Treshnish Isles Auk Ringing Group

Report for 2008



Shag (Robin M. Ward)

Compiled by Robin M. Ward

Expedition dates: 21st - 28th June 2008

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INTRODUCTION

Since 1971, the Treshnish Isles Auk Ringing Group (TIARG) has monitored, through ringing and census work, the breeding seabird populations of the Treshnish Isles, Argyll. A generalised summary of the early expeditions is given in *Birds on the Treshnish Isles 1971-1995* (Walker & Cooper 1996). Annual reports have been produced each year since. This report summarises the results of the Group's 30th expedition to the Treshnish Isles during 21st – 28th June 2008.

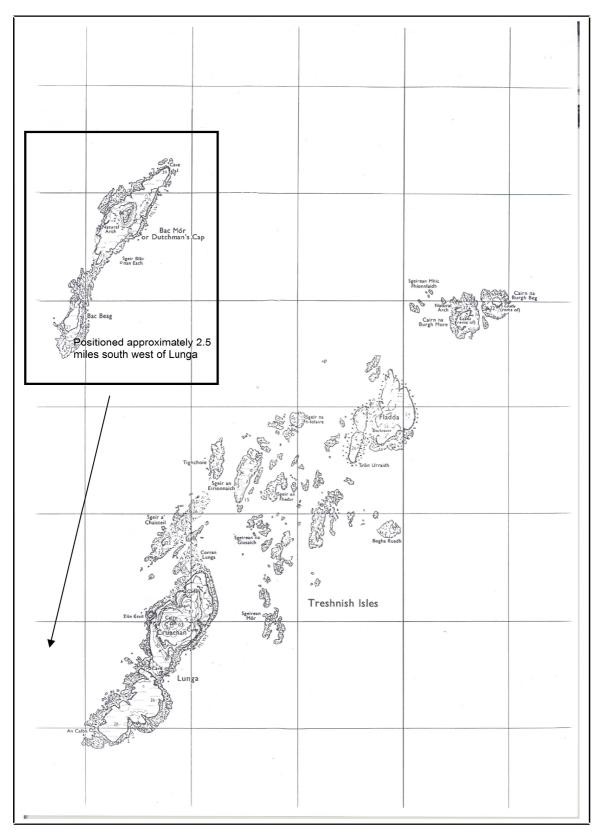
As in previous years, the expedition's base was set up around the ruined village site at the northern end of Lunga. The majority of the week's fieldwork was centred upon Lunga & Sgeir a' Chaisteil where the regular annual full seabird census and the systematic ringing of specific seabird colonies was carried out. The week was dominated by unfavourable weather conditions that resulted in very few Storm Petrels being mist netted on Lunga. Also because of the poor overnight forecasts, no attempt was made to venture out for a night to obtain a ringing sample of Storm Petrels from Fladda. By day, sea conditions releated on a couple of tides to allow good use to be made of the inflatable boat kindly loaned by the Hebridean Trust. We succeeded in fully censusing the breeding birds of the islands between Fladda and Lunga, as well as assess breeding success for the less numerous seabird species on Fladda. With hindsight, our accidental omission to bring across from Mull a crucial component of our fleygs had little impact on our resultant catch total for the large auks. Rain was encountered most evenings and the very notable absence of auk movement in the evenings would have in any case, resulted in very few auks being fleyged. This year the fourth repeat survey of six permanent seabird monitoring plots set up in 2004 was made; providing the Group with some measure of seabird productivity in addition to the general perspective provided by the annual census. The third year of a Shag retrap adult survival study (RAS) was initiated; this entails ringing each adult with its own uniquely engraved colour-ring so that it can be re-identified in the field in future years. This is part of the British Trust for Ornithology's Integrated Population Monitoring Programme funded by the UK Government.

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, being the sole means of monitoring the seabird colonies of the Treshnish Isles. The conservation importance of these islands is recognised by their designation by the UK Government as a Special Protection Area because of the breeding colonies of seabirds they support. Financial support for the monitoring work TIARG undertook in 2008 was provided by the Hebridean Trust (www.hebrideantrust.org), owners of the islands.



Expedition participants 2008: George Henderson, Shaun Micklewright, John Calladine, John Hodson, Simon Walker (behind), Robin Ward & Tim Dixon (*Andrew Carter* – eighth team member)

MAP OF THE TRESHNISH ISLES



WEATHER

Date	Time	Wind (beaufort force)	Max wind speed (mph)	Cloud cover (oktas)	Visibility	Temp (° C)	Humidity (%)	Pressure (mb)	Notes
21⁵ June	18:00	NE 1	3	8/8	Skye	17	71	29.58	19:00 light rain started 19:30 wind changed to E3 22:30 continuous heavy rain 04:00 continuous heavy rain (Manx Shearwater activity) - pressure 29.31mb
22 nd June	10:00	NE 4-5	20	8/8	Fladda	11	100	29.02	Slight lull in rain during morning 11:00 continuous rain started
	16:30	NNW 6-7	29	8/8	Coll and Tiree	11	100	29.16	23:00 wind dropping 23:20 raining
23 rd June	09:00	N 3-4	9	2/8	Rum	10		29.67	
	19:00	N 1-2	5	1/8	Skye	16	50	29.96	Sunshine, calm all day 23:00 visibility dropped to Coll and Tiree
24 th June	09:30	SE 4	15	8/8	Skye	11.8	78.5	29.71	10:00 start of rain
	19:00	SE 5-6	25	8/8	Staffa	12	100	29.55	Continuous rain 22:30 rain stopped, pressure 29.66mb 02:00 Manx Shearwater activity, continuous rain 06:00 dry
25 th June	10:00	SE 5-6	26	8/8	lona	12	100	29.2	Clearing over Mull, squall approaching from Staffa 12:30 rain stopped, 7/8, sunshine
	18:30	SW 7	32	8/8	Staffa	12.6	100	29.34	Squalls
26 th June	11:00	SW 6-7	31	8/8	Tiree and Iona	16	88.1	29.4	
	18:00	SW 6-7	29	7/8	Tiree and Iona	12.3	83.7	29.32	23:30 Light drizzle 01:00 light drizzle and Manxie activity
27 th June	08:30	WSW 4	13	8/8	Ard na murnican	12	98.8	29.49	 11:30 light rain and visibility Dutchmans 12:00 dry and clear 18:30 continuous light rain and thunder, visibility Chaisteil
	20:00	SE 3-4	11	8/8	Staffa	10.7	100	29.38	22:00 mist, visibility less than 400m, warm
28 th June	09:30	SE 2	5	7/8	Treshnish Point	20	-	-	sunshine and sea mist

Between 21st and 27th June the weather can be quickly summarised as wet and windy. Thankfully on three days temperatures managed to get above 15°C; these days were the Saturday we arrived, Monday the 23rd and the Saturday we departed. Winds for the first three days were from the North, midweek winds were from the SE veering late on Wednesday (25th) to the SW until Friday (27th) when wind backed to the southeast. Pressure data showed low pressure on Sunday evening, rising until Monday evening, falling until Wednesday morning then slowly rising until Friday morning. On Friday (27th) south-westerly winds brought mist and thunder, visibility at 11.30am was as far as the Dutchmans and by 6pm Chaisteil. Monday (23rd) was bright and sunny but the northerly wind kept the temperature down. Associated with the wet and overcast weather were three nights of Manx Shearwater aerial activity when birds could be heard flying past the village to nesting sites on the hillside, Saturday and Tuesday during heavy continuous rain and Thursday during light drizzle.

George Henderson



Fulmars (John Hodson)

SYSTEMATIC LIST OF BIRDS FOR 2008

The following systematic list describes those bird species seen during the Treshnish Isles Auk Ringing Group's presence on the Treshnish Isles, 21st- 28th June 2008. No records are available for the Dutchman's. The introductory comments (first paragraph) refer to the species' status during the breeding season as recorded by previous expeditions.

A detailed breakdown of breeding seabird numbers on Lunga and Sgeir a' Chaisteil in 2008 is provided in a subsequent section of the report. For some seabird species, average rates of population change have been calculated by linear regression of the natural logarithms of the breeding numbers year on year. The significance of the slope of the regression, equivalent to the average annual rate of increase or decrease in the population, is then assessed using the t-statistic (Fowler & Cohen 1986).

Fulmar Fulmarus glacialis

A common breeding species. The Treshnish Isles supported 0.2% of the Great Britain population as estimated by *Seabird 2000* (1998 – 2002).

Breeding was confirmed on Lunga and Sgeir a' Chaisteil. Seven and 25 apparently occupied sites were also noted on Cairn na Burgh Beg and Cairn na Burgh More respectively during TIARG's arrival on 21st June. The breeding population for Lunga and Sgeir a' Chaisteil was estimated at 397 pairs based upon apparently occupied sites (AOS). This 8% increase from 2007 follows three years of decline that had brought the population size in 2007 to the lowest it had been since annual monitoring began in 1994. Over the longer term, 1994-2008, the average rate of change in the numbers of breeding birds on Lunga is calculated at -3.9% per annum, this trend being very highly significant (P<0.001). For a similar period, 1993-2005, Mavor *et al.* (2008) reports a non-significant downward trend in the cumulative Fulmar population of colonies monitored in this region, S.W. Scotland.

Manx Shearwater Puffinus puffinus

A regular breeding species. The Treshnish Isles supported 0.4% of the Great Britain population as estimated by *Seabird 2000* (1998 – 2002).

Presumed breeding birds were seen and heard at night on Lunga. During the week groups of up to 150 birds were noted feeding offshore whilst many hundreds of birds were noted flying past out at sea.

Storm Petrel Hydrobates pelagicus

A common breeding species. The Treshnish Isles supported 20% of the Great Britain population and between 0.7 - 1.7% of the Atlantic (north-eastern) population as estimated by *Seabird 2000* (1998 – 2002).

Many birds were heard churring from burrows on Fladda and Lunga.

Mist netting on Lunga simultaneously at the Village and the Boulder Beach on one date provided catches of 62 and 111 birds when using three 18m and three 12m nets respectively for 2.5 hours. Further attempts to mist net on Lunga and also on Fladda were thwarted by rain and wind. These catches provide further evidence of a reduction in the local breeding population in recent years. There has been, for the same effort and net positions, a marked decline in catch totals at the Village from 149-263 birds to 56-85 birds within the periods 1997-2000 and 2005-2006 respectively.

Gannet Morus bassanus

Regularly seen offshore

Up to several hundred birds, the vast majority adults were recorded daily, feeding or passing offshore of Lunga.

Shag Phalacrocorax aristotelis

A common breeding species. The Treshnish Isles supported 2.1% of the Great Britain population and between 0.8 - 0.9% of the Atlantic (northeastern) population as estimated by *Seabird 2000* (1998 – 2002).

Breeding was confirmed on Sgeir an Eirionnaich, Fladda, Lunga and Sgeir a' Chaisteil. The breeding population for Lunga and Sgeir a' Chaisteil was 159 and 19 pairs respectively, based upon a nest count. The overall number counted has increased by 7% from that in 2007. This continues to represents a partial recovery following a rapid, marked decline in the breeding population noted in 2005 and again in 2006. The 2006 count was only approximately half of the previous lowest nest count recorded since annual monitoring began in 1994.

Large numbers of adults were in the vicinity of the colonies but had once again chosen not to breed, as evidenced by atypical concentrations of up 500+ moving offshore from the islands in the mornings to forage. Presumably many of these were in too poor condition to breed successfully. Of those birds that were

breeding on Lunga and Sgeir a' Chaisteil, great variation was found in the progress of breeding, all stages from eggs to already fledged young being noted. Brood sizes were mostly small in size, typically of two or three young. Many more broods were found of a suitable size to ring were found than had been in 2005 but with some localised variation. For example, as in 2007, the vast majority of breeding Shags on the east side of the south end of Lunga were incubating eggs or brooding very young chicks, with few nests containing the well developed chicks usually expected by the end of June.

2008 was the second year of a Retrap Adult Survival study (RAS) on Shags that entails ringing each adult with its own uniquely engraved colour-ring so that it can be identified in the field in future years. This is part of the British Trust for Ornithology's Integrated Population Monitoring Programme funded by the UK Government. In 2008, of the breeding adults marked in 2006 and 2007 on Lunga, four and twenty six were re-sighted by TIARG respectively. The remains of a bird colour-ringed in 2006 was also found in the breeding colony. A further 52 breeding adults were colour-ringed on Lunga in 2008. Earlier in the season, visitors bought to Lunga by *Turus Mara* reported twelve different colour-ringed shags, one of which was not recorded in 2008 by TIARG.



Breeding adult Shag colour-ringed for the Retrap Adult Study with chicks (Robin M. Ward)

Greylag Goose Anser anser

Breeding noted in some years, with a moulting flock present during late summer.

The late summer moult flock had built up to at least 80 birds by 21st June, typically most residing around the islands of Sgeir an Eirionnaich, Fladda and Sgeir an Fheòir. Evidence of local breeding included a brood of flightless young on the south end of Lunga, and two well grown but flightless goslings on Fladda.

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Peak count	25	160	240	268	79	101	316	90	164	77	80

Snow Goose Anser caerulescens

Rare visitor

One white phase bird was briefly seen on Sgeir an Eirionnaich from the Turus Mara boat as she arrived at Lunga with the team on 21st June. A flock of 30-40 introduced geese moves between Coll and Mull during the year, breeding and moulting on Coll (Ogilvie & RBBP 2004).

Shelduck Tadorna tadorna

Rare visitor

On arrival at Lunga on 21st June, two pairs plus a lone bird were seen on Sgeir a' Chaisteil. During the reminder of the week, a pair plus a separate lone female were regularly seen around Corran Lunga and Sgeir a' Chaisteil. Three birds were noted at the south end of Lunga on the 27th June.

Eider Somateria mollissima

Regularly breeds in small numbers

Unusually only one brood was noted from Lunga, a duck with three ducklings at Corran Lunga on 25th June seen later that day accompanied by 5 more ducks off Sgeir a' Chaisteil. Elsewhere clutches of five and four eggs were found on Sgeirean na Guisaich and Sgeir na H-lolaire respectively, whilst six ducklings accompanied by three adults were seen earlier off Cairn na Burg Beg.

The waters between Fladda and Lunga supported small numbers of late summer moulting birds, typically male-biased; a maximum of 52 males was counted on 27thJune.

Buzzard Buteo buteo

Until recently, one pair bred in most years

One juvenile was regularly seen frequenting the south end of Lunga, and also at times in this vicinity, an adult. Sightings would suggest the presence of a further adult and juvenile on Lunga, with one juvenile found oiled by a Fulmar on the east coast of Lunga. No food carrying by adults was observed. These observations suggest successful breeding.

An individual with aberrant white feathers in the wing was seen to come in from over the sea and on to Lunga on 26th June. It was seen again at the South end of Lunga on the following day.

Peregrine Falco peregrinus

Seen most years with breeding known to occur on adjacent coasts

Up to two possibly three individuals were seen on three dates over Lunga, one judged to be a male from size.

Sparrowhawk Accipiter nisus

Rare visitor

The remains of a long dead first year male bird that had been predated by another raptor was found within the gully into the northern most cave on Lunga's west coast. This is the first record by TIARG of the species on the Treshnish Isles.

Corncrake Crex crex

Probably a regular breeder in small numbers

No birds were recorded on any of the islands visited. This is the first year the species has not been heard or seen by TIARG since 1997, the year after the species was first recorded on Lunga. Vegetation on the islands was found to be less developed than previous years, with nettles and bracken stands much lower in height. Whether this has had any influence upon males setting up territory on Lunga is, however, speculation.

Oystercatcher Haematopus ostralegus

Regularly breeds in small numbers

Six breeding pairs were acting as though on eggs or young were being defended on Lunga's beaches and rocky outcrops (2 at Corran Lunga, 1 at Shearwater Gully, 1 in Tarbet west, 1 in area 8 and 1 in area 6a) with the only brood noted (of one well grown young) being at Corran Lunga, this a single well grown young. Other pairs or singles were on territory at times, briefly alarming at human intruders and entering into displays on the appearance of other Oystercatchers. Away from Lunga, breeding pairs held territories on Sgeir na H-lolaire (3 pairs), Sgeir an Eirionnaich (3), Sgeir an Fheòir (2), Sgeirean na Guisaich (1 with a chick), Sgeir a Chaisteil (1) and Fladda (1). The presence of chicks was suggested from the response of the adults to human intrusion during the brief census visit. Small flocks of presumed failed breeders/non-breeders were evident on Lunga, typically at high tide in the area of Sgeir a' Chaisteil and Corran Lunga where there would generally be a minimum of 6 birds roosting.

Ringed Plover Charadrius hiaticula

One or two pairs breed

The behaviour towards intruders of one pair on the northern half of the Landing Beach suggested that they were incubating eggs or had very young chicks. A third adult frequented Corran Lunga, quietly alarming to a human intruder. Elsewhere two pairs were on territory on Sgeir a' Chaisteil and a pair at North Haven, Fladda, with a pair at both the localities presumably with young or eggs (as suggested by displays to a human intruder.)

Golden Plover Charadrius hiaticula

Rare visitor

One bird was calling in flight over Sgeir a' Chaisteil on 25th June.

Dunlin Calidris alpina

Irregular visitor

Two adults, possibly the same birds, were seen at Corran Lunga on the 26th and 27th June.

Snipe Gallinago gallinago

Regularly breeds in small numbers

Breeding was confirmed with two chicks found above Shag Alley, Lunga. Up to four birds at any one time were drumming/chipping over the Village. This would suggest a maximum of four breeding pairs here (Gilbert *et al.* 1998) as females will also at times join the males in drumming and chipping (Nethersole-Thompson & Nethersole-Thompson 1986). Further south, single birds were flushed along the length of the east coast path from the Well to Shag Alley, and also from the southern slope of Cruachan. Singles were heard drumming over the saddle of Cruachan, over Shearwater Gully, and on Corran Lunga. At the south end of Lunga, up to six birds were noted chipping within the vicinity of the reedbed, in area 7. These data suggest a minimum population of 13 pairs.

Elsewhere individuals were flushed or seen whilst walking the heath and bogs of Fladda, and singles were flushed on Sgeir an Eirionnaich and Sgeir an Fheòir.

Whimbrel Numenius phaeopus

An irregular visitor

A single bird was heard over the North End, Lunga, on 28th June.

Curlew Numenius arquata

Irregular visitor

Four non-moulting birds were observed flying south-east over Lunga on 21st June. Two birds were disturbed from Corran Lunga the following day. Single birds were then subsequently seen or heard on Sgeir a' Chaisteil and Corran Lunga on three dates.

Common Sandpiper Actitis hypoleucos

One or two pairs usually breed

Breeding was confirmed on Sgeir an Eirionnaich and Sgeir an Fheòir where single pairs with a chick and clutch of 4 eggs were found respectively. Elsewhere two territorial pairs and a lone bird were observed on Corran Lunga and Sgeir a' Chaisteil respectively.

Arctic Skua Stercorarius parasiticus

Small numbers seen daily presumably from the breeding grounds on Coll where there had been 11 apparently occupied territories in 2006 (Mavor *et al.* 2008)

Up to 1 light phase and 2 dark phase birds at any one time were seen daily, generally offshore from the Harp Rock - Sgeir a' Chaisteil shoreline.

Great Skua Stercorarius skua

A regular but small breeding population has become established since confirmation of breeding by a pair in 1998.

On Lunga breeding was confirmed following a blank year in 2007, on the high ground south of Tarbet (area 6), where breeding has previously been proven. On 23rd June, upon the empty nest being located, a single chick was soon found nearby.

Three pairs were found on territories where breeding has previously been proven on the west and east sides of Fladda, with a chick only located at one site.

Up to 3 birds were seen daily over the Village, Lunga.



Great Skua (Andrew Carter)

Common Gull Larus canus

In recent years has become established as a regular breeding species in small numbers

The presence of seven agitated birds on Sgeir an Eirionnaich and two pairs in the large gullery on Fladda were suggestive of breeding. No birds were seen at the low-lying basalt rock outcrop on Fladda's south-east coast where a colony had been established since 1998.

One adult bird was seen passing along Lunga's east coast on 22nd June.

Lesser Black-backed Gull Larus fuscus

Regular breeding species in small numbers

Two birds of a presumed pair were noted within the south end gullery, Lunga, in area 8. Elsewhere

breeding was confirmed on Fladda and suggested by the presence of paired adults on territory on Cairn na Burgh More. On Fladda, only three live chicks were found, while seven failed broods of varying ages were found, having died 2-3 days previous to the visit on 27th June. At the Fladda colony, 21 adults (estimated 11 pairs) were counted when flushed.

Four adults were seen following a working creel boat off Lunga's west coast on 23rd June.

Herring Gull Larus argentatus

A common but declining breeding species. The Treshnish Isles supported 0.2% of the Great Britain population as estimated by *Seabird 2000* (1998 – 2002).

Breeding was confirmed on Lunga (estimated 16 pairs), Sgeir a Chaisteil (7 pairs) and Fladda (110 adults counted when flushed). Breeding was also suggested by the presence of paired adults on territory on Sgeir an Eirionnaich (9+ pairs; 17 adults counted), Sgeir an Fheòir (4 pairs), Sgeir na H-lolaire (1 pair), Cairn na Burg Beg (2+ pairs; 4 adults) and Cairn na Burg More (11 pairs; 21 adults). No birds were occupying territories on Sgeirean na Guisaich. The average rate of change in the numbers of breeding birds on Lunga for the period 1994 – 2008, is calculated at -12.9% per annum, this downward trend continuing to be very highly significant (P<0.001).

Great Black-backed Gull Larus marinus

A regular breeding species. The Treshnish Isles supported 2.0% of the Great Britain population as estimated by *Seabird 2000* (1998 – 2002).

Breeding was confirmed on Lunga (22 pairs), Sgeir an Eirionnaich (24 pairs), Sgeir an Fheòir (3 pairs), Cairn na Burgh Beg (4 pairs; 8 adults counted with two chicks from separate broods) and Sgeir na Hlolaire (1 pair). During the period 1994-2008 the population of Lunga has fluctuated widely (16-67 pairs) though the population has been in decline since 2000, reaching its lowest in 2007 from which there was a further 38% increase in 2008 but only by six pairs. The average rate of change in the numbers of breeding birds on Lunga for the period 1994 – 2008, is -6.3% per annum, this downward trend now highly significant (P<0.01) because of the continuing low numbers.

Kittiwake Rissa tridactyla

A localised breeding species. The Treshnish Isles supported 0.2% of the Great Britain population as estimated by *Seabird 2000* (1998 – 2002).

Breeding was only confirmed on Lunga where the main colony is situated around Harp Rock. The numbers of apparently occupied nests on Lunga totalled 900. This is a 14% increase from the previous year; continuing the trend of population increase following a marked reduction in colony size in 2005. The size of colony is now comparable to that recorded during the four year period of comparative stability (2001-2004) and when at its peak since counts began.

Observations suggested that the breeding season was poor and/or late with approximately 50% of nesting birds in the monitoring plots sitting on eggs or young, the latter very small.

Typically a flock of up to 250 adults was noted daily feeding at sea off Sgeir a' Chaisteil, some birds roosting on the intertidal rocks.

Common Tern Sterna hirundo

Irregular breeding species. The Treshnish Isles supported 0.6% of the Great Britain population as estimated by *Seabird 2000* (1998 – 2002).

Mixed Common/Arctic terneries were present on Sgeir an Eirionnaich and Sgeirean na Guisaich. Nine pairs of Common Terns were considered to be breeding on Sgeir an Eirionnaich. Sgeirean na Guisaich supported a much larger mixed colony of which over 95% were Common Terns. 145 nests were counted and inspected, the contents of which were:

	Scrape	1 egg	2 eggs	3 eggs	4 eggs
No. of nests	3	31	70	39	2

Arctic Tern Sterna paradisaea

Irregular breeding species

Two and four pairs were estimated to be breeding with Common Terns *Sterna hirundo* on Sgeir an Eirionnaich and Sgeirean na Guisaich respectively.

Guillemot Uria aalge

Common breeding species. The Treshnish Isles supported 0.7% of the Great Britain population as estimated by *Seabird 2000* (1998 – 2002).

Breeding was only confirmed on Lunga and Sgeir a' Chaisteil, the main concentration typically located within the vicinity of Harp Rock with 6,860 adult birds estimated. The number of individuals counted on Lunga and Sgeir a' Chaisteil totalled 7150, similar to counts of the past three years (6,943-7,540). The count for 2008 falls below the mean, but well within the range of variability, shown by from counts from annual monitoring of Lunga and Sgeir a' Chaisteil since 1994.

The average annual rate of change for the population of Lunga is calculated at 1.1% p.a. for the period 1994-2008; the trend now significant (P<0.05).

Casual observations at Harp Rock suggested a very poor breeding season with a low proportion of adults breeding and of those, very few individuals seen to be brooding a chick. This concurs with the results of the seabird monitoring plots (see below). Many fewer adults than in previous years were seen to return from the sea carrying fish, this perhaps related to fewer young requiring feeding but also possibly poor food availability.

Razorbill Alca torda

Common breeding species. The Treshnish Isles supported 0.8% of the Great Britain population as estimated by Seabird 2000 (1998 – 2002).

Breeding was confirmed on Lunga and Sgeir a' Chaisteil. Birds were also seen at suitable breeding sites on Cairn na Burgh More (6 birds) and Fladda.

The number of individuals counted on Lunga and Sgeir a' Chaisteil totalled 1179, a 6% decrease from 2007. As most Razorbills nest within inaccessible crevices, it was not possible to ascertain whether the majority of birds were incubating or brooding.

Following a significant period of increase in the past decade (+24% p.a. 1994-1998; P<0.05) to a count of 1400 individuals, the population has since remained largely stable at around 950-1250 birds (1999-2008; no significant trend).

Black Guillemot Cepphus grylle

Regular breeding species in small numbers. The Treshnish Isles supported 0.4% of the Great Britain population as estimated by *Seabird 2000* (1998 – 2002).

Adult birds were seen around Sgeir an Eirionnaich - Sgeir an Fheòir sea area (15 birds), Lunga's south end (11), Fladda's North Haven (36), Fladda's east coast (4), Cairn na Burgh More (3) and Cairn na Burgh Beg (5). Two bird were observed flying up into two separate nest sites on Lunga's south-east coast whilst a nest with two eggs was found in North Haven, Fladda.

Puffin Fratercula arctica

Common breeding species. The Treshnish Isles supported 0.3% of the Great Britain population as estimated by *Seabird 2000* (1998 – 2002).

Breeding adults were occupying burrows on Lunga and Sgeir a' Chaisteil. Birds were also seen offshore from suitable breeding sites on Fladda.

The estimated breeding population on Lunga and Sgeir a' Chaisteil totalled 2,769 AOBs, a 4% increase from 2007; for counts of birds, one bird is taken to represent one AOB (Lloyd *et al.* 1991, Mitchell *et al.* 2004). The population remains well above the average for the period since 1994 (1,945 AOB). The average annual rate of change for Lunga's population is calculated at +3.1% p.a. for the period 1994 – 2008; the trend is not significant.

An unusual occurrence was of a second year bird visiting a breeding colony, this individual being at the Puffin Lawn on Lunga (area 12A). Most Puffins do not apparently breed until about their fifth year (Harris 1984).

Rock Dove Columba livia

Regular breeding species in very small numbers

Birds were seen daily on Lunga, principally along the east coast, the largest groups being south of Tarbet and at Shearwater Gully both of 6 birds. Elsewhere birds were seen at Cairn na Burgh More and Cairn na Burgh Beg, 3 and 2 birds respectively.

Skylark Alauda arvensis

Regular breeding species in small numbers

At least eight singing males were on Lunga in 2008, an increase on previous years but all within the same general localities. Territories were over the north slope of Cruachan, immediately above and below the

Village, on the saddle of Cruachan above Shearwater Gully and at least two each in sectors 6 and 7. The regular singing male north of the Village was holding territory over ground not occupied in recent years.

Swallow Hirundo rustica

An irregular visitor

A single bird was noted over Tarbet, Lunga, on the 23rd June.

Meadow Pipit Anthus pratensis

Regular breeding species in small numbers

Widespread breeding species on Lunga and Fladda with no estimate of territories made though probably less numerous than Rock Pipit *Anthus petrosus*. Elsewhere birds were seen on Fladda. No birds were recorded during a three hour visit to Sgeir a' Chaisteil.

Rock Pipit Anthus petrosus

Regular breeding species in small numbers

Common breeding species along the coast of Lunga and on Sgeir a' Chaisteil. Food carrying, alarms and recently fledged young confirmed breeding by several pairs on Lunga and Sgeir a' Chaisteil. Birds were also recorded on Fladda, Sgeir an Fheòir (4 birds), Sgeir an Eirionnaich (1 bird), Sgeirean na Guisaich (2 birds) and Sgeir na H-Iolaire (1 bird)

An accumulation of decaying seaweed beside Corran Lunga attracted up to 12 foraging birds, at any one time. Over the course of one day, 10 birds were mist netted at this location comprising of 2 adults and 8 juveniles.

Pied Wagtail Motacilla alba yarrelli

Irregular breeding species

Breeding was confirmed by a sighting of an adult female and nest at the top of the second cave gully south of Corran Lunga. Three other birds were in the vicinity. Elsewhere evidence of breeding included adults carrying food noted on Lunga within the vicinity of Tarbet, Harp Rock and Corran Lunga. A juvenile also frequented the Tarbet area.

Elsewhere one bird was noted on Fladda at South Haven on 27th June.

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, predominantly amongst the boulder scree and bracken-covered slopes from Cruachan down to the sea and on Corran Lunga. Casual observations indicated a minimum of 15 territories between the Village and Tarbet and three north of the Village. Several broods were noted.

Dunnock Prunella modularis

Irregular breeding species

One adult and two juveniles were noted during a visit to Fladda on 27th June.

Stonechat Saxicola torquata

Rare visitor

One adult male was seen at the Well, Lunga on 22nd June. This was followed on 26th June by the sighting of a adult female at the same locality whilst a juvenile was later mist netted at the Village.



Stonechat, juvenile (John Hodson)

Wheatear Oenanthe oenanthe

Regular breeding species in small numbers

A minimum of seven families of dependent and presumed locally bred young were noted on Lunga around the Village, Tarbet, Corran Lunga, Harp Rock, upper slopes of Cruachan, the first gully south of Puffin Lawn and Shearwater Gully. At the south end of Lunga, two juveniles were located near the reedbed in area 7.

Elsewhere an adult and 3 juveniles were seen on Sgeir a' Chaisteil on 25th June and 3 birds on Fladda on 27th June.

Blackbird Turdus merula

Rare visitor

One adult male and a juvenile were initially seen by the Well, Lunga, on 23rd June. (Presumably the same) adult male was subsequently seen on the 25th, 26th and 28th June nearby at the Village, Lunga.

Song Thrush *Turdus philomelos*

Rare visitor

(Presumably the same) single bird was seen near the Well, Lunga, on the 22nd, 23rd, 26th and 28th June. On the latter date it was heard singing.

Hooded Crow Corvus corone cornix

Regular breeding species in small numbers

One pair appears to have bred on Lunga. At least two juveniles and a minimum of three moulting adults were regular seen frequenting the south and north ends of Lunga. One bird was found oiled by Fulmar along the north-east coast of Lunga.

Elsewhere a single bird was at Sgeir a' Chaisteil.

Raven Corvus corax

At least one pair breeds in most years

Up to six individuals were seen at any one time on Lunga, with one bird seen flying across to Sgeir a' Chaisteil. At least one bird was a moulting adult, with the remainder thought to be juveniles due to the lack of wing moult.

Elsewhere up to five birds on Fladda could be seen from Lunga, as were observed in a single flock during the visit on 27th June.

Starling Sturnus vulgaris

Regular breeding species in small numbers

Small flocks of up to 18 birds (including juveniles) were noted daily on Lunga. Though breeding was not confirmed on Lunga it is considered very likely to have occurred given the numbers of birds, juveniles and habitat. Elsewhere birds were noted on Sgeir an Eirionnaich (flock of 28 adults), Sgeir an Fheòir (21 adults), Sgeir a' Chaisteil (5) and Fladda (8).

Linnet Carduelis cannabina

Rare visitor

Two birds were seen at Shag Alley, Lunga on 22nd and 23rd June. Singles were later seen at Tarbet and the saddle of Cruachan on 25th June, and Shag Alley on 26th June. These sighting represents the first records by TIARG of the species on the Treshnish Isles.

Twite Carduelis flavirostris

Regular breeding species in small numbers

All records on Lunga were confined to Tarbet northwards, with parties of usually between 2 and 6 birds noted at Tarbet and along the cliff tops and lower slopes of Cruachan, north of Harp Rock and Shag Alley. Amongst the larger groups were juveniles, with breeding confirmed for Lunga by an adult seen with faecal sac at Shag Alley. Breeding was also confirmed on Fladda where a nest with six eggs was located on the east side. Elsewhere three adults were seen during the visit to Sgeir na H-lolaire on 29th June.

SYSTEMATIC LIST OF MAMMALS FOR 2008

Otter Lutra lutra

Evidence of presence regularly noted

Unusually, no fresh spraint and prey remains were found on inspection of the often frequented localities on Lunga to confirm the species' presence. Tracks of an adult, not particularly fresh but certainly from this spring, were found in the mud at the entrance to the northernmost sea cave.

One individual was seen on the shore of Sgeir a' Chaisteil on evening of 29th, seen by an expedition member who remained on Lunga for an additional two days.

House Mouse Mus musculus

Resident

At least one individual was present indoors at the expedition base, the Village at the north end of Lunga. An animal was also noted in another Cottage.

Rabbit Oryctolagus cuniculus

Resident, numbers much reduced in recent years.

Though no systematic monitoring of this species took place, casual observations on Lunga suggested a resurgenance of the Rabbit population from the low numbers seen during the past six years. All sightings of black individuals were from Lunga, involving five or more individuals.

No evidence was noted of animals on the other islands visited, other than on Fladda where three animals were seen.

Grey Seal Halichoerus grypus

Regular breeding species, contributing just under 3% of annual UK pup production. Their numbers are regularly monitored by the Sea Mammal Research Unit (NERC, St Andrews). The conservation importance of these islands as a breeding colony is recognised by their designation by the UK Government as a Special Area of Conservation.

Unusually small numbers of animals were visible from Lunga hauled out on intertidal reefs to the north and north-east at low tide. However, when TIARG crossed to Fladda on 27th June, 36 animals were found hauled out on intertidal rocks on the north side of Sgeir an Fheòir, out of view from the Village, Lunga. Elsewhere two animals were seen hauled out on Sgeir na H-lolaire, on 23rd June.

Common Seal Phoca vitulina

Rare visitor

One adult with a pup was seen on Cairn na Burgh Beg on 21st June. This sighting represents the second record by TIARG of a pup of this species on the Treshnish Isles, the previous in 2007 on Tighchoie. An adult was seen the following day off the north-east coast of Lunga.

SYSTEMATIC LIST OF LEPIDOPTERA FOR 2008

Common Blue Polyommatus icarus

Regular breeder

Up to in excess of one hundred individuals were seen daily on Lunga, the vast majority along the east coast and including Tarbet. The species was also noted during a visit to Sgeir a' Chaisteil and Sgeir an Eirionnaich (3 individuals).

Dark Green Fritillary Argynnis aglaja

Accidental

A single was seen at the Well, Lunga on 23rd June. This follows on from last years first records for TIARG of this species on the Treshnish Isles.

Meadow Brown Maniola jurtina

Accidental

Singles were recorded on 26th June at Shag Alley and the south end, Lunga. Elsewhere at least two individuals were seen on Fladda during a visit on 27th June.

Six-spot Burnet Zygaena filipendulae

Resident

Up to in excess of one hundred individuals were seen daily on Lunga, the vast majority along the east coast.

The Magpie Moth Abraxas grossulariata

Probable resident

A single moth was seen on Lunga at the Village.

Map-winged Swift Hepialus fusconebulosa

Probable resident

A single moth was seen on Lunga at the Village.

OTHER SPECIES RECORDED LISTED SYSTEMATICALLY

Basking Shark Cetorhinus maximus

Rare visitor

A group of five widely dispersed animals were seen from Lunga off the west coast of Sgeir a' Chaisteil on the evening of 27th June. Earlier, a lone animal had been seen off the southeast coast of Lunga on 23rd June. Two individuals were seen off the north end of Lunga on the morning of 30th, seen by an expedition member who remained on the island for an additional two days.

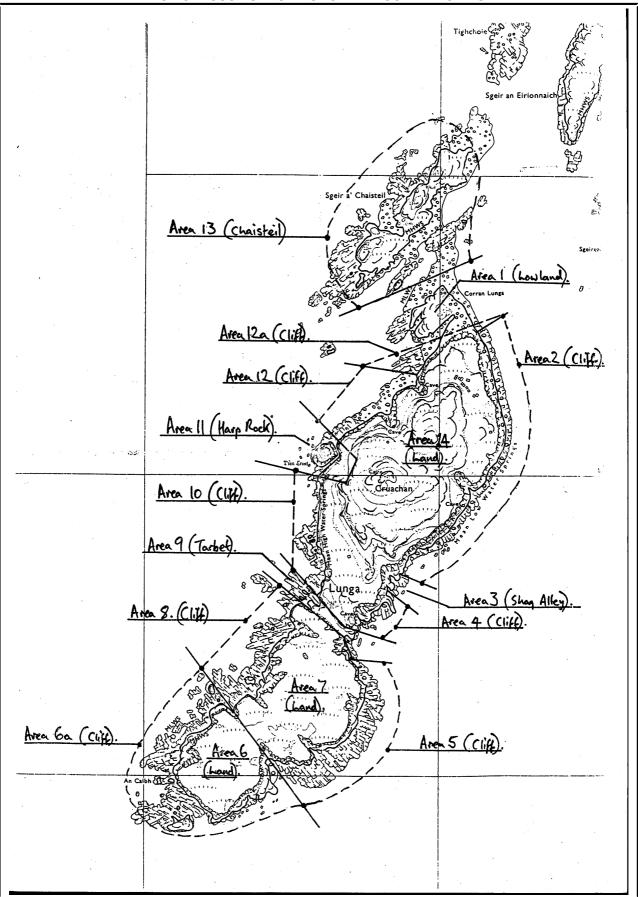
Oyster Plant Mertensia maritima

Localised species known only from "colonies" at Tarbet (west), Lunga and two localities on Sgeir a' Chaisteil.

An absence of plants from what was a well established "colony" at the north end of Sgeir a' Chaisteil was again noted for the fourth consecutive year. At Tarbet (west), Lunga, over 200 plants were found, most comparatively large and many spreading extensively.



Map-winged Swift (Andrew Carter)



MAP OF CENSUS ZONES – LUNGA AND SGEIR A' CHAISTEIL

2008 BREEDING SEABIRD CENSUS DATA FOR LUNGA AND SGEIR A' CHAISTEIL

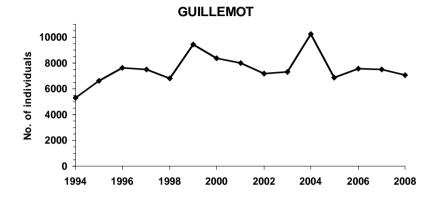
Sector	Count		_		(Count Se	ectors or	n Lunga	(1 – 12a	a) and S	geir a' C	Chaisteil	(13)				Lunga & Chaisteil
	unit	1	2	3	4	5	6	6a	7	8	9	10**	11	12	12a	13	Totals
Fulmar	AON		38	12	15	45		43		47		10	22	95	12	58	397
Shag	AON		29	35	15	25		1		14		5	15	15	5	19	178
Lesser B-b Gull	AOT									1							1
Herring Gull	AOT	2		1						12			1			7	23
Great B-b Gull	AOT	1		1			12		7			1					22
Kittiwake	AON											11	714	151	24		900
Great Skua	AON						1										1
Razorbill	IND		41	17	8	38		11				8	1020	21	5	10	1179
Guillemot	IND				8	34						110	6860	54	27	57	7150
Black Guillemot	PRS					1		5									6
Puffin	IND		387	77	132	47						72					715
Puffin	AOB												830	225	686	313	2054

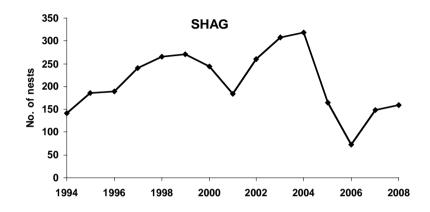
Totals for each Census Zone of Lunga and Sgeir a' Chaisteil

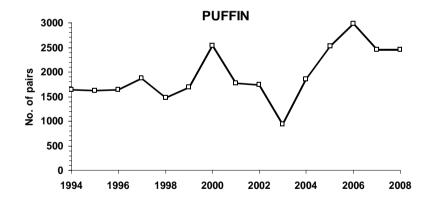
Key to count unit codes:

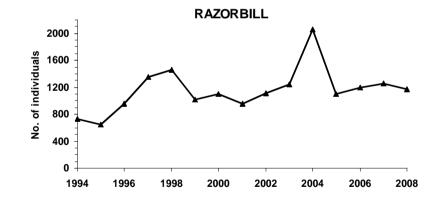
AON = Apparently occupied nest AOB = Apparently occupied burrow AOT = Apparently occupied territory IND = Individuals PRS = Pairs

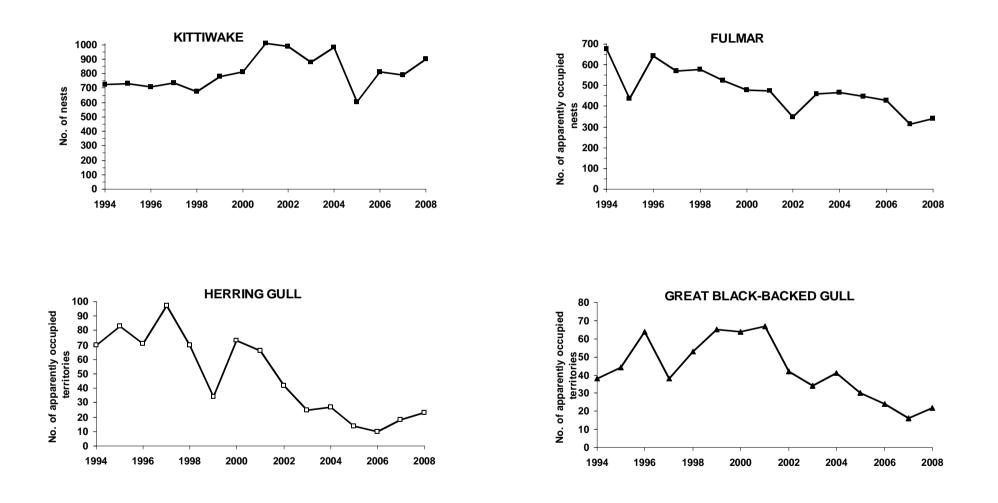
** Access was not gained in 2007 & 2008 to a cave entrance where in 2006 there was 100 Guillemots (IND).











SEABIRD MONITORING PLOTS, LUNGA 2004-2008

In order to give some indication of the variation in timing of the seabird breeding season and its success a series of monitoring plots on Lunga were introduced in 2004. These aim to further aid interpretation of the monitoring data (counts and ringing) collected annually by TIARG. Six plots were chosen based on visibility of nest sites and their contents and to monitor an adequate and representative sample of the cliff nesting seabirds on the island. Each plot was photographed in 2004 and photographs were annotated with lines marking the boundaries of the monitored areas to permit precise location between years. Plot boundaries followed distinct features (e.g. rock fissures) to ease identification of the areas to be monitored.

Within each plot, counts of birds and where appropriate of nests, their contents (when seen), apparently occupied sites and apparently brooding or incubating individuals were recorded. For all species, the numbers of adult birds present (or more accurately birds whose plumage could not reliably distinguish them as non-breeding immatures) within the plots were recorded. Additional information collected was:

- For Kittiwake (i) The number of 'well built' nests i.e. those that could be expected to contain eggs or young, and (ii) the contents of nests where this was visible;
- For Fulmar The number of 'apparently occupied sites' i.e. birds whose appearance suggests they
 could be incubating an egg;
- For Guillemot and Razorbill (i) The number of apparently incubating or brooding individuals (judged from the posture of birds), and (ii) the number of eggs and young that were seen.

Although not a target species for this monitoring programme, the numbers of apparently occupied Shag nests within the plots are also counted.

All counts are made from fixed points (a single point for each plot) and should be made within a period of 1-2 days to minimise variation between plots. Observations should be made in dry and calm conditions to maximise the chances of seeing the contents of nest sites; in wet and windy conditions birds will tend to sit tight for prolonged periods but when dry and calm will more frequently move or stand away from young. The duration of observations at each plot should be sufficient for the observer to be confident that the birds (and where appropriate nests) have been accurately counted and that a reasonable sample of nest contents has been recorded. However, prolonged observations will lead to confusion with counts as birds enter and leave the colony and also lead to potential errors with repeatedly counting the contents of the same nests. Therefore the actual duration of observations at each plot are necessarily somewhat subjective and will vary between plots and years depending on the behaviour of the birds present.

Some interpretation of data collected in 2008:

Kittiwake – The count of birds was within the range reported for the past five years, however relatively low counts of well built nests suggests either a late year or one where relatively few birds attempted to breed. Relatively few young have been seen in any year since initiation of the monitoring plots;

Fulmar – With the exception of Plot 6, relatively few were present in the monitoring plots.

Guillemot – The lowest counts of birds since 2004 and a low proportion of them were with eggs. No young were seen suggesting a very late season for those individuals that attempted to breed;

Razorbill – Although more difficult to monitor than Guillemots (lesser numbers and more obscured nest sites), the counts of birds were low in 2008.

John Calladine

			Р	lot 1				Р	lot 2				Р	lot 3				Р	lot 4				Р	lot 5				Р	lot 6		
	Year (2004 - 2008) ►	04	05	06	07	08	04	05	06	07	08	04	05	06	07	08	04	05	06	07	08	04	05	06	07	08	04	05	06	07	08
Kittiwake	Adults present	28	nc	10	25	26	36	nc	22		13						103	60	53		75										
	Good nest	11	6	2	8	11	18	14	1		4						61	35	18	31	19										
	Trace nest	4		4	0	5	1	5	7		8						14	4	8	9	2										
	Clutch of 0																				19										
	Clutch of 1																														
	Clutch of 2										2								1	11	8										
	Clutch of 3						1										4		4		3										
	Clutch of 4																														
	Brood of 1																			3	4										
	Brood of 2										1						5			8	6										
	Brood of 3																		1												
	Brood of 4																1														
Fulmar	Adult present	15	nc	18	12	8	21	nc	33										2								30	nc	27	21	34
	AOS	10	4	10	11	7	16	20		14									_								22	29	21	19	26
							-	-																				-		-	-
Guillemot	Adult present	54	28	39	31	27						412	419	413	376	187					7	'11	720	984	764	543					
	Apparently incubating or	8		18	14	4						138	16	188	121	15					3	844	28	680	499	94					
	brooding Eggs seen	1		2								21	6	21	14	7						46	21	42	27	28					
	Young seen	'		2								21 34	7	18	14							40 39	21 18	42 96		20					
	roung seen											34	'	10	12							39	10	90	32						
Razorbill	Adults present	13	27	6	19	10	2	12	2			8	13	14	7	1						8	8	29	39	6					
	Apparently incubating or brooding			3		2			1					8	4	1								14		3	1				
	Eggs seen													2										2							
	Young seen																								2						
Shag	Nests					4	5	4	1	6	3							1		1		3									

COMPARISON OF SEABIRD MONITORING PLOT DATA FROM LUNGA, 2004-2008

nc = not counted

Site	Species	Adults	Pulli	Retraps	Controls	Total
Lunga				·		
	Storm Petrel	120		52	1	173
	Shag	40	83	12		135
	Common Sandpiper		1			1
	Herring Gull		7			7
	Lesser Black-backed Gull		1			
	Great Black-backed Gull		13			13
	Kittiwake	3		4		7
	Razorbill	3		7		10
	Puffin	321		89		321
	Rock Pipit	10				10
	Meadow Pipit	4				4
	Wren	2				2
	Wheatear	4				4
	Stonechat	1				1
	Twite	1				1
Treshnish Isles	Grand total for 2008	509	105	164	1	779

TRESHNISH RINGING TOTALS FOR 2008

Note: All rings used in 2008 were registered under Treshnish Auk Ringing Group.



A farmer (Andrew Carter) is never able to escape from the troubles on his farm - a broken Tractor (Robin M. Ward)

SPECIES	1971	1974	1976	1977	1978	1980	1982	1984	1986	1989	1991	1993	1994	1995	1996
Fulmar	17	6	4		8	21	14	18	7	21	15		4	27	38
Manx Shearwater		2	13		4	4	1	8					9	1	
Storm Petrel		254	22		1	283		203	800	411	975	75	440	536	331
Shag	150	7	10	10	24	80	50	160		40	10		10	59	96
Eider															
Buzzard						1	2								
Corncrake															
Oystercatcher		1				1	4	2							
Common Sandpiper															
Ringed Plover															
Great Skua															
Common Gull															
Herring Gull	6	1			14	46	35	56	4	4	3		5	24	19
Lesser Black-b Gull															
Great Black-b. Gull	3	6	3	7	6	22	14	35		22	15		6	25	16
Kittiwake						1	1	1	2	2	4		6	10	1
Guillemot	32	20	14		66	502	137	364	180	250	306		109	498	349
Razorbill	65	72	90		115	266	218	236	151	103	64		81	101	105
Black Guillemot															
Puffin	70	198	271		203	200	208	182	174	160	114		358	236	301
Meadow Pipit														4	
Rock Pipit									5	1				2	4
Pied Wagtail													1	3	2
Wren														3	
Wheatear			12					1	3						5
Stonechat															
Willow Warbler														1	
Hooded Crow															
Starling															
Twite															
TOTAL	343	567	439	17	441	1427	684	1266	1326	1014	1506	75	1029	1530	1267

TRESHNISH RINGING TOTALS 1971 – 2008

(1) Data for 1971 - 1995 extracted from Walker & Cooper (1996).(2) Ringing data for a three day visit in 1972 was not available.

SPECIES	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Total
Fulmar	7	24	23	12	25	22	25	47	14	15	8		422
Manx Shearwater	2	1	4	4			2		1	1	2		59
Storm Petrel	1104	741	732	814	1030	15	360	83	491	962	21	120	10804
Shag	99	150	100	59	37	97	99	200	77	35	141	123	1923
Eider								1					1
Buzzard													3
Corncrake									1				1
Oystercatcher			2		1						4		15
Common Sandpiper		1								1	1	1	4
Ringed Plover									1		1		2
Great Skua		1				1	1		1			2	6
Common Gull		4		5	11	11	6		16	8			61
Herring Gull	52	73	39	15	11	11	8	11	8	1	11	7	464
Lesser Black-b Gull												1	
Great Black-b. Gull	48	19	16	2	27	5	21	18	12	3	4	13	368
Kittiwake	50	41	23	13	11	3	2	21	15	14	16	3	240
Guillemot	472	503	507	892	312	425	261	800	141	172	123		7435
Razorbill	98	112	102	133	31	110	56	147	37	33	34	3	2563
Black Guillemot	1				1								2
Puffin	267	398	274	389	214	351	244	226	151	272	195	321	5977
Meadow Pipit	1			12	1	4	1	3	5	1		4	36
Rock Pipit	2	4	2	1	2	2	2	2		3	21	10	63
Pied Wagtail											4		10
Wren					1			2	4	2		2	14
Wheatear	24	37	22	50	24	2	2	2	7	1	2	4	198
Stonechat										2		1	3
Willow Warbler													1
Hooded Crow											1		1
Starling											3		3
Twite	2					1					1	1	5
TOTAL	2229	2109	1846	2401	1739	1060	1090	1563	982	1526	593	616	30685

TRESHNISH RINGING TOTALS 1971 – 2008 (con't)

RECENT RINGING RECOVERIES

Abbreviations used:

Age

- 1 Pullus
- 4 Hatched before this calendar year, exact year unknown
- 6 Hatched before previous calendar year, exact year unknown
- 8 Hatched more than two calendar years before year of ringing

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 (Robin M. Ward)

STORM PETREL RECOVERIES

Details are given below of three Storm Petrels originally ringed on the Treshnish Isles and recovered elsewhere, and four vice versa.

Storm Petrel 260526?	6 R	02/6/2006 30/7/2006	Lunga Eilean Nan R 262 km	on, Highland 29 degs	Region 35 days
Storm Petrel 2579818	6 R	23/6/2005 22/7/2007	Lunga Eilean Nan R 262 km	on, Highland 29 degs	Region 759 days
Storm Petrel 2579424	6	26/6/2006	Fladda		

	R	13/7/2007	Ballyhornan, 252 km	Co.Down 168 degs	382 days
Storm Petrel 2571888	4 R R	26/7/2004 08/7/2005 30/6/2007	Fife Ness, Ta Calf of Man, I Lunga 238 km		1069 days
Storm Petrel 2580864	4 R	28/7/2004 30/6/2007	Fife Ness, Ta Lunga 238 km	ayside 276 degs	1067 days
Storm Petrel 2607402	4 R	13/8/2006 30/6/2007	Souter Point, Lunga 360 km	Tyne & Wea	r 321 days
Storm Petrel NO2522	6 R	05/6/2005 01/7/2006	Ponta de Alm Lunga 2165 km	Ū	Algarve, Portugal 391 days

Storm Petrel recoveries relating to the Treshnish Isles as either birds ringed or controlled there, now number 490 (relating to 460 birds) of which many have been of birds from the Isle of Man & Sanda (49 & 121 respectively). The above three recoveries of birds ringed on the Treshnish Isles, were attracted in by tape lure on recapture at Eilean Nan Ron & Ballyhornan, and are therefore likely to have been wandering immatures (up to 4 years old) or failed breeders. Only 61 birds ringed on the Treshnish Isles have been recaptured elsewhere, 13% of all recoveries. This figure is remarkably close to the overall probability of 15% that Ratcliffe *et al.* (1998) found for non-breeder colony attendance.

RECOVERIES OF OTHER SPECIES

All other recoveries relating to the Treshnish Isles received since the previous TIARG report are listed below.

Guillemot T14601	4 XF	23/6/1986 19/2/2005 Oil victim	Lunga Ploudalmezea 892 km	au, Finistere 173 degs	6816 days
Guillemot					
R00911	1 R	29/6/2001 28/6/2007	Isle of Canna Lunga	, Highland R	egion
			64 km	174 degs	2190 days
Guillemot		Bird shot			
X79967	6 XL	01/7/1998 10/3/2004	Lunga Treflez, Finist	,	
		Oil victim	887 km	171 degs	2079 days
Guillemot X35558	1 R	02/7/1995 23/6/2007	Isle of Canna Lunga	, Highland R	egion
		_0,0,_00	0	174 degs	4374 days
Guillemot R20196	4 R	29/6/2000 01/7/2007	Lunga Isle of Canna	, Highland R	egion

			64 km	354 degs	2558 days
Guillemot X67652	6 XF	29/6/1997 17/1/2008	France	erre-D'Oleron, Charente-Maritime,	
			1223km	164 degs	3854 days
Puffin EL52623	6 XL	22/6/2005 23/6/2007	Lunga Lunga Okm	0 degs	731 days
Puffin EL52703	6 XF	25/6/2006 11/7/2007	Lunga Iona, Strathcl 15km	yde 173 degs	381 days
Puffin ET19679	8 XF	28/6/1997 16/6/2007	Lunga Colonsay, Str 53km	athclyde 164 degs	3640 days
Puffin EW18273	8 XL	29/6/2007 27/5/2008	Lunga Colonsay, Str 45km	athclyde 157 degs	333 days
Razorbill M55257	4 XF	28/6/1989 26/9/2007	Lunga Glims Holm, 337km	Burray, Orkn 38 degs	ey 6664 days
Razorbill M80168	1 R	01/7/2000 27/6/2007	Isle of Canna Lunga 64km	, Highland R 174 degs	egion 2552 days
Shag 1414382	6 XL	29/6/2006 12/12/2007 Bing found	Lunga Knock Bay, S 77 km by member of	37 degs	d Region 531 days
		Tring Tourio	by member of	public	
Shag 1417004	1 XF	25/6/2007 09/12/2007	Lunga Baugh, Isle o 25km	f Tiree, Strat 270 degs	hclyde 167 days
Shag 1417069	1 XF	27/6/2007 27/7/2007	Lunga Lunga 0 km	0 degs	30 days
Shag 1417015	1 XL	25/6/2007 06/9/2007 Leg & Ring	Lunga Lunga 0 km only found by 1	0 degs member of p	73 days ublic

Snag 1421760	1 XL	25/6/2007 26/1/2008	Lunga Knockintorran, North Uist, Western Isles 137 km 215 degs 215 days
Shag 1421766	1 XL	25/6/2007 24/3/2008	Lunga Near Kilkenneth, Isle of Tiree, Strathclyde 34 km 270 degs 273 days



Kittiwakes (Robin M. Ward)

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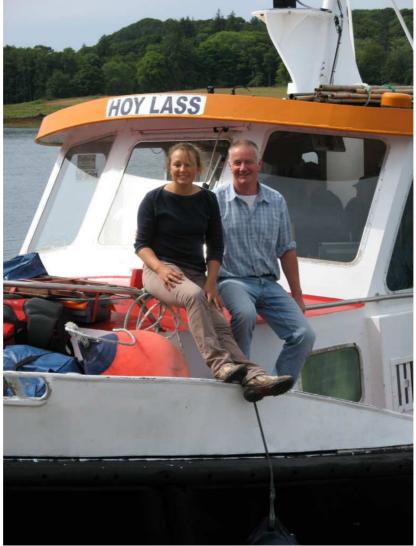
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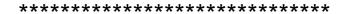
ACKNOWLEDGEMENTS

Firstly we would like to express our appreciation to the owners of the Treshnish Isles, THE HEBRIDEAN TRUST (www.hebrideantrust.org) for permission and funding to allow our continuing studies to be made on these fascinating islands.

We thank lain Morrison and his family, for providing our transportation between Mull and Lunga (http://www.turusmara.com/), and are grateful for his continuing advice, co-operation and help.



MV Hoy Lass of Turus Mara (Andrew Carter)



Any comments on this report, and suggestions for improvements for relaying information required by conservation agencies, are much welcomed.

THE EXPEDITIONS 1971 – 2008

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 "Corryvreckan" boat cruise.*
- **1978** Barry Lawson, Peter Deans, John Hodson, Simon Walker. Full census Lunga and Sgeir a' 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, Sgeir a' Chaisteil and Fladda. Chris Redfern *et al.* Storm Petrel ringing.
- 1994 Simon Walker, Mike Smith, Dennis Cooper, Jan Densham, Danny Lenain.
 Full census Lunga and Sgeir a' Chaisteil and ringing. Chris Redfern *et al.* Storm Petrel ringing.

THE EXPEDITIONS 1971 – 2008 (con't)

- **1995** Simon Walker, Mike Smith, Dennis Cooper, Jan Densham, Fergus Henderson. Full census of Lunga and Sgeir a' Chaisteil and ringing.
- **1996** Simon Walker, Mike Smith, Dennis Cooper, Danny Lenain, Robin Ward Full census of Lunga and Sgeir a' 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. (May).
- Week 2 Simon Walker, John Hodson, Dennis Cooper, Robin Ward, Steve Willis, Andrew Carter, Steve Woodward
 - Full census of Lunga, Sgeir a' 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, Sgeir a' Chaisteil and the islands between Lunga Fladda. Ringing.
- **2002** Simon Walker, Robin Ward, Andrew Carter, Phil Bone, Sara Brown, Jackie Hay. Full census of Lunga, Sgeir a' Chaisteil and the islands between Lunga – Fladda. Ringing.
- 2003 Simon Walker, John Hodson, Dennis Cooper, Robin Ward, Andrew Carter, Jackie Hay, Matt Smith.
 - Full census of Lunga, Sgeir a' Chaisteil and the islands between Lunga Fladda. Ringing.
- **2004** Simon Walker, Robin Ward, Andrew Carter, John Calladine, Tim Dixon, Shaun Micklewright, Tina Wiffen.

Full census of Lunga, Sgeir a' Chaisteil and the islands between Lunga – Fladda. Ringing.

- 2005 Simon Walker, Robin Ward, Andrew Carter, Shaun Micklewright, Gareth Harris, George Henderson, Tracé Williams.
 - Full census of Lunga, Sgeir a' Chaisteil and the islands between Lunga Fladda. Ringing.
- 2006 Simon Walker, Dennis Cooper, Robin Ward, Andrew Carter, Shaun Micklewright, John Calladine, Tim Dixon, George Henderson.
 Full census of Lunga, Sgeir a' Chaisteil, Cairn na Burgh More, Cairn na Burgh Beg and the islands between Lunga Fladda. Ringing.
- 2007 Simon Walker, Robin Ward, Andrew Carter, Shaun Micklewright, George Henderson, Tim Dixon, Tracé Williams.
 - Full census of Lunga, Sgeir a' Chaisteil and the islands between Lunga Fladda. Ringing.
- 2008 Simon Walker, John Hodson, Robin Ward, Andrew Carter, Shaun Micklewright, George Henderson, Tim Dixon, John Calladine. Full census of Lunga, Sgeir a' Chaisteil and the islands between Lunga – Fladda. Ringing.

RING SERIES USED ON THE TRESHNISH ISLES SINCE 1927^{*}

SHAG RINGS	A2 RINGS	E RINGS	F RINGS	G RINGS	H RINGS	RAZORBILL RINGS	GUILLEMOT RINGS	MISC. RINGS
SHAG RINGS 1080101 - 110 1087111 - 120 1105561 - 570 1123541 - 550 1123671 - 690 1123961 - 970 1159651 - 700 1163701 - 740 1168001 - 100 1170601 - 700 1187901 - 950 1237401 - 450 1322951 - 960 1328481 - 490 1350801 - 900 1357901 - 8000 1366901 - 7000 1373751 - 3900 1378401 - 8500 1399601 - 700 1408301 - 500 1414301 - 500** 1421701 - 800**	2010581 - 583 2101991 - 2000 2121401 - 500 2167051 - 068 2170201 - 203 2238501 - 600 2261001 - 2350	EF75001 - 500 EG23501 - 700 EG23721 - 780 EG23801 - 999 EG61000 - 500 EG88501 - 9000 EH33377 - 380 EH54501 - 55000	FB22601 - 700** FB23401 - 500** FC52551 - 558 FC52571 FC74501 FR13606 - 636 FR14401 - 500	G RINGS GH21301 – 350 GN85301 – 400# GJ35401 – 500 GJ76001 – 800** GJ99081 – 082 GK34351 – 354 GK50214 – 220 GK50551 – 570 GK62985 – 990 GK90821 – 840 GK91471 – 490 GM78756 GP13416 – 450 GP47917 GP62201 – 207 GP74501 – 75000	HT03619 HT09001 - 004 HT17871 - 890 HT17931 - 940 HT34021 - 030 HT68201 - 210 HT68221 - 226 HT80301 - 400 HW05351 - 360 HW06951 - 7000 HW08994 - 09000 HW37361 HW68101 - 110 HW68161 - 170 HW74971 - 990	RINGS K10701 - 1000 ^{**} K13001 - 300 [#] M46501 - 800 M55001 - 500 M72451 - 800 M85501 - 800 M88001 - 300 M92501 - 700**	RINGS R07001 - 100 R19401 - 20200 R24001 - 26350 R31601 - 900 R51501 - 2000 R65501 - 6000 ^{°°} R72501 - 4000 ^{°°}	MISC. RINGS
1417001 – 7100*	* 2554001 – 500 2560001 – 1000** 2579001–80000**	ET52501 – 3000 FET80001 – 500 FEW18001 – 500** FEW50001 – 500*						

*All rings series known (to TIARG) to have been used on the Treshnish Isles are documented irrespective of ring ownership. ** Ring series still in use # Ring series purchased but yet to be used