Treshnish Isles
Auk Ringing Group
Report for 2001

Treshnish Isles Auk Ringing Group

Report for 2001

Expedition dates:
23rd June – 30th June 2001

Expedition members:
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INTRODUCTION

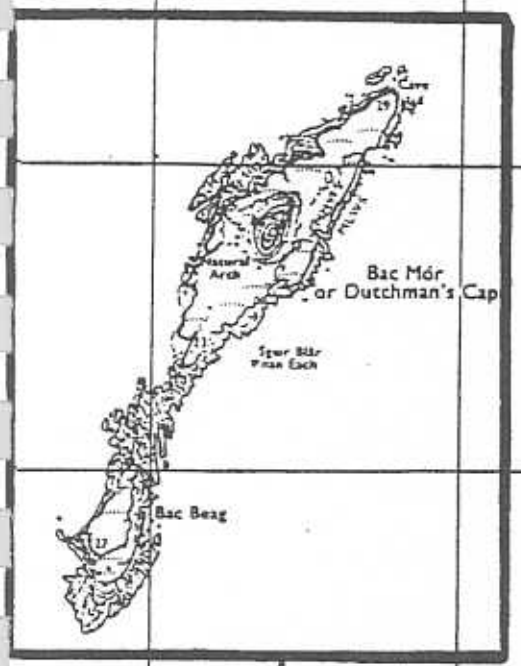
Since 1971, the Treshnish Isles Auk Ringing Group (TIARG) has undertaken to monitor through ringing and census work, the breeding seabird populations of the Treshnish Isles, Argyll (Walker & Cooper 1996). This report summarises the results of the Group's 23rd expedition to the Treshnish Isles on 23rd June – 30th June 2001.

As in previous years the expedition base was set up around the ruined village site at the northern end of Lunga. With much logistical help from Iain Morrison and RSPB staff (from Coll & Tiree), expedition members were in addition able to land on most of the other islands. This year's census was again 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.

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 2001 was given by the Hebridean Trust and the Seabird Group (JNCC) in the form of £1,500 and £250 grants respectively.

Any comments on the report and how future editions can be improved upon for relaying information required by conservation agencies are much welcomed.

THE TRESHNISH ISLES



POSITIONED
2 MILES S.W.
OF LUNGA

Fladda
Tighchoie
Sgeir an Eirionnaich
Sgeir a' Chaisteil
Cairn Lunga
Dùn Cuaich
Lunga
An Cùbh
Treshnish Isles
Cairn na Burgh More
Bogha Ruadh

WEATHER

Weather in the period immediately before this year's expedition had been reasonably good in the Hebrides, as we knew from watching weather reports; and on the journey out it was apparent from the reduced flow of cliff waterfalls that rainfall had been light. The ground conditions on Lunga confirmed this.

In general terms, the weather for the visit week was good, with easy sea conditions and fine though somewhat showery weather throughout, the better weather being in the early part of the week. In terms of the special requirements for catching seabirds, however, we suffered from an unusual lack of strong breezes, so necessary for successful fleyg-netting. This was mainly because the wind was in the southern quarter, leaving both Harp Rock and the village in the lee of the island's mass. The degree of annoyance caused by midges was greater than usual. Weather became more overcast with more showers in the second half of the week, but the rain fell reliably in the early hours of the morning, allowing the island to dry out by lunch and the weather improve each afternoon, before clouding up for rain during the next night. Some rough sea conditions also developed at the end of the week, such that our return (via Staffa) was more eventful than usual.

Saturday 23rd June

Morning in Oban was fine though overcast; cool with a brisk breeze where not sheltered. The sea calm to the east of Mull, but with poor visibility. Heavy cloud on Ben More Mull, and sailing conditions choppy once in the open sea. Rain showers on the way to Treshnish, while landing and thereafter. Sky overcast and fairly cool. Improved in evening with light Easterly breeze. Fine evening at Harp Rock, but midges troublesome.

Sunday 24th June

Fine night, with heavy showers in early morning, stopped by 0900hrs. Strong, gusting Easterly breeze. Full cloud cover, high thin cloud over sea and heavy cloud over Mull, clearer to North. Sea flat calm.
Brightened later, becoming warm and sunny, wind veering SE then backing E and dropping. During evening cumulus building over N.Mull and rainclouds developing elsewhere. Cold East wind blew up, bringing very prolonged showers till 2200hrs., then cleared. Wind dropped, weather fine till 0200hrs at least , showers between 0400 and 0600 hrs Monday.

Monday 25th June

Fine day. Hot and sunny with only slight cloud , mainly cumulus over N.Mull; very light ENE breeze. Sea calm but with underlying swell. Later, wind backed NW, still light. Warm, becoming hot , dry and sunny. Very hot by evening with no wind, midges. Slight breeze at Harp Rock in evening, became much cooler. Dry night.

Tuesday 26th June

By 0900hrs. , weather clear with light cloud over N.Mull, high haze elsewhere. By 1100hrs. , widespread (9/10) light cloud , with light breeze from North. After a shower in mid-morning, became cooler and cloud thickened.
Cloudy all afternoon; improved in evening, but with showers around 2200hrs. Rain stopped but strong E. breeze affected Storm petrel netting from midnight to 0100hrs Wednesday, when abandoned with arrival of thunderstorm from central Mull hills. Heavy rain in night.

Wednesday 27th June

Morning dawned dull and hazy, with sea visibility very poor. Heavy drizzle from mid-morning onwards, stayed wet until early afternoon when began to clear. Evening fine with light wind and flat calm , visibility good but some cloud buildup over N.Mull. (To Fladda at 2200hrs) Night fine with light breeze, but rain (a fine drizzle) began at 0300hrs. Thursday, persisted at times until morning.

Thursday 28th June

Weather at 1000hrs dull, soaking and overcast, but not actually raining. Dried off gradually through morning and early afternoon, with light, fluky breeze veering between W and E., and visibility improving. Open sea choppy during morning, but calmed as day progressed and by late afternoon weather was fine and pleasant, with clear views as far as Ardnamurchan and Skye. During evening cloud built up to 10/10 and rain fell around 1030hrs. , continuing during night.

Friday 29th June

Periodic showers all night, by 0900hrs a heavy continuous downpour. Rain stopped by 1030hrs, brightened from South in warm sunlight. Cloud reduced to a strip above N.Mull, but in early afternoon weather closed up again with more showers. This rapid transition through changing weather conditions is very typical of Hebridean islands; a strong southerly breeze brought brighter weather with cloud reduced to 6/10, but finally closed up in mid-evening with rain, intervals, then heavy rain by 2200hrs. Continued wet during night with gradually diminishing showers.

Saturday 30th June

Weather beginning to improve by 0800 hrs, though taking down of tents delayed to allow them to be packed as dry as possible. Sun came out during morning, though occasionally showers threatened. Came off Lunga at 1500hrs in improving conditions, although a heavy swell made the return passage via Staffa (where it was too rough to land) uncomfortable for some.

ISLAND VISITORS

Boat visitors were fewer this year than last, although no obvious reasons were apparent and Iain Morrison reported a busy season for day visitors. No canoes appeared, and only a few smaller yachts. Iain Morrison and Gordon Grant's boats called most days, and two or three wildlife charter or whale watching boats appeared occasionally. Two bird photographers (including Mark Hamblin, who was here last year) stayed two days on Lunga early in the week, working the Harp Rock area.

Visitors to the Stormie Bothy included John and Ruth Coates of the Wychavon Ringing Group in Worcestershire, who stayed a night with us and caught Storm Petrels, Charlie Self of the RSPB and Fiona, to both of whom we are most grateful for transportation to survey Fladda and the Cairn na Burghs – and some Storm Petrels.

SYSTEMATIC BIRD LIST FOR 2001

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, 23rd June – 30th June. The status comments refer to the species' occurrence during the breeding season as recorded by previous years expeditions. A detailed breakdown of breeding seabird numbers on the Treshnish Isles in 2001 is provided in a subsequent section of the report.

Fulmar *Fulmarus glacialis*
A common breeding species

Breeding was confirmed on Cairn na Burgh More, Cairn na Burgh Beg, Fladda, Lunga and Sgeir a Chaisteil. The breeding population for Lunga and Sgeir a Chaisteil was estimated at 575 based upon apparently occupied sites.

Manx Shearwater *Puffinus puffinus*
A regular breeding species

Presumed breeding birds were seen at night on Lunga. One bird was mist netted on the

Boulder Beach at the northern end of Lunga.

Storm Petrel *Hydrobates pelagicus*
A common breeding species

Many birds were heard churring from burrows on Fladda, Cairn na Burgh More, Cairn na Burgh Beg, and Lunga. A census of the breeding colony within the Boulder Beach at the northern end of Lunga, estimated 450 pairs when repeating the methodology used by Willis (2000). The suggestion of a decline from an estimated 1,700 pairs in 2000, is discussed later in this report (see Ward, Carter & Cooper 2001). A separate census of the breeding colony occupying the village remains at Lunga's north end identified 25 apparently occupied sites; details are provided later in the report (Ward & Carter 2001). Of over 100 birds aged according to the criteria of Bolton and Thomas (2001), all were adults (Euring code 6), as is expected given one year old birds (Euring code 5) remain close to their wintering quarters.

Gannet *Sula bassana*
Regularly seen offshore

Between 1 and 9 birds recorded offshore on four dates, all adults other than an immature on 25th and 28th Of those birds seen fishing, all were off the west coast of Lunga.

Shag *Phalacrocorax aristotelis*
A common breeding species

Breeding was confirmed on Cairn na Burgh More, Cairn na Burgh Beg, Fladda, Lunga and Sgeir a Chaisteil. The breeding population for Lunga and Sgeir a Chaisteil was XXX and XX pairs respectively, based upon a nest count.

Grey Heron *Ardea cinerea*
An irregular visitor

1 heading N.W. on 26th June was noted over the Village, Lunga.

Greylag Goose *Anser anser*
Breeding noted in some years, with a moulting flock present during late summer

The late summer moult flock in June held at least 268 birds, typically residing around the islands of Sgeir an Eirionnaich, Fladda and Sgeir an Fheòir. Extensive areas of vegetation heavily grazed and trampled by geese were located Sgeir an Eirionnaich and the south end of Lunga.

Eider *Somateria mollissima*
Regularly breeds in small numbers

Incubating females were located Sgeir a Chaisteil (3) with an empty nest found at Sgeir an Eirionnaich. A minimum of 9 broods of between 1 and 3 young were noted at Sgeir a Chaisteil (1), Fladda (3) and Lunga (3 south end, 1 Harp Rock south, 1 Corran Lunga). Of those birds not associated with broods in late June, up to 11 birds were present between Fladda and Lunga, these including at least one drake.

Buzzard *Buteo buteo*
One pair breeds in most years

Breeding was suggested in the area of South Haven, Fladda, by the reaction of a pair of birds towards intruders.

Singles were seen over Lunga on 25th, 28th and 29th June, with one of these birds seen to arrive from Fladda.

Peregrine *Falco peregrinus*
Seen most years with breeding known to occur on adjacent coasts

Unlike recent years, no birds were noted during late June.

Corncrake *Crex crex*
Probably a regular breeder in small numbers

What was presumed to be one male called incessantly on most nights from around the Village, Lunga. The bird was somewhat mobile at times moving to the Boulder Beach Well area (2 dates) and the ridge above the Village. The bird was invariably calling from within a nettlebed or Bracken stand. On 25th June, the same or different individual was heard calling from the saddle

north-east of the summit of Cruachan, a site also frequented in previous years.

Oystercatcher *Haematopus ostralegus*
Regularly breeds in small numbers

Ten breeding pairs were found to be holding territories on Lunga's beaches and rocky outcrops (1 in area 5, 1 in area 6a, 2 in area 8, 2 in area 4, 3 at Corran Lunga and 1 at Tarbet west) with only two chicks (Corran Lunga) and 2 eggs (Tarbet west, later predated) located. Elsewhere territorial pairs were located at Fladda ("several"), Sgeir a Chaisteil (3 pairs, one with a clutch of 3 eggs) and pairs present on both the Cairn na Burgh islands. Small flocks of presumed failed breeders were evident on Lunga with up to 4 birds noted at the south end (areas 5 and 6a).

Ringed Plover *Charadrius hiaticula*
One or two pairs breed

A pair with two recently hatched chicks was found on the Landing Beach (Corran Lunga) on the 30th June.

Observations suggested at least two pairs attempting to breed on Sgeir a Chaisteil and one pair on Fladda's south-east coast.

Dunlin *Calidris alpina*
Rare visitor

One birds was flushed from the Landing Beach on 30th June, presumably a bird from the *C.a.schninzii* population breeding across the Hebrides.

Snipe *Gallinago gallinago*
Regularly breeds in small numbers

Perhaps as a consequence of the drier ground conditions, observed numbers were down on previous years, only one displaying male located north of Tarbet on Lunga, this east of the Villaget the north-east end of Lunga.

Two drumming males and a third pair with 2 day old chicks were located on the south end of Lunga.

During the brief visits to some of the other islands, a single bird was heard drumming over Fladda on 27th.

Common Sandpiper *Actitis hypoleucos*
One pair occasionally breeds

A single bird alarming and displaying was noted at Lunga's Landing Beach with regularity. Further alarming individuals suggestive of the presence of breeding pairs were also noted at Sgeir a Chaisteil (1) and during a brief visit to Fladda (3) where observations have suggested no more than two pairs in previous years.

Arctic Skua *Stercorarius parasiticus*
Small numbers seen daily presumably from the breeding colony on Coll

Up to 5 seen daily around Lunga, generally offshore from the Harp Rock - Sgeir a Chaisteil coast pirating incoming auks and Kittiwakes. Both dark and light phase birds were observed.

Great Skua *Stercorarius skua*
An increasingly regular species, with one pair holding territory since 1996 where breeding was confirmed in 1998.

As in the previous two years, two birds were on several occasions seen roosting and displaying on high ground south of the Tarbet (area 6). The site's vegetation was found to be well flattened by the birds, with 8+ pellets but no evidence of a nest located there or in the surrounding area. Neither adults exhibited aggression to human intruders. Three birds were present off the west side of Tarbet on 29th June.

Attempted breeding on Fladda was confirmed with an empty single nest located, within the same territory as occupied since 1996. One pair of adults were in the vicinity but exhibited no aggression to human intruders.

Other sightings relate to 1-3 birds seen on 3 dates either at Harp Rock or over the Village at the north end of Lunga.

On departing Lunga on 30th June, whilst passing Staffa one pair of birds was witnessed killing an adult Herring Gull, the victim already on the sea by the time it was seen under attack. Earlier in

the season, Geoff Hilton(RSPB) reported a breeding pair on Staffa, these birds not evident to visitors by late June. Elsewhere in Argyll, one breeding pair was reported from Coll (C.Self, RSPB, *pers comm.*).

Common Gull *Larus canus*
Irregular breeding species in small numbers

Breeding was once again confirmed on the south-east of Fladda, the colony having expanded on previous years to 9 pairs; 11 chicks were ringed. Several birds were also noted around Sgeir an Eirionnaich where breeding was confirmed in 2000.

Lesser Black-backed Gull *Larus fuscus*
Regularly breeding species in small numbers

Breeding was confirmed on Lunga (area 8) with 4 pairs on territory. A further 10 adults amongst two nearby flocks of loafing immatures and non-breeding adults.

Herring Gull *Larus argentatus*
A common breeding species

Breeding was confirmed on Fladda, Lunga (66 pairs) and Sgeir a Chaisteil (22 pairs), with birds considered to be breeding on Sgeir an Eirionnaich (3 pairs) and Sgier an Fheòir (2 pairs). For the second year in succession, numbers breeding on Corran Lunga were significantly down on the 13-15 pairs recorded during the 1990's; only 4 pairs noted in 2001.

Great Black-backed Gull *Larus marinus*
A regular breeding species

Breeding was confirmed on Fladda, Sgeir an Eirionnaich (48 pairs est.), Lunga (67 pairs), Sgeir a Chaisteil (7 pairs), Sgeirean na Guisaich (north 2 pairs, south 1 pair) and Sgier an Fheòir (9 pairs).

Kittiwake *Rissa tridactyla*
A localised breeding species

Breeding was only confirmed on Lunga (1010 pairs), the main colony situated around Harp Rock. Typically a flock of up to 750 adults and immatures were noted daily on rocks between Lunga and Sgeir a Chaisteil.

Common Tern *Sterna hirundo*
Irregular breeding species

No evidence was found of breeding by either this species or the closely related Arctic Tern *Sterna paradisaea*; however, up to ten birds were noted on several occasions within the vicinity of Sgeir an Eirionnaich, often in aerial display.

Guillemot *Uria aalge*
Common breeding species

Breeding was confirmed on Lunga, Fladda and Sgeir a Chaisteil, the main concentration typically located within the vicinity of Harp Rock with 7740 adult birds estimated.

Razorbill *Alca torda*
Common breeding species

Breeding was confirmed on Lunga and Sgeir a Chaisteil. Birds were also seen at suitable breeding sites on Cairn na Burgh Beg, Cairn na Burgh More and Fladda.

Black Guillemot *Cepphus grylle*
Regular breeding species in small numbers.

Adult birds were seen around Fladda (20 birds), Sgeir an Eirionnaich - Sgeir an Fheòir sea area (17), Cairn na Burgh More (4), Cairn na Burgh Beg (4) and Lunga's south end (9). At the latter locality, one nest site was located (area 5) whilst an accessible nest site on Fladda's north bay allowed one chick to be ringed.

Puffin *Fratercula arctica*
Common breeding species

Adults were apparently occupying burrows on Lunga, Sgeir a Chaisteil, Fladda and Cairn na Burgh Beg (ca.50 active burrows). At the latter locality were many old unoccupied burrows.

Rock Dove *Columba livia*
Regular breeding species in very small numbers

Other than one seen between Harp Rock and the north end on 23rd June, all other sightings refer to the south end of Lunga. A single bird was noted flying out of a sea cave in area 5 and 1-2 birds were seen on occasions frequenting the cliffs in area 6 & 7. The sea caves between Harp Rock and the north end of Lunga were not inspected during this expedition.

Swift *Apus apus*
Irregular visitor

Up to 5 birds were regularly seen above the northern half of Lunga during 23rd – 26th June.

Skylark *Alauda arvensis*
Regular breeding species in small numbers

A minimum of 3 singing birds were considered to be holding territory on Lunga; one at the south end (area 7), a single bird on the north slope of Cruachan summit and one further north above the Village. The only other singing bird noted was an individual on Fladda.

Swallow *Hirundo rutisco*
An irregular visitor

One birds was seen over the Village, Lunga on the 24th June.

Meadow Pipit *Anthus pratensis*
Regular breeding species in small numbers

Widespread breeding species on Lunga and Fladda with no estimation of territories made though probably less numerous than Rock Pipit.

Rock Pipit *Anthus petrosus*
Regular breeding species in small numbers

Common along the coast of Lunga with birds also noted Fladda, Sgeir an Eirionnaich and Sgeir a Chaisteil. A nest in the Village confirmed breeding on Lunga, with young close to fledging. A minimum of 13 pairs were recorded around Lunga, often adults carrying food noted, with birds in areas 6a (4 pairs), 5 (1 pair), 9 (2 pairs), 2 (2+ pairs), 1 (1+ pair), 11 (1+ pairs), 12 (2+ pairs), 14 (2+ pairs).

Pied Wagtail *Motacilla alba yarrelli*
Irregular breeding species

No evidence of breeding was noted with all sightings referring to lone adults, one at Tarbet on 29th June, one at Harp Rock on 29th, and singles on the Landing Beach on 25th & 30th.

Wren *Troglodytes troglodytes*
Regular breeding species, quite common where habitat suitable.

As in previous years, the vast majority of 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. However, all count sectors of Lunga had a minimum of one singing male, many several. Fledged young were noted in area 5. Elsewhere singing males were recorded on Fladda and a single on Cairn na Burgh More.

Dunnock *Prunella modularis*
Irregular breeding species

One bird was noted during a brief visit to Cairn na Burgh More on 28th June.

Robin *Erithacus rubecula*
Irregular visitor

One adult bird was present on Lunga, between Harp Rock and the north end on 24th June.

Wheatear *Oenanthe oenanthe*
Regular breeding species in small numbers
(See separate article)

Song Thrush *Turdus philomelos*
Rare visitor

At dawn one bird regularly sang at the Village, Lunga. Another bird was noted during a brief visit to Cairn na Burgh Beg on 28th June. These sightings represent the first records by TIARG of the species on the Treshnish Isles.

Hooded Crow *Corvus corone cornix*
Regular breeding species in small numbers

The species was noted daily on Lunga, predominately in those areas from Cruachan summit southwards involving both moulting adults and non-moulting juveniles. The presence together of 2 adults and 5 juveniles on 25th June along the east coast suggests at least one pair may have successfully bred on the island. No nest site was found.

Raven *Corvus corax*
At least one pair breeds in most years

Between one and six birds were logged daily on Lunga, this including a party of one moulting adult and 4 juveniles (not in wing moult) on 29th June above Shag Alley. On several occasions a total of six birds were noted at Harp Rock and over the South End, presumably a family party though their respective ages were not determined. No nest site was found.

Starling *Sturnus vulgaris*
Regular breeding species in small numbers

From 4 - 8 birds were seen daily between Harp Rock, Sgeir a Chaisteil and the Village, Lunga, 20 noted flying over the Landing Beach on 30th June. Both adults and juveniles were involved.

Twite *Carduelis flavirostris*
Regular breeding species in small numbers

Up to five birds were regularly seen commuting between the north-east coast, the Village and the Landing Beach. Elsewhere 2 adults were noted north of Harp Rock on 29th June whilst other birds were regularly heard calling from the southern slope of Cruachan. 2 or more birds were also noted above Shearwater Gulley on one date. No juveniles were specifically identified on Lunga.

Elsewhere birds were noted on Fladda and a single on Cairn na Burgh More during brief visits on 28th June.

SYSTEMATIC MAMMALS LIST FOR 2001

House Mouse *Mus musculus*
Resident

At least one animal was present indoors at the expedition base, the Village at the north end of Lunga whilst an animal was seen through another house ruin.

Rabbit *Oryctolagus cuniculus*
Resident, numbers much reduced in recent years.

The population on Lunga has significantly increased from previous years, this including the numbers of black morph individuals counted. For example 20+, 9, 9 and 8 animals could be disturbed from Shag Alley, Tarbet, South Cruachan and Corran Lunga respectively. A likewise increase in grazed vegetation or burrowed land was not evident. Black individuals included a minimum of 6 on the southern slope of Cruachan, 2 north of Harp Rock and singles at Corran Lunga and Shearwater Gully area.

Elsewhere evidence of rabbits (fresh droppings) was found on Sgeir a Chaisteil. No animals were seen during brief visits to Fladda, Cairn na Burgh More and Cairn na Burgh Beg.

Grey Seal *Halichoerus grypus*
Regularly breeding species

Up to 8 animals regularly hauled out on intertidal reefs north and north-east of Lunga, considerable fewer than noted on previous trips.

SYSTEMATIC BUTTERFLIES LIST FOR 2001

Common Blue *Polyommatus icarus*
Regular breeder

A reasonable year for the species with up to 20 individuals noted when walking the length of Lunga, the majority around the Tarbet area.

Meadow Brown *Maniola jurtina*

Singles seen at Tarbet on the 28th & 29th June and Shearwater Gully on 29th.

OTHER SPECIES RECORDED SYSTEMATICALLY

Oyster Plant
Resident species known only from "colonies" at Tarbet (west), Lunga and the north end of Sgeir a Chaisteil.

51 (all flowering), possibly as many as 152, plants were identified on the beach at Tarbet (west), Lunga, the true identity of young (non-flowering) plants being the cause of dissension amongst observers, none wishing to be considered botanists! No count was made of the Sgeir a Chaisteil plants though no significant change in extent was thought to have occurred.

Breeding seabird census for the Treshnish Isles in 2001

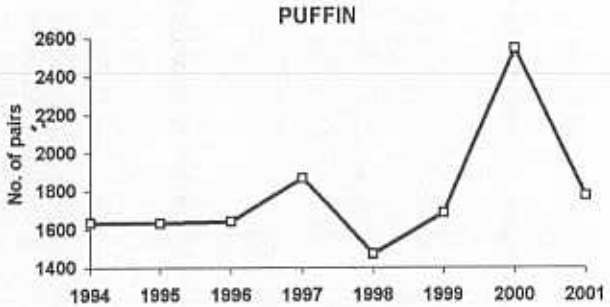
Totals for each Sub Colony Zones of Lunga and Chaisteil

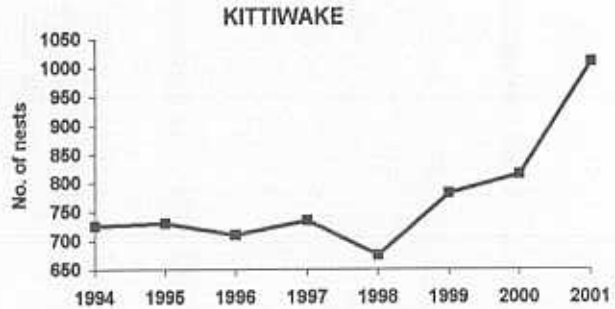
Sector	Count unit	Count Sectors on Lunga (1 - 12) and Chaisteil (13)															Lunga & Chaistiel Totals
		1	2	3	4	5	6	6a	7	8	9	10	11	12	12a	13	
Fulmar	AON		58	3	19	64		50		52	39	15	47	111	16	101	575
Shag	AON		30	38	10	32		2		17	1	11	16	26		14	197
Lesser B-b Gull	PRS									4							4
Herring Gull	PRS	4	3				2		4	50	1			2		22	88
Great B-b Gull	PRS	2	1	2			44		14		1	2	1			7	74
Kittiwake	AON											13	964	9	24		1010
Bonxie	IND						2										2
Razorbill	IND		171	31	34	92		6		22		42	428	96	37	21	980
Guillemot	IND			13		23						84	7740	92	36	30	8018
Black Guillemot	PRS							4									4
Puffin	IND		105	339	33	42						140				85	744
Puffin	AOB												432	502	468		1402

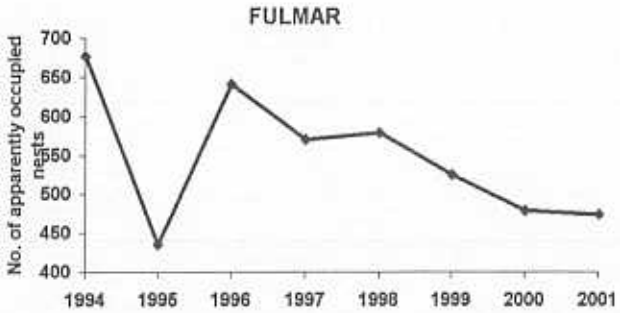
Key to count unit codes:

AON = Apparently occupied nest
IND = individuals
PRS = pairs
AOB = Apparently occupied burrow

Population changes in a selection of breeding seabird species on Lunga 1994 - 2001







TRESHNISH RINGING TOTALS FOR 2001

Site	Species	Adults	Pulli	Retraps	Controls	Total
Carn na Burghs	Herring Gull		4			4
	Geat Black-backed Gull		2			2
Fladda	Storm Petrel	510		44	14	568
	Oystercatcher		1			1
	Common Gull		11			11
	Black Guillemot		1			1
Lunga	Fulmar	25		8		33
	Manx Shearwater			1		1
	Storm Petrel	520		142	19	681
	Shag	3	34	3		40
	Herring Gull		7			7
	Great Black-backed Gull		25			25
	Kittiwake	11		8		19
	Guillemot	312		70	5	387
	Razorbill	31		30		61
	Puffin	214		51		265
	Meadow Pipit	1	5			6
	Rock Pipit	2				2
	Wheatear	24		3		27
	Wren	1				1
Treshnish Isles	Grand total for 2000	1144	90	398	38	2142

Note: Rings used in 2001 were registered under *Treshnish Auk Ringing Group, Hardman, Juckes & Cooper*, and *J.R.Hodson.*

AN ASSESSMENT OF TIARG'S CONTRIBUTION TO THE BRITISH AND IRISH RINGING SCHEME.

Since 1971, the Treshnish Isles Auk Ringing Group (TIARG) has ringed over 20,000 seabirds between the years 1971 - 2000, a substantial proportion of the national ringing total for some species and years. Tabulated below is TIARG's contribution to the National Ringing totals in 1999 (Clark *et al* 1999)*.

	Juv/ad ringed 1999			Pulli ringed 1999			Ringing Totals to & incl 1999		
	UK & Eire	TIARG	% UK & Eire	UK & Eire	TIARG	% UK & Eire	UK & Eire	TIARG	% UK & Eire
Fulmar	605	23	3.8	1,189	0	0	102,958	254	0.3
Manx Shearwater	2,296	4	0.2	3,488	0	0	292,335	49	0.02
Storm Petrel	14,495	732	5.0	44	0	0	366,485	6908	1.9
Shag	241	22	9.1	3,971	78	2.0	186,433	1055	0.6
Herring Gull	344	0	0	3,772	30	0.8	287,862	381	0.1
Great black-backed Gull	21	0	0	1,771	16	0.9	62,235	263	0.4
Kittiwake	633	23	3.6	1,947	0	0	116,589	142	0.1
Guillemot	1,409	507	36.0	8,784	0	0	245,465	4109	1.7
Razorbill	428	102	23.8	1,828	0	0	91,853	1979	2.2
Puffin	862	274	31.8	508	0	0	203,213	3614	1.8

* 1999 is the most recent British & Irish annual ringing totals available at time of publication.

TRESHNISH RINGING TOTALS 1971 - 2001

SPECIES	1971	1974	1976	1977	1978	1980	1982	1984	1986	1989	1991
Fulmar	17	6	4		8	21	14	18	7	21	15
Manx Shearwater		2	13		4	4	1	8			
Storm Petrel		254	22		1	283		203	800	411	975
Shag	150	7	10	10	24	80	50	160		40	10
Buzzard						1	2				
Oystercatcher		1				1	4	2			
Common Sandpiper											
Great Skua											
Common Gull											
Herring Gull	6	1			14	46	35	56	4	4	3
Great Black-backed Gull	3	6	3	7	6	22	14	35		22	15
Kittiwake						1	1	1	2	2	4
Guillemot	32	20	14		66	502	137	364	180	250	306
Razorbill	65	72	90		115	266	218	236	151	103	64
Black Guillemot											
Puffin	70	198	271		203	200	208	182	174	160	114
Meadow Pipit											
Rock Pipit									5	1	
Pied Wagtail											
Wren											
Wheatear			12					1	3		
Willow Warbler											
Twite											
TOTAL	343	558	439	17	441	1427	684	1266	1326	1014	1506

SPECIES	1993	1994	1995	1996	1997	1998	1999	2000	2001	TOTAL
Fulmar		4	27	38	7	24	23	12	25	291
Manx Shearwater		9	1		2	1	4	4		53
Storm Petrel	75	440	536	331	1104	741	732	814	1030	8752
Shag		10	59	96	99	150	100	59	37	1151
Buzzard										3
Oystercatcher							2		1	11
Common Sandpiper						1				1
Great Skua						1				1
Black-headed Gull										
Common Gull						4		5	11	20
Herring Gull		5	24	19	52	73	39	15	11	407
Great Black-backed Gull		6	25	16	48	19	16	2	27	292
Kittiwake		6	10	1	50	41	23	13	11	166
Guillemot		109	498	349	472	503	507	892	312	5313
Razorbill		81	101	105	98	112	102	133	31	2143
Black Guillemot					1				1	2
Puffin		358	236	301	267	398	274	389	214	4417
Meadow Pipit			4		1			12	1	18
Rock Pipit			2	4	2		2	1	2	19
Pied Wagtail		1	3	2						6
Wren			3						1	4
Wheatear				5	24	37	22	50	24	178
Willow Warbler			1							1
Twite					2					2
TOTAL	75	1029	1530	1230	2130	2109	1844	2401	1739	23251

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

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
X - Found dead
XF - Found freshly dead or dying
XL - Found long dead

Storm Petrel

2542196	4	27/06/00	Fladda, Treshnish Isles		
	R	05/07/00	Calf of Man, Isle of Man		
			8 days	290 km	160 degs

Storm Petrel

2355066	4	25/07/98	Langness, Isle of Man		
	R	23/06/99	Fladda, Treshnish Isles		
			333 days	293 km	338 degs

These two Storm Petrel recoveries bring the Treshnish Isles total to 342 of which over 40 have been/from the Isle of Man. Both the above recoveries were attracted in by tape lure on the Isle of Man, and likely therefore to have been wandering immatures (up to 4 years old).

Shag

1366998	1	21/06/99	Lunga, Treshnish Isles		
	X	07/05/00	Baugh, Isle of Tiree, Strathclyde		
			321 days	25 km	270 degs

The 69th recovery for the Treshnish Isles and typically within west coast Scottish waters.

Guillemot

T14586	4	23/06/86	Lunga, Treshnish Isles		
	R	02/07/96	Isle of Canna, Highland Region		
			3662 days	64 km	352 degs

Guillemot

X56937	6	27/06/95	Lunga, Treshnish Isles		
	R	03/07/99	Isle of Canna, Highland Region		
			1467 days	63 km	354 degs

Guillemot

X99498	6	24/06/99	Lunga, Treshnish Isles		
	X	21/01/00	Pointe D'Arçay, L'Aiguillon-Sur-Mer, Vendee, France		
			211 days	1182 km	163 degs

These Guillemot recoveries bring the total for the Treshnish Isles to 60. The breeding colonies on Canna are one of the few localities where extensive ringing of Guillemots occurs, with 13 ringed birds now having been controlled moving to/from Lunga. The Bay of Biscay is the principal wintering area for Irish Sea breeders and, as this eleventh French recovery supports, birds from the Treshnish Isles.

Razorbill

M55406	4	24/06/91	Lunga, Treshnish Isles	
		28/06/00	Lunga, Treshnish Isles	
			3292 days 1 km	270 degs
	Sight Record by non-ringer			

Razorbill

M55227	4	26/06/86	Lunga, Treshnish Isles	
	XF	/02/00	Sylt, Schleswig-Holstein, F.R.Germany	
			4966 days 947 km	101 deg
	Oil victim, bird found dying. Died 8/2/00.			

Razorbill

M72787	6	30/06/98	Lunga, Treshnish Isles	
	X	04/04/01	Portnahaven, Isle of Islay, Strathclyde	
			1009 days 89 km	183 degs
	Dead; bird found decapitated on beach			

The German recovery is the Group's first winter recovery from that coast which lies within the expected range. It is also the ninth Treshnish ringed Razorbill known have to fallen victim to oil pollution. To date, 48 ringing recoveries exist involving Treshnish Isles birds.

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A SURVEY OF STORM PETRELS IN THE NORTH VILLAGE, LUNGA IN 2001

Robin M. Ward* & Andrew Carter

Introduction

The colonies of breeding Storm Petrel *Hydrobates pelagicus* on the Treshnish Isles are one feature of conservation importance that led to the islands designation as a Special Protection Area in 1994 under the EC Wild Birds Directive. The total population of breeding pairs of Storm Petrels on the Treshnish Isles in 1996 was estimated to be 5,040 by Gilbert *et al* (1998). Boyd (2001) in the Hebridean Trust's draft management plan for the Treshnish Isles, identifies a potential conflict may exist between the necessity to preserve some of the current archaeology and conservation of Storm Petrels, some of which use the old walls as nesting habitat. Gilbert & Hemsley (1996) estimated 11 breeding pairs of Storm Petrels to be occupying the walls of the Village ruins at Lunga's north end in 1996. Details of occupancy by Storm Petrels for individual dwellings was not provided by Gilbert & Hemsley (1996). This paper details the survey Treshnish Isles Auk Ringing Group (TIARG) undertook in June 2001 of breeding Storm Petrels occupying the Lunga's Village walls, identifying the location of each Apparently Occupied Site. Thus, the likely impact of restorational work in the Village can be more accurately assessed in respect to breeding Storm Petrels.

Methods

All eight dwellings of the Village at Lunga's northern end were surveyed between 24th - 30th June using the complete census methodology detailed for Storm Petrel in Gilbert *et al* (1999). A tape-recording of the male Storm Petrel purr call was used to elicit the call-back from birds in apparently occupied sites (AOS). The tape was played on a Cassette Walkman with amplied speaker. All walls were divided into 2m sections and the tape-recording of the purr call played for 10 seconds in the middle of each 2m section. All walls were surveyed once every day between 08.00 - 20.00. On the first visit, squares of outdoor tape were stuck on the wall beside a given response on which a unique number was written. On the second day any new sites were marked up as above whilst a note made of whether those recorded previously responded or not. This was repeated for the subsequent 5 days. Though calls are elicited from AOSs outwith the 2m section being surveyed, only those within are recorded.

Gilbert *et al* (1999) instructs surveyors to continue the survey until the number of new sites found during a visit becomes consistently small, e.g. less than 5% of the total found on two previous consecutive visits. This is likely to involve seven or more days surveying (Gilbert *et al* 1999). For the present survey, it was not possible to continue the survey beyond seven days.

Approximate dimensions of all dwelling remains were taken as well as a note of the vegetation adjacent to each wall surface. The position of all AOSs identified by the census was mapped in terms of distance along a given wall.

Results

The frequency of response during the current census from the 25 AOS identified are presented in table 1. The number of new sites detected on the seventh day was less than 5% of the total found on two previous consecutive visits. In fact no responses were noted on the seventh and last day of the survey in contrast to the sixth day when 6 new AOSs and none of the previously idenitified 19 AOSs provided responses. The approximate dimensions of all buildings are provided in Figure 1 with notes on the vegetation adjacent to each wall surface given in table 3. The position each of the 25 AOS in the Village walls as shown in figure 2, are flagged by site numbers corresponding with those in table 1.

The greatest number of AOSs were recorded from B, the only building whose walls were not largely intact but essentially rubble. No responses were recorded from the walls of buildings F & G. Though not tested statistically, no discernible relationship was apparent between vegetation type adjacent to a wall and the presence or absence of AOSs. However, 10 of the 15 AOSs in existing walls were in the southern corner of the buildings, this likely to be the most sheltered perspective given the prevailing winds.

Heavy rain had occured on both nights preceding days 6 & 7. Otherwise the weather during the survey period was essentially dry with light winds; for more detail see the *Weather* summary within this trip report.

Table 1 The frequency of response from each AOS as identifed by the 7 day survey

AOSs*	Visits						
	1	2	3	4	5	6	7
1	1	1	1	0	0	0	0
2	1	0	1	0	0	0	0
3	1	0	0	0	0	0	0
4	1	0	0	0	0	0	0
5	1	0	0	0	0	0	0
6	1	0	0	0	0	0	0
7	0	1	1	0	0	0	0
8	0	1	1	0	0	0	0
9	0	1	0	0	0	0	0
10	0	1	0	0	0	0	0
11	0	0	1	0	0	0	0
12	0	0	1	0	0	0	0
13	0	0	1	0	1	0	0
14	0	0	1	0	0	0	0
15	0	0	1	0	0	0	0
16	0	0	0	1	0	0	0
17	0	0	0	1	0	0	0
18	0	0	0	0	1	0	0
19	0	0	0	0	1	0	0
20	0	0	0	0	0	1	0
21	0	0	0	0	0	1	0
22	0	0	0	0	0	1	0
23	0	0	0	0	0	1	0
24	0	0	0	0	0	1	0
25	0	0	0	0	0	1	0
Total	6	5	9	2	3	6	0

*AOS numbers equates to those used Figure 2.

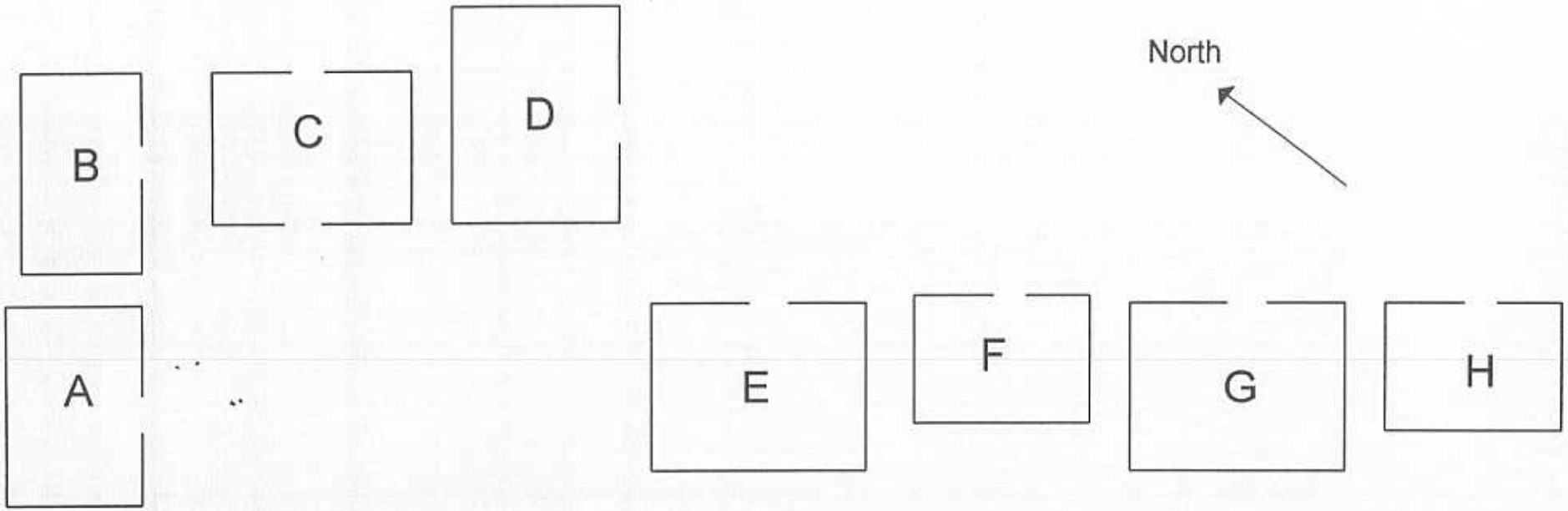
Discussion

The low occurence of sites in the Village walls from which a response was elicited on more than one of the seven survey days could be intepretated as most of the occupants being non-breeders. However, Ratcliffe *et al* (1998) determined that non-breeders are unlikely to constitute a serious bias in estimation of breeding population during duirnal playback given a 0.004 probability for a site detected holding a non-breeder. Furthermore, the probability of a site being occupied by a non-breeder was 15% (*Ratcliffe et al* 1998; n = 415). For all occupants, Ratcliffe *et* al (1998) also determined the probability of eliciting call back was only 0.2 or less for 50% of the birds with approximately 70% of adults in nest attendance by late June. Thus the available evidence would indicate the current census result of 25 AOS is more likely to be an underestimate of the breeding population. This concurs with the survey's cessation before the number of new sites detected had become consistently small, e.g. less than 5% of the total found on the two previous consecutive visits.

The disparity between Gilbert & Hemsley's (1996) and the present survey's population estimate for the Village ruins at Lunga's north end may be attributed to the former being a less intensive survey. Ratcliffe *et al* (1998b) however has also found substantial differences in colony size estimates between years, a consequence perhaps of large inter-year variation in breeding numbers or colony location. Such variation the literature would suggest can not be attributed to birds skipping a breeding season, a feature reserved to other petrel species for accomadating the energtic costs of reproduction (Warham 1996).

Figure 1 Sketch Plan of Village at Lunga's north end with approximate dimensions (cm) tabulated

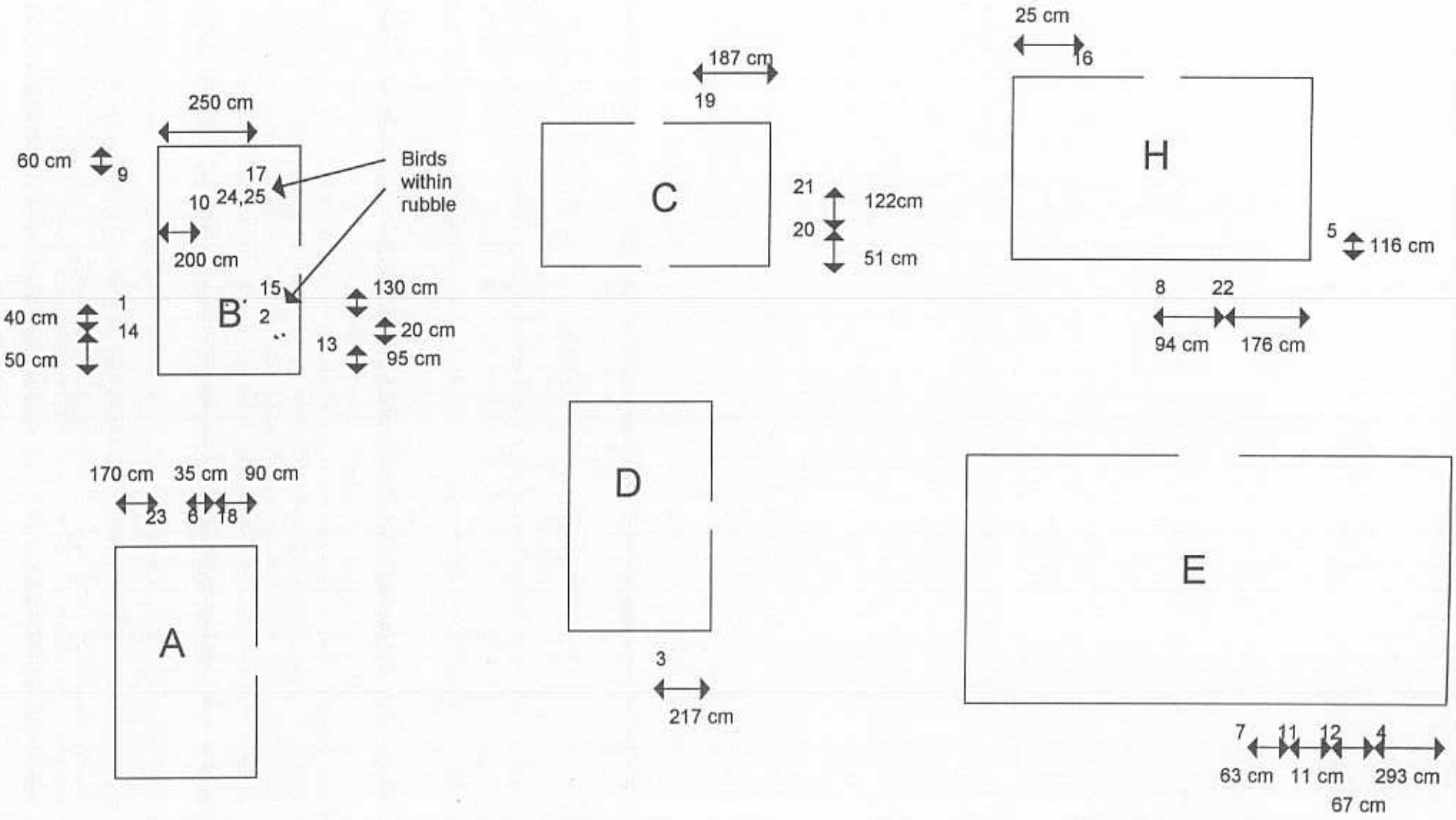
(not drawn to scale)



Cottage	Length	Width	Wall Depth	Max. hieght	Min. height	Door width	Total Wall length	Recording positions
A	777	465	66	160	160	?	2484 - door	11
B	760	450	100	95	0	60	2360	10 & 1 inside
C	690	430	60	145	60	60	2120	11
D	995	560	80	150	45	80	3030	17
E	1012	582	77	190	140	76	3112	15
F	603	468	71	140	90	77	2065	10
G	952	520	60	163	103	77	2867	14
H	599	406	70	130	84	66	1944	10

Figure 2 Locations of Storm Petrel Apparently Occupied Sites

(not drawn to scale; AOS number relates to Table 1)



Conclusion

The present survey estimates a breeding storm petrel population within the Village walls at the northern end of Lunga of 25 AOSs distributed amongst six of the eight building remains.

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A SURVEY OF STORM PETRELS IN THE BOULDER BEACH, LUNGA IN 2001

Robin M. Ward*, Andrew Carter & Dennis Cooper

Introduction

The colonies of breeding Storm Petrel *Hydrobates pelagicus* on the Treshnish Isles are one feature of conservation importance that led to the islands designation as a Special Protection Area in 1994 under the EC Wild Birds Directive. The total population of breeding pairs of Storm Petrels on the Treshnish Isles in 1996 was estimated to be 5,040 by Gilbert *et al* (1998). The validity of this estimate has been questioned (Willis 2000), with disparity in population estimates for one of the Treshnish Isles colonies surveyed on three separate years, using different surveyors and methodologies. Population estimates from a playback census in June 2000, suggested a colony size within the Lunga boulder beach as 1,200 pairs (Willis 2000). This compares to an earlier playback census estimate of 350 pairs as part of Gilbert *et al* (1998) full census of the Treshnish Isles in 1996, and a crude initial survey of 1,700 pairs by Walker & Cooper (1996). This paper details a repeat of the census of Lunga's Boulder Beach colony during June 2001, as undertalen by Willis (2000), thus enabling a direct between year comparison.

Methods

The approach taken to survey breeding Storm Petrels within the Boulder Beach at the north end of Lunga, followed that used by Willis (2000). An initial calibration quadrat was constructed so as to contain at least 15 responses during the inital playback (Ratcliffe *et al* 1998). The resultant 8m x 18m quadrat fully encompassed the smaller calibration quadrat that Willis (2000) was able to use due to a higher call-back response per unit area. A tape-recording of the male Storm Petrel purr call was used to elicit the call-back from birds in apparently occupied sites (AOS). The calibration quadrat was divided into 2m x 2m squares and the tape-recording of the purr call played for 10 seconds in the middle of each square. The tape was played on a Cassette Walkman with amplied speaker. The entire calibration quadrat was surveyed once every day between 08.00 - 20.00. On the first visit, squares of outdoor tape were stuck on the boulders beside a given response on which a unique number was written. On the second day any new sites were marked up as above whilst a note made of whether those recorded previously responded or not. This was repeated for the subsequent 5 days. Though calls are elicited from AOSs outwith the 2m x 2m square being surveyed, only those within are recorded.

Gilbert *et al* (1999) instructs surveyors to continue the playback survey of the calibration quadrat until the number of new sites found during a visit becomes consistently small, e.g. less than 5% of the total found on two previous consecutive visits. This is likely to involve seven or more days surveying (Gilbert *et al* 1999). For the present survey, it was not possible to continue the survey beyond seven days, as was the case with Willis (2000). A response probability and thus a correction factor from these repeat visits was calculated as described by Gilbert*et al* (1999).

Twenty one, 2m wide, transects were marked running perpendicular to and down the shore, every 10m along the length of the boulder beach. Within each transect, the male Storm Petrel purr call was used to elicit the call-back from birds in apparently occupied sites (AOS) for each 2m x 2m quadrat along the transect, with the tape played for 10 seconds in the middle of each square. The number of AOS's within a 2m x 2m quadrat were then corrected for by multipling by the correction factor. Values from adjacent transects were used to estimate the densities of the intervening area, using a linear interpolation.

Results

Gilbert *et al* (1998) advises surveyors to assume that at least 20-30% of AOSs will be detected on a single visit, and so aim to find about 15 AOSs on the inital plot. Though the present survey detected 16 AOSs within the calibration quadrat on the initial visit, after 7 days only 38 AOSs were recorded (table 1). Furthermore, the number of new sites detected on the seventh day was not less than 5% of the total found on two previous consecutive visits as recommeneded for cessation of surveying the calibration quadrat daily. A consequence of these criteria not being attained after 7 days of surveying

is an underestimate in the resultant correction factor, and thus the final population estimate which was 451 AOSs for the whole boulder beach colony. When using the appropriate statistic for a small sample of count data (observations log transformed), we are 95% confident that the response to playback lies between 8.7 - 23.17%, the mean being 17%; this calculation has had to work on the assumption of ignoring the possiblility of change in the number calls received from any one site over the calibration period. From this we can be 95% confident given the already stated assumption, that the population estimate for the colony lies between the limits, 330 - 879 AOSs with a mean of 450 AOS.

Heavy rain had occured on both nights preceding days 6 & 7. Otherwise the weather during the survey period was essentially dry with light winds; for more detail see the *Weather* summary within this trip report.

Table 1 The frequency of response from each AOS as identifed by the 7 day calibration quadrat survey

AOSs*	Visits						
	1	2	3	4	5	6	7
1	1	0	0	0	0	1	0
2	1	0	1	0	0	0	0
3	1	0	0	0	0	0	0
4	1	0	0	1	0	0	0
5	1	0	0	0	0	0	0
6	1	0	0	0	0	0	0
7	1	0	0	0	0	0	0
8	1	0	0	0	0	0	0
9	1	1	0	0	0	1	0
10	1	0	0	0	0	0	0
11	1	0	0	0	0	0	0
12	1	0	0	0	0	0	1
13	1	0	0	0	0	0	0
14	1	0	0	0	0	0	0
15	1	0	0	0	0	0	0
16	1	0	0	0	0	0	0
17	0	1	0	0	0	0	0
18	0	1	0	0	0	0	0
19	0	0	1	0	0	0	0
20	0	0	1	0	0	0	0
21	0	0	1	0	0	0	0
22	0	0	1	0	0	0	0
23	0	0	0	1	0	0	1
24	0	0	0	1	0	0	0
25	0	0	0	1	0	0	0
26	0	0	0	1	0	0	0
27	0	0	0	1	0	0	0
28	0	0	0	1	0	0	0
29	0	0	0	0	1	0	0
30	0	0	0	0	1	0	0
31	0	0	0	0	1	0	0
32	0	0	0	0	1	0	0
33	0	0	0	0	1	1	0
34	0	0	0	0	0	1	0
35	0	0	0	0	0	0	1
36	0	0	0	0	0	0	1
37	0	0	0	0	0	0	1
38	0	0	0	0	0	0	1
Total	16	3	5	7	5	4	6

*AOS numbers equates to those used Figure 2.

Discussion

This survey together with that of the village for Storm Petrel (see previous paper), has raised reservations amongst the authors over the accurancy of the methodology used. The protocol followed however is with minor alterations, that recommended by the *Seabird 2000* partners in censusing for Storm Petrels nationally. No better method of censusing for Storm Petrels has yet been developed, regardless of time and logistics available to the surveyor. The following discussion needs to be viewed with this in mind.

The average response rate of birds in the calibration quadrat was 0.17, giving a correction factor of 5.8 for diurnal playback. This is approximately a two fold difference in the response rate and correction factors of Gilbert *et al* (1996), Ratcliffe *et al* (1998a) and Willis (2000). Though of concern, a similiar response rate at 0.18, was calculated by an adjacent census of the Village walls at the north end of Lunga in 2001. Perhaps the equipment used was at fault in terms of the quality of call put out, though this was not apparent to the surveyors any more so than other equipment used in the past. The tape used was provided by RSPB for the purpose of censusing Storm Petrels. Volume perhaps is an issue given Ratcliffe *et al* (1998a) found the response rate increased significantly with volume of playback, with the increase occurring at volumes in excess of 80dB. Though the volume was considered as loud as that used by Willis in 2000, and to the human ear carried beyond the calibration plot, it was not quantified.

The population estimate from the present census, with or without error, is comparable to that determined by Gilbert*et al* (1996) but no more than 75% of that estimated by Willis (2000) for the same colony in 1996 & 2000 respectively. The latter disparity in estimate given identical survey technique used, is suggestive that real large scale colony population changes may have occurred between years at this site. Ratcliffe *et al* (1998b) also reported substantial differences in colony size estimates between years, a consequence perhaps of large inter-year variation in breeding numbers or colony location. Such variation the literature would suggest can not be attributed to birds skipping a breeding season, a feature reserved to other petrel species for accomadating the energtic costs of reproduction (Warham 1996). Also variablility associated with the attendance by non-breeders may also be discounted. Ratcliffe *et al* (1998a) determined that non-breeders are unlikely to constitute a serious bias in estimation of breeding population during duirnal playback given a 0.004 probability for a site detected holding a non-breeder. Furthermore, the probability of a site being occupied by a non-breeder was 15% (*Ratcliffe et al* 1998a; n = 415).

In order to gain a handle on the between year variability in colony size registered by the playback method, repeat censuses of Lunga's Boulder Beach in subsequent years would be of value. If the variability observed is that of a stable population, this makes identifying changes in population level in the short term difficult to assess and respond to.

During the week of calibration for the 2001 census, two nights were also spent by TIARG mist netting Storm Petrels on the Boulder Beach, Lunga without tape lure as is usual for this site. 54 and 36 metres of 4 shelf netting open for approximately 4 hours each night, caught 427 and 210 Storm Petrels. Equating to 36 and 26 birds caught per net hour, this catching rate differs little to previous years, thus continuing the pattern for mist netting not to reflect the high variability of the colony population estimates from playback method (Willis 2000). This disparity requires further attention in order to inspire greater confidence amongst field ornithologists as to the accurancy of the call-back method for reliably censusing Storm Petrel colonies.

Conclusion

The present survey estimates a breeding storm petrel popuation on Lunga's Boulder Beach of 350 - 550 birds during 2001. This fourth estimate of the colony's population in recent years continues to suggest significant inter-year variation in colony size.

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THE EXPEDITIONS 1971 – 2001

A list of participants through the years, with brief notes on the work performed

1971 Barry Lawson, Peter Deans, John Eatough, Shiela Anderson, Dick Hansford.
Full census and ringing.
This was the first trip and the Treshnish Isles were included in a "mopping up" of islands not fully covered during the 1969/70 "Operation Seafarer" National Seabird Census.

1972 Barry Lawson, Geoff Ward, Bevan Craddock.
Part census and ringing
Forced to leave after three days due to bad weather.

1973 Barry Lawson, Peter Deans, John Hodson, Geoff Cope.
Trip abandoned – unable to land due to rough seas

1974 Barry Lawson, Peter Deans, Geoff Ward, John Hodson, Geoff Cope, Tom Pool.
Census of Lunga and ringing
An RAF Helicopter landed a photographer onto Harp Rock, causing many bird casualties.

1976 Barry Lawson, Peter Deans, Geoff Ward, John Hodson, Geoff Cope, Tony Kilgallen.
Full census Lunga – Fladda and ringing.
Very hot summer.

1977 Barry Lawson, John Hodson.
Ringing only.
Called in on "Corrywreckan" boat cruise.

1978 Barry Lawson, Peter Deans, John Hodson, Simon Walker.
Full census Lunga and Chaisteil and ringing.

1980 Barry Lawson, Peter Deans, John Hodson, Simon Walker, David Lawson.
Ringing only

1981 Geoff Ward, Geoff Cope.
Part census and photography

1982 Barry Lawson, Peter Deans, John Hodson, Simon Walker, Andrew Lawson.
Ringing only.

1984 Barry Lawson, Peter Deans, John Hodson, Simon Walker.
Ringing only.

1986 Barry Lawson, Peter Deans, Geoff Ward, John Hodson, Simon Walker, Andrew Lawson.
Full census with ringing

1989 Barry Lawson, Peter Deans, John Hodson, Simon Walker.
Ringing only.

1991 Barry Lawson, Peter Deans, Simon Walker, David & Andrew Lawson, Jan Densham.
Ringing only.

1993 Roger Broad *et al.* (Scottish Natural Heritage charter)
Full census of The Dutchman's, Lunga, Chaisteil and Fladda.
Chris Redfern *et al.*
Storm Petrel ringing.

THE EXPEDITIONS 1971 – 2001 (con't)

1994 Simon Walker, Mike Smith, Dennis Cooper, Jan Densham, Danny Lenain.
Full census Lunga and Chaisteil and ringing.

1995 Simon Walker, Mike Smith, Dennis Cooper, Jan Densham, Fergus Henderson.
Full census Lunga and Chaisteil and ringing.

1996 Simon Walker, Mike Smith, Dennis Cooper, Danny Lenain, Robin Ward
Full census of Lunga and Chaisteil and ringing.

1997 Simon Walker, Dennis Cooper, Robin Ward, Damian Offer, Steve Willis, Chris Spray
Full census of Lunga – Fladda and ringing.

1998 Simon Walker, John Hodson, Dennis Cooper, Robin Ward, Damian Offer, Steve Willis, Steve Worwood
Full census of Lunga – Fladda and ringing.

1999

Week 1 Simon Walker, Dennis Cooper, Steve Willis, John Osbourne.

Week 2 Simon Walker, John Hodson, Dennis Cooper, Robin Ward, Damian Offer, Jan Densham

Full census of the Treshnish Isles for *Seabird 2000* and ringing

2000

Week 1 John Hodson, Dennis Cooper, Damian Offer
Full census of Manx Shearwater on Lunga for *Seabird 2000.* Limited passerine ringing.

Week 2 Simon Walker, John Hodson, Dennis Cooper, Robin Ward, Steve Willis, Andrew Carter, Steve Woodward
Full census of Lunga, Chaisteil and the islands between Lunga – Fladda. Tern census for *Seabird 2000.* Ringing.

2001 Simon Walker, John Hodson, Dennis Cooper, Robin Ward, Damian Offer, Andrew Carter
Completion of census for *Seabird 2000.* Full census of Lunga, Chaisteil and the islands between Lunga – Fladda. Ringing.

RINGS USED ON THE TRESHNISH ISLES SINCE 1927

SHAG RINGS	A2 RINGS	E RINGS	F RINGS	G RINGS	H RINGS	RAZORBILL RINGS	GUILLEMOTS RINGS	MISC. RINGS
1080101 - 110	2010581 – 583	EF75001 - 500	FC52551 - 558	GH21301 - 350	HT09001 - 004	M46501 - 750	T14001 - 500	1F4094 - 097
1087111 - 120	2101991 - 2000	EH33377 - 380	FC52571	GJ35401 - 500	HT17871 - 890	M55001 - 500	T14501 - 15000	C331894 - 900
1105561 – 570	2121401 – 500	EH54501 - 55000	FR13606 - 636	GJ76001 - 800	HT17931 - 940	M72451 - 800	T82001 - 300	E196501 - 520
1123541 – 550	2167051 – 068	EH89256	FR14401 - 500	GJ99081 - 082	HT34021 - 030	M85501 - 800	X39501 - 40000	JB44316 ('94)
1123671 – 690	2170201 – 203	EH89260	FR56351 - 400	GK34351 - 354	HT68201 - 210	M88001 - 300	X56501 - 57000	K039209 - 230
1123961 – 970	2238501 – 600	EH98001 - 300	FS51016 - 500	GK50214 - 220	HT68221 - 226	M92501 - 700	X63001 - 500	K419290 - 295
1159651 – 700	2261001 – 500	EK29501 - 900	FS87001 - 100	GK50551 - 570	HT80301 - 400		X67501 - 68000	NA84296 - 299
1163701 – 740	2284001 - 5000	EK72657 - 660	FV10611 - 620	GK62985 - 990	HW05351 - 360		X79501 - 80000	
1168001 – 100	2309901 - 10000	EK91471 - 490	FV10646 - 650	GK90821 - 840	HW06951 - 7000		X99001 - 500	
1170601 – 700	2311301 – 400	EN22001 - 500	FV54446 - 460	GK91471 - 490	HW08994 - 09000		R07001 - 100	
1187901 – 950	2311503 – 784	EP85608 - 612	FV62410	GP13416 - 450	HW37361		R19401 - 20200	
1237401 – 450	2311801 - 2000	EP85687 - 700	FV62416 - 226	GP62201 - 207	HW68101 - 110			
1322951 – 960	2348001 – 500	ER03701 - 800	FV96681 - 684	GP74501 - 75000	HW68161 - 170			
1328481 – 490	2369301 – 400	ES64018 - 020	SS96101 - 300		HW74971 - 990			
1350801 – 900	2405001 - 6000	ET19501 - 700			HW87211 - 225			
1357901 - 8000	2430701 – 900	ET52501 - 800			HW94907 - 913			
1366901 - 7000	2436501 - 7000	ET52801 - 3000						
1373751 - 3809	2444501 - 5000	ET80001 - 500						
	2446201 – 300	EG61000 –						
	2455501 - 6000							
	2480001 - 500							
	2513501 - 4000							
	2538001 - 500							
	2538501 -800							

Wheatears on Treshnish - 2001

In 2001 there seemed to be similar numbers of wheatears present to those noted previously. Fully-fledged young were apparent but a nest of six 1-2 day old chicks was also found among the puffin colony near Harp Rock at the start of the trip. The nest was unfortunately predated before the end of our stay either by raven or hooded crow.

The birds proved very mobile and dispersed across the island. Estimating territories proved difficult to do with accuracy. There were probably territories located in the following areas:

1. Corran Lunga
2. Cottages
3. Shearwater Gully
4. Between Shearwater Gully and Shag Alley
5. Tarbett
6. Between Tarbett and Harp Rock, western side
7. Among puffins opposite Harp Rock
8. Between Harp Rock and the Puffin Burrows – 2 pairs
9. Around Cruachan

This would suggest around 10 pairs on the main body of Lunga. (excluding south end) distributed similarly to previous years.

Some 24 new birds were caught along with 3 retraps, using seven spring traps baited with meal-worms. The three retraps were all males ringed previously as part of this study on the Treshnish Isles.

Two of the retraps were ringed as pulli in 2001 on Lunga. The third bird, caught just before we left Lunga, proved to be the most interesting retrap so far. It was a male showing indications of breeding (CP), which turned out to have been ringed as a juvenile **on Fladda in 1997**. It was caught and ringed during the first season of this study during a trip to catch storm petrels on Fladda. Amazingly, the biometrics recorded at the time of recapture match exactly those recorded when the bird was ringed 4 years ago! This capture confirms that wheatears on the Treshnish Isles do not necessarily return to the isle of their birth when they return to breed.

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

	Adult		Juvenile	Totals
TYPE	F	M	N/a	
New	2	2	20	24
Retrap		3		3
Totals	2	5	20	27

	SITES														
	Corran Lunga		Cott-ages	Cruachan			Harp Rock			Otter Gull-ey	Puffi ns	Sh. Gulley		?	Total
TYPE	4M	3J	3J	4F	4M	3J	4F	4M	3J	3J	3J	4M	3J	3J	
New		1	3	1		1	1	1	4	1	2	1	4	4	24

Retrap	1				1							1			3
Total	1	1	3	1	1	1	1	1	4	1	2	2	4	4	27

Three birds were re-trapped from previous years:

Ring No.	Age	Sex	Wing (mm)	Weight (g)	Place	Sub-site	Date of Ringing/ Retrap
VF23201	Pullus				Lunga	Shearwater Gully	27 May 2000
	4	M	95	28.2	Lunga	Cruachan	25 Jun 2001
VF23236	Pullus				Lunga		27 May 2000
	4	M	92	26.3	Lunga	Sh Gully	27 Jun 2001
E196511	3J		97	25.7	Fladda		03 Jul 1997
	4	M	97	25.7	Lunga	Corr Lunga	28 Jun 2001