Treshnish Isles Auk Ringing Group Report for 1999

Treshnish Isles Auk Ringing Group

Report for 1999

Expedition dates: 12th June - 26th June 1999

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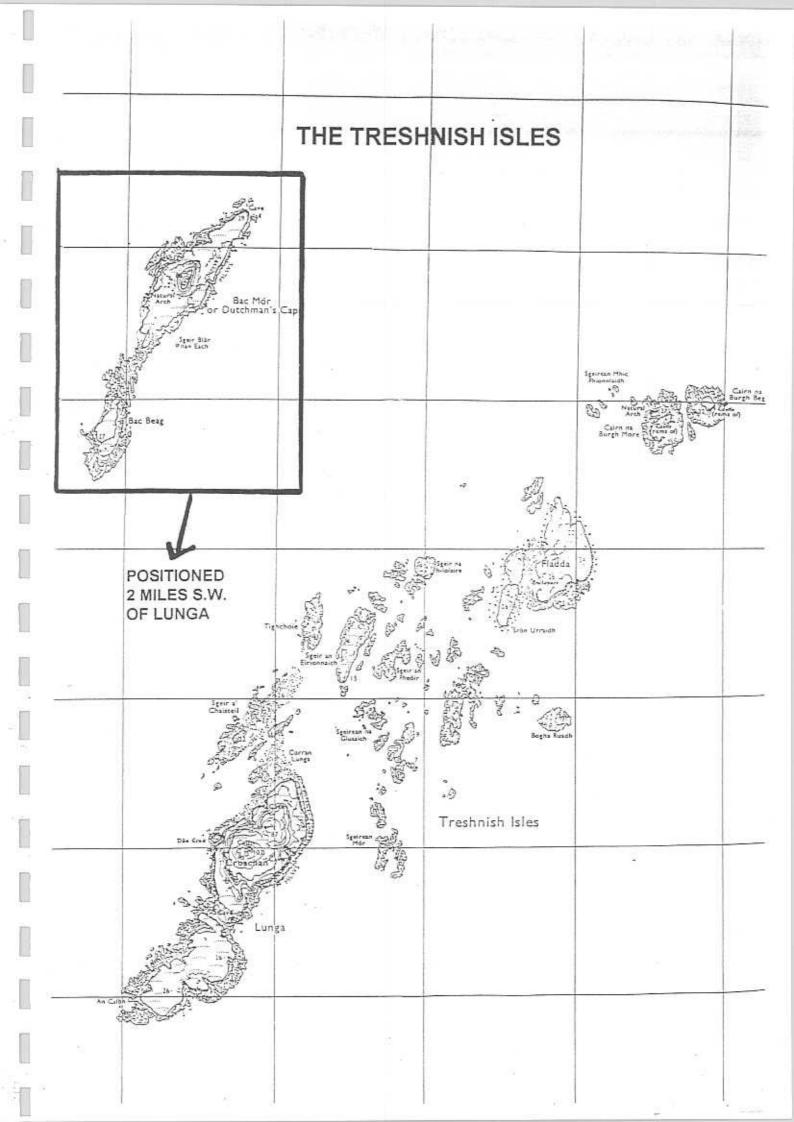
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INTRODUCTION

Since 1971, the Treshnish Isles Auk Ringing Group (TIARG) has undertaken to monitor through ringing and census work, the breeding seabird populations of the Treshnish Isles, Argyll (Walker & Cooper 1996). This report summarises the results of the Group's 20th expedition to the Treshnish Isles on 12th June 1999.

As in previous years, the expedition's base was set up around the ruined village site at the northern end of Lunga. The majority of the fortnight's fieldwork was centred upon Lunga & Sgeir a Chaisteil where a full seabird census (now annual) and the systematic ringing of specific seabird colonies was performed. With much logistical help from Iain Morrison and his family, expedition members were in addition able to census the seabird colonies on all the other islands of the Treshnish Isles in 1999. This year's census was undertaken as part of Seabird 2000, the third census of all breeding seabirds in Britain and Ireland, following on from Operation Seafarer in 1969/70 and the Seabird Colony Register (SCR) census in 1985-87. This is the first time TIARG have been able to census the entire Treshnish Isles group within a year and in particular, that members have landed on Bac Mor (Dutchman's Cap).

All TIARG census and ringing data are fed into two national monitoring programmes, the Seabird Colony Register (J.N.C.C.) and National Ringing Database (British Trust for Ornithology), respectively. The data supplied are of great conservation value as they are the sole means by which the seabird colonies of the Treshnish Isles are currently monitored. The conservation importance of these islands is recognised by their designation as a Special Protection Area by the UK Government for the breeding colonies of seabirds they support. Financial support for the monitoring work TIARG undertook in 1999 was given by Scottish Ornithologists Club (SOC) and the Seabird Group in the form of £200 and £250 grants respectively towards transport costs.



WEATHER

General Summary

The expedition period was some two weeks earlier than usual, which might have been expected to produce better weather, June being usually finer than July in Scotland. In practise, however, this year's late May and early June weather was generally poor, and this continued well into the expedition period. We landed on Lunga on 12th June, a fine dry day, but then the whole of the first week was bedevilled by rain and strong winds. It was not until Sunday 20th that a steady improvement began, and by Tuesday of the second week a spell of warm, dry weather had set in which lasted until Friday night. When we left on the following day, the weather was overcast with showers during the crossing to Mull.

Special considerations

Weather plays a crucial part in our expeditions in several different ways, and prolonged adverse weather can mean the difference between success or failure, however much effort, expense and planning has gone before. Some of the effects are explained below.

Rain hampers our activities in several ways. When surveying and counting seabird colonies, it is not permissible to work in cold and wet conditions as disturbance could mean desertion, egg or chick loss. Further, counting accuracy is diminshed. Similarly, ringing is not carried out in such weather. Apart from concern for the birds' welfare, there is more risk to ourselves of falls on wet rocks and slippery graa slopes, and also a reduction in physical efficiency when hampered by waterproofs. The rain does, however, provide a convienent supplement to our water supply.

Wind is rarely absent on the Treshnish and within reason can be beneficial. Fleyg-netting is most successful in a strong breeze, and a good breeze keeps midges down. But most netting techniques require calm conditions, both for the birds' safety and the fairly fragile equipment. In extreme cases our tents have been blown down by gales and other equipment severly tested. Strong wind also increases the movement of the sea.

In the last 2 years we have visited all the islands and skerries close to Lunga using an inflatable dinghy and outboard motor, and consequently sea conditions now concern us much more closely than in the past. For more ambitious trips to the distant islands such as the Cairn na Burghs and Dutchnmans', we depend on fain Morrison who, in turn, must consider wind and swell conditions and the shipping forecast when deciding if a trip is feasible.

Heat was not a problem on this year's expedition but in some years we have had to be careful to balance water supply and consumption, also taking into account the need to avoid dehydration. There are, however, other liqurds which help in this! It is certainly necessary to ensure sufficient water when visiting islands lacking a safe source of fresh water, espicially if the visit may be longer than anticipated.

Detailed Notes

Saturday 12th June. Weather warm and fine in Oban, cloud cover building later in day. Landed in dry, fair weather which lasted through evening. Clear night.

Sunday 13th June. Early morning very wet, brightened later in morning. Survey work possible late morning and afternoon, turned wet again in evening, with S.E. breeze and driving rain.

Monday 14th June. Continuing heavy rain and mist in morning. Improved around midday with weather front bringing clear skies and warmer weather from S.W.. Weather good through afternnon and into evening but poor again during night.

Tuesday 15th June. Misty during early morning, then cleared, becoming overcast but warm. Afternoon fine. Rain appeared in early evening, became heavy and continued on and off all night.

Wednesday 16th June. Very wet in morning, began to improve around lunchtime so that surveying was possible. Rain started again in late afternoon with strong S.W. breeze.

Thursday 17th June. Windy night with showers, clearing in morning with mixed cloud and clear skies. Breeze remaining strong from S.W.. Evening fine, wind dropping.

Friday 18th June. Heavy rain in early morning, continuing as mist and drizzle. Wind from S.W. around Force 4. Rain cleared in afternoon and conditions improving in evening, clear skies out to the west and wind dropping. Became very cold with strong westerly breeze from midnight.

Saturday 19th June. Heavy continuous rain from at least 06.00 hours. Wind shifted N.E., the E., then S.W., with big seas to west of Lunga. Shipping forecast Force 5 S.W. backing Force 8 N.W.. Actual

as predicted but only reached N.W. Force 6-7, around midnight to 03.00 hours Sunday. No boats

Sunday 20th June. Heavy rain showers in early morning then brightened considerably. Wind S.W. Force 4, good visibility with much broken cloud and odd showers. Rain squall 21.40 hours with fresh

Monday 21st June. Heavy rain squall during night, 02.00 - 04.00 hours with gusts up to gale force. Rain showers at 09.00 hours with wind still N.W. and strong. Weather improved during day with good sunny spells but strong cold breeze. Wind shifted to S.W. and largely dropped in evening.

Tuesday 22nd June. Fine, still, cold night. Sea calm by morning, sky becoming overcast. Wind light north-easterly. Became clear and sunny during evening.

Wednesday 23rd June. Fine day, blue skies with no cloud, very hot and no wind. Sea flat calm. Thursday 24th June. Much as Wednesday, but S.E. breeze and cloud cover developed in late evening. Friday 25th June. Began dull and overcast with S.E. breeze. Brightened during morning, warm and sunny by noon. Sea visibility poor with mist, wind rising S./S.E. and sea becoming choppy. Evening weather fine little wind by dusk.

Saturday 26th June. Damp in early morning, then improved but cloud increased with light showers around midday, and becoming colder with seas choppy. Wet return trip with rain squalls on west side

Mull, clearing before we reached Craignure.

SYSTEMATIC BIRD LIST FOR 1999

The following systematic list is a brief account of those bird species seen whilst the Treshnish Isles Auk Ringing Group were present on the Treshnish Isles, 12th June - 26th June. The status comments refer to the species' occurrence during the breeding season based upon the records of expeditions in previous years. A detailed breakdown of breeding seabird numbers on the Treshnish Isles in 1999 is provided in a subsequent section of the report.

Fulmar Fulmarus glacialis

A common breeding species

Breeding was confirmed on Bac Mór, Bac Beag, Cairn na Burgh More, Cairn na Burgh Beg, Fladda, Lunga and Sgeir a Chaisteil. The breeding population for the Treshnish Isles was estimated at 1078 based upon apparently occupied sites. A single Fulmar showing characteristics of the dark morph (blue phase) was sighted on a ledge on the west coast of Bac Mor. The double dark morph and it's intermediate forms with the double light morph of North-east Atlantic waters, is rare in Scottish waters.

Manx Shearwater Puffinus puffinus

A regular breeding species

Presumed breeding birds were seen at night on Lunga and Bac Mór. Seven birds were mist netted around the Village at the northern end of Lunga whilst other birds were noted at night flying low over the slopes around Harp Rock.

Storm Petrel Hydrobates pelagicus

A common breeding species

Birds were heard churring from burrows on Bac Mór, Fladda and Lunga. In addition to birds noted at colonies documented by Gilberts et al 1996, single churring birds were heard on the summit of Cruchan (Lunga) and from under three isolated boulders on the cliff top plateau of Bac Mór.

Gannet Sula bassana

Regularly seen offshore

Between 1 and 8 birds recorded offshore on five dates, all adults other than 4 immatures in a flock of 8 birds. Of those birds seen fishing, all were off the west coast of Lunga and Bac Mor.

Shag Phalacrocorax aristotelis

A common breeding species

Breeding was confirmed on Bac Mor, Bac Beag, Cairn na Burgh More, Cairn na Burgh Beg, Fladda, Lunga, Sgeir a Chaisteil and Sgeir an Eirionnaich. The breeding population for the Treshnish Isles was 601 based on a nest count.

Greylag Goose Anser anser

Regularly represented by a small number of breeding pairs and a late summer moult flock

The moult flock held at least 160 birds, typically residing around the islands of Sgeir an Eirionnaich, Fladda and Sgeir an Fheòir. A further 7+ moulting adult birds were noted on Bac Mór in addition to a pair with a well developed gosling. Extensive areas of vegetation heavily grazed and trampled by geese was located on Bac Mór adjacent to freshwater pools at the south and north ends. Further such areas were noted on the south end of Lunga, Sgeir an Eirionnaich and Sgeir na Giusaich whilst birds were also seen using Cairn na Burgh More.

170 birds were seen on 14th June flying west from the Treshnish Isles.

Mallard Anas platyrhynchos

Rare visitor

Single ducks were flushed from pools at the south ends of Bac Mor and Lunga on the 24th and 16th June respectively. A single drake seen on Sgeir na h-Iolaire on 23th June.

Eider Somateria mollissima

Regularly breeds in small numbers

Incubating females were located on Sgeir an Eirionnaich (3 nests), Sgeir na h-Iolaire (2) and Lunga (2, Corran Lunga). In addition a minimum of 8 broods of between 1 and 7 young were noted at Cairn na Burgh Mor (3 broods), Sgeir na Fheòir (1), Sgeir a Chaisteil (2) and Lunga (2, Tarbet). At least a further 10 ducks frequented Lunga and Sgeir a Chaisteil whilst only two ducks were noted at Bac Môr. The only drakes noted amongst the Treshnish Isles were a flock of 9 off Sgeir a Chaisteil on 17th June.

Red-breasted Merganser Mergus serrator

A rare visitor

Two birds were noted flying north offshore from Bac Mor on 24th June.

Buzzard Buteo buteo

One pair breeds in most years

No evidence of breeding though one bird was regularly noted within the vicinity of the cliff nest site used in 1998.

Peregrine Falco peregrinus

At least one bird regularly present with breeding known to occur on adjacent coasts

Breeding was confirmed for one pair at Bac Mór, with one, possibly two, well developed young noted on 25th June. A single bird was seen on four dates from the islands to the north of Bac Mór, a male when sexed. On one of these occasions, the bird was hunting Puffins off Sgeir a Chaisteil; this species was also found amongst prey remains on Bac Mór.

Corncrake Crex crex

Probably a regular breeder in small numbers

Single calling birds were heard from 6 localites within the northern half of Lunga involving at least 5 individuals. All birds were associated with nettlebeds surrounded by Bracken. Three birds were heard daily, day and night, during the expedition's first week within close vicinity of the village (expedition base). Only two remained calling during the second week. This is the third year calling birds have been noted at this locality, the previous occasions being in 1996 and 1998. A single bird was also regularly heard by day beside the cliff path above the cave/gully north of Harp Rock. The remaining localities at which single birds were heard, each on two occasions at night, were to the north of Shag Alley and on the saddle north-east of the summit of Cruachan.

Lone calling birds were also noted on single dates on Sgeir an Eirionnaich and Cairn na Burg More whilst one was reported from Cairn na Burgh Beg.

This increase in the total number of calling males on the Treshnish Isles reflects that reported in general for the Scottish west coast islands from a population low in the early 1990's (Ogilve et al 1999).

Oystercatcher Haematopus ostralegus

Regularly breeds in small numbers

Breeding was confirmed on the Treshnish Isles for 5 pairs and probable for a further 18 pairs (alarming at predators). 12 breeding pairs held territories on Lunga's beaches and rocky outcrops (3

pairs Corran Lunga, 1 in area 5, 3 in area 6a, 2 in area 8, 2 at Tarbet and 1 in area 10) with only three broods and one clutch located. Elsewhere territorial pairs were located at Bac Mór (3, one with a pullus), Bac Beag (1 possibly 2), Carn na Burgh Beg (1), Cairn na Burgh More (1), Sgeir na h-Iolaire (1), Sgeirean na Giusaich (1) and Sgeir an Fheòir (1).

Ringed Plover Charadrius hiaticula

One or two pairs breed

Four pairs were considered to have attempted breeding with 2 pairs located on Fladda, 1 pair incubating on Sgeir a Chaisteil and a pair with young at Corran Lunga, Lunga.

Additional records relate to adults, three roosting at high tide at Corran Lunga on 26th June and two on the strand line at Sgeir na h-lolaire on 23rd.

Dunlin Calidris alpina

Rare visitor

One bird was recorded on Sgeir an Fheòir on 23rd June.

Snipe Gallinago gallinago

Regularly breeds in small numbers

At least four drumming males were located along the north-east coast of Lunga; one above Shag Alley, one above Shearwater Gully and two within the vicinity of the village. Up to four individuals were flushed from the south end (count area 7) on a given day with at least 4 pairs considered to be breeding. Elsewhere during a survey of the whole island, up to 9 individuals were flushed on Fladda where at least two drumming males were noted on a subsequent visit. A single bird was flushed from a clutch of 4 eggs on south end of Bac Mór.

Curlew Numenius arquata

Irregular visitor

Up to 2 birds were noted around Fladda and a single was heard calling from Bac Mor on 25th June.

Redshank Tringa totanus

Rare visitor

One bird was recorded on Fladda on 24th June

Common Sandpiper Actitis hypoleucos

One pair occasionally breeds

Single birds alarming and displaying were noted at Sgeir a Chaistell, Sgeir an Fheòir, Fladda (south bay) and Sgeir an Eirionnaich.

Arctic Skua Stercorarius parasiticus

Small numbers seen daily presumably from the breeding colony on Coll

Up to 7+ seen daily kleptoparasitising auks and Kittiwakes at Harp Rock. Both dark and light phase birds were observed, with count maxima of 5 and 2 respectively.

Long-tailed Skua Stercorarius Iongicaudus

First known record for the Treshnish Isles.

A single adult of this less than annual visitor to Argyll, was seen flying over Corran Lunga, Lunga towards Harp Rock on 26th June.

Great Skua Stercorarius skua

An increasingly regular species, with one pair holding territory since 1996 where breeding was confirmed in 1998.

During the expedition's first week one pair was regularly seen perched on high ground south of the Tarbet, Lunga (area 6), apparently holding territory. The pair was agitated by approaching Great Black-backed Gulls as well as humans but no evidence was found of a nest or young. A pair later seen over the Village, at the north end of Lunga, became agitated at the presence of a dog and a human. At the latter locality birds, often in pairs, regularly flew overhead with a maximum of five birds at one time on the 23rd June, a sixth following later that day, identifiable from moulting inner primaries. Elsewhere a single bird was seen over Cairn na Burgh More on 12th June and up to 2 over Fladda where no evidence of breeding was found this year.

Common Gull Larus canus

Irregular breeding species in small numbers

Breeding was confirmed for single pairs on Sgeir an Fheòir and Sgeirean na Giusaich south, nests being found at both localities. Elsewhere 6 pairs were considered to be breeding on the southeast of Fladda where breeding was confirmed in 1998. Otherwise single birds were seen at Sgeir a Chaisteil and Sgeir na h-Iolaire on 17th and 23rd June respectively.

Lesser Black-backed Gull Larus fuscus

Regularly breeding species in small numbers

The breeding population for the Treshnish Isles was estimated at 40 pairs with breeding either confirmed or considered to have occurred on all islands except Sgeirean na Guisaich (north and south) and Sgeir an Eirionnaich. Bac Mór and Cairn na Burgh More held the largest single colonies, 8 pairs each, whilst the remaining colonies supported between 7 and 1 pairs.

Herring Gull Larus argentatus

A common breeding species

The breeding population for the Treshnish Isles was estimated at 225 pairs with breeding either confirmed or considered to have occurred on all islands except Sgeirean na Guisaich (north and south). The largest single colony was of 54 pairs on Cairn na Burgh More.

Great Black-backed Gull Larus marinus

Regular breeding species that has declined in recent years

The breeding population for the Treshnish Isles was estimated at 342 pairs with breeding either confirmed or considered to have occurred on all islands except Sgeirean na Guisaich (south) and Sgeir na h-lolaire. The largest single colony was of 52 pairs at Lunga's south end, area 6.

Kittiwake Rissa tridactyla

A localised breeding species

Breeding was only confirmed on Lunga and Bac Mór with 786 nests in total, the main colony situated around Harp Rock. Colonisation of Corran Lunga, Lunga (area 1) continues with one nest in 1998 increasing to 3 in 1999.

1998 Correction: no evidence of breeding was found for this species on Fladda and Sgeir a Chaisteil.

Common Tern Sterna hirundo

Irregular breeding species

Up to 4 pairs were considered to be breeding amongst the Arctic Tern colony on Sgeirean na Guisaich (south). Numbers breeding remain substantially lower than the 50 pairs noted in 1995.

Arctic Tern Sterna paradisaea

Irregular breeding species

After only one pair probably bred in 1998 (on Sgeir an Eirionnaich), the traditional breeding colony of Sgeirean na Guisaich (south) held good numbers in 1999 (95 nests, 180 birds) with a second smaller colony on Sgier an Fheòir (58 nests, 160 birds). Not all birds present within the vicinity of a colony are breeders, with immatures prospecting for future years.

Guillemot Uria aalge

Common breeding species

Breeding was confirmed on Lunga and Sgeir a Chaisteil, the main concentration typically located within the vicinity of Harp Rock with 8926 adult birds estimated. For the Treshnish Isles as a whole, the counts provided an estimated 9566 adult birds.

Razorbill Alca torda

Common breeding species

Breeding was confirmed on Lunga, Fladda and Sgeir a Chaisteil. Birds were also seen on suitable breeding sites at Cairn na Burgh Beg and Cairn na Burgh More, whilst 7 birds were noted inshore off the north-west cliffs of Bac Mor. For the Treshnish Isles as a whole, the counts provided an estimated 1231 adult birds.

Black Guillemot Cepphus grylle

Regular breeding species in small numbers

Adult birds were seen around Fladda (21 birds), Sgeirean na Giusaich (3), Sgeir an Eirionnaich (25), Sgeir an Fheòir (5), Cairn na Burgh More (5), Bac Mór (7) and Lunga's south end (1, area 8). Breeding was confirmed on Fladda and the south end of Lunga (area 6) with 3 and 1 nests located respectively in different areas from the adult above.

Puffin Fratercula arctica

Common breeding species

Adult birds were apparently occupying burrows on Bac Mor, Lunga, Fladda and Cairn na Burgh More. For the Treshnish Isles as a whole, the counts provided an estimated 1788 pairs.

Rock Dove Columba livia

Regular breeding species in very small numbers

A single pair were found in each of the two caves on the nort-west coast of Lunga between Harp Rock and Corran Lunga. Single birds were seen on occasions elsewhere on Lunga including the Village (north end), Shag Alley, South end and feeding at Cruachan.

Collared Dove Streptopelia decaocto

A very rare visitor

A single bird was seen perched near the Village at the north end of Lunga on 17th June.

Skylark Alauda arvensis

Regular breeding species in small numbers

A minimum of 8 singing birds were considered to be holding territory on Lunga; five at the south end (2 & 3 in areas 6 & 7 respectively), and three on the high ground between Cruachan summit and the Village to the north. The only other birds noted were territorial pairs on Bac Mor (2) and on Fladda (1).

Swallow Hirundo rustica

An irregular visitor

Singles were seen over the north end of Lunga on the 17th & 18th June.

Meadow Pipit Anthus pratensis

Regular breeding species in small numbers

Widespread breeding species on Lunga and Fladda with at least 2 pairs on territory on Bac Mór. The species may have been overlooked on the other islands visited.

Rock Pipit Anthus petrosus

Regular breeding species in small numbers

Common along the coast of Lunga with birds also noted on Bac Mór, Fladda, Sgierean Mor and Sgeir a Chaisteil. Breeding was only confirmed on Fladda (1 nest with 4 eggs) and Lunga but was considered to have occurred on the other islands mentioned given the presence of recently fledged juveniles. The species is likely to have been overlooked on the other islands visited, given the limited duration of visits.

Pied Wagtail Motacilla alba yarrelli

Irregular breeding species

A pair with newly fledged young were located at the boulder beach, Lunga between Shearwater Gully and the Landing Beach on 14th June. A presumed second pair with two fledged young were in residence around Harp Rock from at least 20th June. Away from the general locality of these two families, the only other sighting was of a pair again on Lunga in the south-west end of area 8.

Wren Troglodytes troglodytes

Regular breeding species, quite common where habitat suitable.

All records of the species were confined to the northern half of Lunga, predominately amongst the boulder scree and bracken covered slopes from Cruachan down to the sea and on Corran Lunga. Singing males suggested 8 territories along the west coast between Harp Rock and the north end.

Other singing males included birds at Shag Alley, Shearwater Gully and the boulder beach south-east of the Landing beach. Fledged young were noted at Corran Lunga, the Boulder beach and the Village at the north end.

Dunnock Prunella modularis

Irregular breeding species

No birds were recorded by the 1999 expedition.

Stonechat Saxicola torquata

Rare visitor

One juvenile was noted on two dates (including 20th June) around the Village at the north end of Lunga during a period of poor weather.

Wheatear Oenanthe oenanthe

Regular breeding species in small numbers

In contrast with 1998, there appeared to be less wheatears on Lunga this year. In particular, there seemed to be less juvenile birds around. Despite arriving one week earlier than last year, the young present were well-developed. Family parties were very once again quite mobile and dispersed across the island. Estimating territories was difficult due to the scarcity of birds although adults were seen in locations approximating to 8 territories on the main body of Lunga (excluding south end) distributed similarly to last year.

Despite considerable effort (particularly in attempting to catch known ringed birds), the number of birds ringed was less this year. Only 22 new birds were caught along with 3 retraps using seven spring traps baited with meal-worms. One bird was re-caught in Shearwater Gully near to its original place of ringing. However two others were both caught at locations differing from those of initial ringing.

One was a female bird, ringed as a juvenile in 1997 near the cottages, which was re-caught on the south side of Cruachan. The other, a male, was also ringed as a juvenile by the cottages and was re-caught on the cliffs around the north summit of Lunga.

No effort was made to trap birds on Fladda this year.

	Juvenile	A	dult	TOTAL
	DEGRAMOLIST (MICHES	Male	Female	-23
New birds	19	1	2	22
Retraps	-	2	1	3
TOTAL	19	3	3	25

					Location				
		Lunga Area 14		Cottages	N Beach		earwate Gulley	9r	Tarbett
li li	Juv.	A	dult	Juv.	Juv.	Juv.	A	dult	Juv.
		M	F		errendens	-2000000	F	M	1.00.000
New Birds	3		1	8	6	1	1	1	1
Retraps		1	1					1	

Three birds were re-trapped from the previous year.

Ring No.	Age	Wing	Weight	Site	Date
A297487	3J	99	24.7	Cottages	29/06/98
	4M	96	22.8	Area 14	22/06/99
A297499	3J	98	23.9	Shearwater Gulley	30/06/98
	4M	98	26.6	Shearwater Gulley	21/06/99
E196506	3J	94	22.8	Cottages	02/07/97
	4F	94	26.1	Area 14	23/06/99

Blackbird Turdus merula

Rare visitor

A single bird was heard calling on the 19th - 20th June around the Village at the north end of Lunga during a period of poor weather.

Sedge Warbler Acrocephalus schoenobaenus

Rare visitor

One bird was noted singing from the reedbed at the south-east end of Lunga. A singing bird was also present there in the previous two years but as yet no evidence found of breeding or a second bird.

Hooded Crow Corvus corone cornix

Regular breeding species in small numbers

A recently fledged juvenile in the gully between area 6 and 8 of Lunga was the only indication of breeding on the Treshnish Isles in 1999. The species was noted daily on Lunga referring to either two or three birds, one of the latter possibly a juvenile, most records from Cruachan south. Caches of corvid-predated gull eggs were again to be found on the south end of Lunga. Elsewhere up to two birds were noted on Fladda and, on 15th June, a pair on Sgeir an Eirionnaich.

Raven Corvus corax

At least one pair breeds in most years

Usually a pair, sometimes a single bird, was seen on occasions within the northern half of Lunga. At least one pair was also seen at Fladda on 17th June with a single on Cairn na Burgh Beg on 27th June. No confirmation that breeding had been attempted was obtained.

Starling Sturnus vulgaris

Regular breeding species in small numbers

Up to 9 birds, adults when aged, were seen on 6 dates on Lunga, most records from the north end. A single bird was seen on Sgeir an Fheòir on 25th June. No evidence of breeding was found.

Twite Carduelis flavirostris

Regular breeding species in small numbers

Observations suggested no more than 4-5 pairs resident on Lunga with probably no more than 2 juveniles. The largest flock was of five or six birds seen and heard at Harp Rock and Shearwater Gully. At least one pair with a juvenile, plus a second pair roved along the north east coast of Lunga from Shearwater Gully to the Landing Beach. A second lone juvenile was seen on occasions to join birds around the Landing Beach. The birds recorded from the south end of Lunga were of a pair on single dates at the reedbed and Tarbet.

Only two pairs were noted during a brief visit by the expedition to Fladda on the 17th June. On Bac Môr a minimum of 6 birds (no definite age) were present on 24th June, these seen in a flock feeding on the south face of the Hill. Also on the same date, one pair accompanied by 2 juveniles were seen at the north end of Bac Môr whilst at the south end 1 pair were seen.

SYSTEMATIC MAMMALS LIST FOR 1999

Otter Lutra lutra

Evidence of presence regularly noted

Fresh tracks and freshly eaten auk eggs were found in the first cave north of Harp Rock. In the previous two years, fresh tracks suggested Otters were using the second cave north.

House Mouse Mus musculus

Resident

One animal was regularly observed most evenings indoors at the expedition base, the Village at the north end of Lunga.

Rabbit Oryctolagus cuniculus

Resident, numbers much reduced in recent years.

Up to 4 animals regularly observed in the Harp Rock area, including an entirely black animal. Other sightings included up to 4 animals on the summit and southern slope of Cruachan, Lunga, where there was much evidence of grazing by the species. No evidence of animals on the other islands were noted.

Grey Seal Halichoerus grypus

Regularly breeding species

Up to 40 animals regularly hauled out on intertidal reefs between Lunga and Fladda. On the reefs between Bac Beag and Bac Mor, and off Accessible Gully, Bac Mor, were 24 and 10 animals hauled out respectively on 25th June.

Harbour Porpoise Phocoena phocoena

A resident in West Scottish coastal waters.

A single animal was seen off Harp Rock on 23rd June. Three periods of sightings from Bac Mór east coast involved on two occasions 2+ animals and once a mother and calf only 200 metres offshore. All animals appeared (from a highly variable course taken) to be feeding.

SYSTEMATIC BUTTERFLIES LIST FOR 1999

Common Blue Polyommatus icarus

Regularly breeder

From the 21st June up to 3 butterflies were seen daily along the north-east coast of Lunga. On the 24th June individuals were seen at five locations on Lunga, including the south end.

Small Heath Coenonympha pamphilus

At least one individual of this species was seen on Lunga during the expedition.

1999 Breeding seabird census for the Treshnish Isles

Seabird 2000 census results

Evisionaleh?

Sector	Count	Lunga	Chaistiel	Giusaich	Fheoir	Grionaich	HI-loliare	Fladda	Cairn na Burgh More	Cairn na Burch Bed	Bac Mor	Bac Beag	Grand Total: Treshnish Islas
Fulmar	AON	525	106	200 1112 1112				44	132	56	147	68	1078
Manx Shearwater	No census			1									
Storm Petrel	No census	+	+					+	+	+	+	+	
Shag	AON	271	24			10		222	26	6	42	3	601
Great Skua	PRS	(£)											(4)
Common Gull	PRS			-	-			9					8
Lesser B-b Gull	PRS	6						5	8	7	đ	-	40
Herring Gull	PRS	34	19		15	9	35	49	54	5	8		225
Great B-b Gull	PRS	65	5	2	8	44		64	21	5	80	48	342
Kittiwake	AON	782	Contraction of the Contraction o								4		786
Common Tren	QNI			*		2							9
Arctic Tern	QN			95	58								153
Razorbill	Q	1015	16					190		9	40		1232
Guillemot	QVI	9426	100					40					9566
Black Guillemot	PRS	3		3	5	25		21	5		7	-	70
Puffin	AOB	1684	The second second					40	2		60		4.700

Totals for each Sub Colony Zones of Lunga and Chaistiel

Sector	Count						Count	Count Sectors on Lunga and Chaisteil	on Lung	a and C	Chaisteil						Lunda & Chaistiel
	nuit	-	C	6	4	2	9	6a	7	8	6	10	11	12	12a	+3	Totals
Fulmar	AON		87	23	24	71		40		65	42	21	51	88	13	106	631
Shag	AON		44	48	00	68		9		32		35	22	8		24	295
Lesser B-b Gull	PRS	-						2		9			1000				6
Herring Gull	PRS	15			-			15			22	-				19	53
Great B-b Gull	PRS		***	+	m			52	7				-			5	70
Kittiwake	AON	6								12		26	711	15	12		782
Razorbill	R		74	53	82	104		24		48	4	30	358	150	88	16	1031
Guillemot	Q		20			1. 13.						115	892	320	30	100	9256
Black Guillemot	PRS							-									
Puffin	AOB		- 58	45	2	6						20	580	480	460		1684

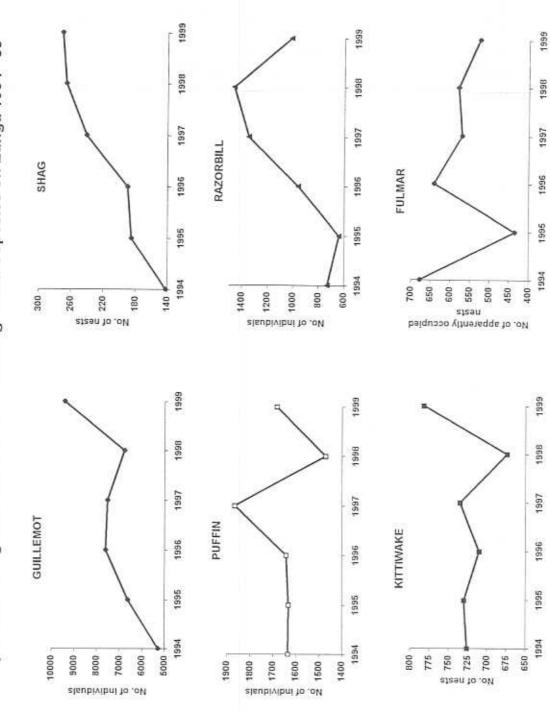
Key to count unit codes: AON = Apparently occupied nest

PRS = pairs

IND = individuals

AOB = Apparently occupied burrow

Population changes in a selection of breeding seabird species on Lunga 1994 - 99



TRESHNISH RINGING TOTALS FOR 1999

SPECIES	NEV	BIRDS RING	ED	TOTAL RINGED	RETRAPS	CONTROLS
	ADULT	JUVENILE	PULLI		in to the start of	A 100-100 (1-10-100-100-100-100-100-100-100-100-10
Fulmar	23			23	7	
Manx Shearwater	4			4	1	1
Storm Petrel	732			732	95	62
Shag	78		22	100	6	1
Oystercatcher			2	2		
Herring Gull		9	30	39		
Great Black-b, Gull			16	16		
Kittiwake	23			23	17	
Guillemot	507			507	65	4
Razorbill	102			102	23	
Puffin	274			274	57	2
Rock Pipit				2		
Wheatear	3	19		22	3	
TOTALS				1844	179	8

Note: Rings used in 1999 were registered under Treshnish Auk Ringing Group, Hardman, Juckes & Cooper, and J.R.Hodson.

TRESHNISH RINGING TOTALS 1971 - 1999

2252	1971	1974	1976	1977	1978	1980	1982	1984	1986	1989	1991	1993	1994	1995	1996	1997	1998	1999	TOTAL
Fulmar	17	9	4		8	21	4	18	7	21	15		4	27	38	7	24	23	254
Manx Shearwater		2	13		4	4	-	ထ					6	Ť)			4	VOV.
Storm Petrel		254	22		Ψ-	283		203	800	411	975	75	440	536	331	1104	741	732	6908
Shag	150	7	10	10	24	80	90	160		40	10		10	59	96	66	150	100	1055
Buzzard						-	N											1000	n
Oystercatcher		7				Ψ-	4	2										2	10
Common Sandpiper																	+	ı	+
Great Skua																		0	
Common Gull																	4		- 4
Lesser Black-backed Gull																			
Herring Gull	9	Σ.			14	46	35	26	4	4	က		22	24	6	52	73	30	284
Great Black-backed Gull	က	9	က	7	9	22	14	35		22	15		9	25	16	48	5	16	263
Kittiwake						-	-	-	2	7	4		9	10	-	20	4	23	440
Guillemot	32	20	4		99	502	137	364	180	250	306		109	498	349	472	503	507	4100
Razorbill	65	72	06		115	266	218	236	151	103	64		81	101	105	86	112	100	1979
Black Guillemot													k)		1	1	-
Puffin	70	198	271		203	200	208	182	174	160	114		358	236	301	267	398	274	3614
Meadow Pipit														4		·)		3 45
Rock Pipit									S	•				2	4	2		2	16
Pied Wagtail														en	2) (C
Wren														ന					000
Wheatear			12					-	က						10	24	37	22	104
Willow Warbler																e E		1	
Twite																2			- 64
TOTAL	343	558	439	17	441	1427	684	1266	1396	4014	4506	75	4020	4530	4000	0400	000		

NOTES: Data for 1971 - 1995 extracted from Walker & Cooper (1996). Ringing data for a three day visit in 1972 was not available.

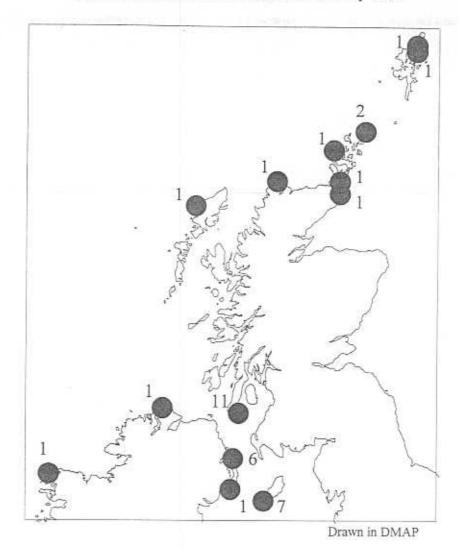
RECENT RINGING RECOVERIES

STORM PETREL

TIARG have in the past year received details of 36 recoveries of birds ringed within Britain and Ireland in the months July - August and controlled by TIARG on Fladda or Lunga in June - July 1998. These recoveries are summarised in both the table and map below; all birds were ringed as adults (Euring code 4).

Ringing Site	No. of co	ntrols at:	Time inte	rval (days)	Distance	Direction
	Fladda	Lunga	Minimum	Maximum	km	(degrees)
Sanda Island, Kintyre, Strathclyde	7	4	335	6883	145	339
Tullagh Point, Donegal, Eire	1	0		322	149	26
Valtos, Isle of Lewis, Western Isles	1	0		3256	194	170
Copeland, Down, Northern Ireland	6	0	1055	5424	209	345
Sheepland Hbr., Ardglass, Down, Northern Ireland	1	0		698	254	348
Faraidh Head, Highland Region	0	1		1058	255	202
Calf of Man, Isle of Man	5	2	338	706	290	340
Noss Head, Highland Region	0	1		3607	300	222
John O'Groats, Highland Region	1	0		327	310	220
Brough Head, Orkney	1	0		319	344	212
Inishglora, Mayo, Eire	1	0		318	346	43
Twinyess, North Ronaldsay, Orkney	2	0	1790	2903	395	216
Yell, Shetland	1	1	2530	5460	550	214

Recoveries of Storm Petrels ringed within Britain and Ireland in the months July - August, and controlled on the Treshnish Isles in June - July 1998



OTHER STORM PETREL RECOVERIES

Four recoveries were received of birds ringed elsewhere in Europe and controlled by TIARG on Treshnish Isles in June - July 1998. These are detailed below together with the two remaining Storm Petrel recoveries received in the past year, both of birds controlled shortly after being ringed by TIARG in 1998.

Abbreviations used:

Age

- 1 Pullus
- 4 Hatched before this calendar year, exact year unknown
- 6 Hatched before previous calendar year, exact year unknown

Manner of recovery

- R Caught and released by a ringer
- XF Found freshly dead or dying
- XL Found long dead

Storm Petrel			
D016420	4 R	8/06/95 2/07/98	Ponta de Almadena, Faro, Algarve, PORTUGAL Fladda, Treshnish Isles
			1120 days 2166 km 5 degs
Storm Petrel			
E403448	4 R	7/08/93 28/06/98	
			1786 days 894 km 226 degs
Storm Petrel			
9986446	4 R	17/07/95 2/07/98	Skogsoy, Oygarden, Hordaland, NORWAY Fladda, Treshnish Isles
			1081 days 790 km 235 degs
Storm Petrel			
E404090	4 R	4/08/93	Runde, Heroy, More og Romsdal, NORWAY
	K	2/07/98	Fladda, Treshnish Isles 1793 days 944 km 226 degs
			220 dogo
Storm Petrel 2311988	4	2/07/98	Fladda, Treshnish Isles
	R	1/08/98	Sanda Island, Kintyre, Strathclyde
			30 days 146 km 160 degs
Storm Petrel 2238546	4	2/07/98	Eleddo Teachaigh Island
2230040	R	19/07/98	Fladda, Treshnish Isles Calf of Man, Isle of Man.
			17 days 290km 160 deg
RECOVERIES (OF OT	HER SPECI	ES
Shag			
1170602	1	27/06/95	Lunga, Treshnish Isles
	XL	10/08/98	near Balevulin, Tiree, Strathclyde 1140 days 32 km 277 degs
Guillemot			
X42526	1 R	6/07/94 29/06/98	Isle of Canna, Highland Region

Gumernot			
X42526	1	6/07/94	Isle of Canna, Highland Region
	R	29/06/98	Lunga, Treshnish Isles
			1454 days 63 km 174 degs
Guillemot			
X67898	6	4/07/97	Lunga, Treshnish Isles
		25/12/98	Bahia de San Juan, Bakio, Vizcaya, Spain
			539 days 1474 km 170 degs
	Oil	victim, fate u	inknown
Guillemot			
GP74564	1	28/06/78	Lunga, Treshnish Isles
	X	26/3/98	Tarskavaig, Sleat, Isle of Skye, Highland Region
			7211 days 73 km 20 degs

Guillemot					
X42526	1	6/07/94	Isle of Cann	a, Highland	Region
	R	29/06/98	Lunga, Tres		
			1454 days	63 km	174 degs
Guillemot					
T96906	6	13/06/98	Port Ban, Is	le of Colonsa	ay, Strathclyde
	R	30/06/98	Lunga, Tres	hnish Isles	-y, olidalicijac
			17 days	46 km	344 degs
Razorbill					
M72732	6	3/07/97	Fladda, Tres	shnish Isles	
	XL	30/01/98	St Just, Con		
			211 days	711 km	176 degs
	Bod	y amongst 1	50 other auks	dumped in r	mineshaft by fisherman.
Razorbill					
M85629	6	1/07/94	Lunga, Tres	hnish Isles	
		3/01/98	West Bexing	ton, Dorset	
			1282 days	692 km	159 degs
	Oil v	ictim			75

REFERENCES

Gilbert, G. et al. 1996. A survey of Storm Petrels on the Treshnish Isles. Unpublished RSPB Report. Walker, S. & Cooper, D. 1996. Birds on the Treshnish Isles 1971 - 1995. Treshnish Isles Auk Ringing Group.

ACKNOWLEDGEMENTS

Firstly we would like to express our appreciation to Sir Alick Rankin for permission to allow our continuing studies to be made on these beautiful islands.

We thank lain Morrison and his family, for providing our transportation in the 1980's and 1990's and are grateful for his continuing advice, co-operation and help.

Once again thanks to Jan Densham for organising the expedition's food and provisions (a thankless task!).

We are grateful for the second of three research grants of £200 from Scottish Ornithologists Club and for a grant of £250 from the Seabird Group in 99 to help with the extra costs of Seabird 2000. Thanks is also due to TIARG members who donated Storm Petrel rings free of charge.