





Subject	Minutes of meetin	g: Forth and Ta	ay Regional Advis	ory Group –	Ornitholog	gy sub	-group (FTR	AG-O)
Meeting location	SNH, Battleby, Pert	th						
Meeting date	02 Jul 2019	Minutes by	NnG			te ued	28 Aug 202 9 Oct 2019	
Attendees	Emma Ahart (EA) Mike Armitage (MA Colin Barton (CB) Phil Bloor (PB) Nick Brockie (NB) Tom Evans (TE) Catriona Gall (CH) Murray Grant (MG Gayle Holland (GH Ben King (BK) Sarah Arthur (SA) Erica Knott (EK) Aly McCluskie (AM Sue O'Brien (SO') Glen Tyler (GT) Helen Wade (HW) Ewan Walker (EW)	A) RPS Cork Pela Seag MSS SNH 6) RHD Inch Inch SNH 1) RSPI NCC SNH SNH	OV (Inch Cape) LOT Cape Cape	Apologies	Jared Wil	ilson (JW)	MSS
Distribution	Attendees + Apolog	gies						



Minutes of Meeting

NNG-NNG-ECF-MOM-0004



Meeting minutes

Ref	Item / Action	Who	When	Status
01	Minutes of last meeting. The Minutes from the previous FTRAG-O meeting held on 4 October 2018 were circulated to the group on 27 November 2018. There were no additional comments to the Minutes and all outstanding actions had been completed.	РВ	N/A	Closed
	No further action required.			
02	Project updates. EW for Neart na Gaoithe, BK for Inch Cape and NB for Seagreen each updated the Group on progress being made for each of their projects.	EW, BK NB	N/A	Closed
	No further action required.			
03	Aerial bird monitoring. The developers informed the Group of the collaborative aerial bird monitoring programme being undertaken across all four wind farms in the Forth and Tay area that started in April 2019. This follows on from the separate monthly surveys that have been undertaken by NnG since June 2018. By working collaboratively coverage over a wider regional area is being undertaken using a consistent approach.	EW, BK NB	By next meeting	Open
	All the wind farm areas and up to a 12 km buffer are surveyed over the course of one day along 2 km spaced transects. All the developers have committed to undertaking the monthly surveys until April 2020 but it was too early to commit to future surveys beyond this.			
	EK suggested that a FTRAG meeting after the forthcoming CfD decision would be a good time to agree a way forward for surveys beyond April 2020.			
	AM pointed out that as there was potential for a relatively long period of construction across all four wind farms that impacts on seabirds during the construction period should not be ruled out and therefore consideration of continuing surveys during the construction period was required. AM also stated that there could be a potential five-year "black hole" in the dataset if no surveys were conducted in the construction period, and that there could be implications resulting from this such as diluting the power of any post-construction statistical analysis.			
	CG asked if it would be better to focus on post-construction in order to get a better handle on displacement rates in the operational phase.			
	HW stated that a five-year data gap would be quite considerable so it would be better to do some survey work in the construction period. GH suggested that there could be some survey work conducted in the breeding seasons in seasons with greater construction activity.			
	EK and MA stated that the key concern is the operational phase but that it would be good to consider a compromise to do some level of monitoring in the construction period.			
	An update on the aerial survey programme would be provided at the next meeting.			
04	Aerial bird monitoring.	EW, BK,	By next meeting	Open
	SNH requested a written copy of the aerial survey methods being used, including the use of different numbers of planes.	NB		
05	Aerial bird monitoring. AM acknowledged that the strategic monitoring approach over a bigger survey area was welcomed by the whole FTRAG group. AM also asked whether the survey start times took into consideration	EW, BK, NB	By next meeting	Open



NNG-NNG-ECF-MOM-0004



Ref	Item / Action	Who	When	Status
	the differing diurnal behaviours of seabirds that could affect the numbers and possibly offshore distributions recorded by the surveys. Also would it be possible to compare the data from the aerial surveys with existing and future tracking data.			
	EK recommended looking at tagging data in relation to flight activity to determine when birds are most active.			
	BK stated that it would be better to look at the whole aerial survey dataset at the end of the surveys, rather than do any analysis part way through the survey programme.			
	Developers to consider this for next meeting.			
06	Aerial bird monitoring. Discussion over the width of the buffer area around each wind farm. Currently NnG have been undertaking surveys with a 12 km buffer around the NnG wind farm area. Seagreen also have a 12 km buffer but are considering reducing it during the 'winter' period to either 4km or 8km. Inch Cape have a 4 km buffer around their wind farm. There was general agreement that the minimum buffer should be no less than 4 km although wider buffer areas could be considered.	КВ	By next meeting	Open
	EK stated that Seagreen should provide a briefing note and an updated survey area map outlining their plans to reduce the buffer area, in order to seek agreement on this.			
	AM stated that RSPB are ok with a reduction to 6 or 8 km in the non-breeding season.			
	BK sought confirmation from SNH and RSPB that the 4 km buffer for Inch Cape is considered sufficient, which was given by EK and AM.			
	Seagreen to provide note on potential reduction of buffer area for SNH			
07	GPS tracking. GPS tracking has been undertaken by CEH for NnG on kittiwake, guillemot, razorbill and puffin during 2018 and 2019 of the Isle of May. Following issues with device effects on puffins discussed at the previous meeting, a decision was made by the group to conduct additional puffin tracking with caution in the 2019 breeding season. This has commenced with no similar issues experienced last year.	N/A	N/A	Closed
	Both GT and AM stated that tracking studies on Isle of May breeding species should be continued through the construction period. TE made the point that tagging studies would provide useful context.			
	No action required			
08	GPS tracking. AM suggested that the use of accelerometers and altitude meters using tags from the University of Amsterdam should be considered for future monitoring, particularly on kittiwakes to help inform flight heights. MG questioned the reliability of altimeters on these tags. Both AM and TE confirmed that the altitude meters had been validated and MW confirmed that they were currently being used on large gulls at Walney Island.	EW, BK, NB	By next meeting	Open
	TE highlighted that base stations for the University of Amsterdam tags are more expensive than other systems, which is a potential issue.			
	It was agreed that their potential use would be discussed with Francis Daunt of CEH and discussed further at the next FTRAG meeting.			
09	GPS tracking. There was a general discussion on whether covariates such as chlorophyll a could be used as a proxy for prey and therefore help identify seabird distributions.	BK/All	By end of July	Open



NNG-NNG-ECF-MOM-0004



Item / Action	Who	When	Status
It was agreed that Inch Cape (BK) would provide further ideas on how to determine what drivers there are on seabird distributions. An action on all Group members to propose ideas on potential future studies looking at the covariates that effect seabird distribution.			
GPS tracking. There was discussion on the potential monitoring that may be required at other seabird colonises aside from the Isle of May and the Bass Rock, e.g. Fowlsheugh and St Abb's. Also there is existing population data at both sites to be analysed. The RSPB have conducted a preliminary review of this data. There is also some work being done on data from breeding colonies in northern England.	All	Before next meeting	Open
EA stated that Seagreen are currently planning on doing tagging in 2020 at Fowlsheugh and St Abbs, with RSPB and National Trust, although this is dependent on access issues.			
BK stated that Inch Cape are considering doing some tracking work, either something complimentary or could look at a new study.			
PB made the point that to date there had been no studies conducted at non-SPA breeding colonies.			
EK asked for ideas to augment tracking work that Inch Cape could consider to be submitted by end of July – these could then be discussed further at a FTRAG meeting after the CfD decision.			
Further thoughts and ideas on what could be done to augment the existing tracking work.			
Population monitoring. It was recognised that population monitoring including the monitoring of productivity could be important in the assessment of potential impacts.	EW, BK, NB	By next meeting	Open
No specific proposals were put forward and it was left to developers to prepare reports on future potential monitoring			
Bass rock gannet tracking. Currently, there is no funding for further tracking of gannets at the Bass Rock beyond 2019. AM and GT thought that tracking should continue during the construction period.	BK & EW	By next meeting	Open
BK to draft the specification for a potential tracking project for ORJIP.			
Bass rock colour ringing. There is an ongoing colour ringing project being undertaken on adult gannets on the Bass rock although it is only funded until the end of the current breeding season. Following a recommendation from Bob Furness at a previous FTRAG-O meeting, NnG have explored the potential for taking a monitoring study forward where adult survival at the Bass Rock is compared with another colony e.g. Grassholm. This would require a long-term study and would analyse adult survival rather than just wind farm impacts. Therefore EW suggested this may be more appropriately taken forward as a strategic study e.g. by government (potentially ScotMER) and funded by developers in the initial years. The Group felt that this was a useful study and should be continued without any breaks in the data collection as this could affect the future usefulness of the data when looking at potential population level impacts. The possibility of a strategic project being managed by ScotMER or under the new ORJIP project was discussed.	BK and EW	Before next meeting	Open
	It was agreed that Inch Cape (BK) would provide further ideas on how to determine what drivers there are on seabird distributions. An action on all Group members to propose ideas on potential future studies looking at the covariates that effect seabird distribution. GPS tracking. There was discussion on the potential monitoring that may be required at other seabird colonises aside from the Isle of May and the Bass Rock, e.g. Fowlsheugh and St Abb's. Also there is existing population data at both sites to be analysed. The RSPB have conducted a preliminary review of this data. There is also some work being done on data from breeding colonies in northern England. EA stated that Seagreen are currently planning on doing tagging in 2020 at Fowlsheugh and St Abbs, with RSPB and National Trust, although this is dependent on access issues. BK stated that Inch Cape are considering doing some tracking work, either something complimentary or could look at a new study. PB made the point that to date there had been no studies conducted at non-SPA breeding colonies. EK asked for ideas to augment tracking work that Inch Cape could consider to be submitted by end of July – these could then be discussed further at a FTRAG meeting after the CfD decision. Further thoughts and ideas on what could be done to augment the existing tracking work. Population monitoring. It was recognised that population monitoring including the monitoring of productivity could be important in the assessment of potential impacts. No specific proposals were put forward and it was left to developers to prepare reports on future potential monitoring Bass rock gannet tracking. Currently, there is no funding for further tracking of gannets at the Bass Rock beyond 2019. AM and GT thought that tracking should continue during the construction period. BK to draft the specification for a potential tracking project for ORJIP. Bass rock colour ringing. There is an ongoing colour ringing project being undertaken on adult gannets on the Bass rock although i	It was agreed that Inch Cape (BK) would provide further ideas on how to determine what drivers there are on seabird distributions. An action on all Group members to propose ideas on potential future studies looking at the covariates that effect seabird distribution. GPS tracking. There was discussion on the potential monitoring that may be required at other seabird colonises aside from the Isle of May and the Bass Rock, e.g. Fowlsheugh and St Abb's. Also there is existing population data at both sites to be analysed. The RSPB have conducted a preliminary review of this data. There is also some work being done on data from breeding colonies in northern England. EA stated that Seagreen are currently planning on doing tagging in 2020 at Fowlsheugh and St Abbs, with RSPB and National Trust, although this is dependent on access issues. BK stated that Inch Cape are considering doing some tracking work, either something complimentary or could look at a new study. PB made the point that to date there had been no studies conducted at non-SPA breeding colonies. EK asked for ideas to augment tracking work that Inch Cape could consider to be submitted by end of July – these could then be discussed further at a FTRAG meeting after the CFD decision. Further thoughts and ideas on what could be done to augment the existing tracking work. Population monitoring. It was recognised that population monitoring including the monitoring of productivity could be important in the assessment of potential impacts. No specific proposals were put forward and it was left to developers to prepare reports on future potential monitoring Bass rock gannet tracking. Currently, there is no funding for further tracking of gannets at the Bass Rock beyond 2019. AM and GT thought that tracking should continue during the construction period. Bk to draft the specification for a potential tracking project being undertaken on adult gannets on the Bass rock although it is only funded until the end of the current breeding season. Following a recomm	It was agreed that Inch Cape (BK) would provide further ideas on how to determine what drivers there are on seabird distributions. An action on all Group members to propose ideas on potential future studies looking at the covariates that effect seabird distribution. GPS tracking. There was discussion on the potential monitoring that may be required at other seabird colonises aside from the Isle of May and the Bass Rock, e.g. Fowlsheugh and St Abb's. Also there is existing population data at both sites to be analysed. The RSPB have conducted a preliminary review of this data. There is also some work being done on data from breeding colonies in northern England. EA stated that Seagreen are currently planning on doing tagging in 2020 at Fowlsheugh and St Abbs, with RSPB and National Trust, although this is dependent on access issues. BK stated that Inch Cape are considering doing some tracking work, either something complimentary or could look at a new study. PB made the point that to date there had been no studies conducted at non-SPA breeding colonies. EK asked for ideas to augment tracking work that Inch Cape could consider to be submitted by end of July – these could then be discussed further at a FTRAG meeting after the CTD decision. Papulation monitoring. It was recognised that population monitoring including the monitoring of productivity could be important in the assessment of potential impacts. No specific proposals were put forward and it was left to developers to prepare reports on future potential monitoring Bass rock gannet tracking. Currently, there is no funding for further tracking of gannets at the Bass Rock beyond 2019. AM and GT thought that tracking should continue during the construction period. BK to draft the specification for a potential tracking project for ORIIP. Bass rock colour ringing. There is an ongoing colour ringing project being undertaken on adult gannets on the Bass rock although it is only funded until the end of the current breeding season. Following a recommendation



NNG-NNG-ECF-MOM-0004



Ref	Item / Action	Who	When	Status
	AM noted that the priority was to ensure that there is no gap in colour ringing studies at the Bass or Grassholm. GT stated that as this would be a wider and longer term study, it would be useful to continue this.			
	EW noted that a discussion paper had been prepared by NnG following discussions with Keith Hamer and Steve Votier.			
	EW to circulate discussion paper prior to next meeting			
	BK to report back on ORJIP possibilities			
14	Collision and displacement monitoring. There were no proposals on future displacement and collision monitoring but potential monitoring requirements would need to be discussed at least 18 months prior to the start of post-construction monitoring.	N/A	N/A	Open
	EK highlighted that turbine engineers need to be made aware that monitoring systems will need to be fitted to turbines.			
15	NB highlighted that Seagreen's Ornithology Monitoring Strategy (OMS) had been circulated and that these will be commented on at future PEMP meetings and would feed back to developers of any changes needed for the OMS.	NB	By next meeting	Open
	Seagreen to feed back to developers of any changes needed for OMS.			
16	BK tasked with sending round doodle poll for next meeting, likely late September/early October	ВК	July 2019	Open