Treshnish Isles Auk Ringing Group

Report for 2014



Shaun Micklewright with a Great Skua chick (Andrew Carter)

Compiled by Robin M. Ward

Expedition dates: 28th June – 5th July 2014

Expedition members:

Robin Ward (Leader), Jurjen Annen, Andrew Carter, Tim Dixon, Claire Dovey, John Hodson, Shaun Micklewright & Cerian Thomas,

Correspondence:

Robin Ward, 15 Church Close, Great Stukeley, Cambridgeshire, PE28 4AP e-mail: rmward1963@btinternet.com

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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 summary of the early expeditions is given in *Birds on the Treshnish Isles 1971-1995* (Walker & Cooper 1996). Annual reports have been produced since 1996. This report summarises the results of the Group's 36^{th} expedition to the Treshnish Isles, during 28^{th} June -5^{th} July 2014.

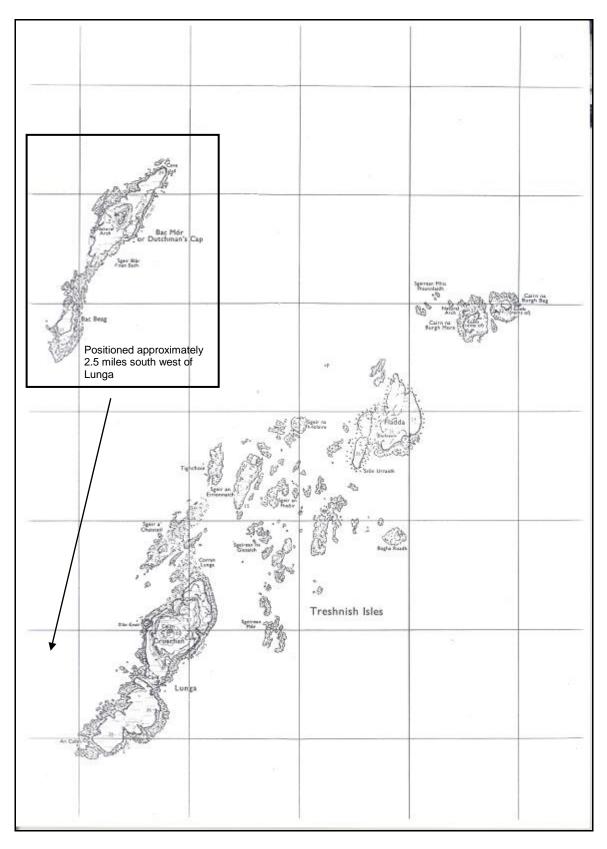
As in previous years, the expedition was based around the village ruins at the northern end of Lunga. The majority of the week's fieldwork was centred upon Lunga and Sgeir a' Chaisteil where the annual full seabird census and ringing of specific seabird colonies was carried out. The Group's activities were dictated as always by the prevailing weather conditions. The week was dominated by very favourable weather that allowed the mist netting of Storm Petrels on Lunga during several nights. Deterioration in sea conditions during the latter half of the week limited seabird census coverage of the islands north of Lunga to the islets south of Fladda. This year was the ninth year of a Shag Retrap Adult Survival study (RAS); 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 (BTO) Integrated Population Monitoring Programme, funded by the UK Government.

All TIARG census and ringing data are submitted to two national monitoring programmes, the Seabird Colony Register (J.N.C.C.) and National Ringing Database (BTO), 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 for internationally important populations of breeding Storm Petrel *Hydrobates pelagicus* and wintering Barnacle Geese *Branta leucopsis*. The islands have also been designated a Site of Special Scientific Interest (SSSI) for seabird breeding colonies of national importance. Financial support for the monitoring work TIARG undertook in 2014 was provided by the Hebridean Trust (www.hebrideantrust.org), owners of the islands.



Expedition participants 2014 (left to right): Andrew Carter, Cerian Thomas, Jurjen Annen, Robin Ward, Tim Dixon, Claire Dovey, Shaun Micklewright & John Hodson (*Andrew Carter*)

MAP OF THE TRESHNISH ISLES



WEATHER

Date	Time	Wind Direction	Wind Force (Beaufort Scale)	Max Wind Speed (mph)	Average Wind Speed (mph)	Temp (°C)	Pressure (mmHG)	Cloud Cover (Oktas)	Visibility	Notes
28.06.14	19:00	N	1	8.7	1.9	16	1010.1	6/8	Skye	Calm sea, clear good visibility, sunny with a light breeze.
29.06.14	09:30	NE	1	6.7	3.5	14.2	1012.4	5/8	Rum	Warm, bright, light
	17:15	NW	1	7.9	2.7	16.4	1012.3	2/8	Skye	wind.
	23:00	N	1	6.8	3.7	13.1	1012.3	1/8	Rum	
30.06.14	10:30	W	0-1	3.0	0.9	17.6	1013.1	7/8	Rum	Cooler, very light
	19:15	NW	0-1	4.1	1.9	17.0	1014.0	1/8	Skye	wind, visibility less with sea mist.
	23:30	NE	0-1	3.4	1.4	14.4	1015.0	2/8	Rum	
01.07.14	10:00	SW	1	4.6	1.6	17.9	1016.8	1/8	Skye	Calm, very warm
	13:00	Е	1	3.3	1.5	22.3	1016.7	1/8	Skye	with light breeze all day.
	21:10	ESE	1	3.8	0.7	14.9	1015.5	2/8	Skye	
02.07.14	12:00	SW	2	5.2	1.4	17.6	1008.2	8/8	Coll/Tiree	Cool and over cast.
	18:00	SW	2	3.2	3.2	15.5	1007.8	8/8	Coll/Tiree	Heavy rain from 12pm-4pm. Clearing
	22:25	SW	2	2.8	2.8	13.9	1009.4	8/8	Coll	late afternoon with stronger breeze.
03.07.14	08:50	SE	2	9.0	2.8	14.5	1007.6	8/8	Coll	Overcast with
	18:30	SW	2	8.8	2.7	15.5	1001.3	8/8	Coll	visibility reduced. Rain showers all
	22:30	SW	2	5.2	1.4	16.9	999.6	8/8	Coll	day.
04.07.14	12:00	NW	3	13.9	4.5	12.9	990	8/8	Skye	Heavy rain showers
	19:00	W	3	14.0	3.2	17.4	992.9	2/8	Rum	from 6am until 13:00 with strong winds
	23:00	wsw	2	5.3	2.9	14.3	994.1	7/8	Rum	clearing to sunny conditions with breeze and good visibility.
05.07.14	09:00	S	2	6.8	2.3	15.9	993.1	3/8	Rum	Sunny spells interspersed with showers. Light breeze, calm sea.

All readings were taken from near the cliff edge beside the Village site at the NE end of Lunga, unless otherwise noted.

Claire Dovey

SYSTEMATIC LIST OF BIRDS FOR 2014

The following systematic list describes those bird species seen during the Treshnish Isles Auk Ringing Group's presence on the Treshnish Isles, 28^{th} June -5^{th} July 2014. 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 2014 is provided on page 17. 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).

Greylag Goose Anser anser

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

The moult flock had built up to at least 196 birds by 1st July, typically most were around the islands of Sgeir an Eirionnaich, Fladda and Sgeir an Fheòir. Breeding was confirmed on Lunga where a mixed flock of adults and goslings were found at the south end (area 6) on the cliff top (4th July).

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006
Peak	25	160	240	268	79	101	316	90	164
count									
` '	~~~=		0000	0040	0044	0040	0040		
Year	2007	2008	2009	2010	2011	2012	2013	2014	
	77		2009				140	196	

Shelduck Tadorna tadorna

Until recently a rare visitor with one pair having bred occasionally since 2003 No birds were recorded.

Eider Somateria mollissima

Breeds regularly in small numbers.

The only evidence of confirmed breeding were of single broods of two ducklings at Sgeir a' Chaisteil and south of Harp Rock (Area 10), and a nest on Sgeir an Eirionnaich.

The waters between Fladda and Lunga supported small numbers of late-summer moulting birds, with a maximum of 4 males, 4 females and 3 immatures.

Corncrake Crex crex

Recorded almost annually and probably a regular breeder in small numbers.

Single males were regularly heard calling from the vicinity of the Village and Well, beside the Boulder Beach, Lunga. A brood of at least 2-3 well grown young were heard and on one occasion seen with adult female in the vicinity of the Village.

Fulmar Fulmarus glacialis

A common breeding species. The Treshnish Isles supported 0.2% of the Great Britain population as estimated by Seabird 2000.

Breeding was confirmed on Lunga and Sgeir a' Chaisteil. The breeding population for Lunga and Sgeir a' Chaisteil was estimated at 354 pairs based upon apparently occupied sites (AOS). This represents no change in the number of breeding birds from the previous year. Over the longer term, 1994-2014, the average annual rate of change in the numbers of breeding birds on Lunga is calculated at -3.5% per annum, this trend being very highly significant (P<0.001). This is consistent with a decline nationally which may be due to declines in offal from trawlers, representing a 're-adjustment' to more natural levels following a period of artificially elevated population size (JNCC 2013).

Manx Shearwater Puffinus puffinus

A common 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 up to 1,000 birds were noted rafting in the evenings off Harp Rock, west coast of Lunga.

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*.

Many birds were heard churring from burrows on Lunga.

Several nights of light winds gave the opportunity to mist net for Storm Petrels on Lunga at the Village and the Boulder Beach. On the Boulder Beach, traditionally ringed localities near the Well and below the Village on single nights, provided catches of 176 and 210 birds using two 12m with a 18 m net (for 2¼ hours), and one 12 m net (2¾ hours) respectively. At the Village, 183 birds were caught using three 18 m nets over three nights (for 8¼ hour period in total). A single 18 m net opened briefly on a further two nights caught a further 7 birds at the Village.

Gannet Morus bassanus

Regularly seen offshore

Small numbers of adult birds were seen daily, feeding or passing offshore of Lunga. A daily peak count of 20 birds was recorded.

Cormorant Phalacrocorax carbo

Rare visitor.

A single adult bird was seen in flight from the north end of Lunga on 2nd July.

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 Lunga and Sgeir a' Chaisteil. The breeding populations on Lunga and Sgeir a' Chaisteil were 104 and 6 pairs respectively, based on nest counts. Following a marked decline in the numbers of active nests in 2005 and 2006, numbers have since fluctuated between 73 and 178 active nests, with an overall small increase.

Large numbers of adults were in the vicinity of the colonies with up to 630 birds moving offshore from the islands in the mornings to forage. It was presumed many of these were in too poor condition to breed successfully or had failed. Of those birds that were breeding on Lunga and Sgeir a' Chaisteil, great variation was once again found in the progress of breeding, with all stages from eggs to already fledged young noted. Brood sizes were mostly small, typically only two or three young.

2014 was the ninth year of a Retrap Adult Survival study (RAS) 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 BTO's Integrated Population Monitoring Programme funded by the UK Government (http://www.bto.org/ringing/ringinfo/ras/index.htm). In 2014, of the birds marked from 2006 to 2013 on Lunga, 54 were re-sighted by TIARG of a possible 247 individuals. An additional four birds were re-sighted by RSPB staff in early June (4-12th). A further 20 breeding adults were colour-ringed on Lunga in 2014, four birds by RSPB staff in early June.

White-tailed Eagle Haliaeetus albicilla

Rare visitor

One adult bird was seen flying from the direction of north Mull to Lunga on 1st July. This is the first record of the species on the Treshnish Isles by TIARG.

Buzzard Buteo buteo

Until recently, one pair bred in most years

Regular sightings suggested the presence of two adults on Lunga with at times, possibly a third unaged bird.

Peregrine Falco peregrinus

Seen most years with breeding known to occur on adjacent coasts.

A single bird was seen on most days, with sightings relating to at least two individuals, one of each sex.

Water Rail Rallus aquaticus

Rare visitor

One bird was heard calling at night from a bracken covered cliff top area immediately east of the Village between 29th June and 3rd July. This is the first record of the species on the Treshnish Isles by TIARG.

Oystercatcher Haematopus ostralegus

Breeds regularly in small numbers.

On Lunga's beaches and rocky outcrops, 6 pairs were behaving as though on breeding territory, alarming at human intruders and performing displays on the appearance of other Oystercatchers (3 pairs at Corran Lunga, 1 in area 2, 1 in area 3 and 1 in area 9). Confirmed breeding records were of single pairs with chicks at Corran Lunga and area 2. Great Black-backed Gull was seen to predate one Oystercatcher chick at Corran Lunga. Away from Lunga, breeding pairs held territories on Sgeir an Eirionnaich (5 pairs, one with a single chick), Sgeir a' Chaisteil (3 pairs) and Sgeirean na Giusaich (2 pairs, one with 3 chicks).

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 up to 29 birds roosting.

Ringed Plover Charadrius hiaticula

One or two pairs breed annually.

Typically, the only breeding pair on Lunga was confined to Corran Lunga and the adjacent boulder beach, where a pair became agitated at the approach of a human intruder.

Golden Plover Pluvialus apricaria

An irregular passage migrant.

One bird was heard calling over Lunga on 2nd July.

Dunlin Calidris alpina

An irregular visitor.

Two adult birds of the race *C.a. schinzii* were seen on the Boulder Beach, Lunga, on 1st July.

Snipe Gallinago gallinago

Breeds regularly in small numbers.

Up to three birds could be heard drumming/chipping over the Village on most days, with singles flushed on occasions in the vicinity of the area. Elsewhere on Lunga, single birds were noted at Corran Lunga and at the south end of Lunga (area 7). These data suggest a minimum population of 3+ breeding pairs.

Three birds were flushed during a brief census visit to Sgeir an Eirionnaich on 1st July.

Redshank Tringa totanus

An irregular visitor.

A bird was heard on most days calling at the north end of Lunga.

Greenshank Tringa nebularia

An irregular passage migrant.

One bird was heard calling, flying south over Lunga on 1st July.

Curlew Numenius arquatus

An irregular visitor.

Single birds were noted calling on four occasions during the week from Lunga. One bird was recorded during a during brief census visit to Sgeir an Eirionnaich on 1st July.

Common Sandpiper Actitis hypoleucos

One or two pairs usually breed.

Two pairs were holding breeding territory on Corran Lunga that became agitated at the approach of a human intruder.

The only additional bird recorded was an agitated adult found during a brief census visit to Sgeirean na Giusaich on 1st July.

Arctic Skua Stercorarius parasiticus

Small numbers seen daily, presumably from the breeding grounds on Coll.

Up to two birds at any one time, of both dark and light phases, were seen on six dates, generally offshore from north-west Lunga.

Great Skua Stercorarius skua

A small but regular breeding population has become established since the first confirmed breeding by a pair in 1998.

On Lunga breeding was confirmed by the presence of one chick on the high ground south of Tarbet (area 6), and a second pair with a chick immediately south of Tarbet (area 7). In area 6, a third pair was at times seen holding territory in which an empty nest was located. Elsewhere, up to three adult birds were seen regularly flying over Lunga.

No adults on territory were viewable on Fladda using a telescope from Lunga.

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 confirmed only on Lunga, where the main colony is around Harp Rock. The number of apparently occupied nests on Lunga was 507, a 228% increase from 2013. This is a substantial recovery from what had been a marked decline in the population since 2008 and following a 15-year period when numbers had largely remained between 650 and 1,000 pairs.

Up to 105 birds roosted on intertidal rocks off Sgeir a' Chaisteil at times. A flock of over 200 birds were noted foraging in the waters around the Sgeir an Eirionnaich - Sgeir an Fheòir - Sgeir na H-Iolaire sea area on 29th June.

Common Gull Larus canus

Irregular breeding species in small numbers.

Three pairs with chicks were noted on Sgeir an Eirionnaich. A single pair holding an apparently occupied territory was also found on Sgeirean na Giusaich. A single bird was seen on four dates at Lunga.

Lesser Black-backed Gull Larus fuscus

Regular breeding species in small numbers.

One pair was noted within the south end gullery on Lunga, in area 8. A single bird was noted frequenting the north end of Lunga on 2^{nd} July.

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 6 pairs). Breeding was also suggested by the presence of paired adults on territory on Sgeir an Eirionnaich (1 pairs) and Sgeirean na Guisaich (2 pairs). No birds were occupying territories on Sgeir a' Chaisteil, Sgeir an Fheòir or Sgeir na H-Iolaire. The average annual rate of change on Lunga between 1994 and 2014, is calculated at -12% 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 $Seabird\ 2000\ (1998-2002)$.

From colony visits, breeding was confirmed on Lunga (8 pairs), Sgeir a' Chaisteil (1 pair with chick), Sgeir an Eirionnaich (estimated 21 pairs; 42 adults counted when flushed) and Sgeirean na Guisaich (4 pairs). No birds were occupying territories on Sgeir an Fheòir and Sgeir na H-lolaire.

Sandwich Tern Sterna sandvicensis

Rare visitor.

Four birds were seen on 30th June foraging in the waters off the Boulder Beach, Lunga, before moving south. Later that day, a single bird was seen from the south end of Lunga.

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).

Single birds were noted in the waters between Fladda and Lunga on two dates; 28^{th} June and 4^{th} July.

Arctic Tern Sterna paradisaea

Regular breeding species.

A ternery was present on the islet at the north end of Sgeir an Eirionnaich. A total of 202 nests containing 306 eggs and 87 chicks were counted. Elsewhere attempted breeding was also suggested by the presence agitated birds on Sgeir an Eirionnaich at its south end (25 birds) and Sgeir na H-lolaire (16 birds) whilst Group members undertook a brief census visit on 1st July.

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 confirmed only on Lunga and Sgeir a' Chaisteil, with the main concentration as usual within the vicinity of Harp Rock where 6,147 adults were estimated. The total for Lunga and Sgeir a' Chaisteil combined was 6,434. The mean count for the past five years is 6,543 birds (range 5,265-7,605).

The Centre for Ecology & Hydrology (Sarah Wanless) organised a national survey in 2014 of the frequency of bridling in common guillemots, a repeat of a similar such study in the early 1980s by Tim Birkhead. TIARG contributed to the present survey by sampling 2,366 birds on Harp Rock of which 181 (8.7%) were found to be bridled.

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. The main concentration was typically located within the vicinity of Harp Rock. A total of 404 birds was counted on Lunga and Sgeir a' Chaisteil, in addition to the birds associated with 29 chicks located amongst accessible boulder colonies. The population has yet to recover from an (as yet) unexplained marked reduction in numbers in 2009 following a period of 'comparative' stability.

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).

Adults were seen around the Sgeir an Eirionnaich - Sgeir an Fheòir sea area (7 birds) and Lunga (6).

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 occupied burrows on Lunga and Sgeir a' Chaisteil. The estimated breeding population on Lunga and Sgeir a' Chaisteil was 2,618 apparently occupied burrows (AOBs). For counts of birds, one bird is taken to represent one AOB (Mitchell *et al.* 2004). Numbers have since 2004 fluctuated between 2,423 and 3,095 AOBs with the exception of the comparatively low estimates of the two years 2010-2011; 1,705 and 1,611 AOBs respectively.

Rock Dove Columba livia

Regular breeding species in very small numbers.

Birds were seen daily on Lunga, principally along the east coast, the largest group of 7 birds flying over the Village. Most days produced one to four sightings of flocks of 2-4 birds with the odd lone bird as well.

Hooded Crow Corvus cornix

A regular breeding bird in small numbers.

The frequency and number of birds recorded on Lunga was notably lower than in previous years. The species was seen on most days on Lunga, the largest group being of 4 birds with most sightings being of 1-2 birds.

One presumed Carrion Crow *C. corone* x Hooded Crow hybrid was noted on 3rd July, this individual black other than grey shoulders.

Raven Corvus corax

At least one pair breeds in most years.

A flock of four birds were seen daily on Lunga, principally north of Tarbet. What was presumed to be the same four birds were joined by a fifth when sighted on 3rd July.

Skylark Alauda arvensis

A regular breeding species in small numbers.

Up to six singing males were on Lunga. Two singing males were present south of Tarbet and up to four on the slopes of Cruachan. There was a notable absence of singing birds being heard from the Village.

House Martin Delichon urbicum

Rare visitor

A single bird was seen flying over Corran Lunga, Lunga on 28th June.

Sedge Warbler Acrocephalus schoenobaenus

A scarce but almost annual visitor.

There were no records of this species.

Wren Troglodytes troglodytes

A regular breeding species, guite common where habitat is suitable.

As in previous years, the vast majority of records 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 four territories within the vicinity of the Village, two on Corran Lunga; one beside the Boulder Beach; four along the west coast footpath between the Village and Harp Rock, and two along the east coast footpath between the Village and Tarbet. Breeding was confirmed with adults seen carrying food and faecal sacs in the Village.

No birds were recorded during a brief visit to Sgeir a' Chaisteil.

Starling Sturnus vulgaris

A regular breeding species in small numbers.

Small flocks of up to 36 birds were noted daily on Lunga, comprising mostly of adults. One nest containing young was found in a rocky crevice at the south end of Lunga.

Wheatear Oenanthe oenanthe

A regular breeding species in small numbers.

Several families of adults with dependent (and presumed locally bred) young were seen on Lunga, including Area 10 (one pair) and at Harp Rock (one).

Elsewhere during brief visits to adjacent islands, five juveniles were seen at Sgeir an Eirionnaich and two juveniles on Sgeir a' Chaisteil.

Dunnock Prunella modularis

Irregular breeding species.

A singing male was heard with in the vicinity of the Village on 28th June. Possibly the same bird, a ringed individual, was seen on two later days singing 200 metres further to the east. One recently fledged juvenile was ringed in the Village on 30th June.

Pied Wagtail Motacilla alba yarrelli

An irregular breeding species.

One pair of adults with one, possibly two juveniles, were regularly seen in the vicinity of the Village, Lunga. Single record occurrences elsewhere on Lunga included two birds on Corran Lunga, an adult male at Harp Rock and an adult in Area 12.

Brief visits to adjacent islands located juvenile birds on Sgeir an Eirionnaich (one bird) and Sgeirean na Guisaich (2).

Meadow Pipit Anthus pratensis

A regular breeding species in small numbers.

Widespread breeding species on Lunga with no estimate of territories made, though probably less numerous than Rock Pipit *Anthus petrosus*. Breeding was confirmed with a nest located on Lunga in the northern most gully of Area 12. A minimum of 11 birds in total were recorded during a walk over the slopes of Cruachan. Elsewhere, the species was noted during a brief visit to Sgeir a' Chaisteil.

Rock Pipit Anthus petrosus

A regular breeding species in small numbers.

Breeding birds were common along the coast of Lunga and on Sgeir a' Chaisteil. Food carrying, alarms and recently fledged young confirmed breeding on Lunga and Sgeir a' Chaisteil. Up to 7 breeding pairs with young were estimated to be present on Corrna Lunga.

Brief visits to adjacent islands located birds on Sgeir an Eirionnaich (7 birds), Sgeirean na Guisaich (4) and Sgeir na H-lolaire (1).

Twite Carduelis flavirostris

Regular breeding species in small numbers

Small parties of up to seven birds were noted almost daily around the northern half of Lunga. Some flocks seen were identifiable as family parties. Breeding was confirmed with a nest and two eggs located on the cliff face overlooking the Village, Lunga. Up to eleven birds were recorded at Tarbet, the southern-most records.

No birds were recorded during a brief visit to Sgeir a' Chaisteil.



Puffin (Stephanie Cope)

SYSTEMATIC LIST OF MAMMALS FOR 2014

Otter Lutra lutra

Evidence of presence regularly noted.

Fresh tracks of one animals was found in the Blow Hole cave on the coast south of Tarbet, Lunga.

American Mink Neovison vison

No known occurrences.

No evidence of this species was noted on either Lunga or Sgeir a' Chaisteil.

House Mouse Mus musculus

Resident, apparently in small numbers.

Single animals were seen on several occasions at the expedition base in the Village, at the north end of Lunga.

Brown Rat Rattus norvegicus

No known occurrences.

No evidence of this species was noted on either Lunga or Sgeir a' Chaisteil.

Rabbit Oryctolagus cuniculus

Resident, numbers much reduced in recent years.

No systematic monitoring took place. Casual observations on Lunga suggest that it is abundant. All sightings of black individuals were from Lunga, involving several individuals at widespread localities. One particularly confiding black Rabbit above the Boulder Beach had a white nose.

No evidence was noted of animals on Sgeir a' Chaisteil.

Grey Seal Halichoerus grypus

A regular breeding species, contributing just under 3% of the annual UK pup production. 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.

A maximum of 40 animals were visible from Lunga hauled out on intertidal reefs to the north and east at low tide.

Pipistrelle Bat Pipistrellus pipistrellus (45 kHz)

Previously regarded a rare visitor. True status uncertain.

At least one animal were seen flying around the north end of Lunga at dusk on three dates. The species identity was confirmed from use of a bat dectector (a device used to detect the presence of bats by converting their echolocation ultrasound signals, as they are emitted by the bats, to audible frequencies). One animal was also detected at the Gully south-west of the Village.

These are the fifth confirmed observations of bats on the Treshnish Isles by TIARG, the previous sightings in 2006, 2011, 2012 and 2013.

Bottlenose Dolphin Tursiops truncates

Rare visitor

A pod of at least 10 animals, including an immature accompanying its mother, were seen to follow boats arriving to disembark visitors on Lunga on 1st and 3rd July.

SYSTEMATIC LIST OF LEPIDOPTERA FOR 2014

Butterflies

Common Blue Polyommatus icarus

Regular breeder

The species was observed throughout the week across Lunga. Elsewhere about 60-70 were seen on Sgeir an Eirionnaich during a brief visit on 1st July.

Red Admiral Vanessa atalanta

Migrant

Singles were recorded on Lunga at the Village on 1st and 3rd July, Harp Rock on 29th June and in Area 2 on 30th June.

Painted Lady Vanessa cardui

Regular migrant

A single was recorded at Shearwater Gully on 29th June.

Meadow Brown Maniola jurtina

Accidental

Several were sighted on 29th June at Area 8 and South End. There were further sightings of the species in Area 8 on 1st & 4th July.

Small Heath Coenonympha pamphilus

Accidental

Singles were recorded on Lunga at the Village (on 29th June) and between Harp Rock and the gully to the south on (1st July).

Moths

Several moth species were recorded as individuals around the Village on Lunga, unless otherwise stated.

Nettle-tap Anthophila fabriciana

The Snout Hypena proboscidalis

Dark Arches Apamea monoglypha

Grey Pug Eupithecia subfuscata

Light Arches Apamea lithoxylaea

The Spectacle Abrostola tripartita

Yellow Shell Camptogramma bilineata

Silver-ground Carpet Xanthorhoe montanata

Lime-speck Pug Eupithecia centaureata

Bright-line Brown-eye Lacanobia oleracea

Common Carpet Epirrhoe alternata

Water Veneer Acentria ephemerella

Agriphila straminella

Eana penziana f. bellana

Six-spot Burnet Zygaena filipendulae

Resident

Several were sighted at the Village on 28th June, on the slopes of Cruachan overlooking Harp Rock on 29th June and 1st July. The species was commonly sighted south of Harp Rock and Tarbet.

Magpie Abraxas grossulariata

Probable resident

Individuals were noted on the 28th, 29th and 30th at the Village and South End. An individual was also

recorded on the 3rd July at the Village.

Garden Tiger Arctia caia

Resident

Several newly emerged individuals were noted at Shag Alley, Tarbet and the Village on 30th June, 1st, 3rd and 4th July. Sightings of this species may have been missed in previous years given the season being more advanced than is typical during visits by TIARG.

Large Yellow Underwing Noctua pronuba

Status unknown

Several individuals observed at Tarbet and east of the Village on 30th June and 1st July.

Wood Tiger Parasemia plantaginis

Status unknown

One newly emerged individual was noted south of Tarbet on the 4th July.

OTHER NOTABLE WILDLIFE RECORDS

Oyster Plant Mertensia maritima

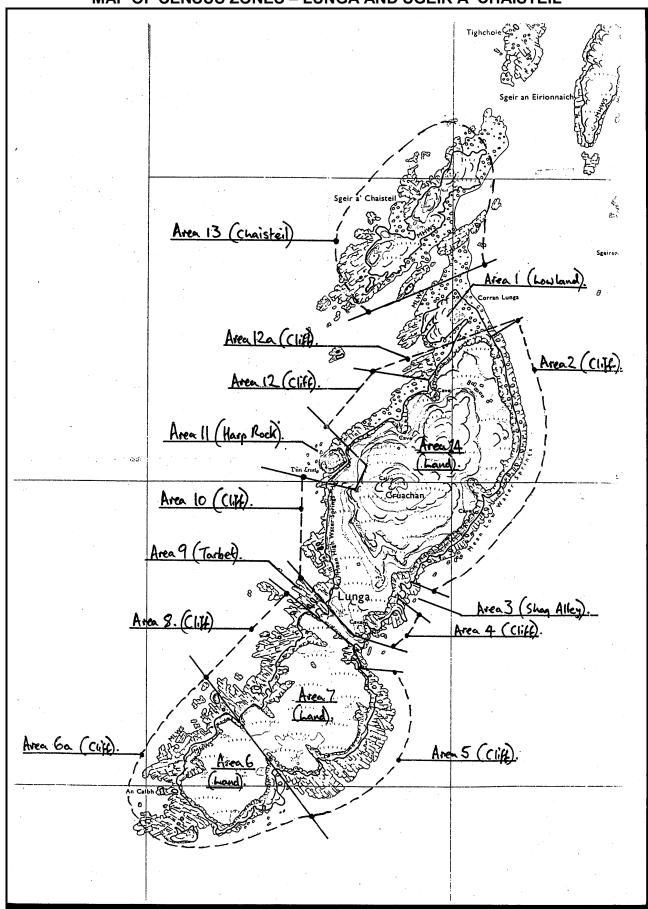
Localised species on Lunga.

At Tarbet (west) the species continues to be well established with no marked difference in abundance and coverage to that of recent years.



Rabbits and Puffin (Stephanie Cope)

MAP OF CENSUS ZONES - LUNGA AND SGEIR A' CHAISTEIL



2014 BREEDING SEABIRD CENSUS DATA FOR LUNGA, SGEIR A' CHAISTEIL AND ISLETS

Sector	Count	Lunga	Sgeir a'	Sgeirean na	Sgeir an	Sgeir an	Sgeir na
	unit		Chaisteil	Giusaich	Fheoir	Eirionnaich	h-lolaire
Fulmar	AOS	308	46				
Manx Shearwater	No census	+					
Storm Petrel	No census	+					
Shag	AON	114	6				
Great Skua	AOT	3					
Lesser B-b Gull	AOT	1					
Herring Gull	AOT	6		2		1	
Great B-b Gull	AOT	8	1	4		21**	
Common Gull	AOT			1		3	
Kittiwake	AON	507					
Arctic Tern	AON					202	
Razorbill	IND	403	1				
Razorbill	AON	24					
Guillemot	IND	292	152				
Black Guillemot	IND	6					
Puffin	SEA	1037					
Puffin	IND	995					
Puffin	AOB	1459	164				

Key to count unit codes: AON/AOT/AOB = apparently occupied nest/territory/burrow IND = Individuals on land

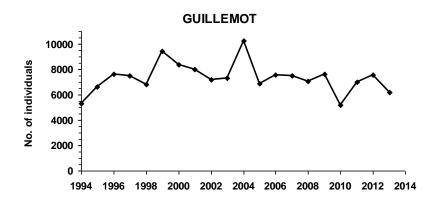
SEA = individuals on sea within 200m of colony PRS = Pairs nc = no count + = breeders present **Estimated from flush count of 42 Great Black-backed Gulls

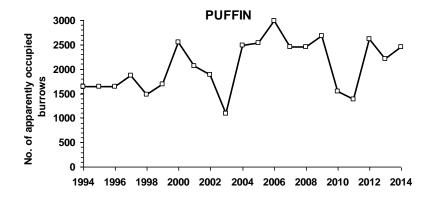
Totals for each Census Zone of Lunga and Sgeir a' Chaisteil

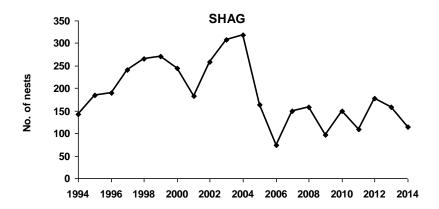
Sector	Count		Count Sectors on Lunga (1 – 12a) and Sgeir a' Chaisteil (13)									Lunga & Chaisteil					
	Unit	1	2	3	4	5	6	6a	7	8	9	10	11	12	12a	13	Totals
Fulmar	AOS		31	7	26	34		16		24		13	60	90	8	46	355
Shag	AON		11	22	6	20				11		17	6	21		6	120
Great Skua	AON						2		1								3
Lesser B-b Gull	AOT									1							1
Herring Gull	AOT		1							4				1			6
Great B-b Gull	AOT						5		3							1	9
Kittiwake	AON												505	2			507
Razorbill	IND		39	9	39			8		9		32	80	136	51	1	44044
Razorbill	AON					15						9					24
Guillemot	IND					15						0	6147	115	5	152	6434
Black Guillemot	IND							6									6
Puffin	SEA		267	345										425			1037
Puffin	IND		162		83	5							20	725			995
Puffin	AOB		60									42	533		824	164	1623

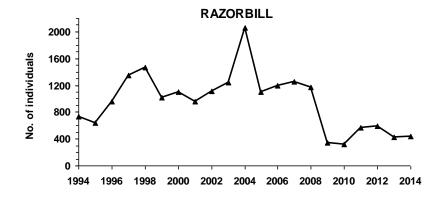
Key to count unit codes: AON/AOT/AOB = apparently occupied nest/territory/burrow IND = Individuals on land SEA = individuals on sea within 200m of colony PRS = Pairs nc = no count + = breeders present

POPULATION CHANGES FOR A SELECTION OF BREEDING SPECIES ON LUNGA, 1994 - 2014

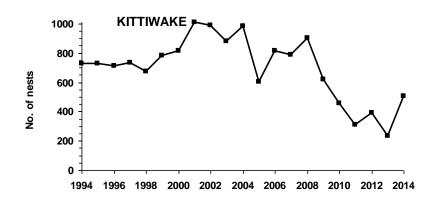


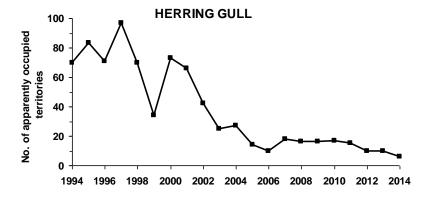


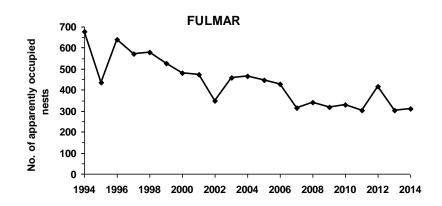


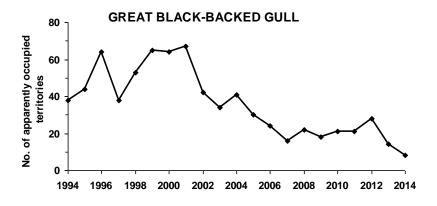


POPULATION CHANGES FOR A SELECTION OF BREEDING SPECIES ON LUNGA, 1994 - 2014 (con't)









TRESHNISH RINGING TOTALS FOR 2014

Site	Species	Adults	Pulli	Retraps/Controls	Total
Lunga	Manx Shearwater	13		4	17
•	Storm Petrel	448		98	546
	Shag	21	69	59	149
	Herring Gull		4		4
	Kittiwake	16		4	20
	Great Skua		2		2
	Guillemot	145		24	169
	Razorbill	32		13	46
	Puffin	128		5	133
	Dunnock	1			1
	Wheatear	7			7
	Meadow Pipit	1			1
	Rock Pipit	2			2
	Wren	2			2
Sgeir an Eirionnaich					
•	Oystercatcher		2		
	Great Black-backed Gull		2		2
	Common Gull		4		4
	Arctic Tern		44		44
Treshnish Isles	Grand total for 2014	816	127	211	1155

Note: All rings used in 2014 were registered under Treshnish Auk Ringing Group.



Ringing of a guillemot (Stephanie Cope)

TRESHNISH RINGING TOTALS 1971 - 2014

SPECIES	1971	1974	1976	1977	1978	1980	1982	1984	1986	1989	1991	1993	1994	1995	1996	1997	1998
Eider																	
Fulmar	17	6	4		8	21	14	18	7	21	15		4	27	38	7	24
Manx Shearwater		2	13		4	4	1	8					9	1		2	1
Storm Petrel		254	22		1	283		203	800	411	975	75	440	536	331	1104	741
Shag	150	7	10	10	24	80	50	160		40	10		10	59	96	99	150
Buzzard						1	2										
Corncrake																	
Oystercatcher		1				1	4	2									
Ringed Plover																	
Common Sandpiper																	1
Great Skua																	1
Kittiwake						1	1	1	2	2	4		6	10	1	50	41
Common Gull																	4
Lesser Black-b Gull																	
Herring Gull	6	1			14	46	35	56	4	4	3		5	24	19	52	73
Great Black-b. Gull	3	6	3	7	6	22	14	35		22	15		6	25	16	48	19
Guillemot	32	20	14		66	502	137	364	180	250	306		109	498	349	472	503
Razorbill	65	72	90		115	266	218	236	151	103	64		81	101	105	98	112
Black Guillemot																1	
Puffin	70	198	271		203	200	208	182	174	160	114		358	236	301	267	398
Hooded Crow																	
Willow Warbler														1			
Wren														3			
Starling																	
Stonechat																	
Wheatear			12					1	3						5	24	37
Pied Wagtail													1	3	2		
Meadow Pipit														4		1	
Rock Pipit									5	1				2	4	2	4
Twite																2	
TOTAL	343	567	439	17	441	1427	684	1266	1326	1014	1506	75	1029	1530	1267	2229	2109

NOTES:

⁽¹⁾ Data for 1971 - 1995 extracted from Walker & Cooper (1996). This may not include all rings used.

⁽²⁾ Ringing data for a three day visit in 1972 are not available.

TRESHNISH RINGING TOTALS 1971 – 2014 (continued)

SPECIES	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
Eider						1											1
Fulmar	23	12	25	22	25	47	14	15	8						1		423
Manx Shearwater	4	4			2		1	1	2		4	9	3	18	3	13	109
Storm Petrel	732	814	1030	15	360	83	491	962	21	118	403	293	202	212	191	448	12551
Shag	100	59	37	97	99	200	77	35	141	124	53	116	67	120	115	90	2485
Buzzard																	3
Corncrake							1						2				3
Oystercatcher	2		1						4				2	2	1	2	22
Ringed Plover							1		1								2
Common Sandpiper								1	1	1							4
Great Skua				1	1		1			2	4		2			2	14
Kittiwake	23	13	11	3	2	21	15	14	16	3	4	3	8			16	271
Common Gull		5	11	11	6		16	8				_	_			4	65
Lesser Black-b Gull					_					1		2	2	_	_		5
Herring Gull	39	15	11	11	8	11	8	1	11	7	20	11	8	7	3	4	517
Great Black-b. Gull	16	2	27	5	21	18	12	3	4	13	12	15	10	4	1	2	412
Common Tern								1									1
Arctic Tern	507	000	040	405	004	000	4.44	470	400		F4	50	400	40	•	44	44
Guillemot	507	892	312	425	261	800	141	172	123	1	51	53	169	46	8	145	7908
Razorbill	102	133	31	110	56	147	37	33	34	5	6	7	8	2	2	32	2622
Black Guillemot	074	000	1	054	044	000	454	070	405	007	00	00	00	004	74	400	2
Puffin	274	389	214	351	244	226	151	272	195	327	32	38	68	301	71	128	6621
Hooded Crow									1								1
Willow Warbler													1				2
Whitethroat													1				1 1
Sedge Warbler			1			0	4	0		0	4	4	2	•		0	2
Wren			1			2	4	2	•	2	1	1	2	6		2	22
Starling								0	3								3
Stonechat	20	50	0.4	0	0	0	7	2	0	1	0	4	_	40	4	7	3
Wheatear	22	50	24	2	2	2	7	1	2	4	2	4	5	10	4 1		230
Dunnock									4				1	4	1	1	1
Pied Wagtail Meadow Pipit		12	1	4	1	3	5	1	4	4		1	3 2	1 15	3	1	14 58
Rock Pipit	2	1	2	2	2	2	J	3	21	10	1	2	4	3	3 1	2	76
Twite		1	۷	1	۷	۷		S	1	10	1	2	3	ა 1	1	۷	10
	40.40	0.40.4	4700		4000	4500	000	4507							405	0.10	
TOTAL	1846	2401	1739	1060	1090	1563	982	1527	593	624	594	555	575	748	405	943	34510

RECENT RINGING RECOVERIES

STORM PETREL

TIARG have in the past year received details of 3 recoveries of birds ringed within Britain and Ireland in the months July - September and controlled by TIARG on Lunga in June - July 2013. These recoveries are summarised in the table below; all birds were ringed as adults (Euring code 4).

Ringing Site	No. of controls at: Lunga	Time inte	rval (days) Max	Distance Km	Direction (degrees)
Inishtrahull, Donegal	1		714	128	24
Fife Ness, Fife	1		2895	238	276
Brough of Birsay, Brough Head, Orkney	1		5076	347	212

STORM PETREL RECOVERIES

Details are given below of a bird originally ringed on the Treshnish Isles and recovered on Eilean nan Ron, Highland.

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 SR - Sick or injured, released with ring S - Sick or injured, fate unknown

O - Ring read on bird in field by non-ringer

Storm Petrel

2624465 6 27/6/2013 Lunga

R 29/7/2013 Eilean nan Ron, Highland

262 km 29 degs 32 days

Storm Petrel recoveries relating to the Treshnish Isles as either birds ringed or controlled there, now number 589 (relating to 559 birds) of which many have been of birds from the Isle of Man & Sanda (65 & 149 respectively). The above retraps of birds ringed on the Treshnish Isles, were attracted in by tape lure on recapture and are therefore likely to have been wandering immatures (up to 4 years old) or failed breeders. Only 71 birds ringed on the Treshnish Isles have been recaptured elsewhere, 12.7% 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 in late June/early July.

RECOVERIES OF OTHER SPECIES

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

Shag

1461512 6 26/6/2012 Lunga

X 08/5/2014 Quinish, Isle of Mull, Argyll and Bute 21 km 37 degs 681 days

21 km 37 degs 661 days

The finding of the above bird's remains is described as follows by its finder Peter Bisset:

"I am a sea kayaker and was paddling around Mull on my own. Suddenly a sea eagle was flapping round my face and for a second I thought I was being attacked and wondered if I should just roll upside down, but then realised that it was being forced down on to me by a pair of ravens. The eagle recovered its balance and flew out to sea with one raven in pursuit until they were both out of sight. I camped near by so decided for my evening stroll to walk back to the bit of cliff where I'd met the sea eagle. The pair of ravens were busy with one fledgling that had managed to get from the nest just below the cliff top to the cliff top. It could fly for about 5 seconds at a time and was dong take offs and landings into the wind. Neither parents nor fledgling seemed very concerned by my presence so I was able to watch sitting quietly from a few metres away. I noticed some choice bits of carrion (mainly bits of dead lamb as it was lambing season) laid out on the cliff edge and amongst these a single leg, pelvis and a few more bones with a few feathers and some flesh of an indeterminate bird. I saw the ring on this so decided to take it. As soon as I picked it up, the parents went for me, but I broke the joint and took off the ring as they soared noisily around my head. Once I'd put down their titbit they were calm again. I'm guessing the eagle was after their bits of carrion rather than the fledgling, although ravens are very discerning, sometimes confiding if you are on your own, and might have decided that I posed no risk to the fledgling whereas an eagle might."

Shag 1445602	8 O	28/6/2009 08/5/2013	Lunga Longa Islan 142 km	d, Gairloch, F 16 degs	Highland 1411 days
Shag 1417035	6F XF	23/6/2008 21/9/2014	Lunga South Balla 78 km	chulish, High 74 degs	land 2281 days
Shag 1417062	8 O	26/6/2007 31/7/2013	Lunga Lunga 0 km	0 degs	2227 days
Shag 1445765	6F O	29/6/2012 18/6/2013	Lunga Lunga 0 km	0 degs	354 days
Guillemot R72617	6 R	27/6/2011 20/4/2014 Bird found d	Lunga Lunga 0 km ead, predated	0 degs d.	1028 days
Guillemot R51693	6 X	22/6/2004 07/6/2013	Lunga Loch na h-L 160 km	Jidhe, Tarans 347 degs	say, Western Isles 3272 days

Guillemot

X63388 6 26/6/1996 Lunga

XF 15/2/2014 Sauveterre, Vendee, France

1151 km 164 degs 6443 days

Found freshly dead on beach after storms

Guillemot

R19453 4 24/6/2000 Lunga

XF 23/2/2014 Phare de la Coubre, La Palmyre, Charente-Maritime, France

1253 km 164 degs 4992 days

Found freshly dead on beach

Guillemot

R72809 6 23/6/2007 Lunga

XF 17/2/2014 Charmouth, Dorset

682 km 161 degs 2431 days

Found freshly dead on beach after storms

Razorbill

M55390 4 22/6/2003 Lunga

XF 17/3/2014 Chesil Beach, near Abbotsbury, Dorset

696 km 159 degs 8293 days

Found freshly dead on beach with many other dead Guillemot and Razorbills

Razorbill

M88128 6 24/6/2002 Lunga

X 18/2/2014 Borth-y-Gest, Porthmadog, Gwynedd

423 km 160 degs 4257 days

Found dead on beach after storms

Razorbill

M88134 6 26/6/2002 Lunga

XF 26/2/2014 Criccieth, near Pwllheli, Gwynedd

423 km 161 degs 4263 days

Found freshly dead on beach after storms

Razorbill

M88201 6 19/6/2004 Lunga

R 01/7/2014 Isle of Canna, Highland

64 km 354 degs 3299 days

Razorbill

M85543 6 29/7/1994 Lunga

XF 15/2/2014 Starr Gate, Lytham St Anne's, Blackpool

370 km 145 degs 7141 days

Found freshly dead on beach

Razorbill

M55331 6 23/6/1991 Lunga

X 30/5/2013 Fionphort, Isle of Mull, Argyll and Bute

17 km 170 degs 8021 days

Razorbill

M72632 6 28/6/1996 Lunga

XF 09/3/2014 Kildonan, North Ayrshire

143 km 145 degs 6456 days

Found freshly dead on beach after storms

Razorbill M72650	6 XF	28/6/1997 09/2/2014 Poor conditi	Lunga Langland, Swansea 569km 164 degs 6070 days on, bird destroyed.
Razorbill M72691	6 XF	27/6/1998 20/2/2014 Found fresh	Lunga Trenow Cove, Perranuthnoe, Cornwall 711km 175 degs 5717 days lly dead on beach after storms
Razorbill M88060	4 X	28/6/2000 09/2/2014	Lunga Rattray Head, Aberdeenshire 305 km 66 degs 4974 days
Razorbill M88067	4 X	29/6/2000 06/3/2014 Found dead	Lunga Criccieth, Gwynedd 423 km 161 degs 4998 days I on beach after storms with 56 dead Razorbills and 6 Guillemot
Razorbill M85642	6 X	24/6/1995 04/3/2014	Lunga Abbotsbury Swannery, Dorset 696 km 159 degs 6828 days
Razorbill M88177	6 X	22/6/2003 17/3/2014	Lunga Braystones, Cumbria 292 km 142 degs 3921 days
Puffin EX12560	6 XF	28/6/2012 16/2/2014	Lunga Le Vivier, Biscarrosse Plage, Landes, France 1386 km 165 degs 598 days
Puffin ES64155	8 X	29/6/1994 22/2/2014	Lunga Vensac, Gironde, France 1290 km 164 degs 7178 days
Puffin EL52803	6 R	24/6/2005 28/6/2013	Lunga Garbh Eilean, Western Isles 158 km 2 degs 2926 days
Puffin ER24993	6 X	24/6/2003 05/7/2013 Found dead	Lunga Kilbrennan, Isle of Mull, Argyll and Bute 17 km 84 degs 3664 days I on beach
Puffin ET80392	6 XF	21/6/1999 09/2/2014 Found fresh	Lunga Barbatre, Vendee, France 1099 km 165 degs 5347 days Ily dead on beach after storms

Puffin

EL52947 6 27/6/2006 Lunga

XF 03/2/2014 Grande Plage, Quiberon, Morbihan, France

1026 km 168 degs 2778 days

Found freshly dead on beach. Oil victim.

Puffin

EW18279 8 21/6/2008 Lunga

XF 13/2/2014 Port Creux, La Turballe, Loire-Atlantique, France

1050 km 166 degs 2063 days

Found freshly dead on beach after storms

Puffin

EW18377 8 21/6/2008 Lunga

XF 13/2/2014 Plage de Mane Guen, Plouharnel, Morbihan, France

1015 km 168 degs 2063 days

Found freshly dead on beach after storms

Puffin

EW18185 6 25/6/2008 Lunga

XF 15/2/2014 Plage des Conches, Longeville-sur-Mer, Vendee, France

1173 km 164 degs 2061 days

Found freshly dead on beach after storms

Puffin

EW50146 6 26/6/2011 Lunga

XF 14/2/2014 Les Moutiers-En-Retz, Loire-Atlantique, France

1092 km 164 degs 964 days

Found freshly dead on beach after storms

Puffin

EX12708 6 24/6/2013 Lunga

X 12/2/2014 Saint Anne la Palud, Plonevez-Porzay, Finistere, France

940 km 172 degs 233 days

Found dead, not fresh, on beach after storms

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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.

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



TIARG (Stephanie Cope)

THE EXPEDITIONS 1971 – 2014

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 "Corrvvreckan" 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.

THE EXPEDITIONS 1971 – 2014 (continued)

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.

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.

THE EXPEDITIONS 1971 – 2014 (continued)

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.

John Hodson, Robin Ward, Dennis Cooper, Andrew Carter, Shaun Micklewright, Tim Dixon, Jurjen Annen, Claire Dovey.

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

John Hodson, Robin Ward, Andrew Carter, Shaun Micklewright, Tim Dixon, Tracé Williams Jurjen Annen, Claire Dovey.

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

John Hodson, Robin Ward, Andrew Carter, Shaun Micklewright, Tim Dixon, George Henderson, Jurjen Annen, Claire Dovey.
 Full census of Lunga and Sgeir a' Chaisteil. Ringing.

John Hodson, Robin Ward, Dennis Cooper, Tim Dixon, Steve Willis, Jurjen Annen, Claire Dovey, Richard Barnes, Simon Roberts.
 Full census of Lunga and Sgeir a' Chaisteil. Ringing.

John Hodson, Robin Ward, Dennis Cooper, Andrew Carter, Tim Dixon, Shaun Micklewright, Jurjen Annen, George Henderson.
Full census of Lunga and Sgeir a' Chaisteil. Ringing.

John Hodson, Robin Ward, Andrew Carter, Tim Dixon, Shaun Micklewright, Jurjen Annen, Claire Dovey, Cerian Thomas.

Full census of Lunga and Sgeir a' Chaisteil. 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	FH36101 - 200	GK34351 - 354	HT68201 - 210	M85501 - 800	R65501 – 6000**	K419290 - 295
1159651 – 700	2261001 - 2350	EH33377 - 380	FR13606 - 636	GK50214 - 220	HT68221 - 226	M88001 - 300	R72501 – 4000**	NA84296 - 299
1163701 – 740	2284001 - 5000 [#]	EH54501 - 55000	FR14401 - 500	GK50551 - 570	HT80301 - 400	M92501 - 700**	T14001 - 5000**	KX83101 - 106
1168001 – 100	2309901 - 10000	EH89256	FR56351 - 400	GK62985 - 990	HW05351 - 360		R73001 – 4000**	KX83116 - 118
1170601 – 700	2311301 – 400	EH89260	FS21478	GK90821 - 840	HW06951 - 7000		T82001 - 300	RF10011-020 [#]
1187901 – 950	2311501 – 2000	EH98001 - 300	FS51016 - 500	GK91471 – 490	HW08994 - 09000)	X39501 - 40000	LA59201-300**
1237401 – 450	2348001 – 500	EK29501 - 900	FS87001 - 100	GM78756	HW37361		X56501 – 57000	DD90261-270 [#]
1322951 – 960	2369301 – 400	EK72657 - 660	FV10611 - 620	GP13416 - 450	HW68101 – 110		X63001 - 500	CBV601-700**
1328481 – 490	2405001 – 6000	EK91471 – 490	FV10646 - 650	GP47917	HW68161 – 170		X67501 - 68000	V711401-500**
1350801 – 900	2430701 – 900	EL19801 – 276	FV54446 – 460	GP62201 – 207	HW74971 – 990		X79501 - 80000	TJ18901-9000 [#]
1357901 – 8000	2436501 – 7000	EL52501 - 3000	FV62410	GP74501 - 75000	HW87211 – 225		X99001 - 500	BT09481-490 ^{**}
1366901 – 7000	2444501 – 5000	EN22001 - 500	FV62416 – 226		HW94907 – 913			NV42851-860**
1373751 – 3900	2446202 – 233	EP85608 - 612	FV96681 – 684		MA12551 – 600**			SR49601-700**
1378401 – 8500	2455501 – 6000	EP85687 - 700	SS96101 - 300		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						
1445601 – 800**	2560001 – 1000	ET80001 - 500						
	2579001-80000	EW18001 – 500						

2605001 - 5500** EW50001 - 500** 2624001 - 5000** EX12501 - 3000#

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