

St Abb's Head National Nature Reserve

Seabird Report for 2015

Introduction

This report presents data from whole colony counts of fulmar, shag, herring gull, kittiwake, puffin, guillemot and razorbill; counts of guillemot and razorbill at monitoring plots and breeding success of shag, kittiwake, guillemot and razorbill.

Full details of methods, location of plots, count positions, section boundaries, maps and photographs are given in previous reports (see especially S. R. D. da Prato Seabird Census 1985 and Seabird Monitoring 1985) or held in the Reserve's files at the Rangers' Office.

Results are presented in a series of tables and comparison is made with previous years.

Summary of seabird counts in 2015

Whole Colony Counts

Species	Count Unit	2015 Total	Change on 2014	Comments
Fulmar	Apparently occupied site (AOS)	85	-25%	This is the lowest count on record. It represents 59% of the 10 year mean of 145 AOS, and just 34% of the 31 year mean of 247 AOS.
Shag	Apparently occupied nest (AON)	133	+24%	The second year of population increase since the wreck in the winter of 2013 which led to the lowest count on record. It represents 95% of the 10 year mean of 139 AON, and 56% of the 31 year mean of 236 AON.
Herring Gull	Apparently occupied nest (AON)	204	+11%	Up on last year, but still the fourth lowest count on record. It represents 88% of the 10 year mean of 233 AON, and 60% of the 31 year mean of 340 AON.
Kittiwake	Apparently occupied nest (AON)	4209	+16%	Kittiwakes have now seen two year's growth in numbers, but this is still the third lowest count on record. It represents 88% of the 10 year mean of 4,765, and just 42% of the 31 year mean of 9,964 AON.

Productivity

Species	Mean productivity in 2015 (chicks fledged/active nest)	Change on 2014	Comments
Shag	2.30	+16%	The second consecutive year of good productivity and the highest figure on record. It represents 202% of the 10 year mean of 1.49 and 178% of the 26 year mean of 1.29 chicks fledged per active nest.
Kittiwake	1.09	+4%	A small increase on last year and the second highest figure on record. It represents 154% of the 10 year mean of 0.54 and 170% of the 29 year mean of 0.64 chicks fledged per active nest.
Guillemot	0.65	+ 41%	This is a 41% increase on the 2014 figure of 0.46 chicks fledged per active nest. However, the monitoring method is still being refined and so these results should be treated with caution.
Razorbill	0.33	- 23%	This is a 23% decrease on the 2014 figure of 0.43 chicks fledged per AOS. However, the monitoring method is still being refined and so these results should be treated with caution.

Counts at Monitoring Plots

Species	Count Unit	Sum of plot means in 2015	Change on 2014	Comments
Guillemot	Individuals	1457	-5%	A small decrease on last year and represents 97% of the 10 year mean of 1508 and 100% of the 32 year mean of 1463.
Razorbill	Individuals	113	-13%	Down on last year and represents 89% of the 10 year mean of 127 and 80% of the 32 year mean of 141.

Whole colony counts were carried out by Liza Cole and Lizy Smith. Shag productivity by Lizy Smith, kittiwake productivity by Liza Cole and guillemot & razorbill productivity by Charlotte Crummack. Counts at guillemot and razorbill plots were carried out by Liza Cole.

Species Accounts

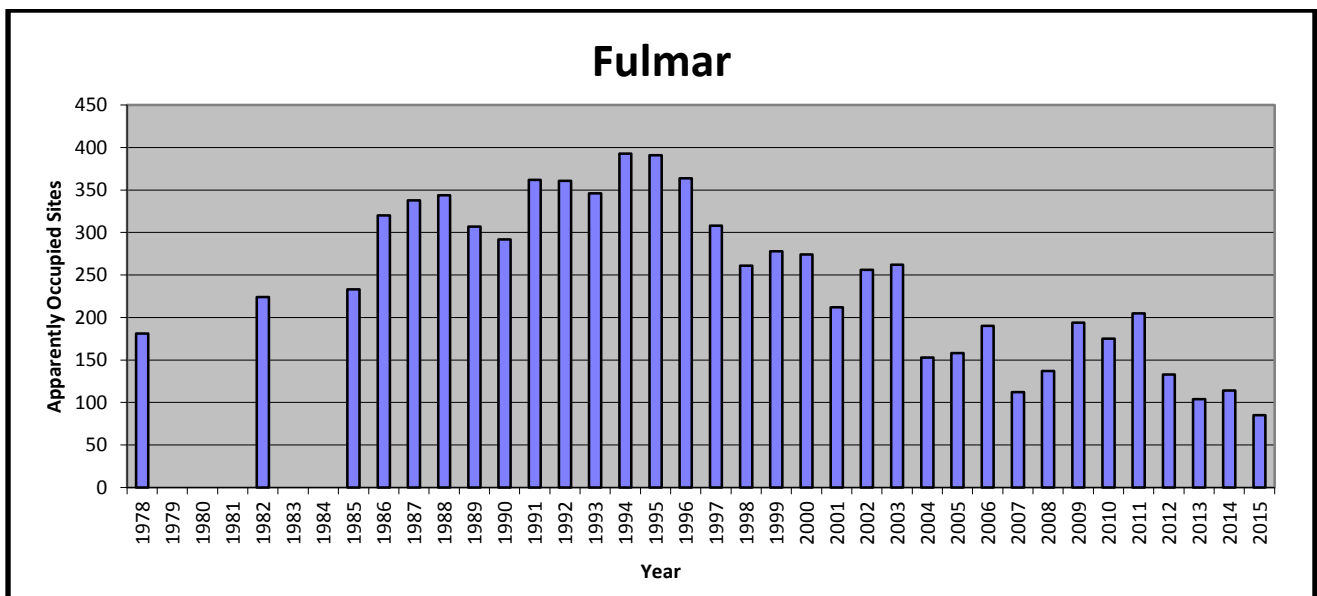
Fulmar

Whole colony count

A count of apparently occupied sites (AOS ie a site with a bird sitting tightly on a reasonably horizontal area judged large enough to hold an egg) was carried out from land on 15th, 16th, 18th, 19th, 21st, 23rd and 25th June. Blind spots were counted from a boat on 29th June.

Results

85 AOS were counted, a decrease of 25% on the 2014 count of 114 AOS. This is the lowest count on record. It represents 59% of the 10 year mean of 145 AOS, and just 34% of the 31 year mean of 247 AOS.



Breeding Success

No count of chicks was carried out this year.

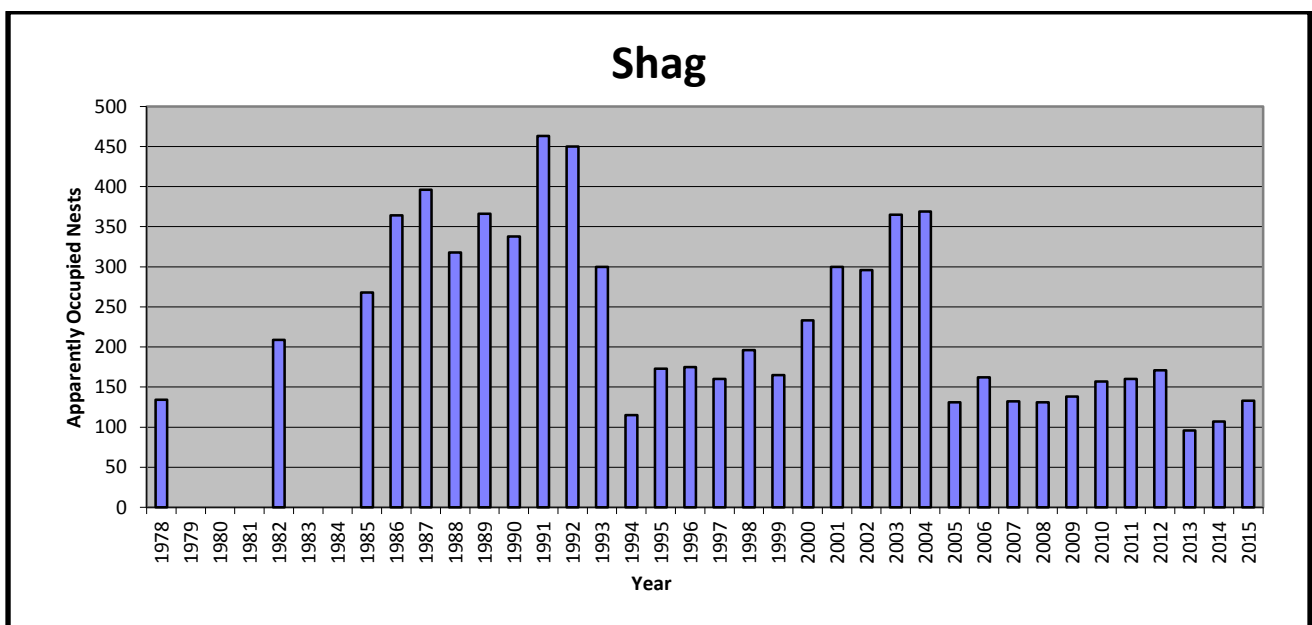
Shag

Whole Colony Count

A count of apparently occupied nests (AON ie a well-built nest capable of holding eggs with at least one bird in attendance) was carried out on 25th, 26th and 27th May. Blind spots were counted from a boat on 11th, 12th and 29th June.

Results

133 AON were counted, an increase of 24% on the 2014 count of 107 AON. This is the second year of population increase since the wreck in the winter of 2013 which led to the lowest count on record. It represents 95% of the 10 year mean of 139 AON, and 56% of the 31 year mean of 236 AON.



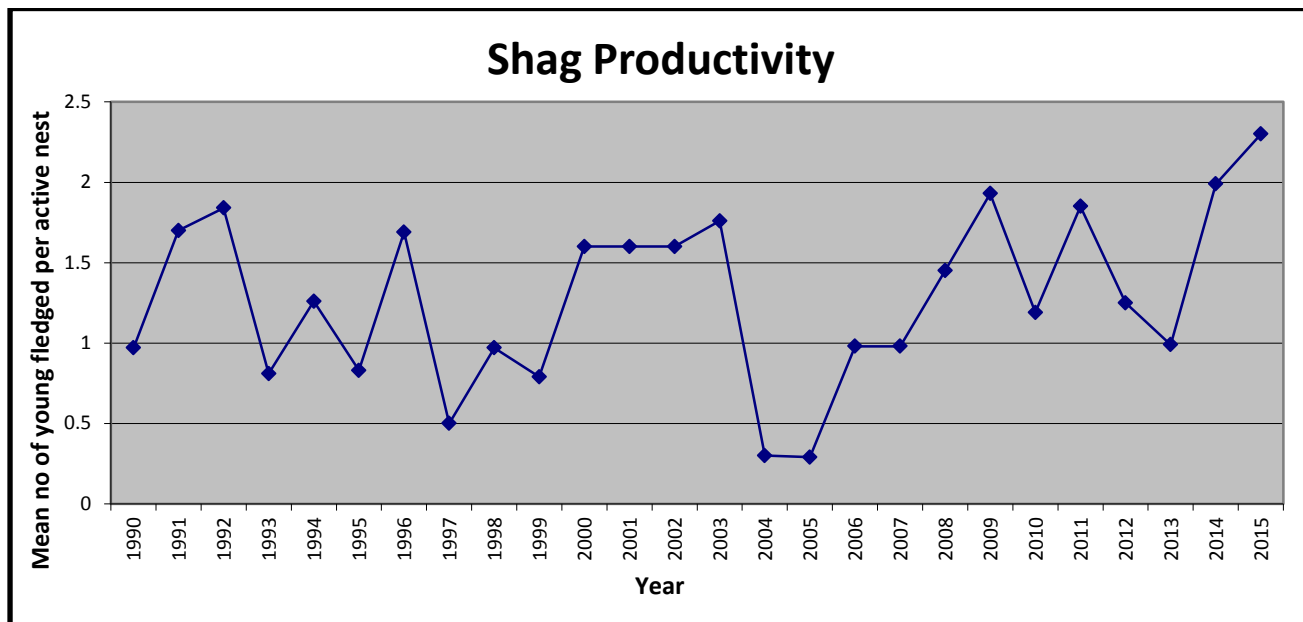
Breeding Success

An assessment of Shag breeding success was carried out using methods described in the 1990 report and following recommendations in the Seabird Monitoring Handbook. Nests were individually mapped on monitoring plots and 14 visits were made to the 4 monitoring plots between the 4th April and 4th September to record the progress of each nest up to fledging.

Results

A total of 58 active nests were mapped on the plots and 135 chicks successfully fledged. The breeding success, expressed as the mean of the individual plot figures, was 2.30 young fledged per active nest. This is an increase of 16% on the 2014 figure of 1.99 chicks fledged per active nest. This is the second consecutive year of good productivity and the highest figure

on record. It represents 202% of the 10 year mean of 1.49 and 178% of the 26 year mean of 1.29 chicks fledged per active nest.



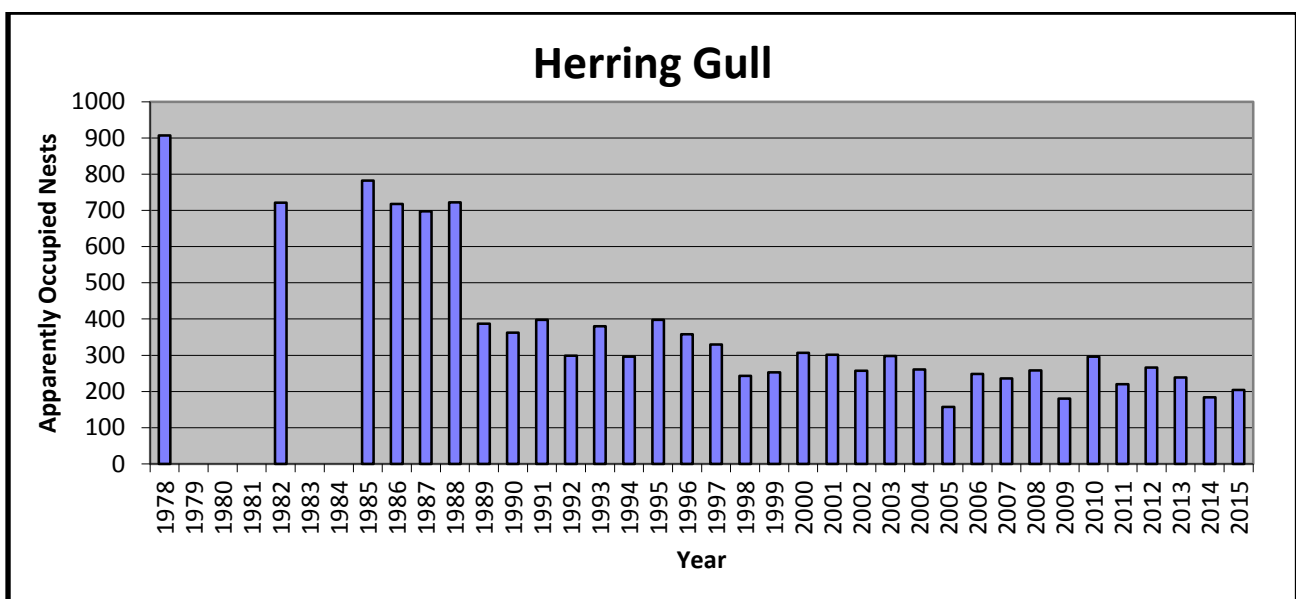
Herring Gull

Whole Colony Count

A whole colony count of apparently occupied nests (AON) was carried out on 25th, 26th and 27th May. Blind spots were counted from a boat on 10th June.

Results

184 AON were counted, an increase of 11% on the 2013 count of 184 AON. This is up on last year, but still the fourth lowest count on record. It represents 88% of the 10 year mean of 233 AON, and 60% of the 31 year mean of 340 AON.



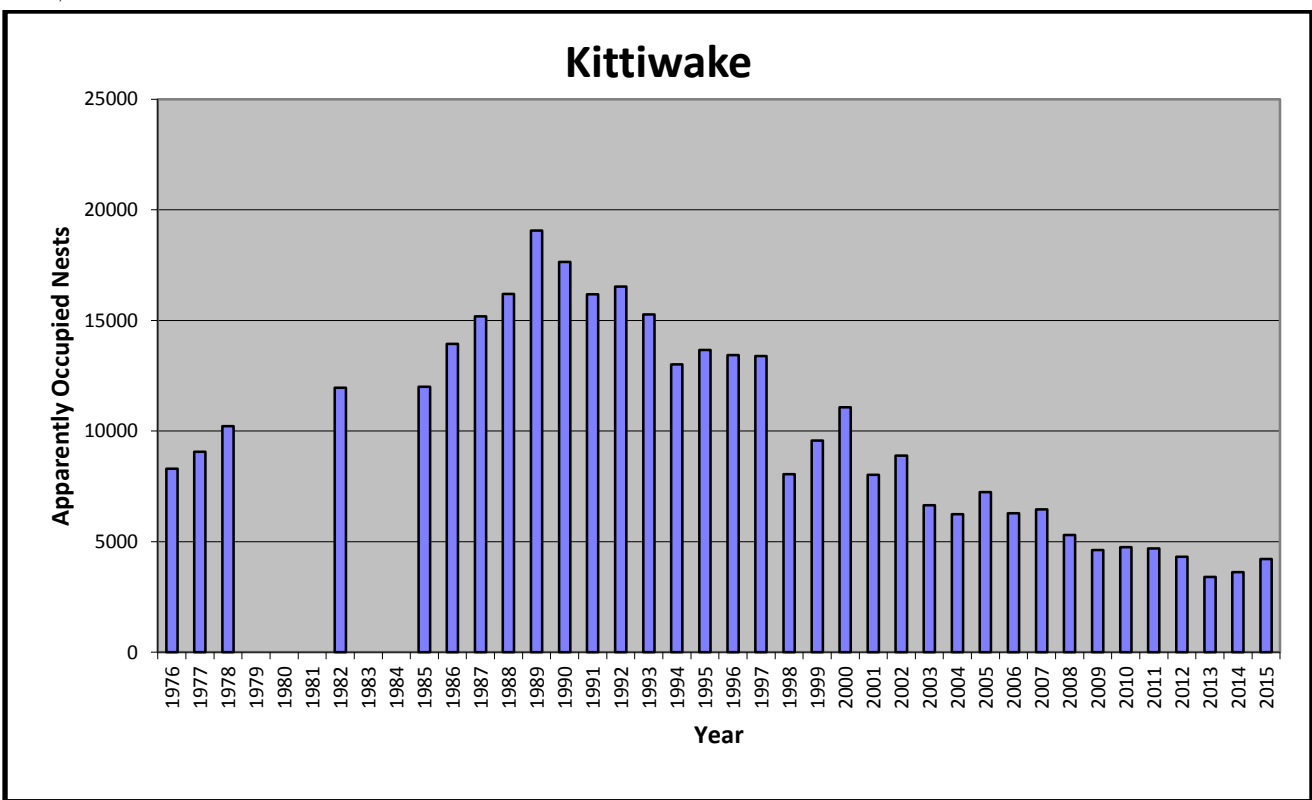
Kittiwake

Whole Colony Count

A count of apparently occupied nests (AONs) was carried out on 15th, 18th, 19th, 21st, 22nd, 23rd, 25th June and 1st July. Blind spots were counted from a boat on 29th June.

Results

4,209 AON were counted, an increase of 16% on the 2014 count of 3,625 AON. Kittiwakes have now seen two year's growth in numbers, but this is still the third lowest count on record. It represents 88% of the 10 year mean of 4,765, and just 42% of the 31 year mean of 9,964 AON.



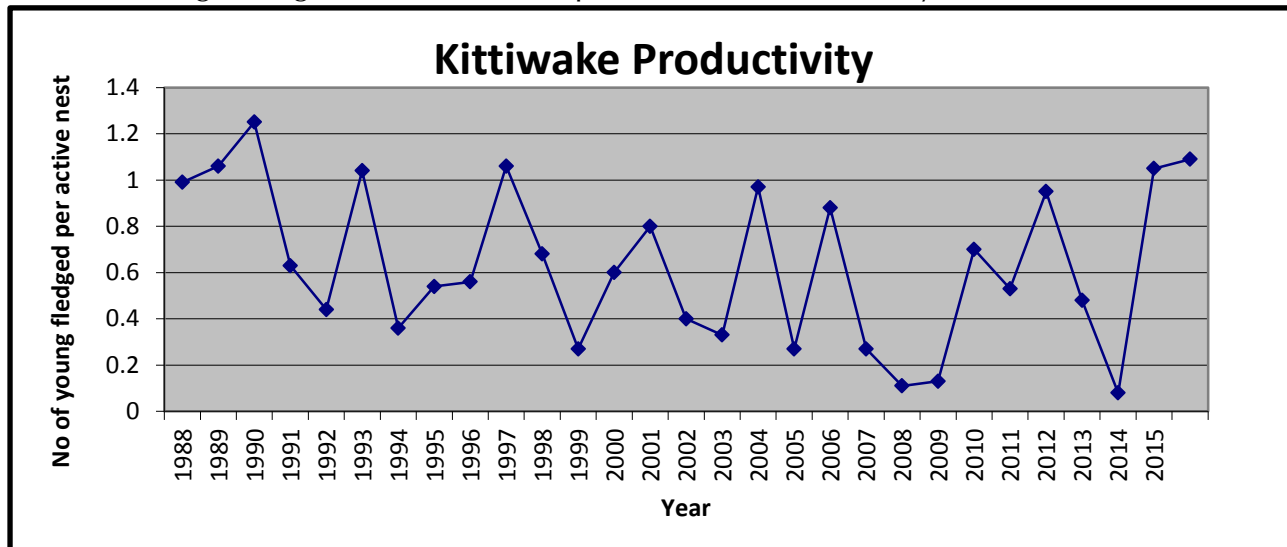
Breeding Success

An assessment of breeding success was carried out using methods described in the 1995 Report following recommendations from the Seabird Monitoring Handbook. Each of the plots was visited on 23rd May when all nests were marked on laminated photographs of the plots, then again on 10 further occasions up to 10th August to check the progress of each nest up to fledging.

Results

The productivity, expressed as the mean of individual plot figures, was 1.09 young fledged per AON. This is an increase of 4% on the 2014 figure of 1.05 young fledged per active nest, and

the second highest figure on record. It represents 154% of the 10 year mean of 0.54 and 17



0% of the 29 year mean of 0.64 chicks fledged per active nest.

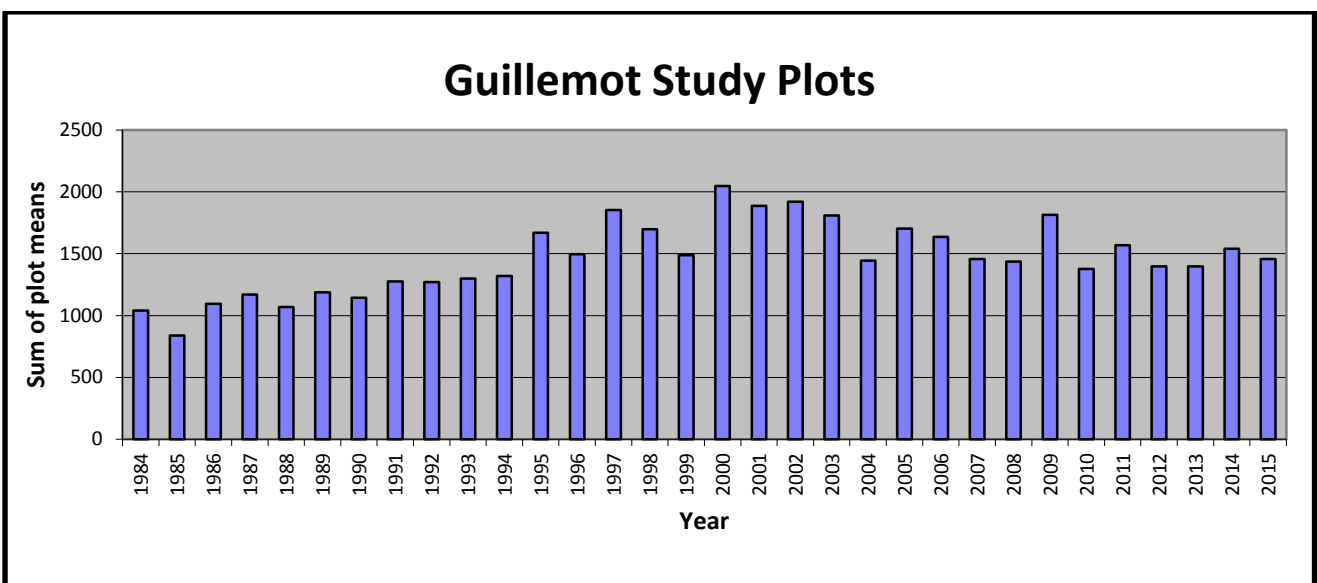
Guillemot

Counts at Monitoring Plots

Eight counts of individual birds on ledges were carried out at each of the five plots between 1st & 19th June.

Results

The sum of the plot means was 1,457 individuals, a 5% decrease on the 2014 figure of 1,541 individuals. This represents 97% of the 10 year mean of 1508 and 100% of the 32 year mean of 1463.



Breeding success

An assessment of breeding success of guillemots was carried out for the second time this year. This was broadly following the method from the Seabird Monitoring Handbook with amendments suggested by Mike Harris (Co-author of the handbook). Fifty Apparently Occupied Sites (AOS) were individually marked on photographs of each of the 2 monitoring plots selected, and 33 visits were made to observe progress at each AOS between 2nd May and 16th July.

Results

The breeding success, expressed as the mean of the individual plot figures, was 0.65 young fledged per active nest. This is a 41% increase on the 2014 figure of 0.46 chicks fledged per active nest. However, the monitoring method is still being refined and so these results should be treated with caution.

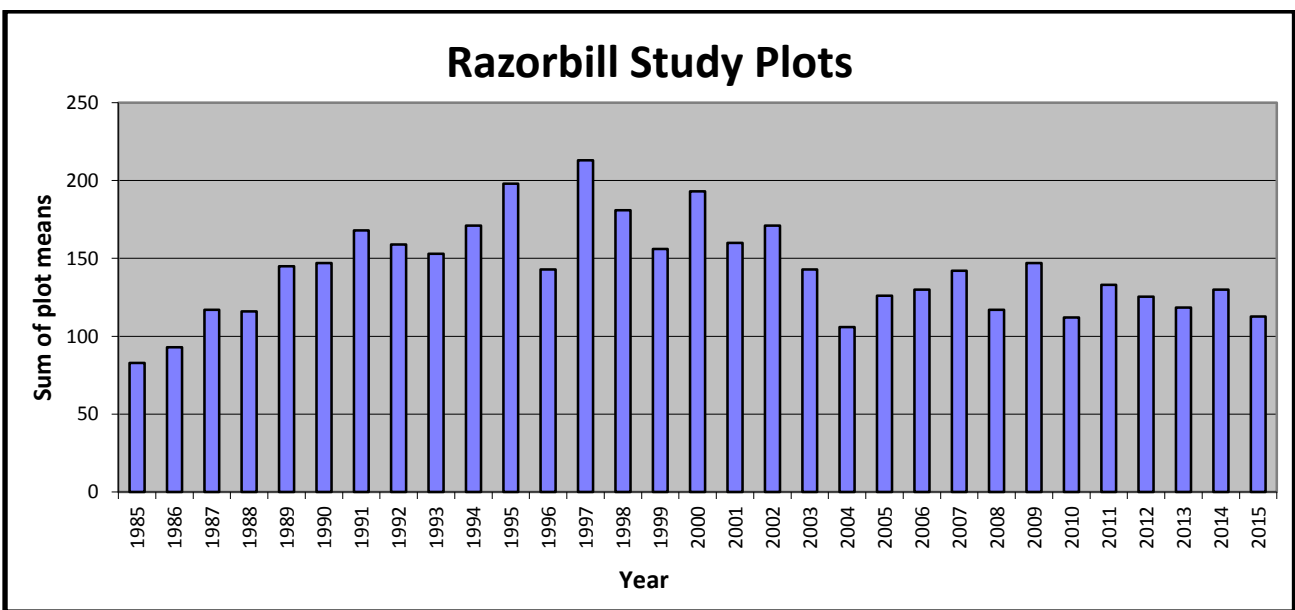
Razorbill

Counts at Monitoring Plots

Eight counts of individual birds on ledges were carried out at each of the five plots between 1st and 19th June (as for the guillemots).

Results

The sum of plot means was 113 individuals, a decrease of 13% on the 2014 figure of 130 individuals. This represents 89% of the 10 year mean of 127 and 80% of the 32 year mean of 141.



Breeding success

An assessment of breeding success of razorbills was carried out this year, broadly following the method from the Seabird Monitoring Handbook with amendments suggested by Mike Harris (Co-author of the handbook). Twenty five Apparently Occupied Sites (AOS) were individually marked on photographs of each of the 2 monitoring plots, and 33 visits were made to observe progress over the season.

Results

The breeding success, expressed as the mean of the individual plot figures, was 0.33 young fledged per AOS. This is a 23% decrease on the 2014 figure of 0.43 chicks fledged per AOS. However, the monitoring method is still being refined and so these results should be treated with caution.

Puffin

Unlike this year, very small numbers of puffins were seen ashore on a few occasions during the season and an evening count on the 30th June found 4 birds ashore.

