Humphries S (Sophie)

From: Gayle.Holland@gov.scot
Sent: 08 December 2017 12:58

To: Sarah Arthur

Cc: Tom Young; Andrew Blyth; Jim.McKie@gov.scot; Nicola.Bain@gov.scot;

Tracy.McCollin@gov.scot; Sophie.Humphries@gov.scot

Subject: RE: Response to ICOL scoping opinion ornithology questions 8 September 2017 **Attachments:** 2017 12 07 Forth and Tay - Offshore windfarm - ornithology - updated Ap....docx

Categories: Purple Category

Hi Sarah,

Please see below comments from SNH and an updated colony count table.

Kind Regards

Gayle

SNH comments:

Having reviewed the table, the figure of 4803 was derived from an email that Inch Cape sent on 28th September, in which they indicated CEH had a more recent count of kittiwakes in St Abbs during 2017 of 4803. We did not check this figure against the SMP and how it related to the SPA or NNR. It seems that this figure does not yet appear in the SMP, but is a draft figure from counts made by NTS of the NNR in 2017.

We advise use of the 2016 SMP counts - the only recent year for which a complete census of the SPA has been completed. The use of a partial SPA count which lies further from the 5 year mean than the NNR count in 2016, and in a direction contrary to the long-term trend in population size is less preferred than the use of the last complete SPA count.

From: Sarah Arthur [mailto:sarah.arthur@redrockpower.co.uk]

Sent: 05 December 2017 12:36

To: Holland G (Gayle)

Cc: Tom Young; Andrew Blyth; McKie J (Jim) (MARLAB); Bain N (Nicola) (MARLAB); McCollin T (Tracy) (MARLAB);

Humphries S (Sophie)

Subject: RE: Response to ICOL scoping opinion ornithology questions 8 September 2017

Hi Gayle,

Apologies to contact you again but we have a further clarification on the colony count data provided by SNH which relates to the SPA count for kittiwakes at St Abbs Head to Fast Castle.

In the attached, SNH give a population estimate of 2779 pairs for kittiwakes at St Abbs Head to Fast Castle SPA in 2016 and an estimate of 4803 pairs for St Abbs Head NNR in 2017. The NNR is a part (but not all) of the SPA, therefore we are querying why the attached suggests that SNH consider that the lower figure of 2779 pairs is the estimate to use for the SPA when a higher number or pairs were counted in the NNR in 2017.

On checking the Seabird Monitoring Programme database, it appears:

- 1. That the 2779 pairs for 2016 actually refers to the NNR and not to the whole SPA.
- 2. Elsewhere in the SPA, a further 555 pairs were counted in 2016.

Therefore, please can you confirm that we should be using an estimate of <u>5358 pairs</u> for kittiwakes for the St Abbs Head to Fast Castle SPA population (i.e. the most recent count for the NNR plus the most recent counts from elsewhere in the SPA).

Many thanks, Sarah

Sarah Arthur Lead Environmental Specialist



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From: Gayle.Holland@gov.scot [mailto:Gayle.Holland@gov.scot]

Sent: 30 November 2017 15:18

To: Sarah Arthur <sarah.arthur@redrockpower.co.uk>

Cc: Tom Young < tom.Young@redrockpower.co.uk; Andrew Blyth < andrew.blyth@redrockpower.co.uk; Jim.McKie@gov.scot; Nicola.Bain@gov.scot; Tracy.McCollin@gov.scot; Sophie.Humphries@gov.scot

Subject: RE: Response to ICOL scoping opinion ornithology questions 8 September 2017

Hi Sarah,

Thank you for contacting MS regarding an apparent error in the illustrative example for calculating non-breeding season effects. SNH have responded as follows:

"Illustrative Example Query

The principles illustrated in the example have clearly been followed and this has enabled Inch Cape to understand the approach to calculating the non-breeding seasons as we had hoped and to adjust for the difference between the non-breeding season periods defined by Furness (for the whole UK) and for SNH (relating to Scotland). In their assessment they have identified an error – this is correct, the example contains an error relating to the information provided on seasons and differences in the seasons defined in the scoping opinion, SNH season guidance and this illustrative example – leaving a lack of clarity on the seasonal period and any adjustment factor to be applied. We agree that this is an error and we confirm that Inch Cape should apply the corrections as outlined in their email to you dated 28th November 2017."

You previously raised several queries regarding colony counts, which have been responded to via several separate emails. To provide clarity I asked SNH to update the colony count appendix which was included in the scoping opinion to include these recent exchanges so this is also attached for your information.

Please contact me if you have any further queries Kind regards Gayle

From: Sarah Arthur [mailto:sarah.arthur@redrockpower.co.uk]

Sent: 28 November 2017 10:59

To: Holland G (Gayle)

Cc: Tom Young; Andrew Blyth; McKie J (Jim) (MARLAB); Pacitti F (Frances); Bain N (Nicola) (MARLAB); McCollin T

(Tracy) (MARLAB); Humphries S (Sophie)

Subject: RE: Response to ICOL scoping opinion ornithology questions 8 September 2017

Hi Gayle,

Further to the emails below, regarding the SNH advice on calculating non-breeding season collisions, we have identified what we believe to be some errors in the approach.

SNH accepted the ICOL suggested amendments we sent previously, which means that the calculation of the non-breeding season collisions will be based on the information and approaches outlined in Furness (2015), the East Anglia THREE assessment and the recent Crown Estate (TCE) 'headroom' report.

Whilst checking through our own calculations for non-breeding season collisions, ICOL have come upon and error in the SNH approach and the associated illustrative example they provided (and which I have attached). This error relates to the differences in the gannet seasonal periods between that advised in the Scoping Opinion (based on SNH advice) and that which has been used in other recent assessments and which is taken from Furness (2015).

To calculate non-breeding collisions for gannet during the autumn passage period, the SNH worked example states that there is no need for any adjustment to be applied because the lengths of the respective autumn passage periods are the same according to the SNH advice and Furness (2015), albeit that they encompass different months (see 3rd paragraph on pg 6 of the attached). Thus, SNH state that Furness (2015) gives the autumn passage period as September to November, whilst the SNH advice is that this period extends from October to December. However, this is incorrect because the Scoping Opinion advises that the gannet autumn passage period should be October to November (paragraph 5.6.4). This is 30 days less than the period advised by Furness (2015). As such, a correction (=0.67) should be applied to the autumn passage collisions calculated using the information from East Anglia THREE and TCE report.

Similarly, the SNH illustrative example is also incorrect in assuming that the Scoping Opinion advises a spring passage period of January to mid March, when it is in fact December to mid March. This means that the correction to be applied to the calculated spring passage collisions for gannet should be 0.86 and not 0.62 as indicated in the SNH example.

Please can SNH confirm that they are happy for us to apply the corrections as stated above.

Many thanks, Sarah

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From: Gayle.Holland@gov.scot [mailto:Gayle.Holland@gov.scot]

Sent: 08 November 2017 16:13

FORTH & TAY SEABIRD POPULATION COUNTS - Updated Appendix A(ii) - Forth and Tay Scoping Opinions - November 2017

Table 4a. Most recent population counts for the key seabirds and SPAs of relevance to the Forth and Tay offshore wind farm reassessments – gannet, kittiwake, herring gull and puffin.

Species	SPAs	SPA citation population	P/I	SNH/JNCC 2014 advice: SPA counts	P/I	SNH/JNCC 2014 advice: dates of counts	Most recent counts	P/I	Dates of most recent counts
Gannet	Forth Islands	21,600	Р	55,482 [§]	Р	2009	75,259	Р	2014
Kittiwake	Buchan Ness / Collieston Coast	30,452	Р	12,542 [§]	Р	2007	11,482	Р	2017
	Forth Islands	8,400	Р	3,776 [§]	Р	2012	4,663	Р	2017
	Fowlsheugh	36,650	Р	9,337 [§]	Р	2012	9,655	Р	2015
	St. Abb's Head to Fast Castle	21,170	Р	6,317 [§]	Р	Trend applied	3,334	Р	2016
	St Abb's Head NNR	13670	Р	4314	Р	2012	2,779	Р	2016
Herring Gull	Buchan Ness / Collieston Coast	4,292	Р	3,079 [§]	Р	2007	3,115	Р	2017
	Forth Islands*	6,600	Р	5,027 [§]	Р	2002	6,580	Р	2014-2017
	Fowlsheugh	3,190	Р	259 [§]	Р	2012	125	Р	2015
	St. Abb's Head to Fast Castle	1,160	Р	356 [§]	Р	Trend applied	325	Р	2016
	St Abb's Head NNR	398	Р	266	Р	2012	197	Р	2016
Puffin	Forth Islands	14,000	Р	50,282	Р	2009	45,005	Р	2009-2017

^{*} Please be aware that herring gull at Forth Islands SPA and fulmar at Forth Islands SPA and Fowlsheugh SPA may not qualify as designated interests.

Buchan Ness / Collieston Coast counted 2016-17.

 $[\]$ Our 2014 advice used number of individuals – converted to pairs (0.5*individuals) for consistency.

Table 4b. Most recent population counts for the key seabirds and SPAs of relevance to the Forth and Tay offshore wind farm reassessments – Guillemot and Razorbill.

Species	SPAs	SPA citatio n popula tion	P/I	SNH/ JNCC 2014 advice: SPA counts	P/I	SNH/JNCC 2014 advice: dates of counts	Most recent counts	P/I	Dates of most recent counts	SNH / JNCC 2014 advice: SPA counts	Date - Unit	Most recent Counts	Date - Unit
Guillemot**	Buchan Ness / Collieston Coast	17280 ^à	I	25,857	Converted Pairs	2007	45,067	Converted Pairs	2017	19,296	2007-1	33,632	2016/17 - I
	Forth Islands \$	8000 ^x	I	29,169	Converted Pairs	2011	38,573	Converted Pairs	2017	21,768	2011 - I	28,786	2017 - I
	Fowlsheugh	56,450	-	60,193	Converted Pairs	2012	74,379	Converted Pairs	2015	44,920	2012 - I	55,507	2015 - I
	St. Abb's Head to Fast Castle	31,750	1	58,617	Converted Pairs	1998/2000 ***	48,516	Converted Pairs	2016	43,744	2000 - 1	36,206	2016 - I
	St Abb's Head NNR			54,565	Converted Pairs	2000	45,060	Converted Pairs	2016	40,720	2000 - I	33,627	2016 - I
Razorbill**	Forth Islands \$	2,800 ³	I	4,649	Converted Pairs	2011	7,792	Converted Pairs	2017	4649	2011 - I	5815	2017 - I
	Fowlsheugh	5,800	I	7,048	Converted Pairs	2012	9,950	Converted Pairs	2015	5,260	2012 - I	7,426	2015 - I
	St. Abb's Head to Fast Castle	2,180	I	4,230	Converted Pairs	2000	2,770	Converted Pairs	2016	3,157	2000-l	2,067	2016 - I
	St Abb's Head NNR			2,967	Converted Pairs	2000	2,290	Converted Pairs	2016	2,214	2000-1	1,709	2016 - I

Buchan Ness / Collieston Coast counted 2016/17.

- a The SPA citation uses number of pairs so converted to number of individuals (2*pairs) for consistency.
- \$ Forth Island counts for 2017 came from CEH but were not available on SMP at the time of circulation to double check whether the counts provided were Individuals or pairs.

 They were treated as Individual counts in the far right two columns and converted in the middle columns.

^{**} For guillemot and razorbill the counts were converted to 'individuals on land equivalent' then corrected using (x 1.34) to give total breeding adults in population. While we acknowledge this correction factor may need review (as per Harris et al. 2015. *Bird Study*: 62, 276-279.), discussions on this are ongoing and we are not in a position to agree an updated correction factor at this time.

^{***} Best available estimate at the time of our 2014 advice.