

Treshnish Isles Auk Ringing Group

Report for 2007



Puffin (Robin M. Ward)

Compiled by
Robin M. Ward

Expedition dates:
23rd – 30th June 2007

Expedition members:
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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 29th expedition to the Treshnish Isles during 23rd – 30th June 2007.

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 auks being fleyged OR Storm Petrel mist netted. Partly due to no available boat the opportunity to visit the other islands was also thwarted in part by the unfavourable weather conditions with consequently no ringing sample obtained of Storm Petrels from Fladda. This year, the third repeat survey of six permanent seabird monitoring plots set up in 2004 were made, providing the Group with quantification of seabird productivity in addition to the general perspective provided by the annual census. The second 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 2007 was provided by the Hebridean Trust (www.hebrideantrust.org), owners of the islands.



Expedition participants 2007: Andrew Carter, Robin Ward, Trace Williams, Shaun Micklewright, Simon Walker, Tim Dixon & George Henderson (Andrew Carter)

[illegible]

WEATHER

Date	Day	Time	Wind direction and speed	Maximum wind speed	Cloud amount	Visibility (miles)	Comments
23-Jun	Sat	18:00	NW3		8/8	55	Hazy sunshine
		20:00	NE1		8/8	55	Clear sky
24-Jun	Sun	07:00	NE2	max 10 km/h	7/8	35	
		10:00	NNE4		2/8	35	Sunshine
		13:00	N5-6	max 48 km/h	8/8	35	Showers
		15:00	N3-4		8/8	40	
		23:00	NE3		8/8	40	
25-Jun	Mon	09:00	NNE4		6/8	35	Sunshine
		18:00	NNE5		2/8	35	
		19:30	NW7	max 54 km/h	2/8	35	Formation of Altocumulus lenticularis clouds
26-Jun	Tues	04:00					Heavy rain
		10:00	NW1-2	max 9 km/h	8/8	40	Hazy sunshine
		14:00	SW2-3	max 15 km/h	8/8	35	Low cloud and rain
		18:00	SW1		8/8	10	Showers
		19:00	SE1-2	max 10 km/h	8/8	2	Continuous rain
		23:00	NE1		8/8	5	Showers
27-Jun	Wed	09:00	NW3-4	max 20 km/h	3/8	35	Sunshine
		14:00	NW3-4	max 24 km/h	5/8	40	Showers
		18:00	W3-4	max 27 km/h	8/8	15	Continuous rain all evening
28-Jun	Thur	08:00	SW2-3	max 17 km/h	8/8	10	Continuous rain
		12:00	SW4	max 30 km/h	8/8	10	Continuous light rain
		16:00	SW5		8/8	10	Continuous rain
		18:00	SW1	max 7 km/h	8/8	5	Sunshine
		23:00					Started raining again into early morning – Manx Shearwater activity
29-Jun	Fri	09:00	NW2-3	max 13 km/h	5/8	40	Sunshine
		14:00	NW2-3	max 14 km/h	1/8	55	Sunshine
		19:00	NW2-3	max 16 km/h	7/8	55	Cloudy
		23:00	NNW2	max 8 km/h	1/8	55	Full moon
30-Jun	Sat	09:00	SE4	max 23 km/h	8/8	55	Rain in air

George Henderson



Formation of Altocumulus lenticularis clouds on 25/06/2007 at 21:00 (Shaun Micklewright)

SYSTEMATIC LIST OF BIRDS FOR 2007

The following systematic list describes those bird species seen during the Treshnish Isles Auk Ringing Group's presence on the Treshnish Isles, 23rd– 30th June 2007. Unless specified, 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 2007 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).

Red-throated Diver *Gavia stellata*

Rare visitor

One bird was seen over the Village, Lunga, flying north on the 26th June.

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. 3 apparently occupied sites were also noted on Cairn na Burgh Beg's south and west facing cliffs during TIARG's arrival on 23rd June. The breeding population for Lunga and Sgeir a' Chaisteil was estimated at 378 pairs based upon apparently occupied sites (AOS). This 25% reduction from 2006 brings the population size to the lowest it has been since annual monitoring began in 1994. Over the long term, 1994-2007, the average rate of change in the numbers of breeding birds on Lunga is calculated at -3.7% per annum, this trend being highly significant ($P < 0.01$). For a similar period, 1993-2005, Mavor *et al.* (2006) 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 at night on Lunga. During the week small groups of between 2 – 40 birds were regularly noted flying past as well as feeding offshore.

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 at the Village (3 x 18m nets) on two dates provided catches of 9 and 43 birds when using 2 x 12m nets for 45 minutes, and 3 x 18 m nets for 2 hours respectively. Further attempts to mist net on Lunga and also on Fladda were thwarted by rain. 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.

Casual observations identified a minimum of 13 churring birds from within the walls of seven of the eight cottages. Cottage 'B' (see Carter & Ward 2005), a building whose walls were not intact but largely rubble, was not inspected for a count of calling birds, though birds were however heard here in 2007. This cottage usually holds at least half of the occupied sites. These casual observations provide no evidence of a decline in the occupancy of the Village buildings themselves by breeding Storm Petrels, as the shortfall in numbers from the 25-30 birds found during call-back surveys can be attributed to the non-examination of Cottage 'B'.

Gannet *Sula bassana*

Regularly seen offshore

Up to 100 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 149 and 12 pairs respectively, based upon a nest count. The overall number counted has increased by 90% from that in 2006. This represents a partial recovery following a rapid marked decline in the breeding population noted in 2005 and then again in 2006, where the latter year's count was only approximately half of the previous lowest nest count since annual monitoring began in 1994.

Large numbers of adults were again in the vicinity of the colonies but had chosen not to breed, as evidenced by the atypical concentration of 800+ roosting adult shags around Sgeir an Fheòir that departed daily in the mornings to forage. Presumably many of these were in too poor condition to breed successfully, as evidence of failed breeding attempts in terms of abandoned nests was limited. Of those birds that were breeding on Lunga and Sgeir a' Chaisteil, great variation was found in the stage of breeding attained, from eggs to already fledged young being noted. Many more broods were found of a suitable size to ring than in 2005 but with some localised variation. For example, 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 most normally expected by the end of June.

2006 was the first 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 Programme funded by the UK Government. In 2007 of the 17 breeding adults marked in 2006 on Lunga, five ("200", "201", "209", "213" & "216") were re-sighted by TIARG, all within the colonies where they were originally marked. A further 78 breeding adults were colour-ringed on Lunga in 2007.



Breeding adult Shag colour-ringed for the Retrap Adult Study (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 77 birds by 26th June, typically most residing around the islands of Sgeir an Eirionnaich, Fladda and Sgeir an Fheòir. Evidence of local breeding included five adults with six half grown goslings on the south end of Lunga, and a gosling with three adults north of Lunga.

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

Eider *Somateria mollissima*

Regularly breeds in small numbers

Five broods were noted around Lunga, comprising three ducks with six ducklings at Corran Lunga, a brood of three ducklings at Harp Rock and broods of one, four & five ducklings at the south end. Elsewhere an empty single nest was located on Corran Lunga.

The waters between Fladda and Lunga supported an unusually (very) small number of late summer moulting birds, typically male-biased; a maximum of 8 birds were counted on 28th June.

Buzzard *Buteo buteo*

Until recently, one pair bred in most years

One juvenile was regularly seen frequenting the east coast of Lunga, and at times in this vicinity, also at least one, possibly two adults. No food carrying by adult was observed. These observations together suggest successful breeding.

Peregrine *Falco peregrinus*

Seen most years with breeding known to occur on adjacent coasts

A presumed female (from size), was seen flying between Lunga and Sgeir a' Chaisteil on 25th June. Remains of Peregrine kills were noted on Lunga.

Corncrake *Crex crex*

Probably a regular breeder in small numbers

At any one time, up to two calling males were noted on Lunga during the week. One male was occasionally heard calling from beside the Well on the Boulder Beach on two dates. A second calling male was in regularly residence beside the main coastal path above the second (southern) west coast gully (area 12), Lunga. No birds were heard to be occupying the area traditionally held in recent years to the east of the village on Lunga though one was seen in flight at the Village. Late evening and night vigils of other areas where in the past calling birds have been recorded, e.g. the saddle to the north of Cruachan, registered no birds.

Elsewhere a single calling bird was heard regularly from Sgeir a' Chaisteil.

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Estimated no. of calling male Corncrakes on Lunga	1	0	1	5	3	2	2	1	1	3	2	2

Oystercatcher *Haematopus ostralegus*

Regularly breeds in small numbers

Six breeding pairs were acting as though eggs or young were being defended on Lunga's beaches and rocky outcrops (1 in area 8, 3 at Corran Lunga and 2 in area 6a) with the only broods noted being at Corran Lunga, these of one and three young. Another 5 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, six breeding pairs held territory on Sgeir a' Chaisteil and a pair were regularly observed from Lunga on Sgeir na H-Iolaire. Small flocks of presumed failed breeders/immatures were evident on Lunga, typically at high tide in the area of Sgeir a' Chaisteil and Corran Lunga with up to 15 birds.

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 they were incubating eggs. Elsewhere two pairs were on territory on Sgeir a' Chaisteil, one presumably with young (as suggested by a broken wing display given to a human intruder.)

Dunlin *Calidris alpina*

Irregular visitor

Two singles, possibly the same bird, were seen at Corran Lunga on the 23rd June with another single heard there on 29th.

Snipe *Gallinago gallinago*

Regularly breeds in small numbers

Breeding was confirmed with a nest of newly hatched chicks found on Corran Lunga. An egg shell

was also found on the north east slope of Cruachan immediately south of the Village, Lunga. Up to two males at any one time would drum over the Village with a third bird heard on occasions giving the “chipper–chipper” call from the west. Further south, up to 2 birds were flushed at the Well and Shearwater Gully. Singles were heard over the area north of Tarbet and the northern slopes of Cruachan. At the south end of Lunga, single birds were flushed when crossing areas 6 & 7.



Snipe nest with chicks and hatching eggs (George Henderson)

Curlew *Numenius arquata*

Irregular visitor

One bird was seen on Corran Lunga on the 24th June.

Redshank *Tringa totanus*

Irregular visitor

One bird was seen at the south end of Lunga on the 26th June.

Common Sandpiper *Actitis hypoleucos*

One or two pairs occasionally breed

Breeding was confirmed on Corran Lunga where a pair was observed with a well-grown chick. At times, a third bird was present within the vicinity of the Landing Beach and Corran Lunga.

Elsewhere a single bird pair was observed on Sgeir a' Chaisteil.

Arctic Skua *Stercorarius parasiticus*

Small numbers seen daily presumably from the breeding grounds on Coll where there had been 12 apparently occupied territories in 2004 and 2005 (Mavor *et al.* 2005, 2006)

Up to 5 light phase and 2 dark phase birds at any one time were seen daily, generally offshore from the Harp Rock - Sgeir a' Chaisteil coast.

Great Skua *Stercorarius skua*

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

A pair of birds was occasionally on territory on the high ground south of the Tarbet (area 6), a locality where breeding has previously been proven. No evidence of nesting was found and the adults were unperturbed by avian or human intruders.

Single pairs were occasionally seen from Lunga holding vigil on territories where breeding has previously been proven situated on the west and east coast of Fladda.

Up to 4 birds were regularly seen daily over the Village and Harp Rock, Lunga. 2 birds were noted over Cairn na Burgh More on 29th June.

On two occasions, a lone Great Skua was seen to isolate and drown a flightless moulting adult Greylag Goose on the sea. Though this event has not previously been recorded by TIARG, ducks and geese form a substantial part of the avian prey of Great Skuas in Iceland, including adult Greylag Geese (Furness 1987).

Common Gull *Larus canus*

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

No breeding was evident on any of the islands as seen from Lunga or from the MV *Hoy Lass* during her passage through the islands north of Lunga. Two birds were seen on 29th June at the low-lying basalt rock outcrop of Fladda's south-east coast where the colony has been since 1998.

Up to five adult birds were seen most days from Lunga.

Lesser Black-backed Gull *Larus fuscus*

Regular breeding species in small numbers

One bird of a presumed pair was noted within the south end gully, Lunga, in area 8. Elsewhere breeding was suggested by the presence of paired adults on territory on Cairn na Burgh More.

Up to two adults were seen on several days from the Village, Lunga.

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 18 pairs), Sgeir a Chaisteil (5 pairs) and Fladda (no count available). Breeding was also suggested by the presence of paired adults on territory on Sgeir an Eirionnaich (2+ pairs), Sgeir na H-Iolaire (4+ pairs), Cairn na Burg Beg (2+ pairs) and Cairn na Burg More (no count available). No birds were occupying territories on Sgeirean na Guisach or Sgeir an Fheòir. The average rate of change in the numbers of breeding birds on Lunga for the period 1994 – 2007, is calculated at -14.1% per annum, this downward trend continuing to be highly significant ($P < 0.01$).

Correction: There were only 8 breeding pairs of Herring Gull on Sgeir an Eirionnaich in 2006 and not 26 as stated in the Systematic list of birds in 2006.

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 (16 pairs), Sgeir a' Chaisteil (1 pair) and Sgeirean na Guisach (north 2 pairs, one with chicks). Scanned from Lunga or a boat, breeding was considered to have occurred on Sgeir an Eirionnaich (10+ pairs), Sgeir an Fheòir (4+ pairs) and Cairn na Burg Beg. During the period 1994-2007 the population of Lunga has fluctuated widely (16-67 pairs, no significant trend) though the population has since 2000 been in decline and at its lowest (from the data available, 1976 onwards).

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 790. This only represents a 3% reduction from the previous year and close to the average for the period since annual monitoring began in 1994. The reduction in colony size has seen the average rate of change in the numbers of breeding birds on Lunga reduce from a highly significant increase at 3.8% per annum for the period 1994 – 2004 ($P < 0.01$), to now one of no significance.

Observations suggested that though many birds were more advanced in terms of breeding than the past three years, clutch/brood sizes were low. Of those nest seen during ringing or census work at Harp Rock, 2 pairs were on a single egg, 15 on 2 eggs, 3 with a single chick and 10 with 2 chicks.

Typically a flock of up to 400 adults was noted daily either on Sgeir a' Chaisteil or the northern end of the Landing Beach.

Common Tern *Sterna hirundo* / **Arctic Tern** *Sterna paradisaea*

Irregular breeding species.

No mixed ternery was evident on any of the islands as seen from Lunga or from the MV *Hoy Lass* during her passage through the islands north of Lunga. Two Common/Arctic Terns were noted over the islet immediately adjacent to Sgeir an Eirionnaich on the 29th June, where a colony has been established in recent years. A single bird was heard from Lunga on 28th June

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 7241 adult birds estimated. The numbers of individuals counted on Lunga and Sgeir a' Chaisteil totalled 7512, similar to that in 2006. The count for 2007 falls just below the mean, and well within the range of variability, exhibited from counts made since annual monitoring of Lunga and Sgeir a' Chaisteil began in 1994.

The average annual rate of change for the population of Lunga is calculated at 1.5% p.a. for the period 1994-2007; the trend is not significant.

Casual observations at Harp Rock did suggest an improvement compared with the two previous poor seasons with a higher proportion of adults breeding and of those, a greater number brooding chicks. Once again comparatively fewer adults than expected were returning from the sea carrying fish, this perhaps related to fewer young requiring feeding but also poor food availability at that time for this species.



Guillemots (Robin M. Ward)

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 offshore from suitable breeding sites on Fladda.

The number of individuals counted on Lunga and Sgeir a' Chaisteil totalled 1257, a 5% increase from 2006. As most Razorbills nest within inaccessible crevices, it was not possible to ascertain whether the majority of birds were incubating or brooding. Amongst the few small boulder colonies accessible, the majority of adults were brooding young.

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 (1999-2007; 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 (14 birds), Lunga's south end (25 adults & 1 immature), off Corran Lunga (2 birds) and in the tidal stream between Cairn na Burgh More & Beg (2 birds). One bird was observed flying up into a potential nest hole on Sgeir an Eirionnaich's north-east coast.

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 2661 AOBs, a 14% decline from 2006; for counts of birds, one bird is taken to represent one AOB (Lloyd *et al.* 1991, Mitchell *et al.* 2004). Despite an 18% reduction in the estimate for Lunga to 2,451 AOB from 2006, the population is still well above the average for the period since 1994 (1,909 AOB), as were the previous two years. The average annual rate of change for Lunga's population is calculated at 2.9% p.a. for the period 1994 – 2007; the trend is not significant.

One white-headed bird was seen in the colony south of Harp Rock. Just as unusual was the occurrence of a second year bird at a breeding colony, this individual being caught, ringed and photographed at the Puffin Lawn (area 12A).



Immature Puffin (Andrew Carter)

Rock Dove *Columba livia*

Regular breeding species in very small numbers

Breeding was confirmed on Lunga by the presence of a nest in the first sea cave south of Corran Lunga. Elsewhere three birds frequented the east coast south of Tarbet, up to two birds around Shearwater Gully and a single was seen at Harp Rock.

Skylark *Alauda arvensis*

Regular breeding species in small numbers

At least six singing males were on Lunga in 2007, as in 2006, and within the same general localities. Territories were over the north slope of Cruachan, immediately above the Village, on the saddle of Cruachan above Shearwater Gully, on Cruachan, in sector 7 and two in sector 6. One bird was seen above Shearwater Gully carrying food.

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 a pair was seen on 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 an estimated seven pairs on Sgeir a' Chaisteil. A minimum of five pairs were located at Lunga's south end. One pair nested above the Village, two of the young being ringed upon fledging.

An accumulation of decaying seaweed beside Corran Lunga attracted up to 13 foraging birds, at any one time. Over two days, 20 birds were mist netted at this location comprising of 19 adults and 2 juveniles.

Pied Wagtail *Motacilla alba yarrelli*

Irregular breeding species

Three families of dependent and presumably locally bred young were noted on Lunga with the

vicinity of the Village, Harp Rock and South End. Up to six birds were attracted to foraging amongst the accumulation of decaying seaweed beside Corran Lunga.

Elsewhere one bird was noted on Sgeir a' Chaisteil.



Rock Pipit pullus (Andrew Carter)

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 9 territories between the Village and Tarbet, four north of the Village and seven south of Tarbet. Several broods were noted.

Wheatear *Oenanthe oenanthe*

Regular breeding species in small numbers

A minimum of six families of dependent and presumed locally bred young were noted on Lunga around the Village, Tarbet north, Corran Lunga, Harp Rock and Shearwater Gully. At the south end of Lunga, the two breeding pairs located were both feeding young in the nest on 24th, in area 5 beside Tarbet and the SW gully in area 6. A single bird was also noted during a visit to Sgeir a' Chaisteil.

Whitethroat *Sylvia communis*

Rare visitor

A male frequented an area of Bracken and Nettles at the east end of the Village, being heard singing more often. This sighting represents the second record by TIARG of the species on the Treshnish Isles, the previous being on Fladda in 2002.

Hooded Crow *Corvus corone cornix*

Regular breeding species in small numbers

One pair appears to have bred on Lunga. A pair of moulting adults accompanied three non-moulting juveniles centred upon Tarbet and the southern slopes of Cruachan. Up to two birds were occasionally seen at the north end of Lunga and a single on Sgeir a' Chaisteil. A recently fledged juvenile at the north end of Lunga, became the first individual of this species to be caught and ringed by TIARG.

Elsewhere up to 2 birds were seen over Fladda and Cairn na Burgh More.

Raven *Corvus corax*

At least one pair breeds in most years

Up to six individuals were seen at any one time on Lunga, with two birds regularly seen commuting to Sgeir a' Chaisteil. At least two birds were moulting adults, with the remainder suggestive of juveniles from the lack of wing moult.

Elsewhere up to 2 birds were seen over Fladda and Cairn na Burgh Beg.

Starling *Sturnus vulgaris*

Regular breeding species in small numbers

Small flocks of up to 27 birds (including juveniles) were noted daily on Lunga. A white-headed bird was seen at Shearwater Gully on 26th June. Single breeding pairs were noted carrying food or faecal sacs at Shearwater Gully, the Village and at the west cliff of the south end. 3 birds were mist netted and ringed when attracted to foraging amongst the accumulation of decaying seaweed beside Corran Lunga. These were the first individuals of this species ringed by TIARG.

Siskin *Carduelis spinus*

Rare visitor

A flock of three birds, including a juvenile, were seen at the north-east end of Lunga on 29th June. This sighting represents the first record by TIARG of the species on the Treshnish Isles.

Twite *Carduelis flavirostris*

Regular breeding species in small numbers

All records on Lunga were confined north of Tarbet, with parties of usually between 2 and 4 birds noted along the cliff tops and lower slopes of Cruachan, north of Harp Rock and Shag Alley. Towards the end of the week, a flock of up to 12 birds, a colour-ringed bird and juveniles included, had gathered in the vicinity of the Village. What were possibly the same 12 birds were also noted during the single visit made to Sgeir a' Chaisteil on 29th June.

SYSTEMATIC LIST OF MAMMALS FOR 2007

Otter *Lutra lutra*

Evidence of presence regularly noted

Many fresh Otter prints and discarded fresh vegetation was found in the cave entrance situated between sectors 8 and 6A. Other Otter prints were found in the northern-most cave on the west coast of Lunga. The only sighting, however, was of a single animal seen swimming offshore between Lunga and Sgeir an Fheòir on 29th.

House Mouse *Mus musculus*

Resident

At least one animal 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 continued to suggest fewer visible animals than in the years immediately prior to 2002. All sightings of black individuals were from Lunga, involving three or more individuals.

No evidence was noted of animals on the only other island visited, Sgeir a' Chaisteil.

Grey Seal *Halichoerus grypus*

Regular breeding species whose numbers are regularly monitored by the Sea Mammal Research Unit (NERC, St Andrews)

Unusually small numbers of animals were noted hauled out on intertidal reefs north and north-east of Lunga at low tide, the maximum being 15. Elsewhere animals were seen hauled out on Sgeir a' Chaisteil (15 on 29th June) and on the south-east coast of Lunga (7 on 24th June)

Common Seal *Phoca vitulina*

Rare visitor

One adult with a pup was seen on Tighchoie on 24th June. This sighting represents the first record by TIARG of a pup of this species on the Treshnish Isles. Adult was seen the following day off the north-east coast of Lunga.

Harbour Porpoise *Phocoena phocoena*

A resident in West Scottish coastal waters

Two animals were seen from Lunga's south-west coast on 24th June.

SYSTEMATIC LIST OF BUTTERFLIES FOR 2007

Green-veined White *Pieris napi*

Accidental

A single was seen at Shag Alley, Lunga on 24th June.

Common Blue *Polyommatus icarus*

Regular breeder

Up to an estimated 50 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.

Peacock *Inachis io*

Presumed migrant

A single was seen at the Village, Lunga on 29th June.

Red Admiral *Vanessa atalanta*

Migrant

Singles were recorded on 25th and 29th June at Shag Alley and the Village, Lunga, respectively.

Painted Lady *Vanessa cardui*

Regular migrant

Between one and five individuals were recorded on four dates between 24th and 29th June on Lunga.

Dark Green Fritillary *Argynnis aglaja*

Accidental

Singles were recorded on 25th and 29th June at Shag Alley and the Village, Lunga, respectively. These are the first records for TIARG of this species on the Treshnish Isles.

Meadow Brown *Maniola jurtina*

Accidental

Between two and five individuals were recorded on four dates between 24th and 29th June on Lunga.

OTHER SPECIES RECORDED LISTED SYSTEMATICALLY

Basking Shark *Cetorhinus maximus*

Rare visitor

A total of two (possibly three) individual animals, based on size, were seen from Lunga. Single large animals were seen off the southwest coast of Lunga on 24th June, followed on the 26th by a similar sized animal off the west coast of Sgeir a' Chaisteil. A smaller animal was seen offshore from Harp Rock on the 28th June and Shearwater Gully on 30th June.

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 150 plants were found, most comparatively large and many spreading extensively.

Six-spot Burnet *Zygaena filipendulae*

Resident

An estimated 100+ individuals were seen on Lunga during the 25th & 26th June followed by small numbers on subsequent dates.

The Magpie Moth *Abraxas grossulariata*

Probable resident

Single moths were seen on Lunga at the Village, along the north-east and north-east of Tarbet.

Silver Y *Autographa gamma*

Resident

One was seen on the north-west coast of Lunga on 24th June.

Garden Tiger *Arctica caja*

Resident

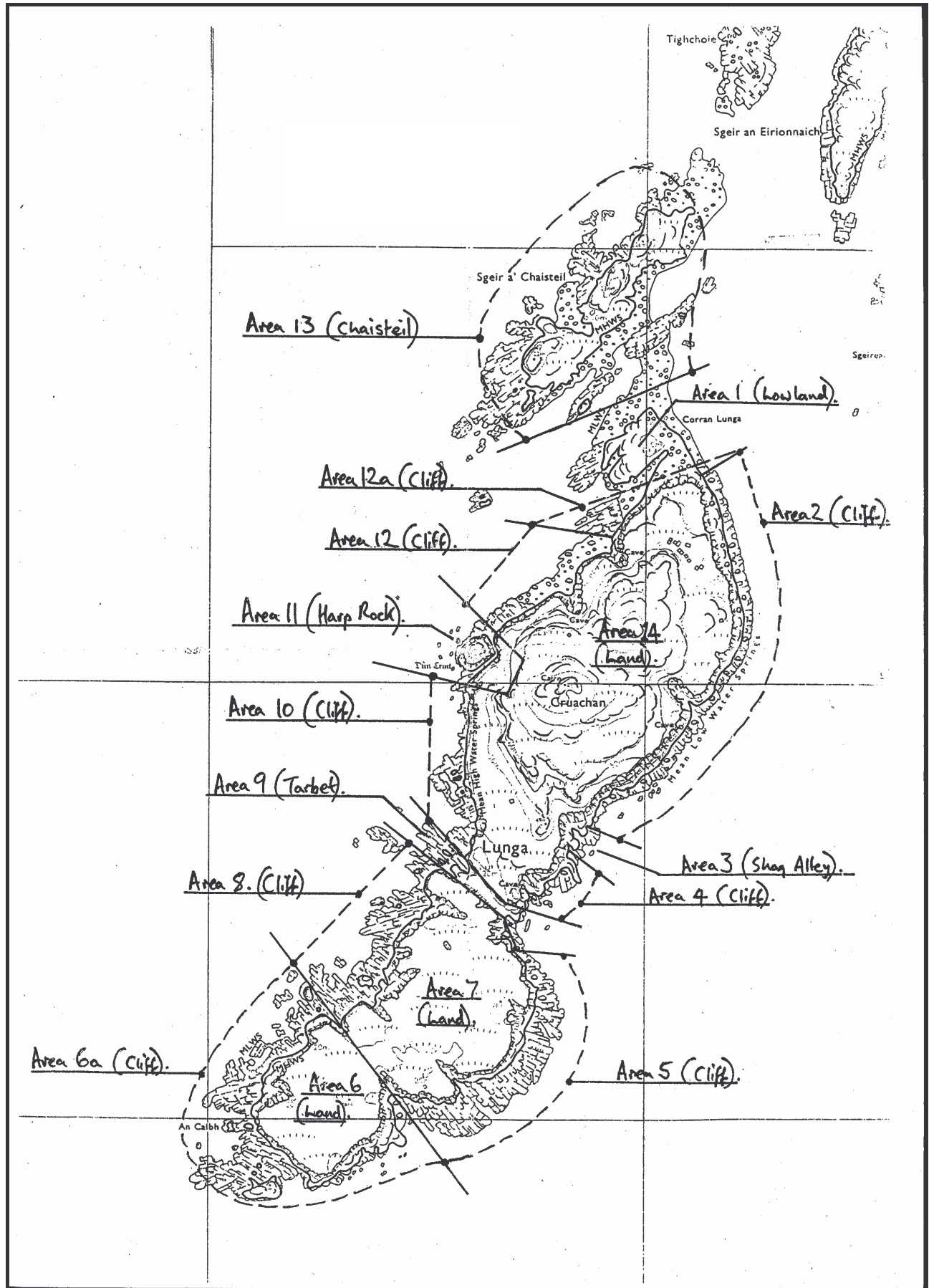
One adults wing of this species was found on Lunga at the Village.

Common Hawker *Aeshna juncea*

Presumed migrant

Two adults at Shearwater Gully followed later by a single at Shag Alley were seen on 24th and 26th June respectively. These are the first records for TIARG of this species on the Treshnish Isles.

MAP OF CENSUS ZONES – LUNGA AND SGEIR A' CHAISTEIL



2007 BREEDING SEABIRD CENSUS DATA FOR LUNGA AND SGEIR A' CHAISTEIL

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

Sector	Count unit	Count Sectors on Lunga (1 – 12a) and Sgeir a' Chaisteil (13)													Lunga & Chaisteil Totals	
		1	2	3	4	5	6	6a	7	8	9	10**	11	12	12a	13
Fulmar	AON			14	7	46		46		33	1	13	24	116	13	65
Shag	AON	27		26	6	20		3		12		10	17	24	4	12
Lesser B-b Gull	AOT									1						
Herring Gull	AOT	3								14				1		5
Great B-b Gull	AOT						11		3			2				1
Kittiwake	AON											19	726	36	9	790
Great Skua	AON															0
Razorbill	IND		83	19	12	50		2		15		6	930	111	25	4
Guillemot	IND											52	7241	147	31	72
Black Guillemot	PRS							13								13
Puffin	IND			250	120	9		14				70		313		776
Puffin	AOB												790		885	210
																1885

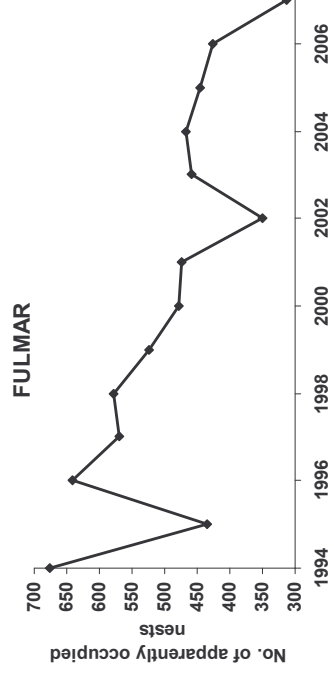
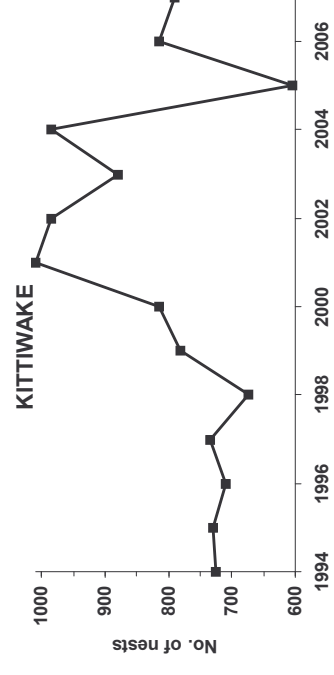
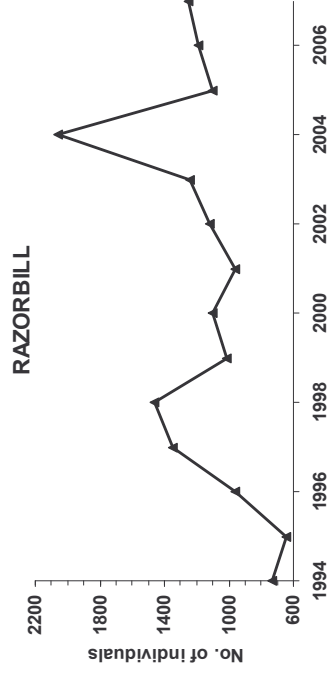
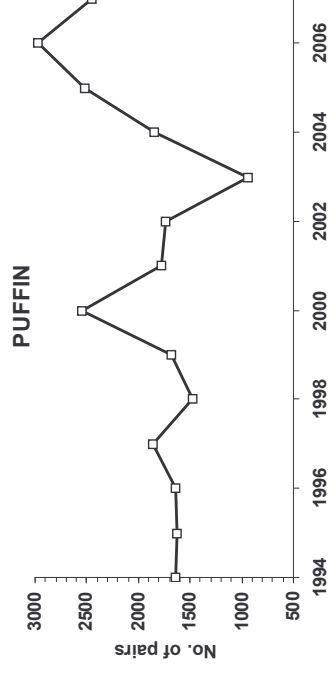
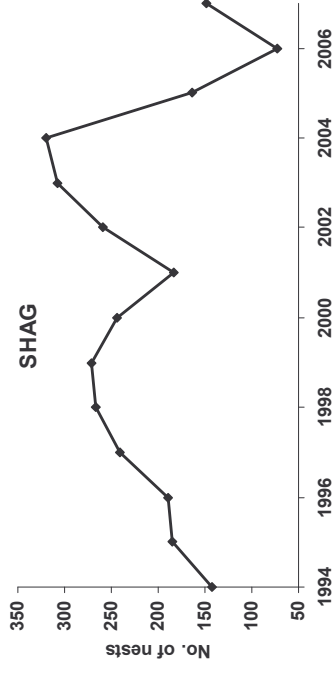
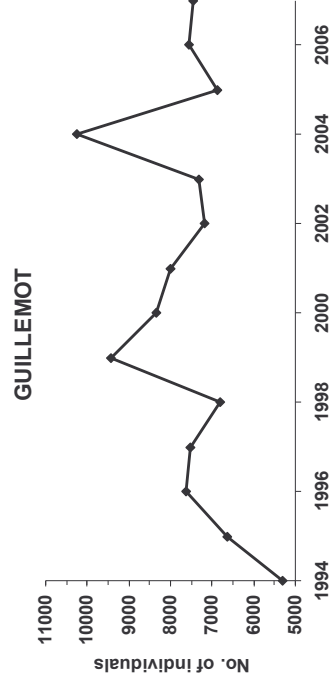
Key to count unit codes:

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

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

Correction to 2006 report: Counts were omitted from 2006 census data tabulation, these being Herring Gull AOTs, 8 on Sgeir an Eirionnaich and 4 on Sgeir na h-Iolair.

POPULATION CHANGES IN A SELECTION OF BREEDING SPECIES ON LUNGA, 1994 – 2007



SEABIRD MONITORING PLOTS, LUNGA 2004-2007

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 the need 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 each year.

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 objective and will vary between plots and years depending on the behaviour of the birds present.

Tabulated below is the seabird monitoring plot data for the four years since monitoring began, 2004 – 2007.

John Calladine

COMPARISON OF SEABIRD MONITORING PLOT DATA FROM LUNGA IN 2004, 2005, 2006 & 2007

nc = not counted

		Plot 1			Plot 2			Plot 3			Plot 4			Plot 5			Plot 6				
Year (2004 - 2007) ▶		04	05	06	07	04	05	06	07	04	05	06	07	04	05	06	07	04	05	06	07
Kittiwake	Adults present	28	nc	10	25	36	nc	22		10	60	53									
	Good nest	11	6	2	8	18	14	1		3	35	18	31								
	Trace nest	4		4	0	1	5	7		61	4	8	9								
	Clutch of 1									14	4	8									
	Clutch of 2											1	11								
	Clutch of 3					1				4	4										
	Clutch of 4																				
	Brood of 1												3								
Fulmar	Brood of 2									5		8									
	Brood of 3										1										
	Brood of 4									1											
	Adult present	15	nc	18	12	21	nc	33			2							30	nc	27	21
	AOS	10	4	10	11	16	20	17	14									22	29	21	19
Guillemot	Adult present	54	28	39	31					41	41	41	37					71	72	98	76
	Apparently incubating or brooding	8	18	14						2	9	3	6					1	0	4	4
	Eggs seen	1		2						13	16	18	12					34	28	68	49
	Young seen									8		8	1					4		0	9
Razorbill	Adults present	13	27	6	19	2	12	2		21	6	21	14				46	21	42	27	
										34	7	18	12				39	18	96	32	
	Apparently incubating or brooding			3						8	13	14	7				8	8	29	39	
	Eggs seen																				
	Young seen																				
Shag	Nests					4	5	4	1	6											
											1		1							3	

TRESHNISH RINGING TOTALS FOR 2007

Site	Species	Adults	Pulli	Retraps	Controls	Total
Lunga	Fulmar	8				8
	Manx Shearwater	2				2
	Storm Petrel	21		27	4	52
	Shag	41	100	32		173
	Oystercatcher		4			4
	Ringed Plover	1				1
	Common Sandpiper	1				1
	Herring Gull		11			11
	Great Black-backed Gull		4			4
	Kittiwake	16				16
	Guillemot	123		24	2	149
	Razorbill	34		8	1	43
	Puffin	195		30		225
	Rock Pipit	19	2			21
	Meadow Pipit	4				4
	Wheatear	2				2
	Hooded Crow		1			1
	Starling	3				3
	Twite	1				1
Treshnish Isles	Grand total for 2007	472	121	121	7	721

Note: All rings used in 2007 were registered under *Treshnish Auk Ringing Group*.

TIARG'S ACTIVITIES IN THE CONTEXT OF THE BRITISH AND IRISH RINGING SCHEME

The Treshnish Isles Auk Ringing Group (TIARG) has ringed over 30,000 seabirds between the years 1971 - 2007, 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 2005 (Clark *et al.* 2007)*.

	Juv/ad ringed 2005			Pulli ringed 2005			Ringing Totals to & incl 2005		
	UK & Eire	TIARG	% UK & Eire	UK & Eire	TIARG	% UK & Eire	UK & Eire	TIARG	% UK & Eire
Fulmar	1,120	14	1.3	648	0	0	112,988	399	0.4
Storm Petrel	10,006	491	4.9	41	0	0	420,214	9,701	2.3
Shag	179	18	10.0	2,814	59	2.1	214,027	1,624	0.8
Great Skua	1	1	100	117	0	0	73,624	4	0.01
Common Gull	32	0	0	1,674	16	0	85,387	53	0.1
Herring Gull	797	0	0	2,979	8	0.3	311,769	445	0.1
Great black-backed Gull	15	0	0	597	12	2.0	73,142	348	0.5
Kittiwake	593	15	2.5	1,405	0	0	128,788	207	0.2
Guillemot	1,118	141	12.6	5,168	0	0	303,449	7,140	2.4
Razorbill	379	30	7.9	1,315	7		105,071	2,493	2.4
Puffin	14,887	151	1.0	537	0	0	255,992	5,189	2.0

* 2005 is the most recent British & Irish annual ringing totals available at the time of publication.

TRESHNISH RINGING TOTALS 1971 – 2007

SPECIES	1971	1974	1976	1977	1978	1980	1982	1984	1986	1989	1991	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total
Fulmar	17	6	4		8	21	14	18	7	21	15		4	27	38	7	24	23	12	25	22	25	47	14	15	8	422
Manx Shearwater		2	13		4	4	1	8					9	1		2	1	4	4			2		1	1	2	59
Storm Petrel		254	22		1	283		203	800	411	975	75	440	536	331	1104	741	732	814	1030	15	360	83	491	962	21	10684
Shag	150	7	10	10	24	80	50	160		40	10		10	59	96	99	150	100	59	37	97	99	200	77	35	141	1800
Eider																							1				1
Buzzard						1	2																				3
Concraike																			1								1
Oystercatcher						1	4	2										2		1						4	15
Common Sandp.		1															1						1			1	3
Ringed Plover																											2
Great Skua																	1				1			1			4
Common Gull																	4		5	11	11	6		16	8		61
Herring Gull	6	1			14	46	35	56	4	4	3		5	24	19	52	73	39	15	11	11	8	11	8	1	11	457
Great Black-b. Gull	3	6	3	7	6	22	14	35		22	15		6	25	16	48	19	16	2	27	5	21	18	12	3	4	355
Kittiwake						1	1	1	2	2	4		6	10	1	50	41	23	13	11	3	2	21	15	14	16	237
Guillemot	32	20	14		66	502	137	364	180	250	306		109	498	349	472	503	507	892	312	425	261	800	141	172	123	7435
Razorbill	65	72	90		115	266	218	236	151	103	64		81	101	105	98	112	102	133	31	110	56	147	37	33	34	2560
Black Guillemot																1				1							2
Puffin	70	198	271		203	200	208	182	174	160	114		358	236	301	267	398	274	389	214	351	244	226	151	272	195	5656
Meadow Pipit														4		1			12	1	4	1	3	5	1		32
Rock Pipit														2	4	2		2	1	2	2	2	2		3	21	49
Pied Wagtail									5	1			1	3	2											4	10
Wren														3						1						2	14
Wheatear			12					1	3						5	24	37	22	50	24	2	2	2	4	2	2	192
Stonechat																											2
Willow Warbler														1													1
Hooded Crow																										1	1
Starling																										3	3
Twite																2					1					1	4
TOTAL	343	567	439	17	441	1427	684	1266	1326	1014	1506	75	1029	1530	1267	2229	2105	1846	2401	1739	1060	1090	1563	982	1526	593	30065

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

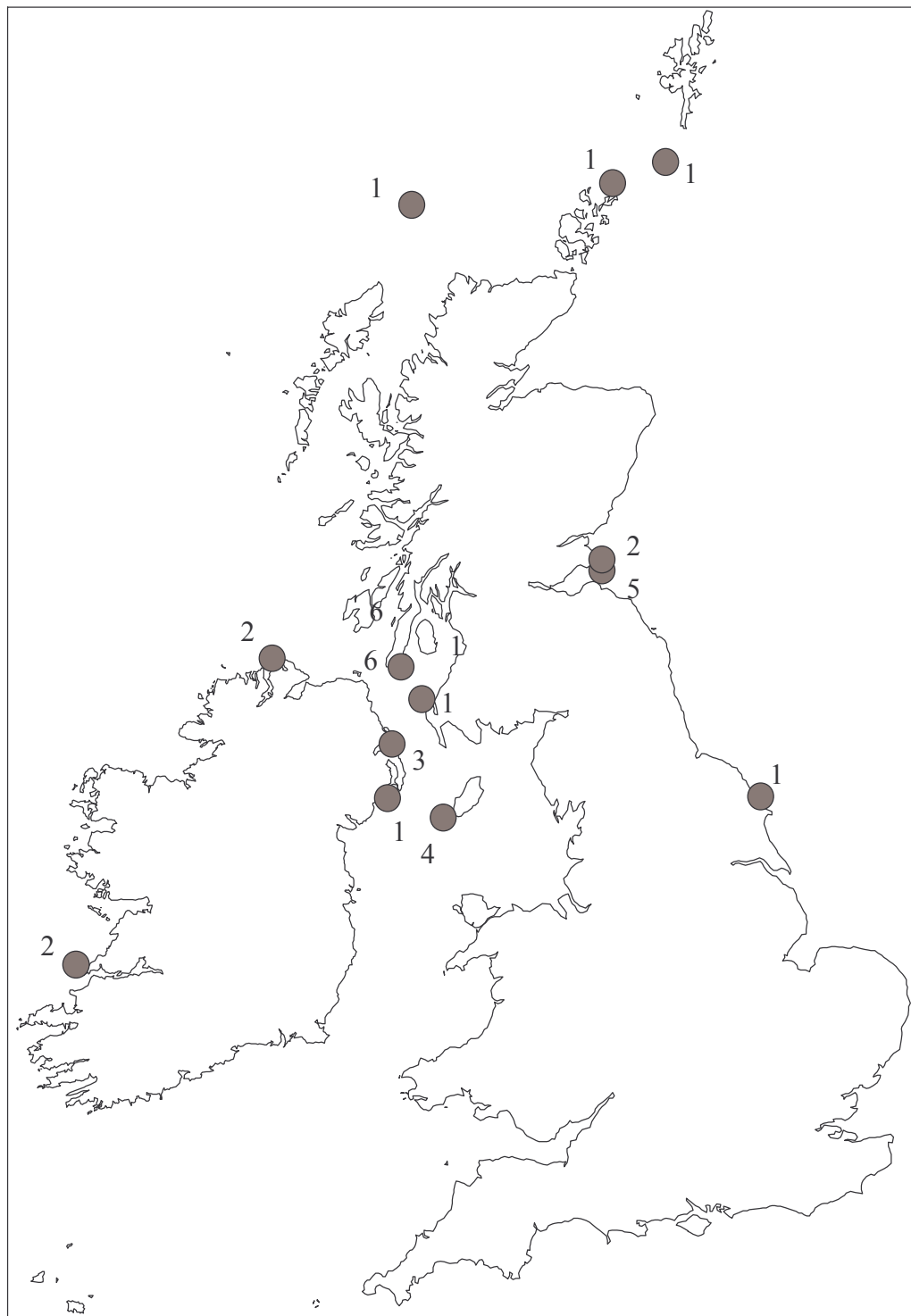
RECENT RINGING RECOVERIES

STORM PETREL

TIARG have in the past year received details of 32 recoveries of birds ringed within Britain and Ireland in the months July - September and controlled by TIARG on Fladda or Lunga in June - July 2006 (& for one bird, 2005). These recoveries are summarised in both the table and map below; all birds were ringed as adults (Euring code 4).

Ringing Site	No. of controls at:		Time interval (days)		Distance (km)	Direction (degrees)
	Fladda	Lunga	min	max		
Bridges of Ross, Loop Head, Co.Clare, Eire	0	2		3627	487	28
Sheepland Harbour, Co.Down, N.I.	0	1		1804	251	348
Copeland, Co.Down, N.I.	3	0	1778	3257	209	345
Tullagh Point, Co.Donegal, Eire	1	1	254	711	149	27
Calf Of Man, Isle Of Man	1	3	679	2162	290	340
Corsewall Point, Dumfries & Galloway	1	0		4357	185	335
Sanda Island, Kintyre, Strathclyde	3	3	319	5072	146	340
North Rona, Western Isles	1	0		6927	293	187
North Ronaldsay, Orkney	0	3	1442	2512	396	216
Fair Isle, Shetland	1	0		2524	442	220
Fife Ness, Fife	2	3	342	1081	237	276
Isle Of May, Fife Region	1	1	316	703	240	278
Filey Brigg, North Yorkshire	1	0		3269	462	304

Origins of Storm Petrels ringed within Britain and Ireland in the months July - September, and controlled on the Treshnish Isles in June - July 2007.



Drawn in DMAP

OTHER STORM PETREL RECOVERIES

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

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 calendars 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
 SR - Sick or injured, released with ring
 VV - alive and probably healthy, ring read in field by non-ringer
 // - condition on finding wholly unknown

Storm Petrel

2560442	6	21/6/2004	Lunga
	R	07/7/2006	Sheepland Harbour, Ardglass, Co.Down
			251 km 168 degs 746 days

Storm Petrel

2579308	6	28/6/2006	Fladda
	R	05/7/2006	Garbh Eilean, Shianta, Western Isles
			156 km 001 degs 9 days

Storm Petrel

2579456	6	28/6/2006	Lunga
	R	26/7/2006	North Sands, Hartlepool, Cleveland
			383 km 122 degs 28 days

Storm Petrel recoveries relating to the Treshnish Isles as either birds ringed or controlled there, now number 483 (relating to 453 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 Sheepland Harbour, Garbh Eilean & North Sands, and are therefore likely to have been wandering immatures (up to 4 years old) or failed breeders. Only 58 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

X39874	6	22/6/1996	Lunga
	X	2/1/2007	Balnakeil, Durness, Highland Region
			252 km 24 degs 3846 days

Guillemot

R65754	6	23/6/2006	Lunga
	XF	25/10/2006	10 nautical miles NE of Nolsoy, Faeroes
			625 km 0 degs 124 days
			Bird shot

Guillemot

T14703	6	27/6/1989	Lunga
	X	3/10/2004	Lunan Bay, near Inverkeilor, Tayside
			242 km 87 degs 5577 days

Guillemot R65645	6 X	27/6/2006 12/10/2006	Lunga West Kilbride, Strathclyde 131 km 133 degs 107 days
Guillemot GJ76014	6 XF	26/6/1982 29/9/2004	Lunga St Cyrus Nature Reserve, Angus, Grampian 247 km 84 degs 8131 days
Guillemot T82044	6 X	24/6/1995 24/12/2006	Lunga Galway Salthill, Near Blackrock, Dublin 255km 178 degs 4201 days
Guillemot R31813	6 XL	20/6/2004 14/6/2006	Lunga Mull (site confidential) 20 km 101 degs 724 days Leg & ring found in White-tailed Eagle nest
Guillemot R24853	6 XL	23/6/2003 28/8/2006	Lunga Mull (site confidential) 28 km 106 degs 1162 days Leg & ring found in White-tailed Eagle nest
Puffin EG88933	6 XL	22/6/2004 5/7/2006	Lunga Lunga 0km 0 degs 1139 days
Puffin EG88583	6 XL	21/6/2003 3/8/2006	Lunga Lunga 0km 0 degs 1139 days Found dead, skeleton only
Puffin EL52824	6 R	24/6/2005 5/7/2006	Lunga Isle of Canna, Highland Region 64km 354 degs 376 days
Razorbill M85703	6 X	19/6/1999 14/2/2007	Lunga Langre, Cantabria, Santander, Spain 1460km 173 degs 2797 days
Razorbill M77258	? R	30/6/1996 24/6/2006	Isle of Canna, Highland Region Lunga 64km 174 degs 3646 days
Oystercatcher FV07403	8 XL	8/8/1998 27/6/2006	Waterfoot, Annan, Dumfries & Galloway Lunga 261km 311 degs 2880 days Ring found by member of public

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We thank Iain 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 (Robin M. Ward)

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

THE EXPEDITIONS 1971 – 2007

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 – 2006 (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.

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
1080101 – 110	2010581 – 583	EF75001 – 500	FB22601 – 700**	GH21301 – 350	HT03619	K10701 – 1000**	R07001 – 100	1F4094 – 097
1087111 – 120	2101991 – 2000	EG23501 – 700	FB23401 – 500**	GN85301 – 400#	HT09001 – 004	K13001 – 300#	R19401 – 20200	C331894 – 900
1105561 – 570	2121401 – 500	EG23721 – 780	FC52551 – 558	GJ35401 – 500	HT17871 – 890	M46501 – 800	R24001 – 26350	E196501 – 520
1123541 – 550	2167051 – 068	EG23801 – 999	FC52571	GJ76001 – 800**	HT17931 – 940	M55001 – 500	R31601 – 900	JB44316
1123671 – 690	2170201 – 203	EG61000 – 500	FC74501	GJ99081 – 082	HT34021 – 030	M72451 – 800	R51501 – 2000	K039209 – 230
1123961 – 970	2238501 – 600	EG88501 – 9000	FR13606 – 636	GK34351 – 354	HT68201 – 210	M85501 – 800	R65501 – 6000**	K419290 – 295
1159651 – 700	2261001 – 2350	EH33377 – 380	FR14401 – 500	GK50214 – 220	HT68221 – 226	M88001 – 300	R72501 – 4000**	NA84296 – 299
1163701 – 740	2284001 – 5000#	EH54501 – 55000	FR56351 – 400	GK50551 – 570	HT80301 – 400	M92501 – 700**	T14001 – 5000	KX83101 – 106
1168001 – 100	2309901 – 10000	EH89256	FS21478	GK62985 – 990	HW05351 – 360		T82001 – 300	KX83116 – 118
1170601 – 700	2311301 – 400	EH89260	FS51016 – 500	GK90821 – 840	HW06951 – 7000		X39501 – 40000	RF10011-020#
1187901 – 950	2311501 – 2000	EH98001 – 300	FS87001 – 100	GK91471 – 490	HW08994 – 09000		X56501 – 57000	LA59201-300**
1237401 – 450	2348001 – 500	EK29501 – 900	FV10611 – 620	GM78756	HW37361		X63001 – 500	DD90261-270#
1322951 – 960	2369301 – 400	EK72657 – 660	FV10646 – 650	GP13416 – 450	HW68101 – 110		X67501 – 68000	CBV601-700#
1328481 – 490	2405001 – 6000	EK91471 – 490	FV54446 – 460	GP47917	HW68161 – 170		X79501 – 80000	V711401-500**
1350801 – 900	2430701 – 900	EL19801 – 276	FV62410	GP62201 – 207	HW74971 – 990		X99001 – 500	TJ18901-9000#
1357901 – 8000	2436501 – 7000	EL52501 – 3000	FV62416 – 226	GP74501 – 75000	HW87211 – 225			BT09481-490#
1366901 – 7000	2444501 – 5000	EN22001 – 500	FV96681 – 684		HW94907 – 913			NV42851-860**
1373751 – 3900	2446202 – 233	EP85608 – 612	SS96101 – 300		MA12551 – 600**			SR49601-700**
1378401 – 8500	2455501 – 6000	EP85687 – 700			MA15801 – 900**			A297482-500
1399601 – 700	2480001 – 500	ER03701 – 800						B229951-992
1408301 – 500	2513501 – 4000	ER48401 – 404						BV70669
1414301 – 500**	2538001 – 800	ES64018 – 189						
1421701 – 800**	2542001 – 3000	ET19501 – 700						
1417001 – 7100**	2554001 – 500	ET52501 – 3000						
	2560001 – 1000**	ET80001 – 500						
	2579001 – 80000**	EW18001 – 500**						
	2605001 – 5500**	EW50001 – 500#						
	2624001 – 5000#							
	2650101 – 61000							

*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