 years, 9 breed locally and often feed on the Reserve, and another 3 species may well breed in future years, if they have not done so already undetected. These are the little grebe, teal, and tufted duck.

REFERENCES

- MERCER, I. D. (1966). The natural history of Slapton Ley Nature Reserve I. Introduction and morphological description. *Fld. stud.*, **2**, 385–404.
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