



**THE WILDLIFE TRUST OF SOUTH & WEST WALES**

# **SKOMER ISLAND NATIONAL NATURE RESERVE**

**ANNUAL REPORT  
2014**

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# SKOMER ISLAND NNR ANNUAL REPORT 2014

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# 1 Summary

The island was inhabited from the 11th of March to the 26<sup>th</sup> of November. Birgitta Büche and Edward Stubbings stayed on for their second year as Skomer Wardens. Jason Moss acted as Assistant Warden. The new Visitor Officer role was filled by Andy Bramwell. This report will hopefully show that it was a good decision to make the Visitor Officer role full time and permanent and that it has been possible to increase visitor numbers in the shoulder seasons with careful marketing and promotion.

The winter of 2013/14 had seen some severe back to back storms. An estimated 40,000 seabirds were found washed up on beaches between Portugal and Scotland (including the Pembrokeshire coast). In February 2014 the wardens spent several days counting dead birds on beaches (Newgale in particular), talking to the media and helping to prepare press releases. As this came just after NRW funding had been cut for one of Skomer's longest standing research projects on Guillemots (the best way of assessing the effects of events like this), WTSWW had cause for concern and launched a campaign.

On arrival to the island an assessment was made of damage caused to the buildings by the winter storms and it soon became apparent that some damage had been inflicted, especially at North Haven. There was some severe damage to the boat ramp on the North Haven beach, the boat shed roof was damaged and one of the garage doors had blown off the North Haven building. Much hard work and effort was put into repairing some of this damage in 2014.

The seabird breeding season turned out to be another late and protracted one, which was possibly an effect of the winter storms. Population counts and breeding success was average or slightly down for some species, especially the auks.

Spring and autumn migration turned up some good birds including up to four species new to the island (some still awaiting acceptance by BBRC).

In short it was another eventful and colourful season on Skomer Island.

## 1.1 Weather

The effects of the winter storms were still being felt in spring. However, it was a generally mild and settled spring and summer with few dramatic weather events. There was also some extremely warm and dry autumn weather. Despite a mild spring it was again an extremely late breeding season. It is thought that this may have been caused by the extreme winter storms of 2013/14.

**March** – Temperatures slightly above average, generally dry and sunny, some blustery and breezy weather.

**April** – Temperatures again slightly above average, unsettled to start with but high pressure dominated through the middle of the month with plenty of dry and warm weather, month ended with more showers but interspersed with sunny spells.

**May** – Average maximum temperatures, generally dry, sunny and warm, heavy thunderstorms and rain between the 19<sup>th</sup> and 24<sup>th</sup>, ending more settled, only two days with wind force 6 or above.

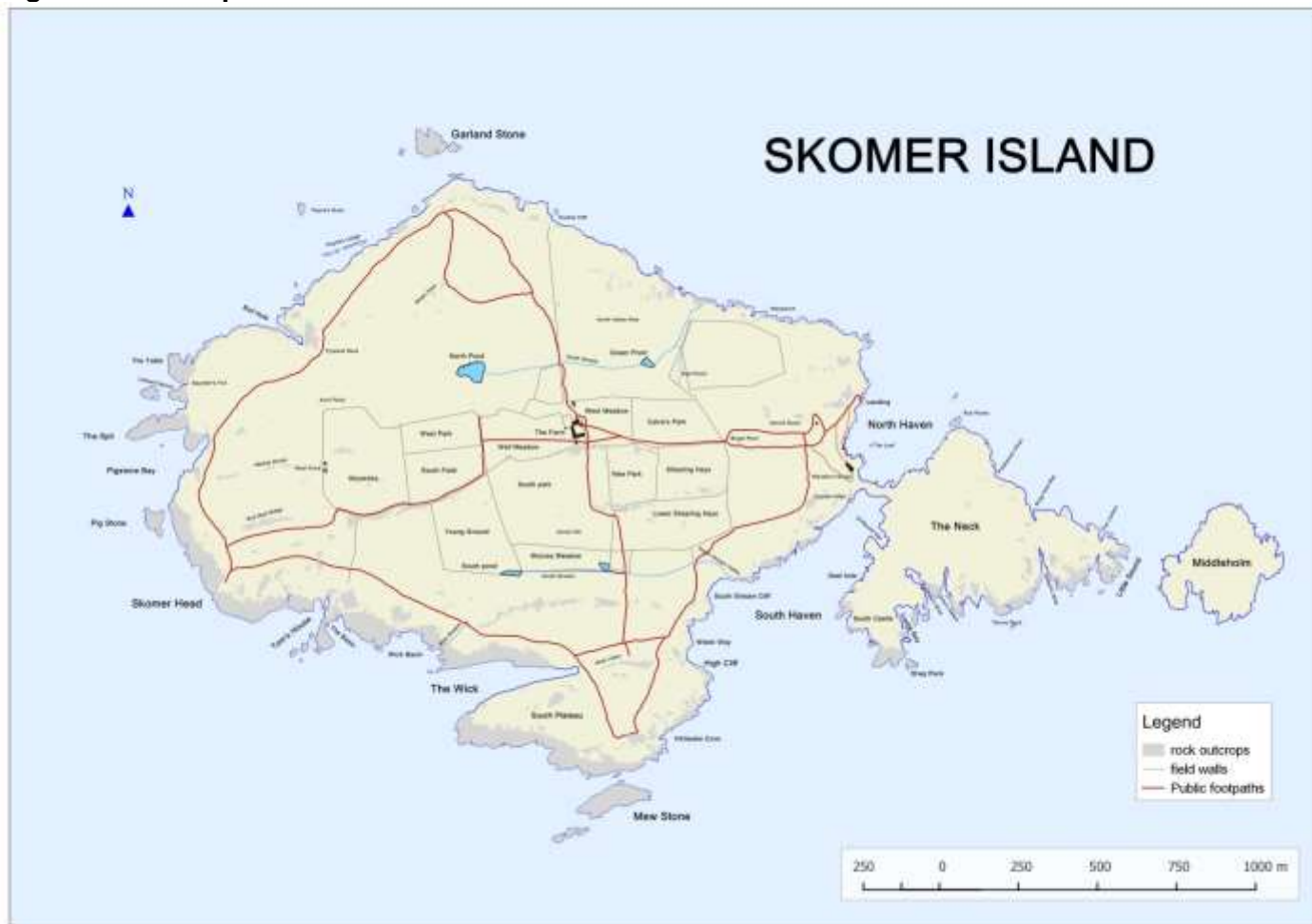
**June** – Showery start, settled mid-month, returning to slightly more unsettled weather towards end of month although last two days were fine.

**July** – First week slightly unsettled with rain on the 4<sup>th</sup> and fairly low temperatures, mid-month much warmer and settled with maximum of 27°C on the 23<sup>rd</sup>, no strong winds.

**August** – Temperatures slightly below average or average for time of year, twelve days with rain, some unsettled weather and a stormy period around the 10<sup>th</sup>

**September** – Dominated by high pressure and easterly winds, maximum temperatures well above average, driest September since 1910.

Fig. 1 Map of the island



## 2 Monitoring and recording

### 2.1 Birds

#### Summary

Chough and Raven were monitored early in the season (March-June) whilst Peregrines, Buzzards, owls and waders were monitored a little later (May-July). Most passerines were picked up on breeding bird surveys (BBS). Wildfowl were either picked up on BBS or when broods of chicks were seen. The table below shows breeding numbers for all species in 2014 and 2013 and, for seabirds only, gives a percentage change between those years. More detail on all of these species can be found in the *2014 Skomer Bird Report* (Appendix 2) and the *JNCC Report - Seabird Monitoring on Skomer Island in 2014* (Appendix 1).

This report deals mostly with work carried out by the wardens, island staff and volunteers. Some other monitoring work was carried out by other institutions; this can be read about fully in the *JNCC Report - Seabird Monitoring on Skomer Island in 2014* (Appendix 1).

There were again three Peregrine territories and a single chick fledged from the eyrie above Protheroe's Dock. Three pairs of nesting Curlew produced two chicks from one of those nests. Short-eared Owls had a relatively successful year with three pairs producing at least six young. A Barn Owl was seen in early spring but was unfortunately found dead in the hostel roof space days later. Encouragingly though another bird was seen in North Valley on the 14<sup>th</sup> of September. Skylark numbers were down again as were Wheatears. Three pairs of Choughs nested again but only one pair was successful, producing a single chick. Reed Bunting numbers were stable and Stonechats bred successfully for the first time since 2007.

**Table 1 Breeding birds on Skomer in 2014**

<b>Species</b>	<b>2014</b>	<b>2013</b>	<b>% change</b>
Puffin (IND)	18,237	19,280	-5.40
Guillemot (IND)	23,493	20,862	+12.61
Razorbill (IND)	6,541	6,663	-1.83
Kittiwake (AON)	1,488	1,045	+42.40
Fulmar (AOS)	556	503	+10.54
Cormorant (AON)	6	7	-14.30
Shag (AON)	?	5	-
Lesser Black-backed Gull (AON)	8,432	8,132	+3.60
Herring Gull (AON)	440	-	
Great Black-backed Gull (AON)	107	84	+27.40
Canada Goose	21	28	
Shelduck	2	1	
Mallard	3	Min. 4	
Shoveler	2	2	
Teal	?	2	
Common Pheasant	Many	Many	
Common Buzzard	5	Min. 5 territories	
Common Kestrel	-	1	
Peregrine	3	3	
Water Rail	-	Min. 1	
Common Moorhen	Min. 4	Min. 4	
Oystercatcher	66	Min. 40	
Eurasian Curlew	3	3	
Wood Pigeon	4	2	
Short-eared Owl	3	4	
Little Owl	1	1	
Skylark	4	6	
Barn Swallow	8	7	
Rock pipit	24	25	
Meadow Pipit	97	c. 80	
Pied Wagtail	2	4	
Dunnock	10	Min. 12	
Northern Wheatear	15	22	
Blackbird	2	7	
Common Whitethroat	26	18	
Sedge Warbler	44	32	
Common Chiffchaff	2	1	
Wren	64	62	
Magpie	2	6	
Red-billed Chough	3	3	
Western Jackdaw	?	?	
Carrion Crow	9	Min. 5	
Common Raven	4	Min. 4	
Common Linnet	? 1 seen with nesting material at Farm in spring	?	
Reed Bunting	4	4-5	
Stonechat	2	0	

AOS-Apparently Occupied Site  
AON-Apparently Occupied Nest  
AOT-Apparently Occupied Territory

IND-Individual

All other units are pairs of birds or males on territory unless otherwise marked

In terms of seabirds it wasn't a 'bumper' year and a lot of species struggled for various reasons. An exception to this was the gulls, some of which had a much better season than in recent years. The summary below is taken from the *JNCC Report - Seabird Monitoring on Skomer Island in 2014* (Appendix 1) and does not cover all species.

**Fulmar:** The whole island count was up by 10.54% on 2013. There was, however, a drop in numbers within the study plot areas from 147 AOS to 112 AOS. Productivity was higher than any of the last six years at 0.45 chicks per AOS, slightly below the average productivity over the period 1986 to 2011 (0.48).

**Manx Shearwater:** The breeding study plot census was completed by students from the University of Gloucestershire. Breeding success was the highest since 1998 at 0.71 fledged young per egg laid.

**Lesser Black-backed Gull:** A much better year in 2014, with just a small population increase of 3.6% on the previous year but a considerable increase in productivity from 0.076 in 2013 (a very poor year) to 0.57 in 2014 – higher than average for the last 20 years.

**Herring Gull:** Better coverage in 2014 with an island population of 440 and productivity of 0.52 chicks fledged per AON.

**Black-legged Kittiwake:** Productivity was up on 2013 (0.33) at 0.64 and was the highest since 2010. The Whole island population count was also up by 42.40%.

**Guillemot:** The whole island count was up by 12.61% on 2013. Although the whole island count and study plot counts were both up on the previous year it is important to note that this is a common effect of a seabird wreck, where young birds occupy gaps in the breeding colonies, and the true effect of the winter storms may not be felt for several years. Productivity in the study plots monitored by the Field Worker (A. Wilson) was the same as in the previous two years at 0.63 (this is just below the overall mean of 0.68). Students working under Professor Tim Birkhead from Sheffield University also reported lower than average breeding success in 2014.

**Razorbill.** The whole island count was down by 1.83% on 2013, and the study plots were down by 12.4%. Productivity was 0.27 chicks per active and regularly occupied site which is considerably lower than the mean of 0.49.

**Atlantic Puffins:** The maximum whole island spring count was down by 5.41% on 2013. Productivity was 0.53 chicks fledged per burrow, which is 25% lower than 2013. Only 59.5% of 2013's breeding adults returned to Skomer in 2014, a 25% drop compared with 2012-2013 (84.2%), although accurate survival estimates require at least one more year's data to put 2014 into context with the average adult survival of 91.1% since 1972.

The last two years have seen two of the latest breeding seasons on record, bucking the recent trend for earlier breeding.

**Table 2 Seabird breeding success in 2014**

Species	Whole island population in 2014	Productivity in 2014
Puffin (IND)	18,237	0.53
Guillemot (IND)	23,493	0.63
Razorbill (IND)	6,541	0.27
Lesser Black-backed Gull (AON)	8,432	0.57
Herring Gull (AON)	440	0.52
Great Black-backed Gull (AON)	107	1.88
Kittiwake (AON)	1,488	0.64
Fulmar (AOS)	556	0.45
Cormorant (AON)	6	1.5
Shag (AON)	Only 1 nest found on the Garland Stone	?

AOS-Apparently Occupied Site

AON-Apparently Occupied Nest

AOT-Apparently Occupied Territory

IND-Individual

### Spring Puffin counts

Whole island Puffin counts were carried out in April and are summarised in the table below. Late afternoon counts were made in North Haven each day at the start of April to assess numbers and whole island counts were only made once numbers were deemed to be high enough. More detail is available in the *JNCC Report - Seabird Monitoring on Skomer Island in 2014* (Appendix 1).

**Table 3 Spring counts of individual Puffins 2014**

Date	No. individual puffins incl. Middleholm	No. of individual Puffins excl. Middleholm
17/04/2014	18237	
18/04/2014	14875	
Max.	18237	
Mean	16556	

### Whole island counts

Whole island counts were carried out by land and sea in the first three weeks of June for Cormorant, Shag, Guillemot, Razorbill, Fulmar and Kittiwake. Two complete counts of the island were made for all species. Mean counts of individuals (IND) are presented in Fig. 1 and full details can be found in the *JNCC Report - Seabird Monitoring on Skomer Island in 2014* (Appendix 1).

### Wick Puffin study

In 2014 a study to assess and compare Puffin productivity between the Wick and an undisturbed site on the Neck was set up. The new study tried to follow the methods used on the Neck as much as possible in order to make the data comparable. As this was treated a pilot year for the study the data is presented here but not in the JNCC report. A productivity of 0.63 chicks fledged per active burrow compares positively to 0.53 in the undisturbed study area on the Neck. See Appendix 3 for full details.

### BBS

Breeding bird surveys were carried out between mid-April and mid-June. The island is split into eight BBS sections and each one is visited two-three times during this period by island staff and Long Term Volunteers. All singing passerines are recorded and notes made to indicate their breeding status. Wildfowl and waders are also recorded where possible. Corvids were also recorded on BBS visits but Jackdaws in particular are incredibly hard to census using this method and the island population is poorly known. Another species that is not covered well by BBS is the Rock Pipit and, although numbers are comparable from year to year, the total is likely to be an underestimate.

## CES

2014 also saw the formation of a new CES (Constant Effort Site) study into the adult survival and breeding success of passerines, particularly migrant warblers. Skomer has now joined a suite of sites across the British Isles that uses standardised ringing to look at survival and productivity. This involves ringing for a set period of time once in every ten day period between May and August and recording the species, age and measurements of all birds caught. The main species involved on Skomer are Sedge Warblers and Common Whitethroats. The data is then inputted onto the BTO's database IPMR and used in their analysis and report on The State of the UK's Birds. Data on retraps and controls (birds ringed elsewhere and retrapped on Skomer) will be written up in future reports.

Nest recording is also carried out on the island to add to productivity and breeding data.

## Migration and birdlog

Bird migration is followed by the wardens, staff, volunteers, researchers, overnight guests and anyone with an interest in the subject and recorded in the daily birdlog. The subject can provide a large part of island chitter chatter and a good day of migration can make for an interesting evening log. Birdlog is also an integral part of the overnight 'experience' on Skomer and many overnight guests of all ages and abilities enjoy taking part and adding their sightings.

In 2014 Jason Moss put together what is surely one of the best and most comprehensive bird reports ever produced for the island. This is appended and makes extremely interesting reading. It covers all species and summarises their status and details from 2014, including breeding numbers and/or maximum counts and last occurrences. Breeding seabirds are perhaps better covered in the *JNCC Report - Seabird Monitoring on Skomer Island in 2014* (Appendix 1) but for non-breeding/migrant seabirds and all other birds (residents and migrants) it brings together all records in a single easily read document. The table below summarises the migrant highlights.

**Table 4** Island rarities summary 2014

Species	Island status	Last recorded
Blyth's Reed Warbler	1 <sup>st</sup> island record	N/A
'Iberiae' Yellow Wagtail	1 <sup>st</sup> island record of this subspecies	N/A
'Nelson's' Gull *1	1 <sup>st</sup> island record	N/A
Gyr Falcon *2	1 <sup>st</sup> island record	N/A
Lesser Yellowlegs	2 <sup>nd</sup> island record	August 1969
Black Kite	2 <sup>nd</sup> island record	May 1998
Northern Goshawk	2 <sup>nd</sup> island record	April 2010
Desert Wheatear	2 <sup>nd</sup> island record	November 2011
Sabine's Gull	3 <sup>rd</sup> island record	October 2011
Greenish Warbler	4 <sup>th</sup> island record	September 2012
Common Kingfisher	6 <sup>th</sup> island record	August 2007
Black-headed Bunting	6 <sup>th</sup> island record	2004
Mute Swan	6 <sup>th</sup> island record	2003
Long-tailed Skua	7 <sup>th</sup> island record	6 <sup>th</sup> October 2011
Blue-headed Wagtail	7 <sup>th</sup> island record	22 <sup>nd</sup> May 2012
Iceland Gull	9 <sup>th</sup> island record	2007

\*1 – hybrid between Herring Gull and Glaucous Gull

\*2 – proven escape



## 2.2 Mammals

### Seals

Grey Seal productivity was monitored by WTSWW under NRW contract as an MNR project. B. Büche and E. Stubbings carried out this work, assisted by J. Moss, A. Bramwell and Long Term Volunteers, and the report was submitted to NRW (Bueche & Stubbings 2014). The full report is appended to this document and is summarised below.

### Grey Seal Breeding Census Skomer Island 2014 Summary

215 Grey seal pups were definitely born on Skomer Island in 2014. In addition eleven pups (wanderers) turned up either just before the start of moult, or moulting.

36 more pups were born than last year and this is the highest total ever recorded.

379 pups were born in the Marine Nature Reserve as a whole in 2014: 215 on Skomer and 153 on the mainland.

The busiest week this year was week 41 (06-12/10) when 36 pups were born

The most productive beaches were Matthew's Wick (41 pups) and South Haven (34 pups). In 2014, in contrast to 2013, Castle Bay (30 pups) was more popular than Driftwood Bay (26 pups) and North Haven beach was more productive (24 pups).

154 pups are known, or assumed to have survived on Skomer, giving a survival rate of 73%, which is slightly higher than last year's rate (68%) but still lower than the average of the last ten years (76%).

The mean size at onset of moult was three; the mean age at onset of moult was 14 days; the mean age at completion of moult was 20 days and the mean duration of moult was six days.

In 2014 the maximum haul-out of 300 was recorded on 16/11/14. The number of seals using the haul-outs was slightly lower than the average for the last ten years.

32 different cows, twelve bulls, one immature and two weaners were photographed with obvious signs of being entangled in nets at some time in their lives, often with netting still embedded.

Photo-monitoring continued in 2014 and nearly 4000 pictures of seals were taken. Ca. 80% of breeding females were photographed and 634 pelage photos were collected and catalogued which will be entered into the SMRU (Sea Mammal Research Unit) seal ID database. Only Bulls and scarred individuals were identified by eye, in total 135 seals were identified, of which 50 were known from previous years.

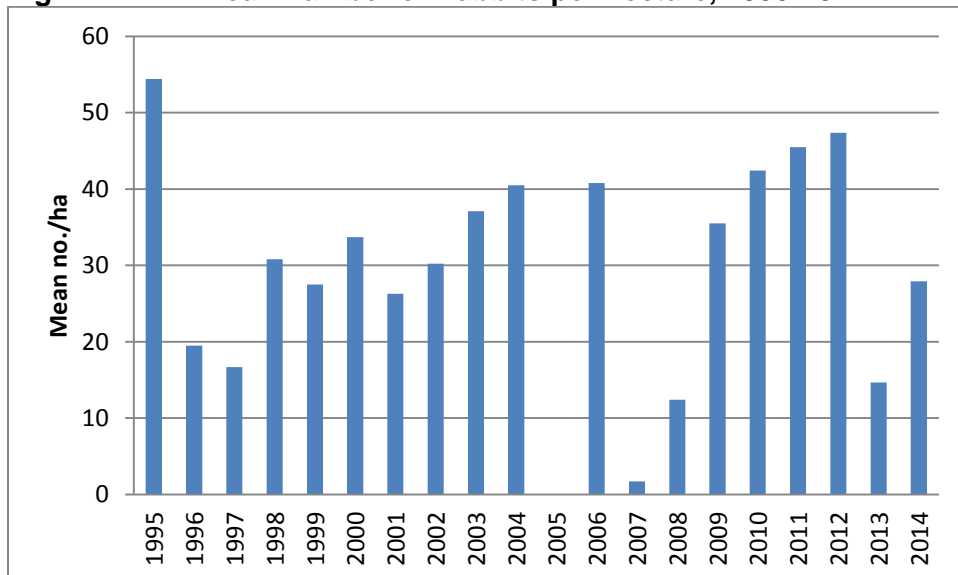
### Rabbits

Monthly Rabbit counts were done in the study plots on the central fields, the Wick grasslands and South Plateau. There was no count made in March and the August count was done on the 1<sup>st</sup> of September. After a slight dip in 2013 Rabbit numbers are back up to nearly 30 per hectare.

**Table 5** Rabbit plot counts in 2014

Plots	3/4/14	27/5/14	31/6/14	29/7/14	1/9/14	28/9/14
1	8	3	0	5	22	15
2	13	13	0	0	8	4
3	14	12	11	0	14	10
4	25	39	3	5	22	27
Wick Grassland	20	18	18	48	39	25
South Plateau	29	46	43	10	73	87

**Fig. 2 Mean number of Rabbits per hectare, 1995-2014**



### **Cetaceans**

Cetacean watches were conducted on a weekly basis from the Garland Stone and Skomer Head. These were carried out to Sea Trust methodology by weekly volunteers. The data was then sent to the Sea Trust and the Marine Nature Reserve (MNR) staff.

The first Common Dolphins were recorded on the 13<sup>th</sup> of June, albeit 20 miles SW of Skomer on the Celtic Deep. The first records from around the island were in July (30 on the 8<sup>th</sup>). Records increased in September and the last record was on the 12<sup>th</sup> of October. Three Risso's Dolphins were seen and photographed in Broad Sound on the 29<sup>th</sup> of June.

### **Skomer Voles**

The annual vole census of study plots was carried out by Tim Healing in August with the help of various volunteers. The results from each plot are as follows: Grid C (North Valley) = 212/Ha; Grid E (Centre of Island next to Abyssinia) = 22/Ha.

Michael Loughran studied voles for a week in April and a week in September 2014. These are in different areas to Tim Healing's. Micks work can be read about in the appended *Report on the work carried out on Skomer Voles between 2001-2013* (Appendix 5)

### **Bats**

A new project looking into bat migration and run by BSG Ecology was brought to Skomer in 2014. An automated bat detector was used to record bat activity on a nightly basis throughout the spring and autumn. An amazing nine species were recorded and the full report is attached to this report (see *BSG Pembroke Islands Bat Report 2014* (Appendix 6)).

## **2.3 Invertebrates**

### **Butterflies**

The island butterfly transect was carried out once a week between April and the end of September. 2014 was another good year for butterflies. Previous to 2013 there had been some of the worst summers for butterflies ever recorded so two good years in a row were a very welcome boost for Britain's butterfly populations and for our island transect. The butterfly transect data were entered online on to the Butterfly Conservation website. Dark Green Fritillaries were again present in North Valley, and small populations of Grayling, Large Skipper and Wall butterflies continue to breed on the island. Highlights from 2014 were the 5<sup>th</sup> record of Comma since 1973, 8<sup>th</sup> record of Speckled Wood and a two sightings of Clouded Yellow

### **Moths**

Regular moth trapping was carried out at the Farm and North Haven during the season. This is not part of monitoring required by the Management Plan but is done for our own interest. Because there are island records that go back a long way and there are some interesting species on the island we would recommend that casual recording continues as long as practicable. Overnight guests and volunteers also

get involved and it can be used as an educational tool. All moth records were also sent to the county moth recorder.



Figure 3 Thrift Clearwing

One of the Long Term Volunteers in 2014, Catherine Blower, did a project on moths looking at the macro moth communities in two different vegetation types. This was to see whether one habitat is more valuable than the other and to check the abundance of several rare moths associated with the coastal thrift community, including Barrett's Marbled Coronet, Devonshire Wainscot and the Black Banded moth, using two heath light traps to attract the moths. See Appendix 7.

### Grasshoppers

Another Long Term Volunteer, Megan Jones, looked at grasshoppers in different areas around the island for her personal project. See Appendix 9.

## 2.4 Herpetiles

Slow Worms, Common Lizards, Common Frogs, Common Toads and Palmate Newts, as well as any small mammals found under the refugia were recorded every week on two set transects. The Farm transect has been going for many years and the wider island transect was set up in 2013 and continued in 2014. These were carried out by weekly volunteers and the data was sent to ARC (Amphibian and Reptile Conservation Trust).

## 2.5 Flora (and habitats)

The flora monitoring/surveys have been undergoing somewhat of a transition in the last few years as the old surveys are replaced by the monitoring recommended in the new management plan. Surveys that were still undertaken in 2014 include Three-lobed Water Crowfoot, Ragwort, Hemlock Water Dropwort, Lanceolate Spleenwort, Rock Sea Lavender and Portland Spurge. All data and any photographs taken are filed on the work computer and, where appropriate, in the office filing system. They are also summarised below. Heathland, coastal grassland, marshy grassland and central field transects and monitoring were not carried out. Photographic monitoring will be a part of the future management plan.

Table 6 Plant surveys carried out in 2014

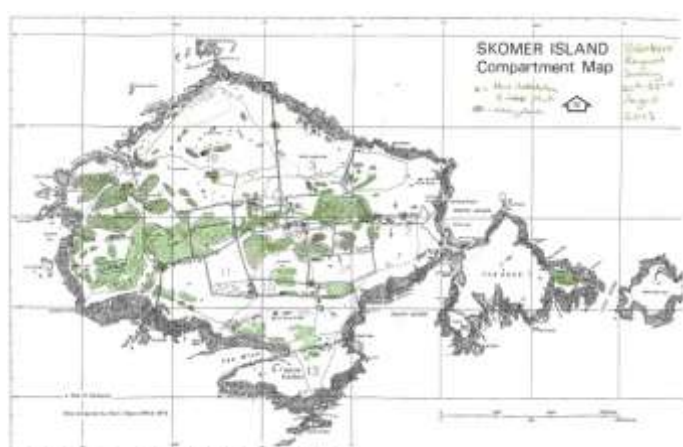
Nationally scarce plant assemblage	2008	2009	2010	2011	2012	2013	2014
<b>Lanceolate Spleenwort</b>							
- Extent (m)	12m	11m	9m		8m	Present	15m
- Condition (%dieback)	10%	60%	40%		13%		-
<b>Portland Spurge</b>							
- NORTH HAVEN	8 small 10 med. 5 large	1 small 4 med. 2 large	3 small 3 med. 2 large		4 small 10 med. 1 large	Not found	58 small 58 med. 0 large
- SOUTH CASTLE	22 small 25 med. 3 large					Not found	-
<b>Rock sea-lavender</b>							
- Presence	Yes	Yes	Yes			Yes	Yes
- No. flower spikes	148/79	116/82	120/90			Not possible to count as on	Not counted but photos

						cliff face	taken
<b>Three-lobed Crowsfoot</b>							
- Extent (m)						Not found	-
- No. flowering	22	18	24		12	Not found	12
<b>Bluebells</b>						Present but not mapped	Present but not mapped
<b>Ragwort</b>						Abundant	Rare

After an amazing year for Ragwort in 2013, the plant was extremely rare in 2014. This is perhaps unsurprising for a biennial but it is still fascinating to compare the two distribution maps.

**Fig. 4**  
**Ragwort distribution in 2013**

**Ragwort distribution in 2014**



Golden Hair Lichen was also checked for presence.

**Table 7** **Golden Hair Lichen *Teloschistes flavicans* survey data**

Golden Hair Lichen ( <i>T. flavicans</i> )	2008	2009	2010	2011	2012	2013	2014
- Presence	Yes	Yes	Yes	Yes		Yes	Yes
- Extent	-	Photo-monitoring repeated	Yes Extent maintained	-	-	On main rock and adjoining smaller rocks	-

Pond size surveys were carried out at North Pond, Moorey Mere, Green Pond, Well Pond and West Pond. Data are stored on the work computer and the last two years are presented below. Moorey Mere was dug out in September to remove accumulated sediment and to try and prevent complete drying out in the summer months.

**Table 8** **Pond size survey data for 2014**

Pond	04/04/2013		03-08/04/2014	
	N-S	E-W	N-S	E-W
North	63	101	67.7	102.17
Green	29.4	48.2	30.5	40.4
Well	26.2	13.7	26	10.8
West	21.2	9.6	24.7	9.9
South	32	81.4	31.5	72.5

Moorey Mere	26.4	42.5	25	41.2
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## 2.6 Wildlife highlights

Wildlife highlights were written up at the end of each month and included in the Skomer Monthly Reports, as well as being sent to Birdwatching for inclusion in the UK Bird Sightings section of the magazine. Highlights are also included under the relevant headings in this report.

## 3 Research

Research projects are all summarised in the *Research Report* (Appendix 11). A letter was sent to all research institutions in 2014 to inform them of accommodation prices and the reasons behind them. Two new PHDs started in 2014, Oliver Padget from Oxford University and Elspeth Kenny from Sheffield University. Another major event in 2014 was the cutting of NRW funding for Professor Tim Birkhead's long term study (40+ years) on the breeding success and adult survival of Guillemots on Skomer. The WTSWW made a public appeal for funds to contribute towards the costs of this study and Tim ran an extremely successful crowd funding appeal. More secure funding now needs to be found. The WTSWW also supported Tim's work in other ways i.e. subsidising his research assistant's accommodation on the island.

## 4 Non biological features

### 4.1 Archaeological

In April 2014 Toby Driver led a collaborative team from the Royal Commission, University of Sheffield and Cardiff University for a third season of field work on Skomer Island. This included the first modern excavation on the island to explore a mound of burnt stone alongside an Iron Age settlement. Among their finds were a piece of charcoal of probable blackthorn and a single cattle tooth. A full summary of this work can be read in the *Research Report* (Appendix 11).

An application was sent to Cadw for consent to remove accumulated sediment from Moorey Mere. The application was consented and the work was carried out in September.

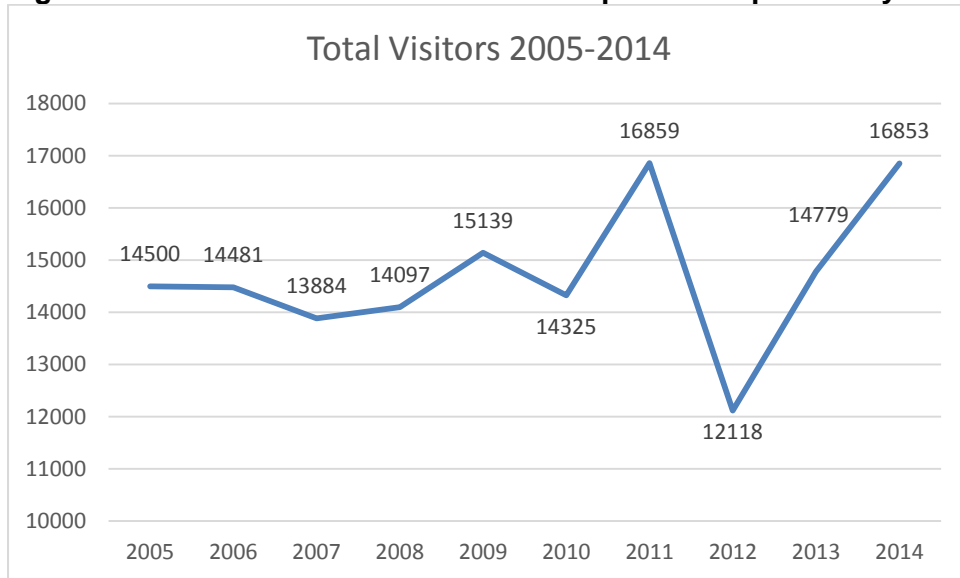
## 5 Visitors

2014 saw the start of a full time Visitor Officer on Skomer, with the aim of improving visitor numbers and hostel customers in the shoulder seasons (April, August and September). As a result there have been new events run on the island and an according increase in hostel guests and income. These goals were certainly achieved, despite a poor August for boat cancellations. Who knows how well we might have done if August had been calm and sunny.

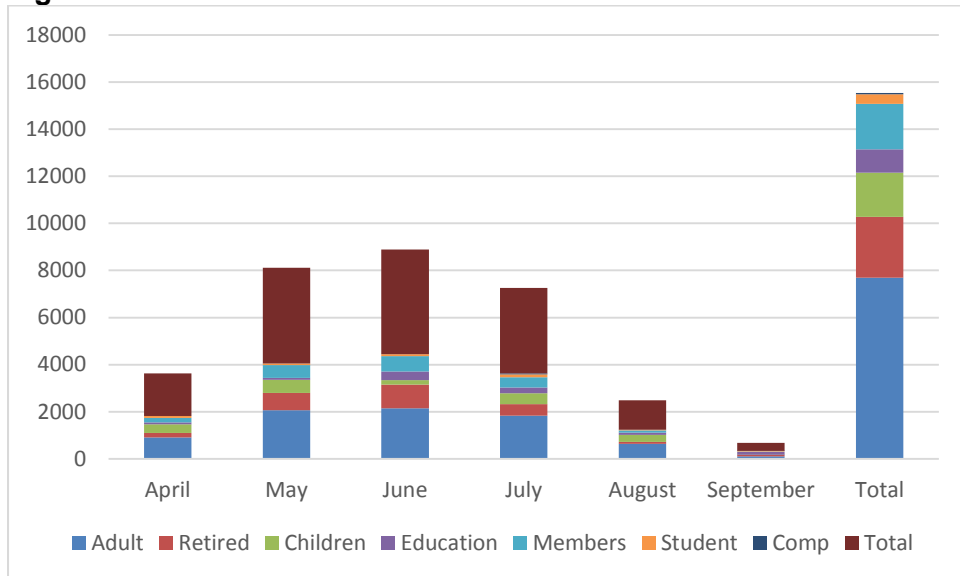
### 5.1 Day Visitors

The spring and summer of 2014 was blessed with calm weather, and this, combined with a later than usual Puffin season, contributed to a good number of visitors this season. 15,732 day visitors (including private landers) visited Skomer between April and the end of September. Add to this the 1,121 overnight guests and we have a grand total of 16,853 visitors to the island.

**Fig. 5 Total visitor numbers in comparison to previous years.**

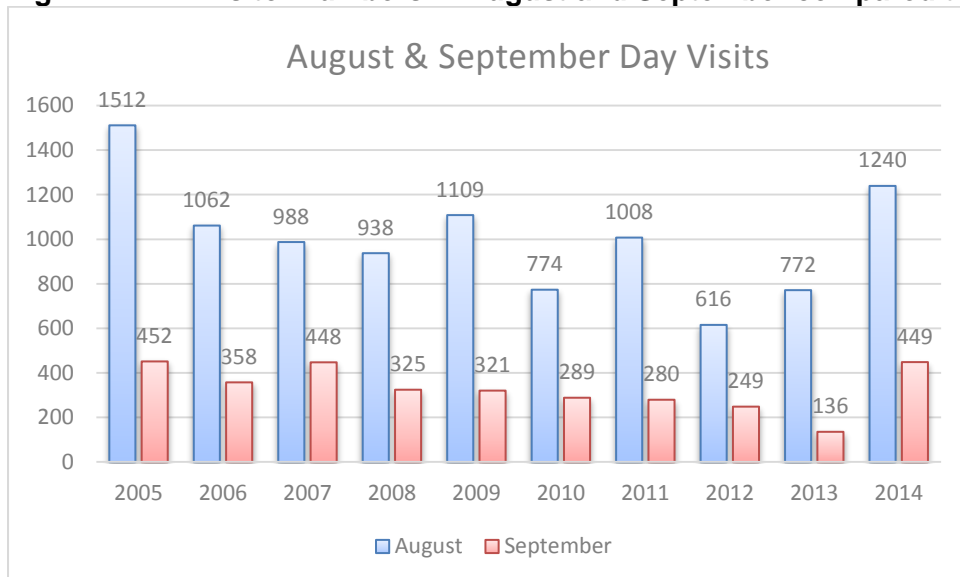


**Fig. 6 Breakdown of visitor numbers**



A new family trail was developed with the help of local supporters Chris Thomas and Lucy Griffiths. This was part of a marketing package aimed at families during summer holidays – a traditionally quiet time on the island. The “Island Adventures” campaign used e-media and posters and leaflets in local Tourist Information Centres, schools and accommodation providers. September’s seal pups were marketed heavily on social media outlets. The graph below shows visitor numbers in August and September compared to previous years.

**Fig. 7 Visitor numbers in August and September compared to previous years**

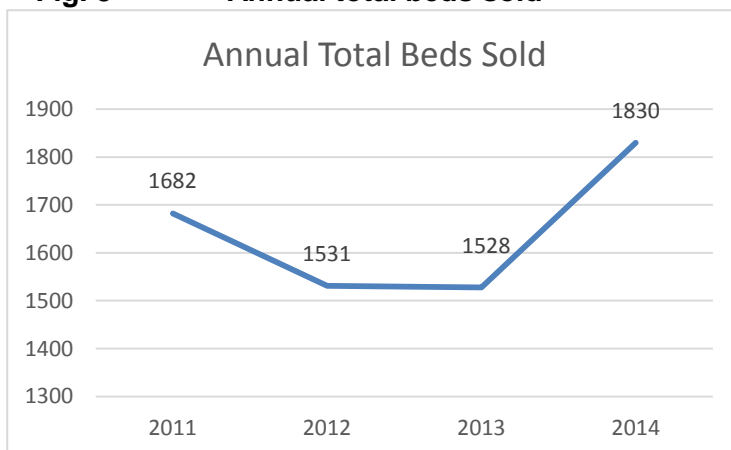


2014 had the second highest August and September visitor numbers for ten years. This was despite many days of no sailings in August due to poor weather, and in part due to calm and hot September weather. It is clear from the data, though, that the marketing campaign had a positive impact on visitor numbers.

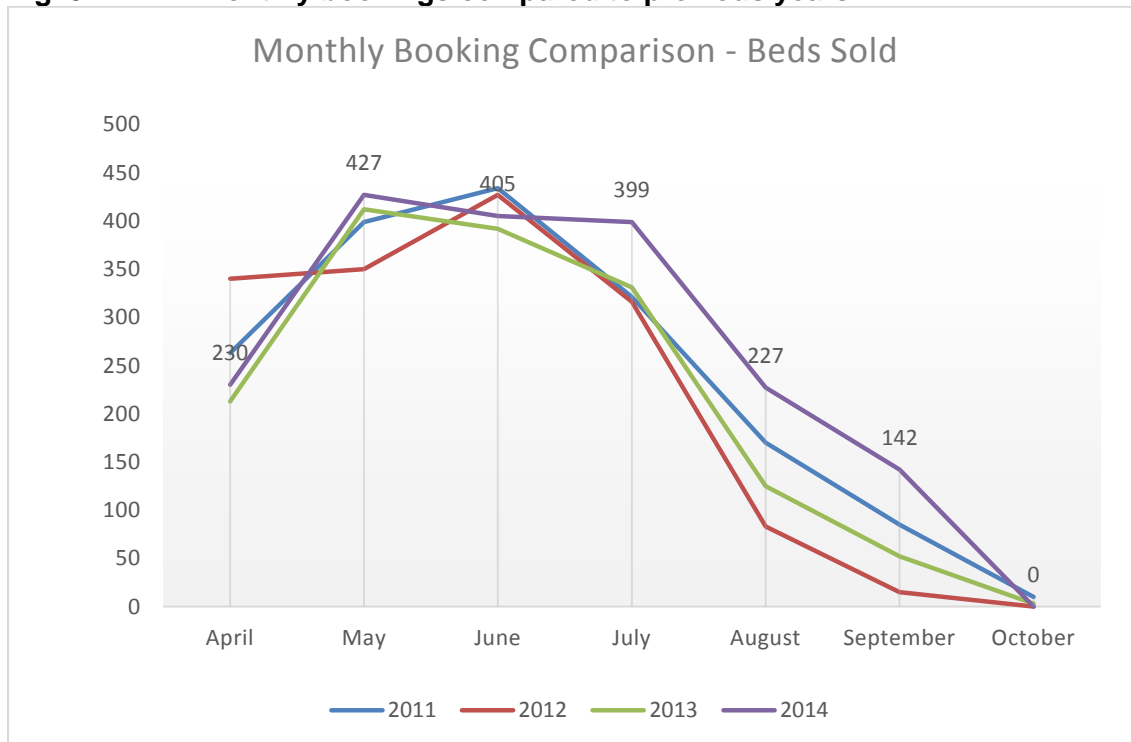
### 5.2 Overnight guests

For the first time any late accommodation availability was heavily promoted on social media, guests suffering cancellation due to poor weather were encouraged to re-book, and a several special events were run to encourage overnight bookings in the shoulder season. These factors, plus excellent weather during the peak season, meant that that the hostel was really busy during 2014, with a total of 1,830 beds sold. As shown to the right, this is a significant increase on previous years.

**Fig. 8 Annual total beds sold**



**Fig. 9 Monthly bookings compared to previous years**



This graph shows the monthly trends in hostel beds sold. As can be seen, 2014 had much higher bookings in August and September, mostly due to the success of Shearwater Week and the September Birdwatching weekend, as well as increased social media presence. We trialled a two-night minimum stay in the hostel in June this year. This explains the plateau in beds sold in 2014. Regardless of this however, the hostel was still full.

## 5.3 Human Impact

### Visitors

The island was regularly warded and patrolled by volunteers and staff. All visitors received an introductory talk, emphasising 'dos and don'ts' with regards to safety and disturbance to wildlife. All introductory talks encouraged visitors to walk the island in an anticlockwise way, which seemed to reduce visitor pressure at the Wick slightly. An area to view the Bull Hole colony was also introduced to offer another view of one of the big seabird colonies. A code of conduct for photography groups was displayed in the hostel and mentioned in welcome talks.

The Wick was manned by staff and volunteers to prevent visitor disturbance and provide information about seabirds to visitors. A human impact monitoring project was started to measure impact at the Wick on the breeding success of the Puffins. Success is measured by the number of chicks fledged per pair. Two sections of the island were studied, one on The Neck; where there is no visitor disturbance and a new site at The Wick; the busiest area of the island during Puffin season. Productivity at the two sites can then be compared.

We worked out how many burrows were occupied by watching the colony over many evenings during the nest building period and marked them with numbered posts. Then four 24 hour feeding watches were carried out in June (If a Puffin was seen taking fish into a burrow on any two of the four watches it can be assumed that the pair was successful). The results of this work are summarised under 2.1 Wick Puffin Study, and the full report *Wick Puffin Breeding Success Report 2014* (Appendix 3), is appended to this report.

Daily records of disturbance from anywhere on the island, including seaborne disturbance, were kept at evening log and are on record.

### Pollution



No major pollution incidents were reported in 2014.

## 6 Staff and volunteers

### 6.1 Staff

Our new Visitor Officer, Andy Bramwell, started on the 18th of March. Jason Moss, Assistant Warden started on the 7<sup>th</sup> of March. Alastair Wilson acted as Field Worker and arrived on the island on the 11<sup>th</sup> of April. Bee and Ed returned for their second year as Skomer Wardens and moved out to the island with Jason Moss on the 11<sup>th</sup> of March.

At the other end of the season, Alastair left the island on the 9<sup>th</sup> of August, Andy left on the 10<sup>th</sup> of October and Jason left on the 27<sup>th</sup> of October. Ed and Bee stayed on until the 26<sup>th</sup> of November to finish the seal monitoring contract.

### 6.2 Lockley Lodge

Chrissie and Gary Eade returned to run Lockley Lodge together for a second year and Mervin Jones returned as recruitment officer. The Lockley Lodge team worked extremely hard throughout the season and the island could not have run so smoothly without their hard work. The Lockley Lodge team run an extremely tight ship which we think is important to keep order and give everyone the best possible experience whilst maintaining the interests of the Trust.

### 6.3 Volunteers

#### Weekly vols

Our first two weekly volunteers arrived on 30<sup>th</sup> of March. John Reynolds from Dale Sailing did us a favour and brought them over on his way to Skokholm.

#### LTVs

Long Term volunteers in 2014 were Catherine Blower and Sophia Jackson (April-June) and Megan Jones and Holly Dillon (July-September). All were exemplary LTVs, performing their roles to a high standard and were invaluable assets to the Trust and the island. All of them did a personal project on top of regular work and applied for £200 funding from the Friends of Skokholm and Skomer on receipt of an article written for the 'Friends' News Letter. All four articles are attached to this report under *LTV Reports* (Appendix 8)

A few extra volunteers were drafted in to help with seabird counts in June. Sarah Purdon helped between the 8<sup>th</sup> and 18<sup>th</sup> of June and Pia Reufsteck helped from the 24<sup>th</sup> till end of the counts. Both volunteers were a real asset to the boat counting team.

#### Work parties

We had planned on getting two work parties over in the last week of March. One group consisted of volunteers from The Friends, the others were a Pembrokeshire National Park group. Neither group made it out to the island, partly because the weather did not allow them to but also because we did not have our boat to pick them up.

In autumn we had mixed success with work parties. One, that we had organised to come and decorate the windows at North Haven, couldn't make it because the weather was too rough to sail in the first week of October. We did however get a Pembrokeshire National Park group over to help dig out Moorey Mere in September.

In the future we will try and organise work parties for April and September to maximise the chances of there being good weather.

### Training

Membership training was given by Jon Cooper to all staff on the island. Staff and LTVs were also trained up on Tractor driving by the wardens.

### Health and safety

All accidents and incidents were reported using accident and incident forms and sent to Diane Berry.

**Table 9 List of Incidents in 2014**

18/07/2014	Skomer	Visitor slipped on a rock at the North Valley Crossing	medium	One medium sterile dressing applied.	No further action required	
22/09/2014	Skomer, The Lantern	The Assistant Warden was injured whilst climbing up a rock face from The Lantern. A stone was dislodged and fell onto his shin causing a deep cut.	low	The wound was treated with antiseptic wipes, butterfly plasters and a bandage	No further action to be taken	BB
22/09/2014	Skomer, North Valley Crossing	An elderly visitor was walking across the North Valley Crossing (an area of rocky uneven ground) when he slipped, losing his balance and fell. He sustained a cut to the back of his hand during the fall.	low	The wound was treated with antiseptic wipes and a long plaster.	No further action to be taken	JM

## 8 Reserve management

### Management plan

Mike Alexander has been working on the new management plan and the first draft of the bird section was circulated in May. Project descriptions were then given in by everyone working on them at the end of the summer. Mike and the wardens then spent the autumn working on maps and the remaining project descriptions. A paper on the vegetation of Skomer, written by Mike, also came out and will form the basis of the vegetation section of the plan. An NNR audit will be undertaken by NRW in May 2015 and this will act as a formal acceptance of the new management plan.

### Species and habitat management

Apart from the digging out of Moorey Mere in September and removal of some Bracken from a Puffin colony at North Haven, no other habitat management was carried out. No species management was carried out above and beyond the normal people management to minimise disturbance to nesting birds.

### Buildings and infrastructure

The hostel was cleaned and decorated as required in March and two new chest fridges were installed in the overnight kitchen and the volunteer kitchen.

**Table 10 Table of maintenance work done in 2014**

	North Haven	Farm
External infrastructure	Boat shed damaged by winter storms, repaired by B C Building. Garage door blown off at NHV, repaired by weekly vol, Howard Driver. Hole in slip filled in by B C Building. Some windows repaired and decorated at NHV in the autumn.	Assistant Wardens hut repaired and decorated.
Broadband/Webcam infrastructure	Internet and some webcams fixed by Peter Barlow but Wick Webcam taken off island for repair. Aytel visited to see if improvements could be made.	
Water supply	Passed water quality test in June	Failed water quality test but passed after chlorine pump replaced.
Plumbing	Booster pumps were installed to increase water pressure and the	

		research kitchen/bathroom was plumbed in to the main system. Old septic tank in the process of being reconnected.
Gas boilers		
Gas fridges	Some decommissioned and replaced	Some decommissioned and replaced
Electrical chest fridges		2 new electrical chest fridges installed in overnight kitchen and vol kitchen
Gas cookers		
Gas		
Solar hot water	Fault fixed by Andy Summers	New system installed by Andy Summers on Hostel roof
Photo-voltaic	Tested all batteries at NHV, any still holding an acceptable charge went up to Farm and battery bank at NHV replaced with 24 6V deep cycle fully flooded lead acid batteries by vol. Henry Lloyd.	
Electrical control boxes/batteries		
Fire alarm		Fault in switch board fixed by Havenkey Fire and Safety in April
Internal fireplaces		A new wood burner was installed in the overnight lounge at the Farm

## Machinery and equipment

**Table 11** List of machinery maintenance

Tractor	Finished painting tractor and covered with Wax Oil. J E Lawrence did a service.
Boat	New engine
Boat trailer	Trailer arm welded back on by Andrew Aldred and given a new coat of paint by weekly vols.
Boat mooring	Checked by MNR team in spring.
Generators	All generators serviced by A M Power and a new shed was built for the NHV generator.
Small machines (brushcutter, etc)	Nothing to report

## Signage

Some new signs were made for us by Dave Gadd, one of our most valued volunteers. We will have some more made in 2015 and are working towards replacing all signs on the island. There are still some old signs with the CCW logo on them and these will be the priority to replace first.

## 9 Media, interpretation and events

### Media/Filming visits

At the end of 2014 it was decided to create a media request form. This essentially means that any group or company wishing to film on the island submit their contact name and details, dates and reasons for filming. This gives us greater control over groups visiting the island to film or record.

Below is a summary of the main media goings on in 2014.

Seaside Antics came to film on the 25<sup>th</sup> of April.

Bee did a radio interview on 4<sup>th</sup> of April for BBC Wales together with Tim Birkhead about the seabirds and the seabird conference in Cardiff.

Skomer starred in Springwatch once again after Gordon Buchanan visited the island to make a short piece highlighting the fate of our Guillemots after the harsh winter storms.

Annette Fayet produced a nice article in Birdwatching magazine on Shearwaters, and Skomer also featured in a National Geographic article on Puffins.

From 21<sup>st</sup> to the 24<sup>th</sup> of June Charlotte Engel from the Canadian film company, Rock Yenta Productions Inc. came to film Puffins with Annette Fayet.

Tim Birkhead, Trust staff Lizzie Wilberforce and Nia Stephens, and the BBC's environment correspondent Iolo ap Dafydd came to Skomer to film Guillemots on the 2<sup>nd</sup> of June and Mark Colwell from BBC Radio interviewed Tim Birkhead on the 3<sup>rd</sup>.

Seaside Antics filmed again on the 15<sup>th</sup> of July.

Andy Davies and David Miller came to photograph Puffins under water on 22<sup>nd</sup> of July.

WWF Cymru filmed on 23<sup>rd</sup> of July at the Wick for a promotional video for the Well-being of Future Generations bill.

Simon Cowell came and filmed from the Skomer Explorer on 30<sup>th</sup> of July with Andy and Jason and visited Skomer the next day to film the final part of a long charity walk undertaken by two women. This received the most staff time as there was a lot of scope to promote Skomer's shearwaters, overnight stays outside of peak season, and the island as a walking destination.

A BBC crew came to film a short clip of some enthusiastic children meeting Manx Shearwaters on the island on 29<sup>th</sup> August, with Dr Tim Guilford leading them round the island.

The BBC came over again and stayed a night to film CBBC wild. This involved four children meeting Oliver Padget, a Manx Shearwater researcher.

Seaside Antics came over again on the 13<sup>th</sup> of September and stayed a night to film.

On the 24<sup>th</sup> of September Countryfile came over to film seals, we took them down to South Haven where they stayed till the tide came back in. They managed to film cows suckling and produced a nice five minute piece on the seals of Skomer.

## **Interpretation**

We are currently working on replacing any out of date signs (see above), including those with CCW logos on. Children's maps of the island were produced by Lucy Griffiths and Chris Thomas and are on display at the sales point and the Farm.

## **Events**

A series of new events were run on the island in 2014. These helped to raise the profile of the island, increase visitor numbers and raise island income.

### **Monday Guided Walks**

A guided walk was offered for £40 per person, with a 15 person limit, on Monday 3<sup>rd</sup> June, 16<sup>th</sup> June and 7<sup>th</sup> July. The walks were led by Dave Astins of West Coast Birdwatching, an island regular, who received a £13 per person fee. All the walks were fully attended and received excellent feedback from attendees. The Trust earned £1215 from these events. Seven of these exclusive walks are planned for 2015.

### **Island Adventures**

This promotion ran for all of August, and promoted free boat fares for children under 16 (thanks to Dale Sailing), activities on Wednesdays for families, and free use of the newly developed Discovery and Mystery Trails and Kids Packs which were lent out from the sales point. We also held a reading of Puffin Pal books on August 8<sup>th</sup> which was attended by around 30 people. The Island Adventures promotion included social media campaigns, printed leaflets being put in local schools, and leaflets and posters in local Tourist Information Centres and accommodation providers. The marketing and the production of the family trails packs were paid for with the income from the Monday Guided Walks.

Despite poor weather in August causing many days of cancelled sailings, the three kids events that did run were well attended (19 children over three events), and there was lots of interest in the way of calls to the

Visitor Officer about the campaign and the island. We had the second highest number of day visits in August since 2005, so the promotion did have a positive impact, but perhaps not quite as much as we'd hoped for.

### **Shearwater Week**

Running from August 20<sup>th</sup> to 27<sup>th</sup> (with 28<sup>th</sup> and 29<sup>th</sup> added due to high demand), Shearwater Week was a huge success and was fully booked. The event ran daily, and overnight guests were able to meet a Manx Shearwater chick being weighed as part of daily monitoring. Later they were invited to a presentation about the research being carried out on Skomer into shearwater navigation and life history, before being guided by a member of the island team around the colony at night to have the full shearwater experience. A huge thanks must be made to Ollie Padget and Liam Langley for their time, enthusiasm and experience. Guests were charged the normal hostel rate of £30pppn.

The event brought in over £3000 extra income during period when the hostel is traditionally very quiet for bookings. In fact due to the Shearwater Week we had over 100 more beds sold in August compared to 2013.

The event will run again in 2015, but with a two night minimum stay to ease pressure on staff, volunteers and visitors, and the adults charge will be £70.

### **Migrants Birdwatching Weekend**

This was a two night event led again by Dave Astins, held on 14<sup>th</sup> and 15<sup>th</sup> of September. It offered two days of guided birdwatching around Skomer, with particular emphasis on finding autumn migrants. The event cost £99 per person, with £39 per person being charged by Dave. Eight people attended, netting a modest £480 through the usual hostel charge. The event was a resounding success as warm sunny weather and easterly winds brought out some excellent birds. It also meant the hostel was relatively full during a normally very quiet time of year.

In 2015 we will run guided birdwatching weekends in April and again in September.

### **History Guided Walks**

Two were planned for 13<sup>th</sup> and 20<sup>th</sup> September but the 20<sup>th</sup> was cancelled due to no sailings. Six people attended the walk, two of whom booked a night in the hostel off the back of the guided walk promotion. John Archer Thomson (formally of FSC Dale Fort) helped Andy Bramwell deliver the walk.

### **Marketing and publicity**

The new Visitor Officer role allowed more time to be spent on social media promoting and interpreting the island. Facebook proved really popular, rising from 1200 followers in April to over 3000 by the start of October. One video of a puffling was shared by BBC Springwatch and received over 100,000 page views! Facebook and Twitter provided a successful way to market events and hostel availability. Twitter was used also to update the public on rare bird sightings. Skomer has now joined Instagram.

The blog has been very popular, if a little irregular. The highlight was probably the blog post about the Short-eared Owl chicks in Bee's garden.

The power of social media was certainly felt on Skomer this year with many day visitors commenting on having seen posts, or following the facebook page. Andy Bramwell, Visitor Officer, relied heavily on his personal iphone for uploading content to social media sites, and recommends that the Wardens be given a decent smart phone so that they can do the same.

### **Wildlife adoption scheme**

Reports completed for the Seal and Puffin adoptions.

## **10 External groups and liaison**

### **IAC**

The Islands Advisory Committee (IAC) meetings were held on the 17<sup>th</sup> of February (Cilgerran), 28<sup>th</sup> of April (on Skomer) and the 1<sup>st</sup> of December (Cilgerran). The wardens were able to attend all three meetings. A seabird monitoring subcommittee was set up at the December meeting to advise on future monitoring and research.

## **Friends**

The Friends of Skokholm and Skomer committee meeting was held on the 15<sup>th</sup> of February which was attended by the Skomer wardens. The Friends reunion was held the next day and was another great success. Since the completion of the Skokholm renovation project it was suggested that the Friends offer more support to Skomer. It was decided to offer a grant (£200) to LTVs on Skomer on receipt of a project write up for the Friends newsletter. Support will also be offered in the form of work parties and a representative of the Friends helping out during Shearwater Week 2015.

## **Marine Nature Reserve-MNR (now MCZ)**

Especially strong links are maintained with staff at the MNR office at Martin's Haven. The MNR team are extremely generous and helpful to the island and we would not be able to run so smoothly without them.

## **Natural Resources Wales-NRW**

The island has obvious and important links with NRW. Mike Alexander and Chris Lawrence provided invaluable help and advice to the island wardens with regards the management plan and permissions and licencing.

## **Others**

Links were maintained with a wide range of external groups including NRW, the National Trust, Pembrokeshire Coast National Park Authority, the RSPB (especially Greg and Lisa Morgan on Ramsey), H.M. Coastguards and of course Dale Sailing. Cooperative work was also undertaken between WTSWW and the Pembs Ringing Group.

## **Acknowledgements**

Thanks go to many parties and individuals that helped with the successful running of Skomer Island in 2014. Apologies to anyone left off this inevitably incomplete list. Many thanks go to all staff and volunteers (long term, weekly volunteers and anyone drafted in at last minute to get us out of trouble), staff at the MNR and Dale Sailing (Kenny, Carl, Pete, Derek, Jamie and John Reynolds in particular), Lizzie Wilberforce (Conservation Manager for WTSWW), Diane Berry, all staff at Cilgerran and Tondu, Steve and Anna Sutcliffe, The Friends of Skokholm and Skomer, all useful contractors and volunteers (especially Henry Lloyd who started doing a lot of electrical work on the island with no labour costs), all members of the IAC and other helpful wildlife consultants, staff and students at Oxford, Sheffield and Gloucestershire Universities and finally to all of the visitors that came and enjoyed the wonderful wildlife of our very special island.