BRISTOL ORNITHOLOGY



12

BRISTOL ORNITHOLOGY

THE JOURNAL OF THE BRISTOL ORNITHOLOGICAL CLUB

No.12 DECEMBER 1979

CONTENTS

38	Preface
39	A review of 1978 Brian Rabbitts
49	Birds on Brean Down, 1967 to 1978 Ken Hall, Robin Prytherch and Brian Rabbitts
63	Wintering warblers in Avon R.L. Bland
	NOTES
67	A Black-and-white Warbler on the Isles of Scilly Bernard King and Nigel and Laurel Tucker
68	A summer population of non-breeding gulls at Saltford Bernard King
69	Killdeer at Chew Valley Lake Keith Vinicombe
70	Black Kite feeding and preening whilst in flight Bernard King
70	Blackbirds feeding young on estuarine worms Bernard King
71	A hybrid Black Duck x Mallard on the Isles of Scilly Bernard King
71	Blackcap eating snowberries Brian Rabbitts
72	Blackcap singing in winter Bernard King
	REPORT
72	Club Activities, 1978

PREFACE

Much interesting information lies buried in the Club's monthly newsletter Bird News and it is this that forms the basis of the survey of Brean Down published in this issue of Bristol Ornithology. Similarly, the annual review of the year, written as usual by Brian Rabbitts, is based on the newsletter and the record slips used to compile it. This seems a good opportunity to thank all those who send in their observations so regularly; also to stress the point that their value is greatly enhanced if locations of sightings are given as precisely as possible. The other main item in this issue is also based firmly on the observations of many people - the charting year by year by Richard Bland of the numbers of wintering Blackcaps and Chiffchaffs in our area. This local study complements the national one carried out by the BTO, the results of which should be published in the near future.

As normal we include a good variety of notes. Short contributions such as these are always welcome, not only for the interesting observations they themselves document, but also in the hope that some at least will inspire further study.

The photographic plates section is larger than usual as in addition to illustrating the Brean Down paper, photographs by Club members have been chosen that depict some of the more unusual species seen in 1978, the year reviewed. Our thanks are due to all those who have submitted photographs, as well as to those who provided the line drawings. In particular, congratulations to Laurel Tucker, who in 1979 came runner-up in the British Birds 'Bird Illustrator of the Year' competition.

Ken Hall

CHAIRMAN HON. SECRETARY

K.J. Hall M. Lord D.G. Haddy

TREASURER

MEMBERSHIP SECRETARY Mrs. J.F. Copeland

Other members of the General Committee for 1979:-

D. Buffery

B. Rabbitts

S.A. Crick

K.E. Vinicombe

D.H. Payne

G. Youdale

R.J. Prytherch

D. Walter

Bristol Ornithology Editorial Committee:-

K.J. Hall

M. Lord

R.J. Prytherch

B. Rabbitts



A REVIEW OF 1978

by Brian Rabbitts

Although similar to previous reviews the area from which observations have been drawn is reduced to the county of Avon and Somerset to within some 30 miles of Bristol. Even here we have areas where records are sparse reflecting many birdwatchers' preoccupation with rarities with visits to the most fruitful places. There were 142 contributors (29 only for six or more months) to our monthly reports *Bird News* and this information, together with records from the Bristol Naturalists' Society, forms the basis of my review. Additional notes have been kindly supplied by J. Breeds, P.J. Chadwick, A.H. Davis and D.E. Paull. Some 217 species occurred during the year (excluding obvious escapes) and no reference has been made to the British Birds Rarities Committee.

Reservoirs, often referred to collectively, signifies those at Barrow Gurney, Blagdon, Cheddar, Chew Valley Lake (CVL) and Durleigh. The levels is a term used to cover the peat-moors and heaths in Somerset and to the moors which lie to the south of the Polden Hills; the channel means from the Bridgwater Bay area to Severn Beach (this place name has been used to cover observations from nearby Chittening). St. George's Wharf includes records from the Royal Portbury Dock. Some of the wildfowl and wader counts mentioned for Steart include numbers from elsewhere in the Bridgwater Bay National Nature Reserve. The hides here proved popular but these and other alterations have resulted in the complete character destruction of a formerly fascinating area. One can only hope that the trend in recent years to provide hides and the accompanying paraphernalia at all reserves is reversed before there are no longer any wild open places to visit. When computing totals, especially of the scarcer passage waders, minimum numbers have generally been used. These have been arrived at by adding up the highest monthly figures in each locality. However for some species (e.g. terns) at coastal sites where obviously different birds are involved from day to day the total for the month has been used.

The first winter period

The year started with westerly winds (gale force north-west on 3 January) and it was generally unsettled. Although the first week of February was mild, an anticyclone brought a very cold easterly airstream for the following two weeks. On the 18/19th the ridge of high pressure together with a weak trough close to south-west England resulted in severe blizzards. There was however a fairly rapid thaw. It was mild for the first half of March and some summer visitors arrived during this time (see Spring migration). Mid-month there were wintry showers and a strong west airstream after the third week. Extensive flooding occurred on some of the levels.

Red-throated Divers were at Cheddar (16—27 January and 2—4 February) and one or two Great Northern Divers at Blagdon or CVL (from 1977) to 27 January (one at the Axe Estuary on the 28th). Numbers of Great Crested Grebe at CVL were very low (20—25 throughout this period) but there were up to 67 at Cheddar. A Slavonian Grebe here (from 24 December 1977) remained to 22 January. Cormorants at CVL numbered 72 on



1 February and 66 on the 26th (16 had white heads and were presumably older individuals). Five Shags occurred in January; of note was the long stay of two near Clevedon (from 1977) with one being found dead on 2 March (singles also at CVL on 26 February and 26 March). Bewick's Swans reached 212 on Wet Moor (5 February) with smaller numbers on other levels, the reservoirs and coast. Of the geese eight Bean over Tealham/Tadham Moors on 23 February was unusual for the area, there was a maximum of 12 White-fronts at Steart and 15 Brent (two identified as the pale-breasted race *B.b. hrota* but both races are subject to some variation) while 38 flew down channel off Severn Beach on 12 March.

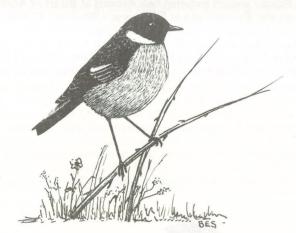
Counts of commoner wildfowl included 1350 Shelduck (Steart in January), 2000 Wigeon (King's Moor on 5 March), 1000 Wigeon (Wet Moor on the 12th), 2025 Teal (CVL in January), 1000 Teal (King's Moor in March) and 2200 Mallard (Steart in January). Pochard numbers were low (not over 250 on the reservoirs or 122 on the levels) while most Tufted Duck (560) occurred at CVL (495 at Cheddar on 11 February probably included birds displaced from the larger lake by the weather conditions). Other duck included up to 88 Gadwall at CVL (small numbers from another 15 localities); three counts for Pintail of 96–140 on the levels (beginning of February to mid-March); 150 Shoveler (levels and reservoirs); 50–58 Goldeneye at CVL (12 February and 3 March); 57 Goosander with the last on 22 April at the Brue Estuary. Such regular large numbers have only become a feature in recent years but the Goosander is slowly extending its range southwards and has recently bred in Gwent (see *Brit. Birds* 71 (1978):214–216). Ruddy Duck were present in good numbers (a combined total of 260 on Blagdon and CVL on 4 January). Scarcer species were Green-winged Teal *A.c. carolinensis* at CVL to 26 January (from 17 November 1977); five Red-crested Pochard, but the localities of three suggested they were not all truly wild; Ferruginous Duck at Chilton Trinity on 8 January; four Scaup; four Eider off Stolford on the 8th; three Common Scoter at Berrow on 26 February; several Smew on the reservoirs (one remained to 30 April) and a Red-breasted Merganser at CVL (from November 1977) was last seen on 4 March.



Hen Harriers ('ring-tails') remained to 7 May and at least four (probably more) individuals were involved. It is probably hoping too much that this species could regain its former status in Somerset (bred fairly regularly until about 1910) but an increase in the last five years no doubt reflects an expansion of breeding range. Merlins, present at 11 localities, included a series of records at Steart (one or two to 22 April) while Peregrines were also regular here (last on 3 May) and recorded at seven other places. Water Rails (up to six) were at usual habitats. Coot at Cheddar numbered 2750 on 1 January (including a partial albino from 1972 - this bird later moved to Blagdon where it apparently bred) while other counts included 910 at CVL (mid-February) and 140 on the levels (mid-March). Of the waders Oystercatcher reached 185 at Steart with one inland at CVL 26 January-12 March (unusual in length of stay) and Ringed Plover 50 (Severn Beach) with inland records of one-three on the levels 4-6th. Most Golden Plover (1400) occurred on Tealham/Tadham Moors in January with other good counts of 1200 on Kenn Moor (the same month) and 1100 on West Sedge Moor mid-March (a small movement south was noticed 10-23 February). Lapwing estimates included one of 10000 on the levels (southward exodus on 18/19 February), 250 Knot occurred at Sand Bay in the first week of March (otherwise not over 20) and Dunlin numbers indicated 24500 in January (12000 at Steart) and 25500 in February (14000 at Steart); 1000 were on Kenn Moor (on the 4th), 1197 trapped on the 11/12th (most at the Axe Estuary) included 12 which had been ringed on the Wash and others from as far afield as Finland and Poland (Wader Ringing in Somerset, 1977/78 unpublished report) and 1100 on Tealham/Tadham Moors (4 March). Snipe did not exceed 330 (it is only since 1970 that far larger numbers have been recorded) and Curlew 1200 (at Steart in March). Over-wintering and other scarcer waders were Avocet; four Little Stints; nine

Purple Sandpipers; 78 Ruff, mainly in February (43) with doubtless some interchange of the small groups between the levels and reservoirs; 59 Jack Snipe (last on 20 April); two Long-billed Dowitchers at Blagdon (from 1977) remained until 11 January with one on the 15th and perhaps the other at Steart on the 13th; Woodcock in scattered places; 35 Black-tailed Godwits at Durleigh in the first week; up to 20 Bar-tailed Godwits; one or two Spotted Redshank at St. George's Wharf and Steart; 40 Green Sandpipers mainly in January (14) and March (19) and Common Sandpipers at Sea Mills and the Yeo Estuary (two).

Interesting gulls at CVL were two Mediterranean, four dates to 2 March with one of the individuals being the same as in November 1977 (one was at Barrow Gurney on 25 January), an albino Black-headed on 26 February, a probable Lesser Black-backed x Herring hybrid on the 7th and a Glaucous on 30 January (another possibly this species was seen at Sea Mills on 6 February). Since R.A. Hume (*Brit. Birds* 68 (1975): 24–37) drew attention to the possibilities of confusing Glaucous and Iceland Gulls with aberrant or hybrid individuals of these and other gulls additional material which may be of interest can be found in *Brit. Birds* 71 (1978): 80–82, 272–274 and 279. By 1966 some 50% of the Icelandic population of Glaucous were of hybrid origin (with Herring) but a recent finding has shown an apparently poor survival of Lesser Black-backed x Herring hybrids (see *Bird Study* 25 (1978): 161–166). Weather-motivated movements of Kittiwakes occurred in the channel on 3 January and 1 February (200 on both days). Short-eared Owls (singles) were seen at seven sites (one inland) with a small passage in April (last on the 29th). Passerines included a Woodlark at Berrow on 23 February, 12 Water Pipits *A.s. spinoletta* at St. George's Wharf on 2 April (otherwise up to eight here and three at the reservoirs) and roost counts of 500 Pied Wagtails. A Waxwing on 10/11 February at Filton fed on the berries of *Cotoneaster*. Black Redstarts occurred at seven places (to 1 April)



Stonechat

and Stonechats were well distributed on the coast and levels in February (counts of 11/12). Parties of Fieldfare did not exceed 700 (last on 29 April) and Redwing, apart from one estimate of 2000, 500 (there was a small movement south on 18/19 February). Reports of Dartford Warblers at Berrow (on 6 February), Portishead (4 March) and Brean Down (31st) represented an unusual movement but this species is now believed to be a partial migrant (see *Brit. Birds* 72 (1979): 10–22). Wintering Blackcaps (32) were found, these usually in gardens, and Chiffchaffs (mainly singles) at nine localities. A Bearded Tit was at CVL on 8 January and Berrow on 19 February while a Wallcreeper at Cheddar was last seen on 9 April (see *Bristol Orn.*11 (1978): 17–20). Brambling, apart from 50 at St. George's Wharf, did not exceed 10, Siskin included several parties of 25–35, Twite counts of 35–40 were made at Clevedon and Portishead and there were small flocks of Redpoll (one of 20). Record numbers of Lapland Buntings occurred at Steart with 14 in January (last on 19 February at Berrow), a Snow Bunting was at Severn Beach on 26 February, six Cirl Buntings were reported (28th–16 March) and 10 Corn Buntings at Berrow (only recorded here since January 1976).

Spring migration

Temperatures for April were generally below average with prolonged cloud cover and frontal systems moving over the country. In the first half winds were mainly from the north quarter, in the last week from the east and some warm days included 22—24th. Summer migrants remained scarce until the end of the month. With a slow-moving low pressure trough in the upper atmosphere unsettled conditions continued into May with frequent rainfall. From mid-month the weather pattern became mainly anticyclonic with the last few days and start of June being very warm. The rest of this month was mostly cool.

A few Great Crested Grebe occurred at coastal sites, a Slavonian Grebe at Cheddar on 18–27 March and a Black-necked Grebe at CVL on 8–16 April. Fulmars appeared in the channel from mid-March, there was a Storm Petrel at the Brue Estuary on 21 April with Gannets at Cheddar on the 1st (oiled) and off Steep Holm (possibly two) on 1 May. Two Spoonbills were at the Parrett Estuary on 26 April. Escaped wildfowl included several Ruddy Shelduck and a Ferruginous Duck which appeared likely to be of this origin. The peak count of Tufted Duck at CVL was 510 on 16 April and of 65 Common Scoter 40 occurred off Sand Point on the same day and 11 at the reservoirs (3 March—31 May). Birds-of-prey included Marsh Harriers at St. George's Wharf on 24 April, Berrow and CVL on 7 May, two perhaps three Ospreys here 8–10 April (at Blagdon on the 7/8th), 17th and 10 May and the first Hobby was reported on 26 April.

The maximum count of Oystercatcher was 140 at Steart in May (eight at CVL on 16 April). Most Ringed Plover (300) occurred at Severn Beach on 11 May (two over Crook Peak on the 12th were unusual) and of 100 Golden Plover on the levels on 25 March 10% were attributable to the northern form P.a. altifrons (similarly four at the Axe Estuary on 8 May). Sanderling reached 73 at Berrow on 20 May, 56 on 4 June and Dunlin 1150 in the first month but inland passage was poor (up to seven). The main movement of Black-tailed Godwits was in March with 45 at Steart and up to 30 on the levels and Bar-tailed Godwits in April with 73 at the first locality. Whimbrel at the roost here numbered 860 on the 21st, 406 on the 22nd (an early morning count of birds leaving), 973 on the 28th and 1191 on 5 May. At King's Moor 341 arrived at dusk on 27 April (possibly to roost) while movement north was observed at Berrow (322 on 9 May) and Brean Down (450 on the following day) perhaps to roost at Collister Pill, Gwent. Common Sandpipers arrived from 10 April with most at Cheddar (maximum of 29 on the 22nd) and Turnstone reached 274 at Severn Beach (8 May). Scarcer waders included two Avocets at Steart in April; only one Little Ringed Plover; five Dotterel at Crook Peak on the 30th and one at St. George's Wharf on 21 May (a welcome increase of records for this species since 1974); Little Stints at Berrow (10th) and Severn Beach (30th); two Curlew Sandpipers (9-27th); a high count of 11 Purple Sandpipers at Severn Beach on 7 April (five to 1 May with the last on the 13th); up to 10 Spotted Redshank at the Brue Estuary (17 April); eight Greenshank (24th-19 May) and 15 Green Sandpipers in April. Most unusual was a Red-necked Phalarope at CVL on 28 May (surprisingly parallelled by one at Nailsea Pond on 26 May 1979).

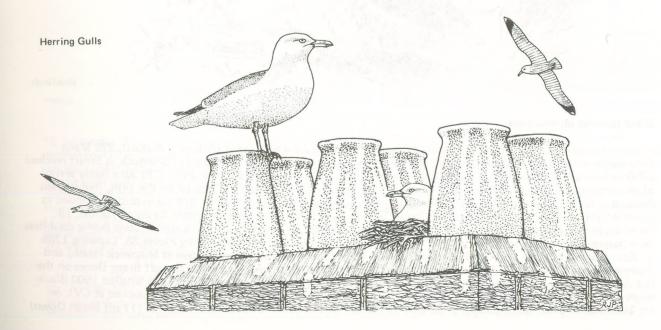


Skuas off Brean Down were a single Pomarine on 7 May, six Arctic 22 April—12 May (one off Severn Beach on the 6th) and a Great on the same day. Of some 28 Little Gulls (12 March—22 May) eight occurred at CVL on 16 April. Gull roost counts here on the 2nd included 500 Common and 400 Lesser Black-backed (up to five of the race *L.f. fuscus* elsewhere in the previous month). 782 Kittiwakes off Brean Down (14 March—16 May) included counts of 130 on the first date, 305 on the 23rd and 166 on 12 May (four inland 26 March—1 April). Common/Arctic Terns (237) passed through from 17 April to 5 June with 120 off Brean Down 5—13 May (few were specifically identified). Other terns included seven Sandwich (18 April—13 May), 21 Little (27 April—3 June), 10 of which flew north off New Passage on 2 May, and 72 Black (22 April—5 June) of which 52 were in April (27 on the 27th). A Razorbill was found dead (heavily oiled) at Weston-super-Mare on 25 March and two (or Guillemot) were off Brean Down on 13 May.

There was a small movement of Collared Dove with records on eight days at Brean Down of up to four. Summer visitors to arrive in March were Chiffchaff 3rd (five at CVL with other small influxes from the 11th); Swallow 7th; Sand Martin 11th; Ring Ouzel 12th; Wheatear 16th; House Martin 25th; Willow Warbler 30th and Blackcap (most however appeared to be wintering birds). 200 Sand Martins occurred at CVL on 1 April (but otherwise scarce) and north-east movement of Swallows was apparent on the 29/30th (926 in three hours at Clevedon on the last day). Tree Pipits (from the 2nd) included up to 14 at coastal places, most Yellow Wagtails passed through in the last week (flocks of up to 40) and White Wagtails M.a. alba from the 22nd (28 at Cheddar) with the first on 11 March. Counts of 12–19 Wheatear were made at two places on 24 April and at four in the period 5–13 May. Small movements of Goldfinch, Linnet and Redpoll were noted in April (also in May for the last species with up to 30 at Abbots Leigh and eight on the coast). Scarcer species were Rock Pipits of the race A.s. littoralis at Cheddar (26/27 March and 12 April), a Yellow Wagtail on the 17th resembling M.f. iberiae (Spanish Wagtail), three Ring Ouzels, 10 Wood Warblers 16 April–10 May (usually a scarce passage bird), 23 Pied Flycatchers 21 April–10 May (higher numbers than usual) and a Hawfinch at Cheddar on 7/8 April.

Breeding species (selected)

A count of Little Grebe at CVL showed at least 24 young from 14 broods and Great Crested Grebe 82 (42 broods). A Little Grebe was also noted on a small pool in an old quarry but this was not unusual; they have been found breeding in similar habitat in the area recently and require only very small areas of water. Shelduck included 42 (five broods) at Sand Bay in June and 37 (six broods) between Avonmouth and Aust in July. It was a good breeding season for duck at CVL (high water level) with 160 young Gadwall (23 broods), 342 Mallard (51 broods), seven Garganey (one brood - last bred here in 1970), eight Shoveler (one brood), one young Pochard and 95 Tufted Duck (19 broods). Ruddy Duck however failed to breed (last did so in 1975). Birds-of-prey included Sparrowhawk (no accurate assessment of the population is possible but seemingly well distributed), Buzzard (eight pairs in April in an area near Wraxall), Hobby (six potential breeding places) and Peregrine (a pair in April but apparently not recorded after 9 May). Red-legged Partridge were noted at eight places, Grey Partridge at 23 (April-June), Water Rails at CVL (17-26 May) and Charterhouse (9 June), Corncrake on the levels (last week of May) and Coot included 280 young (90 broods) at CVL. A pair of Oystercatcher bred at St. George's Wharf, three pairs of Little Ringed Plover were present in June but there was no evidence of any breeding success (a pair returned to last year's site near Bath but apparently were disturbed) and a pair of Ringed Plover. A Woodcock was at Shapwick Heath on 2 June. Of the gulls a Black-headed built a nest near Avonmouth but soon deserted, a pair of Lesser Black-backed at CVL reared three young, Herring on Steart Island (850 pairs) showed a further reduction (roof-nesting was reported for the last two species) and a pair of Great Black-backed at CVL in May appeared to be holding territory.



Six occupied nest sites (possibly four others) of Stock Dove were discovered on Steep Holm (first bred here in 1969) and Turtle Dove appeared to be reasonably well distributed (seven in song Goblin Combe in May and at 10 sites in June). Barn Owls were reported from five places (May-June) but bred successfully at only two, Nightjars at Shapwick Heath, Kingfishers at seven (May-July) and Lesser Spotted Woodpeckers at eight in the same months. Three pairs of Sand Martin at Somerdale, Keynsham compared with 25 in 1977. Tree Pipits occurred in usual numbers on some of the levels and also Yellow Waqtail (18 singing males or pairs on Tealham/Tadham Moors). Nightingales included up to eight at Inglestone Common and Shapwick Heath, Redstart continued to decline on the levels (perhaps some increase at upland sites however) and Stonechats bred successfully at three sites including three families (seven young) at Brean Down, Grasshopper Warblers (five places in June) remained at a low level, Sedge Warbler numbers appeared less than last year on some of the levels, Reed Warblers showed an increase. Lesser Whitethroats were well distributed in May and in June in the Vale of Berkeley, Whitethroat numbers remained similar and Wood Warblers appeared at seven possible breeding sites. Of Spotted Flycatchers five to seven families or pairs were reported from two areas while despite more Pied Flycatchers than normal in the spring none apparently remained to breed. Pied Flycatchers favour mature oak woods and a recent project near Okehampton, Devon, using nest boxes saw the population rise from two pairs (14 young) in 1974 to 21 pairs (119 young) in 1978 (Devon Birds 32 (1979): 31-35). Marsh Tits were rarely reported but with insufficient evidence to suggest a decline and Willow Tits occurred at some usual places (five). Rooks nested on the arms of electricity pylons and from a recent rookeries survey it was thought that possibly the habit is increasing (see Bird Study 25 (1978): 64-86). Five Ravens near Cheddar on 30 August suggested a family party (two here in March). Redpoll (located at three sites) maintained their recently acquired status in the area and Hawfinch bred at Leigh Woods, Two Cirl Buntings were located in June.



Hawfinch

Other summer observations

Sea-birds in the channel included Fulmar (regular in June and one at CVL on 6 August), 229 Manx Shearwaters on 24 June, 155 on 6 August and 22 Gannets with 12 on the 16th. Counts of Shelduck at Steart reached 2250 in June and 2796 in July, Mallard 1300, Pochard 131 at CVL and Tufted Duck 240 on 25 June (early arrival of moulting males). Other duck included Wigeon (two) here on 9 July, Pintail at Cheddar on the 14th, Red-crested Pochard at CVL and Scaup on the 8/9th (only three previous records in this month). Aythya hybrids continued to be reported (see *The Wildfowl Trust 17th Report* (1964–5): 49–65 on a study of certain Aythya hybrids). 18 Common Scoter occurred (24 June–27 July) with six at Cheddar on the 10th. Of the waders in June (some doubtless were passage birds) Oystercatcher reached 186 at Steart (highest for the year here), Grey Plover 38, Lapwing 1365 on West Moor, Whimbrel seven at St. George's Wharf, Green Sandpiper four (another two at Shapwick Heath) and Turnstone eight at Clevedon. Eight Arctic Skuas in the channel (24th–3 July) included five off Brean Down on the last date together with a Great Skua. Two Little Gulls were at CVL on 29 June and gull counts totalled 1500 Blackheaded at St. George's Wharf on the 22nd, 3500 at Severn Beach on 18 July, 125 Lesser Black-backed at CVL on the 26th and 41 Great Black-backed at St. George's Wharf on the 19th. 12 Kittiwakes occurred (11 off Brean Down)

11 June—3 July, five Sandwich Terns in July and four Common/Arctic Terns (22 June—7 July). A Guillemot or Razorbill (probably the former) was off Severn Beach on 1 July. Concentrations of Swift over the reservoirs did not exceed 1000 (eight found dead at CVL on 16 June apparently struck by passing vehicles) and at Abbots Leigh 750 (unusually high numbers here from mid-July to mid-August). 94 Mistle Thrush at the same place on 31 July was the largest flock recorded. A juvenile Crossbill at CVL on 18 June may have been bred locally, but could equally well have originated many miles distant.

Autumn migration

July was often stormy but there was a warm sunny spell in the second week. Unsettled, often cool, weather continued in August with winds persistently from the west quarter. Some sunny and drier periods occurred 17—28th. The weather in September was variable although still with a westerly pattern; on the 10/11th there was an unusual combination of strong winds with high temperatures, and a deep depression (very strong winds across northern North Atlantic 21—30th) brought north-west gales in the last two days. After a poor start October was mainly fine and very dry. South winds (6—13th) brought influxes of some species. Although it was a dry autumn (water shortages at places in the south-west) levels at the reservoirs dropped too late for the main passage of waders.

There was a count of 94 Little Grebe at CVL on 16 September, 420 Great Crested Grebe on the 2nd and a Black-necked Grebe was present 16—25th. A Fulmar was off Steep Holm on 23 August and 4 September while strong winds in this month resulted in a number of sea-bird records including Manx Shearwaters (on nine days including 27 on the 11th and seven 'wrecked' — as far inland as Bath), Storm Petrels off Severn Beach (16th), New Passage (30th) and Leach's Petrels at Steart (9th, 23rd with two on the 30th thought to have been this species), Axe Estuary (28th) and CVL (30th). Large numbers were recorded particularly on the Merseyside coast and it is expected that a paper documenting these events will be published shortly (see *Brit. Birds* 72 (1979): 334—336 on some characters of Leach's Petrel). A Gannet was off Brean Down on 16 October and a Shag at Sand Point on

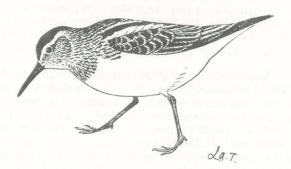


Heron

10 September. Four Grey Herons which flew south at Steart on 25 August appeared to be migrants. Gadwall numbered 331 at CVL on 18 September, Teal 1450 on the 2nd, Mallard 1900 on the 2nd (3700 at Steart in August was very high) and Garganey 34 (a record count) again on the same day (one on 7 December was exceptionally late). Diving duck included four Red-crested Pochard (three on 27 August) but difficult to ascertain if true vagrants, 700 Tufted Duck at CVL (2 September) and 30 Common Scoter with 26 here in August (21 on the 3rd is the highest inland count only previously approached by flocks in spring). Raptors included at least six Kestrels on Steep Holm (7–27 October), Hobby (to 24 September) and Peregrines (from 7 August with two regularly observed on Steep Holm from the 26th). A Quail was near Durleigh on 20 August while the Coot population at CVL remained above 1000 (9 July—16 September).

Of the commoner waders Oystercatcher numbered 218 at Berrow (19 September and 7 October), Ringed Plover 450–563 (two counts in August with one in September at separate places), Knot 350 at Steart (21 September) and Sanderling 164 at Berrow (1 August). Black-tailed Godwits reached 620 at Steart (the lowest peak since 1972), Whimbrel 200 (very high autumn count with 56 on King's Moor which flew west at dusk on 25 July suggested

roosting here), Curlew 1000—1210 (August—October), Redshank 1250—1300 (July—September) and Turnstone 200 at Severn Beach (26 August). A small number of all the above mentioned species appeared inland. Other passage waders included 23 Little Ringed Plover 15 July—8 October (nine at CVL in August); 70 Little Stints 26 July—5 November (most 6—17 September); 102 Curlew Sandpipers 19 August—15 October (69 in September including 33 at Steart); 60 Ruff (27 at CVL on 18 August); Spotted Redshank (166) 29 July—7 November (high numbers with 29 or 30 CVL and Steart 16/17 September and a total of 61 at various places in October); 156 Greenshank 9 July—1 November (29 in the first month with the majority passing through during August and September); Green Sandpipers (127) from 2 July with 49 in this month and 40 the next; 12 Wood Sandpipers 16 July—15 October included six at CVL on 9 September and Common Sandpipers numbered 51 here on 5 August (a high autumn count). Rarer waders were Avocets at St. George's Wharf (23 September—6 October) and Steart (from August), Kentish Plover at Severn Beach on 11 August and Dotterel at Brean Down on the 27th. It was a good autumn for American waders with two

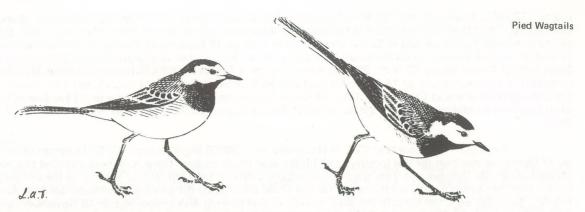


White-rumped Sandpiper

White-rumped Sandpipers at CVL 27/28 October (one remaining to 1 November), Pectoral Sandpiper 20—26 September (one, perhaps two, at Cheddar 18—31 October) and a Buff-breasted Sandpiper on 14/15 October — killed by a Carrion Crow (one at Steart on 28 July was unusually early). Another Nearctic vagrant, a Wilson's Phalarope was at Steart 22—30 August. Disturbed weather conditions brought Grey Phalaropes onto the reservoirs from the last week of September (one at Cheddar and one or two at CVL).

10 Arctic Skuas 6—30 September included three (singles) off Severn Beach and three at CVL on the 16th. Great Skuas in the channel occurred 16—23 August (three) and 10—29 September (nine). Nine Little Gulls passed through (all except one at CVL) 11 August—1 October and a similar number of Kittiwakes (two inland) 6 August—21 October. Passage of Common/Arctic Terns (87 with 33 Common and 30 Arctic being specifically identified) occurred from 16 July to 10 October (38 on 20 August). However too much reliance should not be placed on these totals as conflicting identifications appear to have been made (see *Brit. Birds* 67 (1974): 133—136 on the upperwing pattern of these two species). Black Terns (219) from 29 July to 8 October were mainly in August (at least 150 passed through CVL on the 19th). Other terns concerned 25 Sandwich (a total of 20 here 17—26 September was unusual), 16 Little (six, again at CVL, 30 July) and a White-winged Black 9—17 September (also one showing mixed characteristics of this species and Black 9—11th). Three Razorbills were at Steart on 4 October and two (or Guillemots) at the Yeo Estuary on the 8th.

Movement of Swift was especially noticed on 12 August with very much smaller numbers on 16 September and 8 October. A Great Spotted Woodpecker flew west at Brean Down on 17 August and two Woodlarks were here on 11 October. Other scarce passage birds included eight Ring Ouzels in this month, two Aquatic Warblers (trapped at Steart 31 August and 5 September), two Pied Flycatchers on Steep Holm (20–23 August), Hawfinch at Brean Down on 29 October, Lapland Buntings at Cheddar (13th) and Steart (18th), Snow Bunting at Brean Down (16th) and Corn Bunting at CVL (28th). Late migrants were Swift on 12 November, Tree Pipit on 23 October and Grasshopper Warbler on the 3rd. There was a small movement of Tree Pipits at coastal sites in August (maximum of 15) and Yellow Wagtails (counts of up to 40) but Grey Wagtails (six at Sand Point on the 26th and 12 at CVL on 16 September) appeared scarce. Some more migrants on Steep Holm included Dunnock (very numerous with 80 caught and ringed), eight Whitethroats 23 August—4 September, five Garden Warblers 21 August—4 September, eight Blackcaps 20 August—12 October (low numbers), Chiffchaff (no more than three on any one day), Willow Warbler (maximum of 25 on 25 August and a poor autumn passage for this species also) and up to eight Goldcrest 20 August—23 October (nine days) but at least 30 on 3 September. Visible migration in October included 260 Meadow Pipits over Steep Holm on the 11th, 1500—2200 Chaffinch at three coastal sites (five counts 8—29th), 160 Goldfinch and 800 Linnet (Steep Holm on the 11th). Smaller numbers of other species with up to 20 Swallows east at Brean Down



7–11th (low numbers), 32 Pied/White Wagtails 8–12th, 50 Blackbirds 11–16th (103 caught and ringed on Steep Holm during the autumn), 40 Song Thrush 11–14th, 44 Coal Tits, 19 Brambling, 52 Siskin and 20 Redpoll. Many other species (some have been mentioned earlier) were reported on migration watches and included Bullfinch (see *Brit. Birds* 72 (1979): 249–263 on Bullfinch dispersal and fruit bud damage).

The second winter period

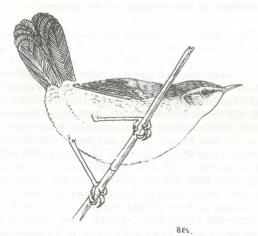
Anticyclonic weather predominated in November (winds mainly from the south-west) and it was exceptionally mild. From the 24th (as the high pressure system moved east to Scandinavia) a cold north-west or north airstream persisted. After a variable start to December low pressure became dominant and it was very wet with south-west gales. A colder north-east airflow then occurred from the 16th but it was milder again from the 24th (south-west winds). The weather turned very cold again on the 29th and with severe snow storms (gale force north-east wind) on the last day of the year heralding very hard weather for the remainder of the winter.

A Great Northern Diver was at Sand Bay on 3 December. Great Crested Grebe at CVL numbered 275 on 26 November (79 at Cheddar on 24 December) and three or four Slavonian Grebe (one on 9 September) were present. Leach's Petrels turned up at Cheddar on 2 December and the 14th (see Autumn migration). 67 Cormorants at CVL on 19 November was the highest count while up to 17 were observed going to roost on Steep Holm (probably birds from Cheddar). Three Shags occurred here on 13 December with singles later at CVL and Clevedon. Herds of Mute Swan included 104 at CVL (September) and 51 on the levels (November). The first Bewick's Swans arrived on 22 October and counts in December included 56-66 (levels and reservoirs). A Whooper Swan was at Cheddar on 16 November (last recorded in Somerset in 1974). White-fronted Geese appeared at several places (up to 38 and most in the last week of the year) and Brent Geese at the Axe Estuary (one) and Steart (10). Shelduck reached 2164 here in November (up to 12 on the reservoirs in December) and Wigeon (first on 12 August) 786 (5000-6000 in January 1979). An American Wigeon was at CVL on 10 December (to 20 January 1979) and some counts of other surface feeding duck here included 185 Gadwall, 2155 Teal, 1600 Mallard (3200 at Steart), 56 Pintail (from 12 August) and 450 Shoveler. Of diving duck present there were small flocks of Pochard (highest 405), the population at Cheddar continuing to decline (compare 792, the average of three highest monthly counts made 1965-69, with 452 over 1974-78) perhaps due to increased disturbance; 460 Tufted Duck at CVL; seven Scaup at the Axe Estuary on 26 November (singles here and at Barrow Gurney later); eight Eider at Cheddar on 3 December (very unusual inland); a Long-tailed Duck at Portbury Wharf on 22 October; up to 33 Goldeneye on the reservoirs (first on 2 September); two Smew in December (Cheddar and CVL); two Red-breasted Merganser at CVL on 18 November; a maximum of 28 Goosander (five over Weston-super-Mare on 31 December) and a total of 324 Ruddy Duck at Blagdon and CVL on the 16th.

A Red Kite was at Clevedon on 31 December. Other birds-of-prey included Hen Harriers (first on 11 August) and well represented in December (three different birds at Berrow, two at Steart and singles on the levels), Merlins (from 26 August) at five places and Peregrines at eight (October—December) with regular sightings at the reservoirs but more especially at Steart. Coot at Cheddar reached 2000 but there was an early decline in numbers (under 750 on 16 December) and a partial albino continued to be seen. Of the waders Ringed Plover numbered 86 at Berrow (5 November) with four counts (separate localities) of 47—64 (December), there were 1000 Golden Plover on Tealham/Tadham Moors, 250 Grey Plover at Steart (five at CVL 10—16 December with three on the 30th) and estimates of up to 10000 Lapwing on the levels (many thousands moved south on the 31st). Dunlin at Steart

reached 10000 in November and 12000 in December (360 at CVL), Snipe 255 (levels and reservoirs), Black-tailed Godwits 66—78 at Durleigh and Steart in October and November (inland records from other reservoirs), Curlew 24 on the levels and Turnstone 120 at Severn Beach (one at CVL on 18 November). Scarcer wintering waders were Avocet at the Axe Estuary on 30 December; five Little Stints; four Curlew Sandpipers (to the 20th); three Purple Sandpipers at Severn Beach; 60 Ruff; 25 Jack Snipe (first on 4 September); four Woodcock (obviously underrecorded); a maximum count of 18 Bar-tailed Godwits; 29 Spotted Redshank (14 at CVL and 10 at Steart in December); Greenshank at CVL on the 10th; 14 Green Sandpipers from mid-November and 11 in December and three Common Sandpipers. A Grey Phalarope was at Barrow Gurney 26—31 December and one was found dead at CVL.

Some gull roost counts at CVL in November were 20000 Black-headed, 10000 Common (438 at Berrow on 17 December was high for this locality) and 1100 Lesser Black-backed. Other gulls here included two individual Mediterranean (26 October and three days in December), Little on the 14th (also at Berrow on the 3rd and Cheddar on the 15th; presumably birds wintering not far from land affected by the weather conditions, see Brit, Birds 71 (1978): 563-582 on Little Gulls in Britain and Ireland) and Herring with yellow legs on 18 November (another at Barrow Gurney on the 25th; see Brit. Birds 71 (1978): 338-345 on 'Variations in Herring Gulls at a Midland roost'). 100 Kittiwakes were off Aust on 15 November (strong to gale force south-west wind) and five in December included one at CVL. A Guillemot (freshly dead) was found at Portishead on the 17th, Short-eared Owls (first on 10 August) were much in evidence October-December (nine sites in all three months and up to five at Steart). The possibility of Long-eared Owls occurring more frequently should also be considered by observers (see Brit, Birds 69 (1976): 281-287 on field identification of these two species). A Woodlark was at Berrow on 12 November, hard weather movements of Skylark in the last week of December included 1000 at CVL (south in one hour on the 31st) and a Shore Lark at Berrow on 7 November was joined by another on 30 December (a fairly rare visitor on the west coast). Rock Pipits in October included one or two at Barrow Gurney and Cheddar and 25 at St. George's Wharf while Water Pipits were also here and at CVL (six or seven). Black Redstarts (from 12 October) numbered six or seven in all of the three months. Apart from 1000 Fieldfare at the Yeo Estuary, Redwing appeared to be more numerous (two roost estimates of 1500 while 1420 moved south in 2½ hours at Berrow on 31 December) and Song Thrush



Cetti's Warbler

were conspicuous near Brean Down the previous day. Wintering warblers found were two Cetti's 1 October – 28 November, 23 Blackcaps mainly in December (see pages 63-66) and six Chiffchaffs. Firecrests (from 21 September) were unusually numerous with six in October and four in November. There was a small irruption of Bearded Tits (up to 11 including some ringed birds; three retrapped were found to have been ringed at Radipole Lake, Dorset (two) and Tichfield Haven, Hampshire). The expansion of the Bearded Tit as a British breeding bird (see *Brit. Birds* 69 (1976): 473–489) continued with the first breeding record for the area in 1979. Away from the more usual places a Willow Tit was at CVL (2 September and into November). A Great Grey Shrike wintered on Wet Moor (from 12 November). Carrion Crow gatherings included 150 at Berrow and 200 on Nailsea Moor while one at CVL was seen to catch and kill a Pied Wagtail (see *Somerset Birds* 1978: 76–81 on a recent study). Brambling were scarce, Siskin also (no count exceeded 15), Twite (from 4 October) included 30–40 at Clevedon and Portishead (similar numbers have only been reported since 1977 but indicate a marked change in wintering areas) and Redpoll did not go beyond 10. A Lapland Bunting was at the Axe Estuary on 18 November, a Snow Bunting at Berrow 18–20 December, only two Cirl Buntings were noted and there were one or two Corn Buntings at Berrow.

BIRDS ON BREAN DOWN, 1967 to 1978

by Ken Hall, Robin Prytherch and Brian Rabbitts

Plates 7-12

Introduction

Since the first issue of the Bristol Ornithological Club's monthly newsletter *Bird News*, in January 1967, a vast amount of information has been published over the twelve years to the end of 1978. We decided to extract the information for one well observed location, Brean Down, in order to give an account of the birds which have occurred there. To these records we have added others published in *Somerset Birds*, the annual reports, for 1967 to 1978, of the Somerset Ornithological Society, and many of our own unpublished observations. Defining the area to be covered has proved difficult, since many sightings, particularly of wading birds, have been vaguely recorded, being noted simply as 'Brean', when the birds could have been on the Down, the adjacent fields or sands, or even on the Axe Estuary. We decided to restrict ourselves, for the purpose of this paper, to birds seen on the Down itself, migrating over or passing off-shore; the area is shown in fig. 1. Vague records, unless they could be resolved, have usually been omitted. Some older records have been incorporated in this introduction, but there has been no systematic search of the literature. Useful background information appears in Palmer and Ballance (1968), and W.E. Jones (1966) gives an interesting account of his observations at Lavernock Point on the Welsh shore opposite. As far as can be ascertained the Down has not been properly surveyed for breeding birds and this would be a valuable exercise as the numbers and exact distribution of commoner species are still very imperfectly known.

From its position the Down makes an ideal spot for studying sea-bird movements in the upper Bristol Channel, and for making observations of migrant landbirds, particularly in autumn when it is used as a guiding point for many species. Both of these aspects have been partially covered in previous issues of this journal (*Bristol Orn.* 4(1971):143–171; 5(1972):191–200).

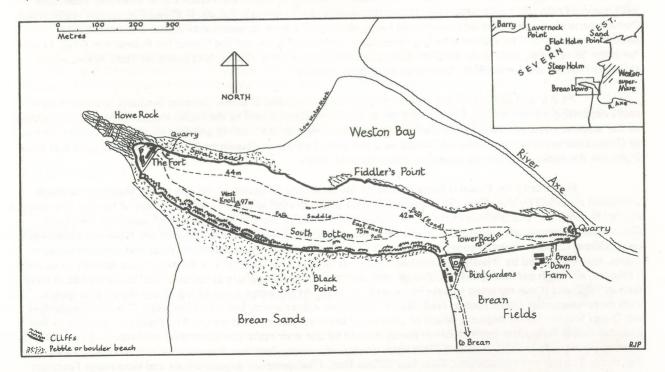


Fig. 1. Map of Brean Down with (inset) its position relative to the other features at the mouth of the River Severn.

To put the observations into context, it is worth outlining the structure, vegetation and land use in a little detail, particularly as reports on previous studies are scattered through the literature. Useful supplementary sources are 'On and Around Brean Down' (Somerset Trust for Nature Conservation) and 'Archaeology in the National Trust: Brean Down, Somerset' (National Trust), with background information and additional references to be found in MacInnes and Whittard (1955), Hall (1971), Coysh et al (1962) and Atthill (1976).

Brean Down occupies a dominating position on the eastern shores of the Bristol Channel, being almost an island and forming the most westerly point on this stretch of coast north of the Parrett estuary. To the south lie the mudflats of Bridgwater Bay, backed by sand dunes, while inland the alluvial plain of the north Somerset levels stretches nearly as far as Glastonbury, the most prominent interruption being Brent Knoll, ten kilometres south-south-east. At low tide the mud flats are exposed for practically the whole kilometre and a half that Brean Down extends beyond the high-tide line. To the north-east lie the parallel peninsulars of Worlebury Hill and Middle Hope, enclosing the mudflats of Weston and Sand Bays, and again backed by alluvial plain. Neither point however, reaches as far west as even the most easterly point of Brean Down. Immediately north of the Down, the channel of the River Axe forms a natural moat and the river mouth separates the Down from the rest of the Mendips, of which it is really an outlier, like the island of Steep Holm, which with its sister island Flat Holm, lies in the centre of the Channel to the west. The Down is only joined to the mainland by a strip of land three-quarters of a kilometre wide at its south-eastern corner, and was in fact a true island until the nearby Bleadon Level was drained.

Geologically speaking, the peninsular is relatively simple, being composed of highly inclined beds of carboniferous limestone which dip to the north, giving rise to a precipitous scarp face on the south and more gentle slopes to Weston Bay. The ridge is of fairly even height, the highest point of the west knoll (97m) being separated from the slightly lower east knoll by a distinct saddle. The only cliffs of any size occur along the south side, being particularly well marked near the east knoll and above Brean Down Farm, and also occur in the quarries at the eastern and western ends of the Down. The cliffs provide breeding habitat for Stock Doves*, Kestrels and Jackdaws, and, in the past, have done so for Peregrines and Ravens. A pair of the latter bred for many years at various sites, most recently at the eastern end until 1973. Peregrines appear to have raised young in most years from at least 1911, ceasing to breed regularly in 1947. A couple of possible breeding attempts were recorded in 1950 and 1954, and with numbers now increasing nationally, they could well return in the near future, if allowed to remain undisturbed. Perhaps surprisingly there are no breeding sea-birds, although Fulmars do sometimes appear around the cliffs, possibly prospecting. The nearest breeding colonies are in North Devon and the Gower for Fulmar and Shag, Lundy for Manx Shearwater, and Pembrokeshire for Gannet and Storm Petrel. Cormorants breed on Steep Holm, where there are Herring and Lesser Black-backed Gulls in large numbers.

At the foot of most of the Down there are rock exposures of either jumbled boulders or smooth bare rocks depending on how the sea has cut into the strata. From Sprat Beach to the Howe Rocks fairly substantial areas of flat seaweed-covered rocks are exposed at low tide, forming favoured resting and feeding areas for small numbers of Oystercatchers plus the occasional Turnstone and Purple Sandpiper. Elsewhere Shelduck, Mallard, gulls and Rock Pipits use the rocks, but they are generally rather poor for birds.

Botanically the Down is fairly typical of the limestone grassland of the rest of the Mendips, although somewhat modified by the effect of the prevailing west or south-west wind, and the proximity of the sea. The average rainfall is about 35" but because of the porous nature of the rocks, there is no natural fresh water on the Down. Short, rabbit-cropped grass with Wild Thyme Thymus drucei, Field Scabious Knautia arvensis, Harebells Campanula rotundiflora, Cowslips Primula veris, and Carline Thistle Carlina vulgaris, occurs on the ridge and exposed western slopes, and is favoured by Wheatears, Meadow Pipits and Skylarks for feeding. The Wheatear now appears to be only a migrant, although previously it bred, though whether it ever did so regularly is not clear. Certainly two pairs were seen in 1922 and it was reported to have 'done well' in 1925. At the eastern end of the Down the grass is longer, with more substantial plants such as Herb Robert Geranium robertianum, Common Storksbill Erodium cicutarium, and Dwarf Mallow Malvia neglecta. Much of the rest of the area is dominated by Bracken Pteridium aquilinum and Bramble Rubus fruticosus, both of which plants have to be burnt or otherwise controlled on a regular basis. Other plants growing here include St John's Wort Hypericum perforatum, Common Ragwort Senecio jacobaea, Hemp Agrimony Eupatorium cannabinum, Rose-bay Willow Herb Chamaenerion angustifolium and Wood-sage Teucrium

^{*} Latin names of birds are given in the systematic list.

scorodonia, which is particularly common over most of the area. Trees, not unexpectedly, are few and are restricted to a few Sycamores Acer pseudoplatanus, Tamarisk Tamarix gallica, Yews Taxus baccata and Elms Ulmus procera (most now dead from Dutch Elm Disease), all near Brean Down Farm. Bushes are more widespread, being scattered along most of the northern slopes, and most concentrated in the hollow north-west of the saddle and on the southern side east of the hillfort area. Hawthorn Crataegus monogyna is the commonest species, with some Elder Sambucus nigra and Privet Ligustrum vulgare. Being undergrown with bramble, they form the best nesting sites for most breeding passerines, and shelter for migrants. Ornithologically less significant but worth mentioning in passing are the Red Valerian Centranthus ruber and Rock Samphire Crithmum maritimum growing on the bare rocks and the rare White Rock Rose Helianthemum apenninum abundant here on the southern slopes but found otherwise in only two other British localities.

Inevitably Man has left his mark on the landscape. There are remains of prehistoric field systems and round barrows on both knolls, there is an L-shaped camp on the ridge just west of where the road reaches the top, and the east knoll was the site of a Roman temple. Rather more conspicuous are the various military installations, most notably the fort at the western end and the nearby nissen-hut bases in the quarry, which are favoured by Rock Pipits and the occasional Black Redstart. Other World War 2 emplacements are scattered along the northern slopes, and the tarred road is of 19th century military origin. Little trace now remains of previous extensive cultivation, or, apart from the Rabbits *Oryctolagus cuniculus*, of the area's use as a warren. The burrows at one time provided nesting sites for Shelduck which, although they no longer breed owing to increased disturbance, are numerous on the nearby mudflats.

Conservation has a relatively long history on the Down, with the area being controlled by the RSPB from 1911. During the period of their lease, until relinquished in 1952, the site was guarded by a series of 'Watchers', most notable of whom was a Mr Harry Cox who actually lived in a hut on the Down. The primary interest was in protection of the breeding Peregrines, Ravens and Shelduck, though notes were kept of other species observed. Among these are interesting records of a Puffin seen in January 1922, Grasshopper Warbler first recorded as breeding in 1933, a Great Spotted Woodpecker observed on 2 August 1937 and a Little Owl on 14 July 1928. The Down was requisitioned by the War Office in 1940, probably no bad thing for the birds, and remained in their hands until the early fifties. In 1954 the Down was given by Axbridge Rural District Council to the National Trust who now manage it in conjunction with Sedgemoor District Council and the Somerset Trust for Nature Conservation. Cattle have been introduced recently to help control the Bracken and new fences and steps have been constructed as part of a management programme.

Current problems involve erosion and disturbance by the large numbers of people using the Down for recreation, and the encroachment of Bracken and Brambles. A bigger threat looms in the form of a possible Severn Barrage from Brean to Lavernock Point, via Steep Holm, with a nearby pumped storage reservoir extending into Bridgwater Bay. This, or any of the barrage schemes, would radically affect the area, though a cautionary note can be struck by the fate of the 19th century harbour. The foundation stone was swept away the day after it was laid in 1864, and the rest of the laboriously built pier in 1872. Today, no trace of it remains.

The Systematic List

This list follows the sequence and scientific nomenclature of Professor Dr K.H. Voous (1977, *List of Recent Holarctic Bird Species*). Observers have been named where the species has only been noticed once. We are indebted to many others for their records over the years.

RED-THROATED DIVER Gavia stellata. Two flew north on 15 May 1971 (B. Rabbitts).

GREAT NORTHERN DIVER *Gavia immer.* One between Black Rock and the Down on 28 January 1978 gradually drifted out to sea (R. Angles).

DIVER sp. Gavia sp. One off-shore on 18 May 1971 and five which flew down channel on 29 April 1975 were probably Red-throated. Other divers have been seen on 12 January (two) and 2 April 1972 and 23 April 1977.

GREAT CRESTED GREBE *Podiceps cristatus.* One was off-shore on 2 June 1971, two on 10/11 April and three on 7 May 1976 and two on 10 May 1978.

FULMAR Fulmarus glacialis. Small numbers (up to nine together in strong winds) are seen from the last week of March or first week of April through to June with records decreasing in July to mid-September. One was present on 14 January 1976. Although possible prospecting birds have been seen around the Down and Steep Holm numbers are so small that the possibility of breeding in the near future seems remote.

SOOTY SHEARWATER *Puffinus griseus*. One with Manx Shearwaters on 19 June 1971, the second record for Somerset (R. Angles).

MANX SHEARWATER *Puffinus puffinus*. Observations have been made on an average of only six days per year. Generally movements are complicated (flock sizes of 10–30 usually but occasionally over 100) with parties flying in various directions. Largest numbers (most 1015 on 19 June 1972) in unsettled weather and usually windy. Up to 300 have occurred in anticyclonic conditions with east or north-east winds. The June/July peak is probably associated with wandering non-breeding birds.

Manx Shearwater Birds - - 2 47 876 3742 1918 409 23 - - - - J F M A M J J A S O N D

STORM PETREL *Hydrobates pelagicus*. Six on 29 September 1968, two or three on 24 April 1971, two on 27 May 1972 (Angles 1973), with single birds on 3 July and 8 September 1974. All during strong west winds.

GANNET Sula bassana. Most have been seen in July including 100 on the 25th (1971) when there was an area of low pressure to the south-west, although the wind was only light to moderate. Usually one to five but larger groups are not infrequent.

Gannet Birds - - 1 7 45 52 294 148 28 1 2 - J F M A M J J A S O N D

CORMORANT *Phalacrocorax carbo*. Regularly observed on various flight-lines to and from Steep Holm where they breed and roost. Usually singles but with seven counts totalling 20 or over (once 30) in any one day (up to 17 together). Groups which spend the day inland on Cheddar Reservoir, Somerset are occasionally seen when they return to roost. One flying over the Down with a large stick on 22 March 1975 is the only observation of nesting material being carried to the breeding sites on the island.

SHAG *Phalacrocorax aristotelis*. Single birds on 24/25 September 1967, 25 September 1971, 29 July and 6—8 September 1974 with two on 16 February 1972 and 24 October 1975 and three on 10 September 1974. Most have been immatures during periods of unsettled weather. (These records however have been totally eclipsed by a flock of 21 on 17 August 1979.)

EGRET sp. Egretta sp. One flying across channel on 17 May 1972 was no doubt a Little Egret Egretta garzetta but the diagnostic colour of bill and legs could not be seen (B. Rabbitts).

GREY HERON *Ardea cinerea.* There have been records of birds apparently on passage in every month from March to October with most in June (12) and July (13). Not seen to land on the Down. Generally singles or two but three flew south on 27 June 1970, four flew up channel on 20 June 1972 and six arrived from the north-west on 20 July 1975.

MUTE SWAN Cygnus olor. An immature flew north on 4 May and four (three immatures) came in from the west on 16 June, 1974. Four were also noted on 21 September 1971.

BEWICK'S SWAN Cygnus columbianus. 21 flew south-west on 21 November and eight (one immature) went north a long way out on 24 December, 1971. Six swans off-shore on 29 February 1972 were also probably this species.

WHITE-FRONTED GOOSE *Anser albifrons*. A skein of eight was over the Down on 5 January 1969 and a goose off-shore on 18 February 1973 was considered to be a White-front. Larger numbers are occasionally reported from the Axe Estuary or nearby, wandering birds from winter haunts around the Severn Estuary.

CANADA GOOSE Branta canadensis. Five flew down channel on 11 April 1975 (B. Rabbitts).

BRENT GOOSE *Branta bernicla*. Three of the dark-bellied race *B.b. bernicla* were seen on 31 January 1970 and one (race not determined) on 7 December 1978.

SHELDUCK *Tadorna tadorna*. Small numbers are to be seen crossing to or from Steep Holm mainly from April to mid-June. A group (generally up to 20) is usually on the slopes of the Down in the spring. Larger numbers are sometimes off-shore or at the Axe Estuary.

WIGEON Anas penelope. Apart from four on 18 September 1972 which flew south all other records have been offshore (exceptionally 130).

GADWALL *Anas strepera.* Six flew north on 27 August 1970. One on 13 November 1967, three on 16 January 1971 and two on 17 March 1972 were off the north side. A flock of 12 on 31 January 1972 was being taken down channel on the ebb tide.

TEAL Anas crecca. Up to 60 winter near Brean Down Farm and if disturbed may occur off the south side.

MALLARD Anas platyrhynchos. Counts of 200 or more have been made off the north side or roosting on the rocks. One or two pairs are present on the Down in spring.

PINTAIL Anas acuta. Three on 9 February 1972 and seven on the 16th flew south.

SHOVELER Anas clypeata. Another duck which is only rarely observed with three records including eight on 12 August 1970.

TUFTED DUCK Aythya fuligula. Four in flight on 1 November 1970 and three on 7 March 1971.

SCAUP Aythya marila. A female was seen on 15 April 1970, eight (four males) on 17 November 1971 (from the 14th at the Axe Estuary), seven (two males) flew north on 20 March 1974 and an immature male flew towards the Axe Estuary on 7 December 1978. Earlier this century this species occurred in much larger numbers off the Down.

EIDER Somateria mollissima. One on 17 November 1968 and two on 17 November 1971. Regularly observed in 1972 (from 16 February) with up to 13 (four immature males) and 1973 (five on 18 March, 11 (three males) 29 April to 5 May and one or two to 8 July). Up to three in May 1974 and 1976 and five (one male) in 1977. One on 16 October 1977.

COMMON SCOTER *Melanitta nigra*. The peak in April includes flocks of 35 and 60. Four groups of 20—35 have been seen in February or March.

Common Scoter Birds 2 91 68 201 45 13 46 14 12 26 27 2

VELVET SCOTER Melanitta fusca. One flew north on 17 December 1977 (G.J. Upton).

RED-BREASTED MERGANSER Mergus serrator. Two were seen on 17 May 1971 (B. Rabbitts).

GOOSANDER Mergus merganser. A male and female flew south on 4 March 1972 (B. Rabbitts).

HONEY BUZZARD Pernis apivorus. One flew south-east, mid-morning on 23 October 1977 (T.B. Silcocks).

RED KITE Milvus milvus. One flew from the Down to Uphill on 4 November 1976 (H.R.H. Lance).

MARSH HARRIER *Circus aeruginosus*. A female or immature flew in from the west on 15 May 1971. (Another, flying east over the Axe Estuary on 9 May 1976, was observed from the Down.)

HEN HARRIER *Circus cyaneus*. A ringtail on 17 December 1977 and another on 22 April to 1 May 1978, the latter seen hunting over several areas of the Down. Surprisingly not more recorded in view of regular reports from nearby Berrow and Steart. Occasionally also seen at the Axe Estuary.

SPARROWHAWK Accipiter nisus. Many records probably refer to migrants as they bunch neatly in spring (February to May) and autumn (August to November) with most (nearly half) in April and September. All singles except for two in October 1973 and two or three on 30 April 1977. Movement noted: a male flew west from the fort on 20 April 1969 and others similarly on 27 April 1973, 30 April 1977 and 1 November 1978. Singles flew east (from the channel) on 5 May, 18 and 27 September 1971 and 23 May 1972.

BUZZARD *Buteo buteo.* Noted on seven dates, mostly in September or October, with others in February and April; all singles and probably migrants. Movement noted: one west on 16 October 1974 and one east on 26 April 1975. (Two over the Axe Estuary on 3 September 1968.)

Buzzard Birds — 1 — 1 — — — 1 4 — — J F M A M J J A S O N D

OSPREY Pandion haliaetus. One high over the Axe Estuary on 1 September 1969 came from the west (presumably over the Down) and continued east over Uphill.

KESTREL Falco tinnunculus. One or a pair noted on many dates, with four on 9 October 1973 and up to six in October 1972. Breeding suspected on south cliffs in several years and a family party at Brean Down Farm in July 1976. Movement noted at the fort: 'west' on 18 April and 26 August 1971, 18th and 23 May and 11 June 1972; 'east' on 4 August and 3 September 1972 (three individuals), 7 May and 27 September 1976. The high numbers in October and some of these movements concern migrants, but the May and June birds may be wandering non-breeders.

RED-FOOTED FALCON Falco vespertinus. A male on 8 June 1969, the second record for Somerset (G.L. Webber).

MERLIN *Falco columbarius.* Noted in all years except 1977, usually singles, but two on two dates in 1972. Of 27 sightings, the 16 in October, four in November, two in September and one in August undoubtedly refer to migrants; birds flew west from the fort on 18 October 1973 and 12 October 1974. The other four records (January to March) were no doubt wintering birds. No spring movement noted.

Merlin Sightings 1 2 1 - - - 1 2 16 4 - J F M A M J J A S O N D

HOBBY Falco subbuteo. One on 22 September 1968 (A.D. Lucas et al).

PEREGRINE *Falco peregrinus.* Not recorded until 1970 (in the period being reviewed) but thereafter the number of reports increasing: one (throughout December) in 1970, two sightings in 1971, at least seven in 1972, six in 1973, five in 1974 and 1977, only two in 1975 but seven sightings again in 1976 and 1978. Mostly singles but two on two dates in 1978. Records mainly spread from October to April (single observations for May, August and September) with peaks in October and March/April which may indicate a few migrants.

Peregrine Sightings 3 3 11 10 1 - - 1 1 9 5 6

RED-LEGGED PARTRIDGE Alectoris rufa. Many records of between one and three birds with sightings being more regular from September 1976. The records of two together (pairs) are restricted almost entirely to April and May, and single birds (the other 'on'?) from April to June, whereas threes are seen mainly in the autumn and winter thus providing some meagre evidence for breeding.

PHEASANT *Phasianus colchicus*. A small resident population. Females with young noted in 1971, 1972 and 1974. Buff coloured birds noted from 1975.

WATER RAIL Rallus aquaticus. Two records: one freshly killed on 6 October 1968 and one on 15 January 1972.

CORNCRAKE Crex crex. 'At least one' on 20 April 1968 (E.E. Green).

WADERS. Many record slips for waders have not discriminated between the Down, the fields or sands or, indeed the Axe Estuary. If positive reference was made to indicate that the record concerned the Down then it is included separately below in the list. Otherwise, and for the sake of completeness, the species which are often or commonly seen, mostly in migrant or wintering flocks, in the habitats mentioned are: Oystercatcher, Ringed Plover, Golden Plover, Lapwing, Knot, Sanderling, Dunlin, Ruff, Black-tailed Godwit, Bar-tailed Godwit, Whimbrel, Curlew, Redshank, Greenshank, Common Sandpiper and Turnstone.

OYSTERCATCHER *Haematopus ostralegus*. Small flocks, up to 10 occasionally 20, settle on the rocks to feed. 14 seen well out in the channel flying south on 17 August 1971.

RINGED PLOVER *Charadrius hiaticula*. One heard on 17 May and one seen flying over on 24 August 1972, several heard on 24 April 1973 and five seen high up (with two Turnstone) on 25 May 1977. Birds also heard on 22 May 1977 and 17 May 1978.



Plate 5. Two species reported in A review of 1978. Barn Owls Tyto alba (upper) were seen at five locations in the summer. Great Northern Diver Gavia immer (lower) is a regular but unusual winter visitor to our area(photos: Robin Williams).

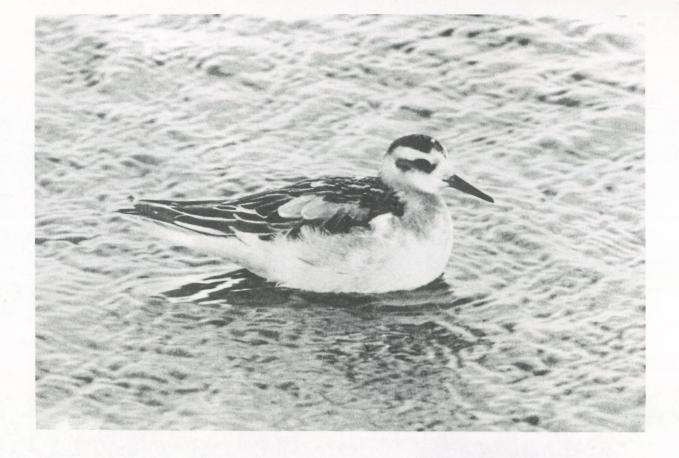


Plate 6. Two of the Grey Phalaropes *Phalaropus fulicarius* reported in *A review of 1978.* Above, a juvenile moulting into first winter plumage was at Cheddar Res. 29 September to 1 October *(photo: N. A. Tucker).* Below, an adult in winter plumage was at Barrow Gurney Res. (no. 3) 26-31 December *(photo: Robin Prytherch).*

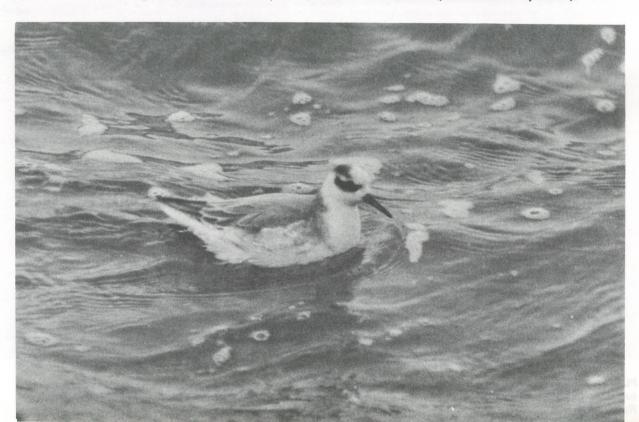
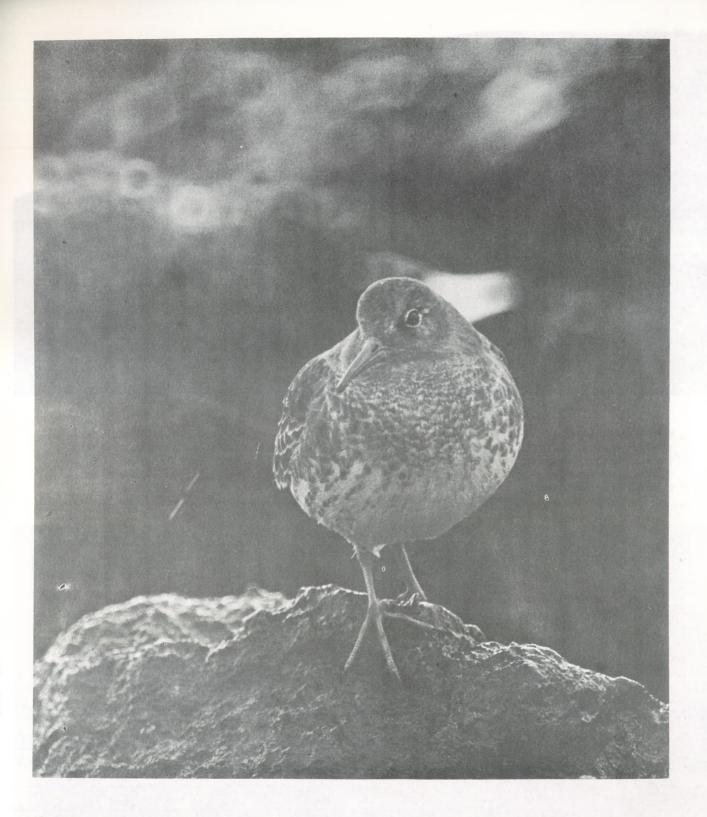




Plate 7. Aerial view of Brean Down taken at high tide from over the River Axe, looking NNW (Steep Holm, Flat Holm and the Welsh coast just visible beyond). The road which traverses the south slope then along the north side, and the pathway along the high ridge, can be seen clearly. The extensive cover on the south slope and the quarry (in deep shadow) at the east end can also be seen well. Ravens *Corvus corax* bred regularly at this quarry until 1973. See pages 49-62 (photo: West Air Photography, Weston-super-Mare).







Plates 8 and 9. Characteristic birds of Brean Down. Opposite: upper, silhouette of a Raven *Corvus corax* showing diagnostic tail shape and lower, Kestrel *Falco tinnunculus*, a resident which breeds on the south facing cliffs. Above: Purple Sandpiper *Calidris maritima*, which winters in very small numbers on the surrounding rocky shores. Others are seen during spring and autumn *(photos: Robin Williams)*.

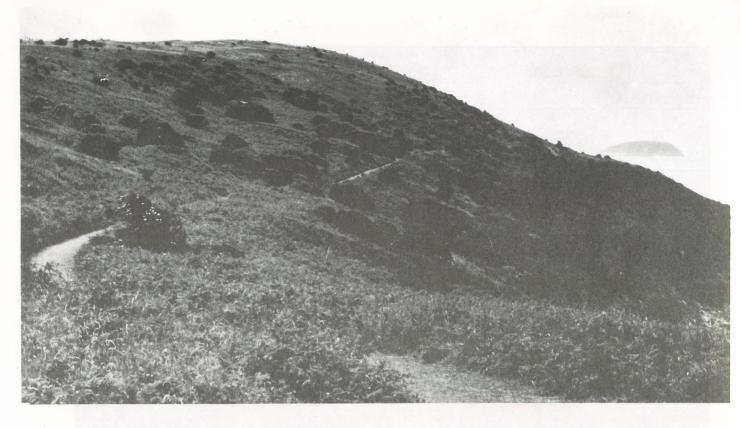
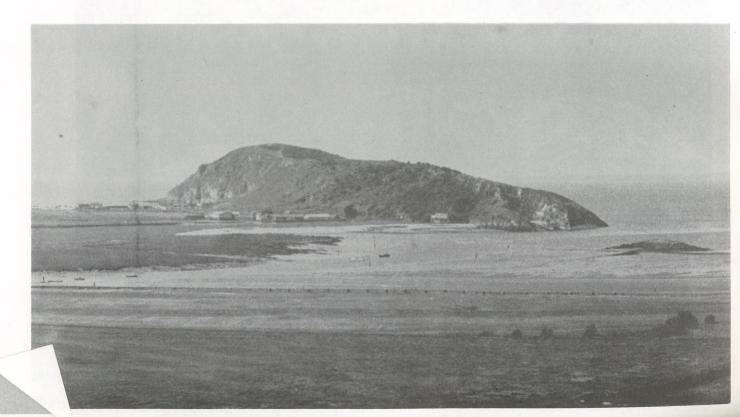


Plate 10. Above, the extensive area of cover below the saddle on the north side of Brean Down (mostly Hawthorn and Elder undergrown with Bramble, the rest well covered by Bracken). Below, the east end of the Down as seen from Uphill Church showing the cover above the farm buildings. Both of these areas of cover are favoured by migrant passerines but much of it is so thick that many birds must go unnoticed, particularly in windy weather (photos: Robin Prytherch).



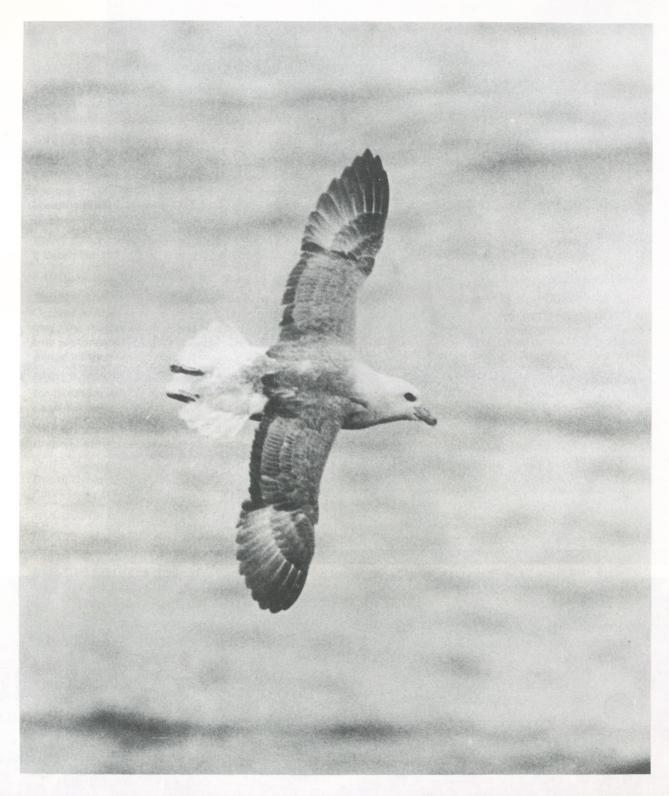


Plate 11. Fulmar *Fulmaris glacialis* are seen regularly during April to June, some half-heartedly prospecting the cliffs. However, breeding is likely to occur later, rather than sooner *(photo: Robin Williams)*.

Plate 12 (over). Two resident species on Brean Down: Stonechat Saxicola torquata, female, above (photo: Brian Thomas) and Skylark Alauda arvensis, below (photo: Robin Williams). Three to four pairs of Stonechats and about 12 pairs of Skylarks breed regularly. Skylarks are also common autumn migrants.





DOTTEREL Charadrius morinellus. One on 10 September 1974 (B. Rabbitts).

GOLDEN PLOVER *Pluvialis apricaria*. Two huge flocks (several 1000 each) together with two smaller ones moving north at dusk on 1 February 1967 is the only mass movement noted: the weather was very mild at this time and they were possibly roost flights. Many large wintering flocks frequent the fields.

GREY PLOVER *Pluvialis squatarola*. One flying up channel on 5 May 1971 and five other singles noted in October and November.

LAPWING *Vanellus vanellus*. Movement includes singles well out or across channel on two dates in April and June and one in July; *c.* 30 well out flew north on 15 July 1970 and *c.* 300 moved south on 31 January 1972. Small post-breeding flocks have been seen over the Down in June and July. Lapwings are present all year on the adjacent fields and/or the Axe Estuary.

KNOT *Calidris canutus.* 11 came in from the west on 3 September and *c.* 20 (in two groups) were over the Down on 5 December 1972. (*c.* 100 probably this species flew down channel on 18 February 1973.)

SANDERLING Calidris alba. Five, flying up channel on 18 May 1972 and another five similarly on 22 May 1977.

PURPLE SANDPIPER *Calidris maritima*. Records of birds present, usually seen near the fort, in August and from October to May. Most are of one to three birds, rarely four. Exceptional records of six and eight birds were both in May. The August sightings and numbers in April and May suggest migration through the area; the other birds being true wintering individuals. However, because of inaccessible rocky beaches where birds could be feeding, this analysis should be treated with caution.

DUNLIN *Calidris alpina*. Between one and 20 seen from the fort or flying over the Down, mainly in April and May, the rest from July to November. c. 143 (in several flocks, the largest being c. 50) flying up channel on 17 April 1971. Large flock of c. 2000 seen flying from Brean sands to Weston Bay on 26 December 1971 as the tide rose.

RUFF *Philomachus pugnax*. One, with two Lapwings, over the Down on 21 September 1976. Up to six (usually one to three) sometimes occur at or near the Axe Estuary.

SNIPE Gallinago gallinago. Three on 24 September 1967 and one or two in February 1968; singles high over the Down, flying north on 24 August and west on 27 September 1972; two over the Down on 14 October 1974 and one flushed near the west knoll on 21 October 1977.

WOODCOCK Scolopax rusticola. Single flushed on 10 November 1975 (B. Rabbitts).

BLACK-TAILED GODWIT *Limosa limosa*. Singles flying south on 26 July (with two Turnstone) and 6 August 1971; three south on 29 September 1972. Autumn flocks (occasionally over 100) sometimes occur nearby.

BAR-TAILED GODWIT *Limosa lapponica*. Nine, three in summer plumage, flew north on 17 May 1978. Four, probably this species, also flew north on 30 April 1978. Surprisingly not more records of migrants especially in the spring. Small numbers may occur on the Axe Estuary or adjacent sands.

WHIMBREL *Numenius phaeopus.* Records from April to October, mainly in April/May with a smaller peak in July/August (only one record for June and five in all for September and October). Generally one to 12 but larger numbers in May: late-afternoon or evening flights north of 53 on the 14th and 50 on the 15th in 1972; 30 on the 11th and *c.* 74 on the 12th in 1973 and 15 on the 7th, 69 on the 8th, 20 on the 9th, *c.* 450 (largest group *c.* 175) on the 10th and 46 on the 11th in 1978. These were perhaps heading for a roost site at Collister Pill, Gwent.

CURLEW *Numenius arquata.* Singles, occasionally two or three, noted in flight over the channel off the fort; 15 on 3 September 1971 much less usual although flocks from this size up to 200 occur on the surrounding estuarine and field areas and some of these at times roost on the south shingle bar (Black Point).

REDSHANK *Tringa totanus*. Singles or small flocks fly around or over the Down and they sometimes roost at Black Point. 20 passed off-shore from the fort on 16 October 1974.

GREENSHANK Tringa nebularia. Singles (usually heard only) on three dates each in August and September.

COMMON SANDPIPER Actitis hypoleucos. Noted in April/May and July/August; mostly singles with two records of two (April and July) and two of four (April).

TURNSTONE Arenaria interpres. Usually one to six, mid-winter through to autumn (not noted in October and November); singles flying up channel on 3 June 1971 and 4 May 1974 and six (two of which accompanying a Blacktailed Godwit) down channel on 26 July 1971. 11 noted in February 1972.

POMARINE SKUA Stercorarius pomarinus. Three flew up channel on 24 May 1973 and one on 7 May 1978. Seven unidentified skuas either this species or the next have been seen.

ARCTIC SKUA Stercorarius parasiticus. Movement in April and May is northerly suggesting an over-land spring passage route through the Severn Estuary. Most (39) have been dark phase with 16 light and 16 not determined.

Arctic Skua Birds — — 2 19 29 9 6 4 1 1 — — J F M A M J J A S O N D

LONG-TAILED SKUA *Stercorarius longicaudus*. An immature was watched for some 40 minutes off-shore on 27 September 1971 (B. Rabbitts).

GREAT SKUA Stercorarius skua. There have been 49, with up to four together; an additional one found long dead on 17 May 1972 had been ringed as a pullus at Foula, Shetland on 8 July 1969. A. Landsborough Thomson (1966) analysed recoveries of Great Skuas ringed in Shetland. The majority off the Down have been moving north including a total of nine on 16 August 1970 in a gale force west wind.

LITTLE GULL *Larus minutus.* Five records (11 birds). One near adult on 19 March 1972, an immature on 7 March 1973, three on 4 May 1974, 29 April 1976 and 7 May 1978. The last three sightings concern two adults and an immature moving north.

BLACK-HEADED GULL *Larus ridibundus*. With large numbers at the Axe Estuary Black-headed Gulls are regularly recorded, especially from the end of April to October. Several hundreds are occasionally seen from the fort, feeding or perhaps engaged on local movements dependent on tidal conditions. During 1970 and 1971 some early movement was noticed in the first week of June.

COMMON GULL *Larus canus*. Very small numbers are occasionally seen (more often at the Axe Estuary) but there is a distinct passage from March to the first week of May, usually up to 10 in a watch (once 72) with most passing up channel. *c.* 35 on 7 December 1978 was unusual. Observations on Common Gull movements in the spring are summarised and discussed by Vernon (1969).

LESSER BLACK-BACKED GULL *Larus fuscus*. Movement to and from Steep Holm but few counts have been made (240 pairs bred on the island in 1977). Only three have been identified as the Scandinavian race *L.f. fuscus*. A very small number have been seen with white wing-patches including one with a patch in one wing only.

HERRING GULL Larus argentatus. Abundant, especially early in the year through to summer with flights to and from Steep Holm (some 6300 pairs bred in 1976 but only 4500 in the following year). A pair sometimes attempts to breed on the Down. Large numbers (once several thousand) are rarely reported sitting around on the water. Aggressive individuals have been seen attempting to catch Starlings. Eight with white wing-patches may have been in moult rather than showing aberrant plumage.

GLAUCOUS GULL Larus hyperboreus. A first-spring bird was seen on 1 May 1976 (S.B. Edwards, B. Rabbitts). All-white gulls have been seen on 2 April and 8 May 1975, 25 May 1976 and 12 May 1978. The last was an albinistic Herring Gull but the second bird was identified as an Iceland Gull L. glaucoides. After reviewing notes following a recent identification paper (Hume 1975) it seems safer to relegate this record to only a possible Iceland Gull.

GREAT BLACK-BACKED GULL *Larus marinus*. Up to nine have been seen. 20 pairs bred on Steep Holm in 1977 but the population has been decreasing recently.

KITTIWAKE *Rissa tridactyla.* Regularly seen in good numbers in spring. The status of the Kittiwake off the Somerset coast has been published recently (Rabbitts 1972) and there has been no change in the following years.

Kittiwake 8 35 58 Birds 27 1142 596 1181 95 15 D F M A M .1 S

SANDWICH TERN Sterna sandvicensis. Of the 62 that have occurred 25 have been in June and July and are probably non-breeding birds. Records in all but two of the years under review.

Sandwich Tern Birds - - - 13 10 10 15 8 6 - - - - J F M A M J J A S O N D

COMMON TERN Sterna hirundo and

ARCTIC TERN Sterna paradisaea. Only a small percentage have been specifically identified. Almost without exception spring passage is north or east suggesting a movement overland. Highest counts: 236 on 2 May and 200 on 5 May 1971, 290 on 29 April 1973 and 600 on 27 April 1974. The June total includes 130 on 4/5th (1970).

LITTLE TERN Sterna albifrons. One flew north on 2 June 1971 (B. Rabbitts).

BLACK TERN *Chlidonias niger.* Spring passage migrant with 168 being almost equally divided in May (80) and June (75). Counts include 22 on 4 June and 46 the next day, 42 on 6 May 1971 and 20 on 5 May 1973; usually associated with passage of Common or Arctic Terns. Occasional singles have been seen in the autumn.

GUILLEMOT Uria aalge. Of the eight identified four have been in May.

RAZORBILL Alca torda. Occasionally seen on the water. At least 90 of this species or the preceding one have been seen (up to six together) with 41 in 1972. Of the number specifically identified this would indicate a higher proportion of Razorbills.

Razorbill Birds — — — 23 13 4 3 — — 4 — 1
Razorbill/Guillemot Birds — — 3 30 43 11 1 — 1 1 — —

J. F. M. A. M. J. J. A. S. O. N. D.

LITTLE AUK Alle alle. One on 9 February 1974 in the garden of the farmhouse was later released at the Axe Estuary (Mrs J. Paine, B. Rabbitts).

FERAL PIGEON (ROCK DOVE) Columba livia. Has bred on the cliffs but no positive evidence noted during the last 12 years. Many racing flocks fly over the Down with lost birds regularly joining the residents.

STOCK DOVE *Columba oenas.* Noted most of the year, usually 12 or less. Has bred and probably still does so. Small parties are commonly seen at the fort heading out or coming in especially in the spring. While some are no doubt migrants most are probably flying to Steep Holm where they first bred in 1969 (six to eight pairs in 1977).

WOODPIGEON *Columba palumbus*. Common breeding resident. Movement occasionally noted in the spring and autumn but generally only one to four birds. Larger counts: eight east on 18 October and 10 west on 24 October 1970, 16 west and three south on 24 October 1971 and 149 (119 south and 30 west) on 25 October 1975.

COLLARED DOVE Streptopelia decaocto. Occurs mainly as a spring (April/May) and autumn (September/October) migrant with singles or small flocks generally not exceeding 11 but 25 on 25 April 1975. Other records in February, March, June and December. This pattern closely matches observations made at Berrow, Somerset (Slade 1978).

TURTLE DOVE Streptopelia turtur. Singles (occasionally two or three) noted in April (earliest on the 12th) to August, with most sightings (about half) in May. There is little movement in the autumn.

(RING-NECKED PARAKEET *Psittacula krameri*. Two sightings, on 20 June and 24 August 1972, of green parakeets, almost certainly refer to this species which is established ferally in outer London, and in particular in Kent (Sharrock 1976).)

CUCKOO *Cuculus canorus.* Noted April (earliest on the 19th) to August. Juveniles July—September may have been bred locally but proof of breeding on the Down has not been recorded.

BARN OWL Tyto alba. One in February 1976 is the only record. (B. Rabbitts).

LITTLE OWL Athene noctua. Noted regularly at one site (a rocky outcrop towards the east end of the Down, above the main footpath) where they presumably bred 1967 to 1971. Recently a few sightings at the fort.

SHORT-EARED OWL Asio flammeus. Seven records of single birds, three in April, two in October and one in December and January.

SWIFT *Apus apus.* Movement noted from April (27th) to the end of August (latest 16 October) usually east or south and more rarely west or north. Larger counts: *c.* 200 east on 15 May 1970, *c.* 110 and 106 east on 17/18 July 1972 and 150 south (in 15 minutes) on 10 July 1975.

HOOPOE Upupa epops. Two singles, 16 May and 8 September 1971.

WRYNECK Jynx torquilla. Singles, all in September, on the 14th and 18th 1971, 10th 1974 and 19th-22nd 1976.

GREEN WOODPECKER Picus viridis. Recorded in most months - usually singly.

GREAT SPOTTED WOODPECKER *Dendrocopos major*. One or two records of birds in the trees near Brean Down Farm and one flew towards Steep Holm on 17 August 1978.

LESSER SPOTTED WOODPECKER Dendrocopos minor. One near the fort on 11 July 1971 (B. Rabbitts).

SHORT-TOED LARK Calandrella brachydactyla. One on 16 June 1973, the first record for Somerset (R. Angles).

WOODLARK *Lullula arborea.* Five records (seven birds). Singles on 8 October 1967, 15 September 1968 and 23 October 1975 with two on 26 April 1973 and 11 October 1978. There is a very small passage in the autumn along the Severn Estuary but Woodlarks no longer appear to breed in Somerset.

SKYLARK *Alauda arvensis*. The breeding population is very small, c. 12 in song on 16 April 1967 but with encroachment of Bracken and Bramble and increased disturbance is less now. Regular on autumn passage from September to the beginning of November with most counts not exceeding 50.

SAND MARTIN *Riparia riparia*. Records from March (earliest 19th) to October (latest 4th). Up to 26, but irregularly observed with most April/May and August/September. A few June and July records probably indicate non-breeders.

SWALLOW *Hirundo rustica*. Movement in April and May is between north-west and east. From August to October passage is almost without exception east (counts sometimes of over 200) with the birds initially following the line of the River Axe. There have been several November reports. Several pairs breed at Brean Down Farm.

HOUSE MARTIN *Delichon urbica*. Generally numbers have not been so large as for the previous species. Spring passage from April (earliest 9th) and return movement to November (latest 13th) with up to 150 in the last week of September and first of October.

TREE PIPIT Anthus trivialis. Migrants are recorded mainly in April and May, and August to the first week of October (extremes 27 March and 14 October). Several June records probably relate to local (west Mendip) breeding stock. Rarely over 20 in a visit and exceptionally 67 in one hour on 15 April 1968 (to north-east). Most are flying over the Down but occasionally small flocks are 'grounded'.

MEADOW PIPIT Anthus pratensis. The breeding population has not been surveyed recently but c. 20 were in song on 24 March 1967. Spring passage is sometimes noticeable but more often the return movement in September and October which is invariably easterly (up to 100 birds per hour).

ROCK PIPIT Anthus spinoletta. Present throughout the year, along the rocky shore area and the fort; up to four pairs (probably more) breed. No evidence of any movement and A.s. littoralis which could easily occur has not been identified.

YELLOW WAGTAIL *Motacilla flava.* Records in all months from April to October (latest 29th). Highest numbers in April (up to 48) and up to 15 at the end of August or beginning of September. More regular observations can be expected in the future following the introduction of the cattle and the expected decrease in Bracken. A few pairs of Yellow Wagtail breed on the nearby levels.

GREY WAGTAIL *Motacilla cinerea*. Although there have been sightings throughout the year Grey Wagtails are infrequent visitors with a peak in September (up to eight in a visit), probably reflecting passage at that time (Sharrock 1964).

PIED WAGTAIL *Motacilla alba*. Autumn passage is mainly in September and October (only once over 40) and the race of many has not been determined. One or two pairs breed at Brean Down Farm. Very small numbers of *M.a. alba* (White Wagtail) have been identified in April, May and once in September.

WREN Troglody tes troglody tes. Breeds and there is a small resident population.

DUNNOCK *Prunella modularis*. The breeding population is perhaps in the region of 15 pairs. The only suggestions of passage are of five flying about in an excitable manner on 16 September 1975 and two on 13 October 1978.

ROBIN Erithacus rubecula. Good numbers have been noted occasionally in the autumn which would suggest migrants joining the few resident pairs.

NIGHTINGALE Luscinia megarhynchos. One was heard on 5 May 1973 (D. Buffery).

BLACK REDSTART *Phoenicurus ochruros*. Birds usually arrive in October (up to three in a day) and depart in March or April. Mainly single females or immatures, some stay for the winter either on the Down (a favoured area being the fort) or nearby. Interesting reports concern one from 5 August 1967 and a male (singing) on 16 March 1973.

REDSTART *Phoenicurus phoenicurus.* Migrants are recorded in April (earliest 10th) to May and August to October (latest 25th). Exceptionally six in a day. The breeding population on the Somerset levels has continued to decline but there has however been an apparent increase at sites in upland areas.

WHINCHAT Saxicola rubetra. Observations mainly in April/May and August/September (up to seven) but passage is very small.

STONECHAT Saxicola torquata. Present throughout the year and little evidence of any movement. An average of over three pairs each year with most young (11) in 1967.

WHEATEAR *Oenanthe oenanthe*. Small numbers occur in March (rarely from the first week) and spring passage can extend into June. One on 19 June 1971 was thought to have been an example of *O.o. leucorrhoa* (Greenland Wheatear) but others may not have been identified. Juveniles in July (earliest 5th) perhaps indicates breeding on the Mendip Hills. Autumn records to mid-October (rarely more than five).

RING OUZEL *Turdus torquatus*. A regular spring and autumn passage migrant with some 99 individuals, the majority singly but six observations of parties of three or four. Favoured areas are along the top ridge of the Down or on the bushes in the hollow north-west of the saddle.

Ring Ouzel	Birds	alvi m s	-	16	39	2	A. 400	-	-	9	28	5	where
							J						

BLACKBIRD *Turdus merula*. Resident but there is little information on the size of the population. More than usual have been noted in the spring and especially in the autumn (mainly October) with counts of up to 50 and once 100; when disturbed from the bushes migrants usually fly east.

FIELDFARE *Turdus pilaris*. Only in October are Fieldfare regularly observed (very occasionally over 200) although records through winter extend to the third week of April.

SONG THRUSH *Turdus philomelos*. One or two pairs breed. The pattern for migrants in October is similar to Blackbird although numbers tend to be smaller. At the end of December 1978 they were said to be unusually conspicuous in the area at the onset of some hard weather.

REDWING Turdus iliacus. As for most of the other thrushes highest numbers are seen in October (once over 500) but is recorded through the winter months.

MISTLE THRUSH *Turdus viscivorus*. Scattered records throughout the year but is very irregular (most in a visit 16 on 21 October 1967).

GRASSHOPPER WARBLER Locustella naevia. Arrival is usually in the third week of April with counts seldom over 10 (remarkable fall of some 100 on 20 April 1968). One or two pairs breed. There have been few autumn records (latest 20 September), but non-singing birds are more difficult to detect at this time.

SEDGE WARBLER Acrocephalus schoenobaenus. Almost exclusively a spring migrant (April/May) with six of the 13 birds recorded in the last month. Also seen in August and September.

REED WARBLER Acrocephalus scirpaceus. Only five with three in May and singles in August and September.

DARTFORD WARBLER Sylvia undata. One was seen from 12th to 22 October 1977 and another on 31 March 1978, at a time when the British breeding population at a relatively high level.

LESSER WHITETHROAT Sylvia curruca. Low numbers (usually singly) of migrants from April to September. One or two pairs breed on the Down in most years.

WHITETHROAT Sylvia communis. Highest counts (most presumably moving through the area) have been 35 on 13 May and 28 on 26 August 1967. 70 on 20 April and c. 40 on 27 April, 1968. Scarcer since the well known population crash in 1969 but recently a partial recovery in breeding numbers on the Down and c. 20 on 25 August 1977 perhaps reflects a nationwide increase.

GARDEN WARBLER Sylvia borin. Most migrants in May (up to six) but Garden Warblers are very much rarer than the next species. Last in the autumn on 13 October.

BLACKCAP Sylvia atricapilla. Migrants recorded in the spring (from the last week of March) and again during the autumn (to October) with up to 10 in a visit. The breeding population is probably less than five pairs. No evidence of wintering.

WOOD WARBLER *Phylloscopus sibilatrix*. Of the eight that have occurred six have been in May with singles in April and August. This species is a scarce migrant at coastal stations.

CHIFFCHAFF *Phylloscopus collybita*. Occurs from mid-March and a few pairs breed. Autumn passage of this species and the next is sometimes noticeable, generally only small numbers but *c*. 40 on 20 September 1969. There is a distinct trickle of birds through in October (last 6 November).

WILLOW WARBLER *Phylloscopus trochilus*. There have been only a few March records. Generally larger numbers than for Chiffchaff pass through in the spring (occasionally counts over 50 but of *c.* 75 *Phylloscopus* sp. present on 16 April 1967 Chiffchaff were said to predominate). More pairs of Willow Warbler breed on the Down than Chiffchaff and autumn departure is earlier.

GOLDCREST Regulus regulus. Increases in the spring and autumn of migrants are often noted. The breeding population is very small, probably under five pairs, and is located near Brean Down Farm or in the hollow northwest of the saddle.

FIRECREST Regulus ignicapillus. Single birds have been seen on 24 October 1971, 17 March 1972, 9 February 1975, 14th to 17 January 1976 and 12 October 1978.

SPOTTED FLYCATCHER *Muscicapa striata*. A scarce migrant with most in May (up to six), once June and up to three in August and September.

PIED FLYCATCHER *Ficedula hypoleuca*. Scarce migrant with five in April, six in May and eight August to October. Perhaps a slight increase in recent years and presumably birds of British breeding stock (one in May 1978 was seen to be ringed).

LONG-TAILED TIT Aegithalos caudatus. Evidence of movement in October and November including 40 on 13 October 1974 which were very restless and occasionally circling high up. Rather sporadic in appearances and for the greater part of the year is not present.

MARSH TIT Parus palustris. One on 1 October 1974 although it would seem probable that there have been others.

COAL TIT *Parus ater.* Up to five from the end of March to May but more regular in September and October (up to 25 in a visit). There has been no general direction of movement for the migrant flocks

BLUE TIT Parus caeruleus. Seen in most months (has bred at the fort and probably elsewhere on the Down) but there is a distinct passage at the end of September and in October (usually parties of four to 20 but one count of over 50).

GREAT TIT Parus major. Although often present they do not occur as frequently as Blue Tits (but again mainly in October) or in such large numbers.

GREAT GREY SHRIKE Lanius excubitor. One was present on 18 October 1970 (M. Kendall, Mrs R.T. Lovell et al).

JAY Garrulus glandarius. Observations have been mainly in April, May (usually one or two but up to six) and October (up to 10) but with no regularity.

MAGPIE Pica pica. Up to four pairs breed. A species that is currently at a high population level in Somerset.

JACKDAW *Corvus monedula.* The breeding colony on the cliffs is augmented by migrants in the autumn and there is much local movement (counts of up to 125). Small parties (one to 14) cross the channel March to May and September to October.

ROOK *Corvus frugilegus.* Unusual, with sightings in March and April (usually ones and twos although up to eight have been seen) but mainly in October (up to 22).

CARRION CROW *Corvus corone.* Present all year (breeds). Numerous reports of Carrion Crows moving across channel February to May (maximum of 18 in a watch and parties of up to 11) and again in September and October. One was seen carrying a Starling on 20 February 1975. A Hooded Crow *C.c. cornix* flew west on 25 October 1975.

RAVEN *Corvus corax.* A pair nested until 1973. Increased disturbance no doubt caused the abandonment of the site in the quarry at the eastern end of the Down. In 1973 nest building was started on 30 January but Ravens are early nesters (Coombs 1978). Up to six have been seen on the Down, and up to four flying to or from Steep Holm where they nested in 1971: the first breeding record there for several years.

STARLING *Sturnus vulgaris*. Autumn passage migrant in large numbers, seen throughout the year. A pair usually breeds at the fort. Estimates of many thousands (largest in the winter months and once 20000) when a roost is formed on Steep Holm. Occasionally there is a roost near Brean Down Farm.

HOUSE SPARROW *Passer domesticus*. Suggested migration has been noted on many occasions (mainly September and October) with up to 13 around the bushes near the fort or in flight high up.

TREE SPARROW *Passer montanus*. Most Tree Sparrows on the Down have been seen in May and October (up to 12) but they are infrequent visitors. The pattern of migration in the general area is not clear. Small flocks sometime form in winter nearby.

CHAFFINCH *Fringilla coelebs.* Typically many movements on days in October and early November, occasionally 1000 and once 3900 (in two and a half hours). The general direction for the majority of the migrant flocks is confused but is usually in the southern half of the compass. Rare on spring passage with under 10 in March. The breeding population on the Down is perhaps in the region of five to 10 pairs.

BRAMBLING *Fringilla montifringilla*. Autumn passage invariably with Chaffinches (up to 66 in a visit) and undercounted. Occasionally up to 45 in the winter nearby but usually numbers are much smaller. As for Chaffinch spring passage is almost non-existent with singles in March and 2 April.

GREENFINCH Carduelis chloris. A breeding bird, no survey has been made, but in the spring small numbers (under five) can be seen in display flight. Although there have been groups of 50 to over 100 (mainly October) migration patterns are far less marked for this species than for Goldfinch and Linnet.

GOLDFINCH *Carduelis carduelis*. Distinct increases in April/May (parties of usually eight to 12) and September/October (counts up to 90). One or two pairs probably breed.

SISKIN *Carduelis spinus*. Although there have been records from the last half of September to April (in 1972 parties of 11–16 in January and February) most Siskins are seen in October and November (variable numbers of one to 25 in a visit).

LINNET *Carduelis cannabina*. Migrants occur mainly in April (up to 30 in a visit, once parties totalling 80) and September to October (up to 100 but usually far fewer). c. 40 pairs were noted on 16 April 1967 but the breeding population now is probably in the region of 20 pairs.

TWITE Carduelis flavirostris. One flew over on 22 October 1976. Seven have been seen at Brean Farm and they now winter in larger numbers further up the channel.

REDPOLL *Carduelis flammea.* Noted from March to November with peaks in May (up to 24) and September to October (maximum of 24 in both months). In the spring song is frequently heard and in recent years Redpolls have become established as breeding birds in Avon.

CROSSBILL Loxia curvirostra. Three flew south-west on 5 November 1972 (M. Kendall). 1972 was an irruption year for this species.

SCARLET ROSEFINCH *Carpodacus erythrinus*. One was seen from 14th to 18 October 1977, the second record for Somerset (B. Rabbitts, B.E. Slade *et al*).

BULLFINCH *Pyrrhula pyrrhula*. Recorded in most months (mainly under five) but especially October (maximum of 14), probably relate to irruptive movements (Summers 1979).

HAWFINCH Coccothraustes coccothraustes. One flew east on 29 October 1978 (B. Rabbitts).

SNOW BUNTING *Plectrophenax nivalis.* Singles on 16 November 1969, 7 December 1971 and 16 October 1978. Other records (including up to three October to December 1967) probably relate to the nearby sands.

YELLOWHAMMER *Emberiza citrinella*. Apparent migrants only very occasionally present with a few spring records and up to three in a visit during October. Occurs nearby in winter with the small finch flocks.

ORTOLAN BUNTING *Emberiza hortulana*. One seen on 18 August 1971 was the third record for Somerset (B. Rabbitts).

REED BUNTING *Emberiza schoeniclus*. One or two pairs breed on the Down. Noticeable movement in September and October (under five in a visit but occasionally up to 18).

CORN BUNTING *Miliaria calandra*. One singing on 13 May 1967. Four others could relate to the area just outside that being reviewed.

Acknowledgements

The majority of the records, which form the basis of this paper, were provided by a great many members of the Club. They were acknowledged individually in the usual way in each issue of *Bird News*, but we would like to thank them all again. We would also like to mention Ian Dawson, RSPB Librarian, who kindly provided information covering the period of the RSPB lease, and W.J.B. Thorneycroft, Assistant Agent of the Wessex Region of the National Trust, for information on the archaeology of the Down.

References

Angles, R. 1973. Herring Gull taking adult Storm Petrel. Brit. Birds 66:495-6.

Atthill, Robin, Ed. 1976. Mendip: A New Study. David and Charles, Newton Abbot.

Coombs, Franklin. 1978. The Crows. Batsford, London.

Coysh, A.W., Mason, E.J. and Waite, V. 1962. The Mendips. Robert Hale, London. 2nd edn.

Hall, W.G. Ed. 1971. Man and The Mendips. Mendip Society.

Hume, R.A. 1975. Identification and ageing of Glaucous and Iceland Gulls. Brit. Birds 68:24-37.

Jones, W.E. 1966. Sea-watching in Glamorgan. Seabird Bull. 2:18-20.

MacInnes, C.M. and Whittard, W.F. Eds. 1973. Bristol and its Adjoining Counties. Wakefield.

Palmer, E.M. and Ballance, D.K. 1968. The Birds of Somerset. Longmans, London.

Rabbitts, Brian. 1972. Recent changes in the status of the Kittiwake off the Somerset coast. *Bristol Orn.* 5:201–204.

Sharrock, J.T.R. 1964. Grey Wagtail passage in Britain in 1956-60. Brit. Birds 57:10-24.

——1976. The Atlas of Breeding Birds in Britain and Ireland. B.T.O., Tring.

Slade, B.E. 1978. Movements of Collared Doves. Bristol Orn. 11:35.

Summers, D.D.B. 1979. Bullfinch dispersal and migration in relation to fruit bud damage. Brit. Birds 72:249-281.

Thompson, A. Landsborough. 1966. An analysis of recoveries of Great Skuas ringed in Shetland. *Brit. Birds* 59:1–15.

Vernon, J.D.R. 1969. Spring migration of the Common Gull in Britain and Ireland. Bird Study 16:101-107.

Ken Hall, Robin Prytherch and Brian Rabbitts

The Anchorage, High Street, Chew Magna, Bristol.

WINTERING WARBLERS IN AVON

by R.L. Bland

The winter of 1978/79 was chosen by the British Trust for Ornithology for a national survey of wintering Blackcaps *Sylvia atricapilla*. Nationally that winter was rather poor for them (see *BTO News* No. 102, September 1979) but by total contrast was the best ever as far as Avon was concerned. Over the past decade the number of records in Britain of wintering warblers, both Blackcaps and Chiffchaffs *Phylloscopus collybita*, has been increasing, perhaps due to the succession of mild winters of the early seventies. A suggestion by John Marchant (in *BTO News* No. 71, March 1975) that every wintering warbler must be regarded as news and not just left unrecorded led me to attempt to monitor the records from the recent past in what is now the county of Avon and to attempt to ensure that all birds seen were recorded. Observations have been drawn from the *Bristol* (now *Avon*) *Bird Reports* published by the Bristol Naturalists' Society, and the monthly *Bird News* of the Bristol Ornithological Club for the period from the 1962/63 severe winter to 1979 inclusive, in order to compile this summary.

It soon became clear that many birds were seen and not recorded - for instance I spoke to one observer who had seen a Blackcap every winter since 1958 in Canynge Road, Clifton, Bristol but who had never published his records. Also, perhaps because Annual Reports run from January to December, no attempt had been made to assess the significance of a particular winter as a whole. Additional problems arose out of the fact that it was difficult to distinguish between records of an odd bird recorded once and a bird that was apparently resident in a garden throughout a winter. To try to resolve this last problem I extracted the data in two different ways. Firstly I noted 'apparent individuals' in each month, treating resident birds as individuals and each occasional sighting as also of an individual. Birds apparently identical but appearing in any particular spot at intervals of more than ten days were treated as separate individuals. Using this method I was able to compare records month by month. One of its drawbacks is shown by the trapping and ringing of up to nine individual Blackcaps in gardens where casual observation has given the impression of one or two birds in apparently continual residence (pers. comm. T.B. Silcocks and H.R.H. Lance). Normally records of occasional birds form the majority but in the winters of 1976/77 and 1978/79 there were large numbers of apparently resident birds. To give an idea of their increased conspicuousness I also adopted a second method of recording them - by Blackcap-days. An apparently resident bird seen throughout a month would get a value of 30, equating it with 30 individual observations of apparently different birds. In many ways this seems a more precise method of recording observations and enabling comparisons to be made between weeks, months and years. It does produce some very large numbers and it is important to recognise that they do not represent the actual number of birds in the area. The first method of analysis should perhaps give a better idea of this figure, which would be very interesting to know, and I shall return to this question later in this paper.

Table 1 summarises the information published for both Blackcaps and Chiffchaffs from 1962/63 to 1978/79, covering the months of November to February inclusive, the data being given in 'warbler-days'. The large figure for Blackcaps in 1967/68 was caused by two pairs resident in a Clevedon garden for two months. The published records are often vague; sometimes it is not clear whether birds were seen in the early winter period (Jan/Feb) or the late one (Nov/Dec) of a particular year. However, despite the drawbacks, the pattern is clear. Up to 1974/75 there were occasional and sporadic records of both Blackcaps and Chiffchaffs, with no obvious trend. Since then substantially larger numbers have been recorded, with the winters of 1976/77 and 1978/79 being by far the most remarkable for Blackcaps. Chiffchaff records reached a new level in the winter of 1974/75 and have more or less maintained it since, though 1978/79 was poor for them. The 1974/75 winter was exceptionally mild, and very much milder than any of the winters since. Indeed, they have tended to become colder, culminating in the winter of 1978/79, the most severe since 1962/63, though because its periods of frost and snow were intermittent, its impact on bird life was less marked.

Table 2 summarises the numbers of 'apparent individuals' of both species present in each of the four winter months in Avon from 1975/77 to 1978/79. In the last two winters more birds were recorded in February than in any other month, though in 1976/77 January had a maximum and in 1975/76 November. This is interesting because clearly a bird recorded in February has managed to survive somewhere throughout the winter until that date.

Table 1. Totals of Blackcaps and Chiffchaff recorded in the months November to February inclusive from 1962/63 to 1978/79. Data in 'warbler-days'.

	Blackcap	Chiffchaff
1962/63	27	0
1963/64	22	1
1964/65	0	1
1965/66	0	5
		8
1966/67	2	
1967/68	240	4
1968/69	12	1
1969/70	1 1	7
1970/71	14	2
1971/72	10	6
1972/73	4	9
1973/74	3	5
1974/75	199	30
1975/76	88	28
1976/77	473	39
1977/78	202	32
1978/79	1200	18

Table 2. Numbers of 'apparent individuals' month by month over the four winters 1975/76 to 1978/79.

			Nove	ember						
		75/76	76/77	77/78	78/79		75/76	76/77	77/78	78/79
Blac	ckcap	12	8	9	4		6	24	10	31
	ffchaff	4	8	1	2		4	7	8	6
			Jan	uarv				ruary		
		75/76	76/77	77/78	78/79		75/76	76/77	77/78	78/79
Blac	ckcap	4	33	15	61		6	21	25	85
Chif	ffchaff	4	10	6	10		4	11	9	0

Those unobserved in the early part of the winter may move into Avon as part of a cold weather movement; alternatively they may always be present in the area but only become more obvious as a result of changes in the weather. In this connection there is a contrast in the types of habitat used by Blackcaps and Chiffchaffs. Chiffchaffs are most frequently recorded from waterside areas — Chew Valley Lake and Avonmouth Ponds being two favourite locations which have probably supported two each throughout recent winters. At such habitats the insects which comprise the main part of their diet must be more plentiful. There is no record of them eating any unusual food, even when seen in gardens. The complete absence of Chiffchaff records in the winter of 1978/79 after 24 January suggests that the exceptional nature of that winter killed off most insect life, and the Chiffchaffs with it, unless they moved south into better climes. Blackcaps, by contrast, are most frequently recorded in gardens, and at bird tables, eating a wide assortment of food. In 1978/79 only 12 of some 1700 Blackcap-days were of Blackcaps in rural settings. The kinds of food recorded were: berries of Honeysuckle Lonicera periclymenum, Holly Ilex aguifolium, Spindle-tree Euonymus europaeus, Cotoneaster, Pyracantha, Hypericum and Skimmia; bird seed, nuts, coconut, apple, cheese, suet dumpling, fats, meat from a bone, raisins, bread, pastry and Christmas pudding! They were clearly capable of thriving on this diet, as there were four retraps of ringed birds showing either weight gain, or no significant loss over up to ten weeks of very cold weather. I suggest that the following explanation for the pattern of observations of Blackcaps through the winter months is possible. They are resident in woodland, eating berries, for the first two months when they are difficult to see, partly because they are not singing and are naturally secretive, and partly because few ornithologists visit woodland in November and December. When the natural supply of berries runs out - and in the very cold first week of January 1979 invading hordes of Redwings Turdus iliacus stripped the Downs, in Bristol, of Hawthorn berries Crataegus monogyna in a week — the Blackcaps move to gardens and adapt

their diet to what is available. They are still secretive and easily missed, but they are now far more likely to be seen. Thus I would contend that the exceptional number of records last winter was the result of the cold weather and not despite it.

Fig. 1 shows the distribution of Blackcap-day records week by week during the 1978/79 winter from December to March, alongside the weekly average noon temperature. I have attempted to relate temperature to Blackcap records for previous winters, though with slight success because of the small number of such records. Even so it was apparent that the colder weather produced a larger number of Blackcap records. The 1978/79 figures show a rather different pattern, with numbers leaping up in the first week of January, the coldest week of the winter, followed by a pattern not directly related to temperature. Numbers reached a peak in mid-February, the last severe spell, and remained high throughout March. The BTO survey required observations to the end of March, whereas in my previous studies I had assumed that March birds might be incoming migrants and that it would be safer to omit them. However, I checked through the available records for previous years, especially those in *Bird News*, and discovered that there have been very few March records, but that they appeared to be, from their date and habits, of wintering birds rather than migrants. This was certainly the case for almost all the March records in 1979.

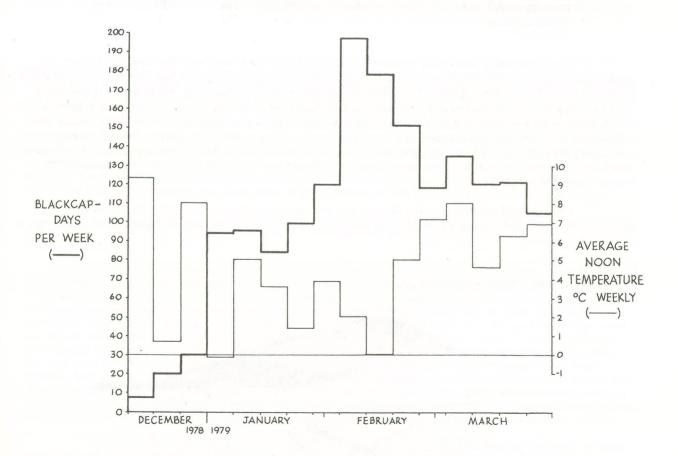


Fig. 1. Blackcap-days per week and weekly average noon temperature (OC) for the period including the last three weeks of December 1978 and January - March 1979.

I examined the geographical distribution of Blackcap records within Avon for the 1978/79 winter but it merely showed where observers happened to live! Bristol accounted for 30% of all records in that winter, overwhelmingly from the suburban North West of the city. It is interesting, however, that of 27 watchers in Avon, half within the city, who fed and noted their garden birds throughout the winter only six recorded a Blackcap at any time, none having an apparently resident bird. Thus, although the records give the impression of a large and mobile population of Blackcaps, the total cannot have been that high. There are only three clear indications of the size of the population. Nine individuals were trapped by H.R.H. Lance and five by T.B. Silcocks. Five of these birds were retrapped, three of them by H.R.H.L. (his own) at intervals of three, seven and ten weeks. One of T.B.S.'s birds was retrapped by S. Wilkinson about three kilometres away after seven and again after nine weeks. Secondly, in mid-February there was a day when 33 individual birds were recorded by different observers. The third indication is given by the number of apparently resident birds recorded, which were 12 in January, 11 in February and 17 in March. It is interesting to compare these figures with those for the same winter that result from plotting 'apparent individuals' and Blackcap-days (see Table 3). It is clear that short of a massive campaign of trapping and ringing it is almost impossible to say with any high degree of certainty how many birds are present at any one time.

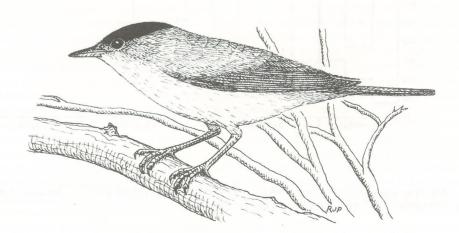
Table 3. Summary of observations of Blackcaps and Chiffchaffs in 1978/79.

	Nov	Dec	Jan	Feb	Mar
Blackcaps: 'apparent individuals'	4	31	61	85	69
Blackcap-days	4	75	434	680	539
Chiffchaff-days	2	6	10	0	0
Observers	4	27	36	43	32

Some interesting behavioural observations were made by many observers. Blackcaps were often very aggressive, driving off Robins *Erithacus rubecula*, Blue Tits *Parus caeruleus* and House Sparrow *Passer domesticus*, but giving way to Starlings *Sturnus vulgaris*. There was also aggression between Blackcaps, males against males, males against females and females against males, though most of these confrontations appeared to be resident birds driving off intruders. There were also records of harmonious pairs, and of birds who took no notice of other species. One bird became very tame and was approachable to within four feet. Song or sub-song was rare. Records coincided with sunshine on 24th, 25th and 27 February and 18th, 19th, 22nd and 24 March. The sex ratio of 'apparent individuals' varied somewhat over the winter. There were always more males than females, in December 76%, January 60%, February 55% and March 60%.

I must record my thanks to the 68 observers who sent in their records. Looking to the future, I hope that every observation of a wintering warbler will be carefully noted so that this unusual change in behaviour may be properly documented.

R.L. Bland 21 Downfield Road, Clifton, Bristol BS8 2TJ



NOTES

A Black-and-white Warbler on the Isles of Scilly

The autumn of 1975 was outstanding for the number of North American vagrants found in England (*Brit. Birds* 69 (1976): 321–368; 70 (1977): 446–449). It would appear that hurricanes of more than usual severity emanating from the eastern seaboard of North America affected large groups of birds migrating from their northern breeding grounds towards their winter localities in Central and South America and the Caribbean. Thus, strong winds resulting from these major disturbances swept across the Atlantic carrying a number of birds with them. No doubt many perished en route; others may have received whole or assisted passage (Durand 1961, 1963, 1972; King and Curber 1972); while a few may have made a direct flight in the high altitude winds (Nisbet 1959). A detailed analysis of this and other autumns has been published by Elkins (1979).

Imagine the excitement, therefore, when three such birds turned up on the Isles of Scilly in late September 1975 — a Yellow-bellied Sapsucker *Sphyrapicus varius* on Tresco on the 26th, the first Nearctic woodpecker for Britain and Ireland (see Hunt (1979)); a Black-and-white Warbler *Mniotilta varia* on St. Mary's on the 27th, only the second British record (found by M. Coath and A. Holliman) (Hollom 1960); and a Scarlet Tanager *Piranga olivacea* on Tresco on the 28th, another second for Britain (found by R.E. Alderton). We were able to watch the Black-and-white Warbler intermittently for a total of seven hours from the 28th to 30th September and the following is a summary of our observations of its plumage, habitat and feeding behaviour.

The two wide black coronal bands and a dark grey eyestripe were immediately obvious, as were the even black streakings on the back. Viewed at close range very fine short grey streaks were noticeable on the ear coverts. When the wings were occasionally drooped the lower back and rump could be seen to be black. Its central tail feathers were also black; the outer-tail feathers paler, and the tail notched. There was a white triangular patch on the median coverts; the greater coverts were tipped with white making a bar which joined that formed by the white-edged tertials. The primaries were pencil grey, silvery grey in some lights which thus contrasted with the black primary coverts. On the underparts, black streaks on the breast and flanks, some forming continuous lines, bordered the pure white belly. Even the under-tail coverts were surrounded by a row of black spots, with a complete dark margin around the under-tail feathers. Bill short and pointed, the culmen dark, with paler cutting edge, and the pale tip of the lower mandible shading into a pinkish base. A pale orbital ring was occasionally visible; eye dark. Legs brownish-grey; feet rather large for the size of the bird, being paler (Parkes 1964).

Thus the warbler is aptly named with its glossy white plumage being heavily streaked black or grey; it was about the size of a Coal Tit *Parus ater* and as L.T. mentioned it gave the impression of an animated 'porcelain bird'.

In regard to the Black-and-white Warbler's behaviour, it confined most of its activities to the outskirts of a coniferous wood on the high ground on St. Mary's, where the undergrowth consisted of bramble and bracken. It showed a definite preference for trees with thick vertical trunks and bare horizontal boughs, often with dead stems and branches. Nevertheless, prolonged observations of this very active bird were at times difficult as sometimes it disappeared from view for long periods; however, B.K. spent a morning in the area when there were periods for viewing the warbler under ideal conditions without disturbance and N.T. and L.T. were able to take photographs and make field sketches. The variety of movements of the Black-and-white Warbler when hunting for food were in many ways distinctive. For instance, it not only ran along but actively moved up and down branches in a manner similar to Nuthatches Sitta europaea and Treecreepers Certhia familiaris. Indeed its toes and claws are adapted to this method of feeding (Parkes 1964). It also showed tit-like agility by occasionally hanging upside down on the stems. During the period when winged insects (Diptera) were plentiful it was observed making flycatcher-like sallies to obtain them while in flight; on these occasions faint bill snapping was at times audible.

Furthermore, it was also found forcibly digging into the bark for insects, banging hard with its bill in the manner of a Great Tit *P. major*, even on one occasion scattering small chips of wood. In this manner it extracted small blackish beetles (sp.?), about 1 cm. long, and these were then stunned and softened by strong whacking side-to-side movements of its head, before being swallowed. There were also periods when, apparently finding little food in the branches, it resorted to seeking insects among the fallen pine needles on the ground below. Thin brownish coloured beetle larvae, about 2 or 3 cm. long, were similarly dealt with. This ground

feeding behaviour of the Black-and-white Warbler seems not to have been mentioned previously in the literature, though of course many other American warblers feed in this way. The Black-and-white Warbler in its winter quarters in Florida, U.S.A., can at times be most difficult to observe (King 1974), so we must consider ourselves fortunate to have encountered one on the Scillies and seen its beautiful and immaculate plumage so well.

References

- Durand, A.L. 1961. White-throated Sparrow and American Robin crossing the Atlantic on board ship. *Brit. Birds* 54: 439–440.
- ——1963. A remarkable fall of American land-birds on the 'Mauretania', New York to Southampton, October 1962. *Brit. Birds* 56: 157–164.
- ——1972. Landbirds over the North Atlantic, unpublished records 1961—65 and thoughts a decade later. Brit. Birds 65: 428—442.
- Elkins, N. 1979. Nearctic landbirds in Britain and Ireland: a meteorological analysis. *Brit. Birds* 72: 417–433. Hollom, P.A.D. 1960. Additions to the British and Irish list. *Brit. Birds* 53: 97–99.
- Hunt, D.B. 1979. Yellow-bellied Sapsucker: new to Britain and Ireland. Brit. Birds 72: 410-414.
- King, B. 1974. Use of recorded predator calls as a field aid to passerine recognition in wooded areas. *Bristol Orn.* 7: 73.
- King, B. and Curber, R.M. 1972. Great Blue Heron coming on board ships in mid-Atlantic. *Brit. Birds* 65: 442–443. Nisbet, I.C.T. 1959. Wader migration in North America and its relation to transatlantic crossings. *Brit. Birds* 52: 205–214.
- Parkes, K.C. 1964. Warbler (2) In A New Dictionary of Birds ed. A.L. Thompson. London.

Bernard King
Gull Cry, 9 Park Road, Newlyn, Penzance, Cornwall
Nigel and Laurel Tucker
1st Floor Flat Arvalee, Clifton Down Road, Bristol 8

A summer population of non-breeding gulls at Saltford

From my elevated garden at Saltford, Somerset (now Avon), I observed almost daily each summer from 1935 to 1971 (excluding the War years and annual holidays) a non-breeding population of gulls. They frequented the fields, and in some instances horizontal boughs of tall trees, close to the banks of the River Avon. The gulls were present between early May and mid-August and they comprised, with few exceptions, up to 15 adult Lesser Black-backed Gulls *Larus fuscus* and a larger mixed flock of 50 to 75 immature Herring Gulls *L. argentatus* and Lesser Black-backs, mostly, if not all, first summer birds, of which *argentatus* was greatly in the majority.

I have previously described the behaviour of a few adult Lesser Black-backed Gulls which were timed at their day roost in trees, at Saltford, where they remained for periods of up to six hours or a little more (*Brit. Birds* 54 (1961): 243–244). Subsequently I spent many additional hours watching the summering adult gulls on their tree roosts. They were lethargic for much of the day if undisturbed, but became alert in the evenings and would move a little on the boughs to gain favourite vantage points overlooking the river. I discovered that they were waiting for the appearance of small chicks of water-birds, for mammals moving in the grassy banks and for other edible items. These they pounced upon and consumed: the food thus obtained seemed to be sufficient to maintain these birds, as far as I could see. Other adults perched on posts or by the river apparently obtained similar food. Often they would not depart from the area until dusk or a little later and then they would fly towards Keynsham and on to Bristol, towards their night roosting haunts.

On no occasion during the 26 years I watched these adult gulls did I ever witness similar behaviour by any of the immatures. Indeed, the age groups did not wilfully associate in any way and for much of the summer remained apart. The feeding areas of the immatures were cosmopolitan and extended to the fields, both arable and grassland, as far as the outskirts of Bath, and to the Saltford sewage beds or near farm buildings where cattle were housed. Nevertheless, most of them drew together as evening closed in when they could be seen flying, in straggling lines, towards Keynsham and Bristol. It is presumed, judging from similar daily routines, that the same populations of gulls returned each day to the area I was watching. If so it would have been fascinating to have learned whether these gulls roosted amongst others during the night or remained as isolated flocks.

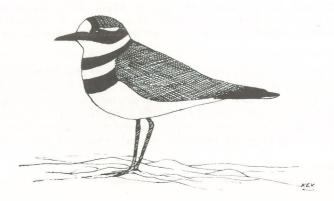
Killdeer at Chew Valley Lake

At 14.45 on 17 January 1976, I was sitting in Moreton Hide, Chew Valley Lake, Avon, counting a large flock of Lapwings *Vanellus vanellus* resting on Moreton Point. I got about half-way through the flock when I noticed a 'ringed' plover *Charadrius sp.* standing motionless, back-on, in front of them. Winter records of Ringed Plovers *C. hiaticula* at Chew are very unusual so I stared at it closer through my 25x telescope. As I did so, it turned and showed to my total amazement that it was in fact a Killdeer *C. vociferus*. It remained in view for about five minutes, feeding over an area of mud and stones about 25m. from the water's edge, before disappearing into a gully. About ten minutes later it reappeared and fed for a further ten minutes or so by a small puddle close to a grazing flock of Wigeon *Anas penelope*. Eventually it was threatened by a Lapwing and it flew into the gully again and disappeared. I was joined by Dr and Mrs Malcolm Sainsbury and two other birders and I decided to run back to the Ringing Station at Herriott's Bridge to fetch other observers. I returned with Dorian Buffery, Tim Cleeves and Sid and Olive Mead and the Killdeer was again in view at closer range, sitting on stones close to the shore. However, after about a minute it threatened a feeding Snipe *Gallinago gallinago* and flew over a creek and disappeared behind a small ridge. Unfortunately(!) an immature Merlin *Falco columbarius* then flew along the shore and landed in front of the hide, scaring off all the waders. The Killdeer disappeared and despite a thorough search by large numbers of observers over the following days it was never seen again.

Description: A smallish wader, though distinctly bigger than a Ringed Plover. Structurally similar to Ringed but with a long looking body and a long rear end (primaries/tail). The most striking feature was the double black breast band, conspicuous at all times but best seen when it was front-on. The lower band was slightly broader and browner, while the upper one continued round the top of the mantle. The rest of the underparts were white, extending round to form a collar between the crown and the mantle. Bill appeared dark. A blackish area extended from the bill back through the eye and extended up as a band over the fore-crown. Forehead white. There was a white, rather wedge-shaped line immediately above the blackish ear-coverts, from the level of the eye backwards. Top and rear of crown brown, as was the mantle which was distinctly darker in shade than that of Ringed Plover. Leg colour not noted. It was seen to fly about 20m. and it had a very striking and beautiful bright orangey rump. The long, full tail was black, with conspicuous white tips to at least the outer feathers. Noticeable white bar on open wing. Feeding habits resembled Ringed Plover as far as I could ascertain.

Killdeers are numerous in North America from the southern half of Canada to northern Mexico, as well as in the West Indies, Peru and Chile. Like our Lapwings they occur in a wide variety of dry habitats such as ploughed fields, pastures, lawns and the edges of lakes and ponds. Most northern birds migrate south reaching as far as the northern coast of South America though some may winter as far north as British Columbia and the Great Lakes. Unlike other American waders, Killdeers have occurred in Britain and Ireland mainly in winter, mostly between November and March and it seems likely that they may cross the Atlantic in response to cold weather, rather like the occasional Lapwings travelling the other way. The Chew bird was only the 22nd British record but was one of a high total of four or five individuals seen in Britain during that winter (others being in Leicestershire (Sept.—Nov.), South Yorkshire (Nov.), Scilly (Mar.—Apr.) and Tyne & Wear (Mar.—Apr.)). It constitutes the first record for Chew and Avon and is a welcome addition to an increasing list of American waders recorded at the lake.

Keith Vinicombe 28 Canynge Square, Clifton, Bristol BS8 3LB



Black Kites feeding and preening whilst in flight

It is a well known phenomenon that Black Kites *Milvus migrans* are useful scavengers and it has been stated by Colonel R. Meinertzhagen that they will take offal and carrion off water with amazing accuracy (see *Birds of Arabia* (1954):372) and there are other records of a similar nature. Nevertheless, it is thought that the following observations, though no doubt normal Black Kite behaviour, may not previously have been fully mentioned in the literature.

Between 1942 and 1944 I paid sporadic visits to Freetown, Sierra Leone, West Africa where troop ships often berthed in mid-stream in the vast and natural harbour complex. On these occasions I observed as many as twelve or more Black Kites soaring at various heights in search of food which often lay among large 'rafts' of rotting matter floating on the water. When edible items were found, the behaviour of the kites was invariably the same: swooping close to the water with wings held well above their bodies and maintaining equilibrium by flapping their wings fairly quickly and purposefully, with tail spread and claws fully extended they made carefully timed movements to snatch food from the surface of the sea. On gaining height and still circling over the harbour they plucked at items held in their talons, breaking off pieces which were quickly swallowed. Similarly, when scraps were thrown overboard from a ship's galley the Black Kites obtained many of them in the manner I have described, enabling me to observe the behaviour at close range. These items too were eaten whilst the birds were in flight and formed an equal if not larger portion of the birds' diet.

Obviously this method of feeding caused much fouling of the kites' underparts because while seascavenging and flight-feeding, putrefying material was rubbed against their plumage as a claw was brought near the bill. Breast feathers particularly became contaminated, and so as the birds flew and soared over the harbour much time was spent in preening.

Although there are a number of records of birds such as gulls and terns (*Laridae*) and swifts (*Apodidae*) preening whilst in flight (see *Brit. Birds* 54 (1961): 117–118, 323–324, 431) there seems to be little concerning birds of prey (*Accipitridae*) or other large birds such as crows (*Corvidae*) or owls (*Strigidae*) either preening or feeding in flight. It would be interesting to collate other records of this behaviour to see if its occurrence is in fact very widespread.

Bernard King Gull Cry, 9 Park Road, Newlyn, Penzance, Cornwall

Blackbirds feeding young on estuarine worms

It is well known that Blackbirds *Turdus merula* feed on a great variety of foods, some of which have been documented by Dr D.W. Snow (see *A Study of Blackbirds* (1958):25–33) and in *Brit. Birds* 52 (1959): 97, 239, 315–316; 53 (1960): 32; 55 (1962): 88; 56 (1963): 191–192; 57 (1964): 302; 58 (1965): 151, 386; 59 (1966): 77–78, 249, 341–342; 60 (1967): 412–414; 61 (1968): 85, 380; 62 (1969): 200–201; 63 (1970): 38–39; 65 (1972): 82; 67 (1974): 441; and 69 (1976): 371. Included among these are a note by Roger Harkness and a letter from Dr C. Suffern (52 (1959): 97 and 239) in which adult Blackbirds are described feeding on marine worms. In regard to the latter it is felt that the following may be of interest as an extension of the behaviour.

At Lelant, Cornwall during the last week of May 1978 I watched a pair of Blackbirds obtaining estuarine worms by probing into very soft ooze or by searching among the small seaweed-covered rocks. The worms, about seven cm. long, were covered in wet mud and therefore appeared dark in colour. This food, without being washed by the adults, was taken directly to nestlings in a nearby wood, and during the hour or so they were under observation the birds persistently sought the marine worms from the soft estuarine banks in order to feed them to their young. However, the adults themselves were not seen to feed on the worms.

Bernard King Gull Cry, 9 Park Road, Newlyn, Penzance, Cornwall

A hybrid Black Duck x Mallard on the Isles of Scilly

In October 1976 two Black Ducks *Anas rubripes*, almost certainly true vagrants, were discovered on the Great Pool, Tresco, Isles of Scilly, one of which remained throughout the winter and summer of 1977 (*Brit. Birds* 70 (1977): 416). Either the latter reappeared or another was present in the late summer and autumn of that year and was still present to at least the end of 1978.

I visited Tresco on 29 September 1977 and, where the Great Pool at its east end comes to a narrow neck to join the much larger west side, came within some fifty metres of a party of wildfowl which were resting on a mud bank. They comprised Mallard A. platyrhynchos and a few Teal A. crecca. In addition there was another which at first appeared to be the Black Duck. However, it proved not to be so but it was an interesting bird nevertheless: Bill a little larger than a Mallard's and a clear yellow colour throughout, except for a dark tip: there was no semblance of yellow-green on the upper or lower mandibles. Crown and nape chocolate or blackishbrown finely streaked with darker markings. Mantle, back and wings more 'solid' looking in tone than crown, being very dark blackish-brown; at close range and in good sunlight a pleasing pattern of uniform vermiculations, caused by paler edgings to many of the feathers, was visible. The speculum was a clear purple with, I think, a fine lightish or whitish line behind. Rump and upper-tail coverts dark brown with clear white tail. The latter character is not associated with Black Duck but of course most Mallard show it. Side of face down to upper breast lighter than the rest of its plumage, and heavily streaked, more so than a number of Black Ducks I have seen in Florida, U.S.A. A dark streak through eye. Underside of wing silvery-white as per normal Black Duck. Rest of underparts dark with paler marks extending to under-tail coverts. Underside of tail light, or whitish. Dark eye; legs yelloworange, not deep orange as drake Mallard. Later all the wildfowl were seen in flight for a short while, but the bird under review kept apart and made its way to resume roosting on the bank.

It would appear that the bird may have been the offspring of the Black Duck and one of the local Mallard, although the possibility that it originated in North America cannot be ruled out. Furthermore, I was informed that there had been during the year an importation of rather darkish brown Mallard but in my opinion it was not one of these. In my long wildfowl experience I have come across many dark-phased ducks in England and elsewhere but none like the bird under review.

The description was forwarded to Dr Jeffery Harrison who commented (in litt.) 'I am sure you are right from the description you give... that the bird was not a Mallard variety. I have seen specimens of this hybrid from America. I am particularly interested because it is a very good example of one of the underlying causes of hybridisation in which a bird of one species gets isolated from its own and mates with another.'

Bernard King Gull Cry, 9 Park Road, Newlyn, Penzance, Cornwall

(In the *Isles of Scilly Bird Report 1978*:49–50 one Black Duck, a female, was reported apparently paired with a male Mallard through the summer of 1977. In 1978 the two birds were again seen together and, although a nest was never discovered, seven ducklings showing mixed characters of the two species were seen in June 1978 on the Great Pool. The Black Duck and at least one of the hybrids were still present at the end of the year — Eds.)

Blackcap eating snowberries

On 17 January 1979 in my garden at Axbridge, Somerset I watched a female Blackcap *Sylvia atricapilla* feeding on snowberries *Symphoricarpos rivularis*. Portions of pulp were pulled out from the white berries (dark, over-ripe ones were also present on the same bush) and swallowed. At the same time a male Blackcap was feeding on the berries of honeysuckle *Lonicera* but this food source is more usual (see *Bird Study* 25 (1978): 60–61) A.P. Radford has also recorded Blue Tits *Parus caeruleus* and a Robin *Erithacus rubecula* feeding on snowberries but in these instances the birds selected only the dark, over-ripe berries (*Brit. Birds* 71 (1978): 133). In *The Handbook of Foreign Birds volume one* (1964: 24) A. Rutgers records that the berries are specially appreciated by the small Quail. Snowberries are probably taken by birds far more than records would suggest.

Brian Rabbitts
13 Hippisley Drive, Axbridge, Somerset BS26 2DE

Blackcap singing in winter

A.P. Brown has recorded a singing Blackcap *Sylvia atricapilla* in February 1975 (*Brit. Birds* 69 (1976): 310). This is probably not unusual as the following account may show. I observed a male Blackcap for much of the 1976—77 winter in some small but unkept gardens near the centre of Penzance, Cornwall. The bird was occasionally found feeding on insects as well as on the berries of ivy *Hedera helix*. In January 1977 I heard snatches of a rather subdued song which I thought may have been that of the Blackcap. However by February and throughout March it was in fairly good song, especially it seemed during wet weather when the bird used some favourite partly concealed perches. The clear and dominating song became a source of interest to many people.

In regard to the winter singing of Blackcaps in other countries the following item from *The Handbook* is relevant: 'According to R.E. Moreau does not sing in Egypt, but R. Meinertzhagen records song in November and April and D.A. Bannerman song in W. Africa prior to departure, while J.G.L. van Someren describes it as singing freely in Kenya and Uganda. On European side of Mediterranean sings regularly in winter, and songs have even been recorded from birds wintering in England' (H.F. Witherby *et al* 1938-41 *The Handbook of British Birds* vol. 2:80).

Bernard King Gull Cry, 9 Park Road, Newlyn, Penzance, Cornwall

CLUB ACTIVITIES, 1978

The club continued its policy of running not only winter indoor meetings but year-round outings to venues at varying distances from Bristol, both by car and by coach. In addition, through the General Committee, the Club kept in constant touch with other similar organisations and continued to make its points both on planning matters and with regard to the Chew Valley Lake Nature Reserve.

The committee was unfortunate in March to lose two members, Malcolm Sainsbury and Roy Smith, when they

resigned, and continued for the rest of the year without co-opting any new members.

Membership remained around the 550 mark, despite an increase in subscriptions passed at the December 1977 Annual General Meeting. As usual, a joint film show with the RSPB in February gave a welcome boost to club funds.

Field Meetings

Weekends on the Solway and in Anglesey were the two main outings; other trips included Kenfig, Capel-y-ffin, the Cotswold Water Park and the London Reservoirs. The Summer Social took the form of a tally hunt followed by an evening in the clubhouse of the Chew Valley Lake Sailing Club and was felt to be one of the most successful socials for some time.

Indoor Meetings

These were again held at St Mary Redcliffe and Temple School and consisted of:

12.1.78	Birds of the Wiltshire Chalk Downland - Robert Morgan	
9.2.78	Members' Evening	
16.3.78	Swallows, the inside story - Dr Cliff Davies	
14.9.78	Steep Holm - Tony Parsons	
12.10.78	The Great Bustard - Dr Nigel Collar	
16.11.78	Natural History Sound Recording - Richard Margoschis	
14.12.78	Annual General Meeting and Christmas Social	

Publications

Bird News continued to be circulated to members every month, and Bristol Ornithology 10 was published early in the year.

