











Meeting:	Forth and Tay Regional Advisory Group – Ornithology Subgroup	
Location:	Virtual meeting	
Date, Time :	10:00-12:00, 07/03/2023	
Attendees:	Abby Gray (AGr); Alexander Gilliland (AG); Aly McCluskie (AM); Andrew Logie (AL) - Chair; Caitlin Cunningham (CC); Colin Barton (CB); Ellie Noble (EN); Emily Nelson (ENe); Francis Daunt (FD); Gayle Holland (GH); Joe Deimel (JD); Jude Lane (JL); Karen Taylor (KT); Maria Bogdanova (MB); Murray Grant (MG); Phil Bloor (PB); Polly Tarrant (PT); Rebecca Hall (RH); Sarah Arthur (SA); Simon Zisman (SZ).	
Apologies	Catherine Kelham; Claire Gilchrist; Drew Milne; Ed Thompson; Ed Maxwell (EM); Erica Knott; Gavin Kelly; Heather Shaw; Jane Renwick; Jared Wilson; Jelmer Samplonius; Julie Miller; Juliet Shrimpton; Rebecca Bamlett; Richard Howells; Stephanie Sweeting; Sue O'Brien.	

Minutes taken by:	Emily Nelson (SSE Renewables)
Date Issued – Draft for Comment:	16/03/2023
Date issued - Final:	XX/03/2023

Minutes			
Agenda Ref	Topic (Actions are identified in red)	Action status (open/closed)	Action owner and deadline
1.0	Introductions (New Group Members)		
	EN – note that Nick Brockie has moved on from Seagreen to work within another team at SSER. EN and EM representing Seagreen on the FTRAG-O until the site is handed to the operations team.		
2.0	Previous Minutes and Action Register Review (Chair)		
	AL – highlighted the email from CC circulated on 03/03/2023 which provided an update on NatureScot actions. Confirmed that the Action Register has been updated to reflect these points. No queries were raised from the group on the email. AL - Outstanding on the Action Tracker:		
	No. 9: Raise at the upcoming ScotMER coordination meeting the possibilities of monitoring of immature gannets through ScotMER.	Open	NatureScot













Forth a	and Tay Regional Advisory Group (FTRAG)	iviinutes (or ivieeting
	CC – NatureScot will advise in due course.		
	No. 10: FTRAG to contact NRW to highlight that Bass Rock/Grassholm research is ongoing. GH to pass on contacts for PT in the first instance.	Open	FTRAG
	AL – This was changed to a low priority action during the November 2022 FTRAG-O meeting, with FTRAG to contact NRW if the opportunity arose. Any updates?		
	GH – no updates.		
	No. 13: PT and FD to discuss the use of the NnG aerial survey auk distribution data over August to October. PT – Still to be discussed. Results from the NnG aerial surveys were still pending during the November 2022 FTRAG-O meeting. FD – Agreed.	Open	PT/FD
	No. 18: FTRAG members to share material for posters/talks prior to conferences.	Open	FTRAG
	AL – Are there any comments or thoughts on upcoming conference needs? Conference on Wind Energy and Wildlife Impacts? No responses.		
	No. 20: Circulate status of current and upcoming Marine Scotland projects.	Open	MSS
	AL – This action currently sits with GH and Tom Evans.		
	GH – Request to change action owner to MSS so that others can pick this up.		
	No. 22: Lessons Learned/Results Sharing: MSS and NatureScot to circulate strategic monitoring updates, including ScotMER work.	Open	AL
	AL – This action overlaps with No. 20 so I will amend the action tracker to ensure no doubling up on actions.		
3.0	Developer Updates		
3.1	Neart na Gaoithe		
	PT – Brief update. Second substation installed in December 2022. Ongoing drilling, casing and pile installation for jackets. Good progress made despite challenging winter conditions. Official opening of the		
	challenging winter conditions. Official opening of the O&M base in Eyemouth in January 2023 – happy to arrange a visit if members of the FTRAG-O are interested. An inter-array and export cabling campaign		













Forth a	ind Tay Regional Advisory Group (FTRAG)	Minutes	of Meeting
	is to start later in March 2023, with continued installation of jackets and then turbines and remaining cabling. Very busy summer 2023 ahead. The updated PEMP was approved in December 2022.		
3.2	Seagreen EN – 106 of 114 jackets have now been installed. The remaining jackets have left the Port of Nigg ready for installation. A total of 35 turbines are commissioned and exporting now. Landfall ducts to be completed in May 2023. Installation of interarray cabling and the final eight turbines is to be completed in Q2 2023.		
3.3	Inch Cape SA – Brief update. Seeking S.36 and marine licence variations for the existing consent. OfTW screening opinion now received. Looking to amend coordinates for the export cable now that an OSP location has been selected. A new marine licence will also be sought for required works to a seawall and outfall at the landfall location. First plans and programmes for construction will be late Q2 2023 at the earliest.		
3.4	Berwick Bank		
	AL – Consent application submitted early December 2022. Public consultations are still ongoing as extensions have been granted to the end of March 2023, later for planning authorities. Given the consultation is live, unable to comment in detail on the application. Good case for digital EIA as the application was 13,000 A4 pages in 19 folders. Focus now on design and engineering, suction caissons vs. pin piles and turbine selection ongoing. Geotechnical, supply chain and vessel availability decisions to be made, then FEED studies. If consent granted, would be looking to start construction in March 2025 so working to ensure expected long-lead consent conditions such as decommissioning and pre-construction survey plans are in place for this timeline.		
4.0	Monitoring Plans for 2023		
4.1	Tracking and colony monitoring - Isle of May, St Abb's and Fowlsheugh (UKCEH & RSPB)		
	Isle of May MB – Unused tags from last year (given the situation		













been stored and charged over the winter according to the manufacturer's instructions. A battery test will be carried out in the field ahead of deployment with sufficient time to address any unforeseen issues or order replacements if needed. No anticipated problems though. In touch with PathTrack and want to highlight that they are developing a new version of small tag with added pressure sensors which would be good for collecting flight height data. Also looking to include accelerometers which will help to quantify detailed behaviour, particularly for kittiwakes, but accelerometers collect a large volume of data so remote download presents challenges. PathTrack are working on this issue now, so it is something to consider for the 2024 season. For this season, fieldwork protocols are exactly the same as those agreed last year. Four species to be studied (kittiwake, guillemot, razorbill and puffin). Two types of tags will be used – combined GPS/TDR tags for guillemot and razorbill, GPS only for puffin as need the smallest tags for this species, and GPS only for kittiwake this year (but with the potential for new tags next year). For kittiwakes, attempts will be made to deploy on birds which have previously carried tags, which are identifiable from colour-rings. This would be a powerful approach to compare individual movements, behaviour and breeding success between pre- and postconstruction. Device effects will also be examined following the same protocols as previously used. For kittiwake this will involve nest observations to record changeover rates (as a proxy for foraging trip duration). Chick attendance and nest status up to fledging will be monitored to record breeding success, in both control and tagged birds. For puffin, chick feeding rates will be monitored for both control and tagged birds. As device effects have previously been recorded for puffin, supplementary feeding will be undertaken, with breeding success and chick body condition recorded. Additional work will be undertaken this year in relation to HPAI. Fieldworkers will check for signs of the virus and mortality. If HPAI is detected then UKCEH will work with reserve staff to monitor the situation. Blood and swab samples will be taken from tagged kittiwakes, guillemots and razorbills, but not puffin due to disturbance sensitivity. All work will be done following appropriate risk assessments, biosecurity protocols and NatureScot/BTO licensing conditions. FD - Protocols re. HPAI have not been finalised. NatureScot guidance in relation to HPAI is expected in













the next few weeks. The hope is that guidance will provide a nuanced 'decision tree' approach based on conditions on the ground. Specific information on this cannot be given today.

Questions

SZ - is the SSER AI camera proof of concept monitoring on the Isle of May continuing this year?

JD - understanding is that the plan is to continue this year.

AL – Berwick Bank are also proposing to use an AI camera to monitor kittiwakes at Dunbar castle as part of compensation measures. James Scobie can provide an update on this from SSER.

FD - please keep us updated on what exactly is being collected (in relation to kittiwakes at Dunbar Castle). PT —there is a need to acknowledge that blood and swab sampling is maximising value from bird handling - analysis and work around HPAI is being done outside the Forth and Tay monitoring work. This will increase handling time slightly.

FD – we don't anticipate additional handling time to cause any measurable effects on the birds. Three species (kittiwake, guillemot and razorbill) respond well to blood sampling. The Isle of May team have lots of prior experience with this type of sampling.

MB – experienced staff would undertake this work, so it would require minimal additional time. Increased handling time and long-term negative effects have been found to be minimal. This is a great opportunity to maximise handling – it will provide more complete information about these birds.

FD - fundamental question is whether asymptomatic birds have encountered the disease and are immune, or whether they haven't encountered it. Variability in HPAI effects were noted last year. The question of herd immunity through exposure is very important. Ultimately herd immunity is where these populations will get to – but we don't know how long this will take or how significant the effects will be.

AL – is there a feel for timescales as to when HPAI might be detected this year?

FD - no signs in guillemot which come and go during the winter on the Isle of May. Other species will start coming ashore in April and we will keep a close watch for signs of HPAI. Guillemot are behaving as usual so far. FD explained guillemot winter behaviour and colony attendance, with the species present for well over half the time from late Jan.













St. Abb's and Fowlsheugh

AM - lots of similarity with the work planned for the Isle of May, but only working with kittiwake at St. Abb's and Fowlsheugh. Aiming for max of 50 birds at each site, but may not achieve this. Where possible, the plan is to deploy on birds that have been tracked before, but this is only one aspect which determines which birds will be tagged. Accessibility and minimising disturbance, especially in context of HPAI, will also be considered. Device effects will be monitored by recording changeover rates and chick attendance until fledging, with breeding success recorded, as for the Isle of May. FD has already talked about HPAI considerations. At St. Abb's and Fowlsheugh, enhanced colony monitoring is already taking place through FTRAG and signs of HPAI will be detected as part of this. Staff will receive additional training to spot signs of the virus. If signs are found then the RSPB will work with reserve staff to monitor the situation. All monitoring and tagging will be carried out in accordance with licensing conditions from NatureScot/BTO. RSPB are working collectively on a decision tree with UKCEH to avoid the situation last year - this will allow us to be clear and transparent when making decisions. It will be site specific and dependent on colony characteristics (e.g. to avoid going through areas where birds are nesting). Contingency will be in place for all possibilities. All tagged birds will have blood samples and swabs taken, with this research separate from FTRAG monitoring, as for the Isle of May.

Questions

EN - Seagreen are trying to approve funding for this year's tagging. Two questions which would help with this 1) What are the timings between when the NatureScot guidance is issued, and when the work will happen on the ground? Seagreen are looking for certainty around how decisions will be made whilst fieldwork plans come together. Understand that if tagging does not go ahead there will be enhanced monitoring; and

2) What will the consequence be of two years of interrupted monitoring on PEMP obligations?

AM – to answer first question, RSPB aim to have staff on the ground by end of April. Even if no HPAI is detected at this stage, we will still monitor for it. Tagging would not go ahead until June. Understand that advice from













NatureScot will be received end of March. Not going to be a simple answer. There may be circumstances where we won't want to tag, and some where licenses will prohibit it. There is currently uncertainty about licencing and even more about the situation on ground. GH – to answer second question, a PEMP is a live document so monitoring requirements can be updated use this forum to discuss as the situation evolves. EN – are there likely to be additional monitoring requirements in remaining years, or additional years? GH – a PEMP is not set in stone, not in a position to say at this stage as to what will be required in future. MB - from an ecological perspective, not tracking last year is not so crucial as lots of data already from preconstruction. This year likely to be more important given construction programmes.

4.2 Gannet adult survival study – Bass Rock and Grassholm (RSPB and NnG)

Bass Rock

JL - focus is on survival monitoring as part of the Before-After-Control-Impact (BACI) study on the Bass Rock. Usually work would be undertaken in July, but this year there is a need to untangle impacts from HPAI and those from developments. Last year no baseline was collected as to which (colour-ringed) individuals were present before HPAI. This year there is a plan to go out in April (hopefully) before HPAI is present to gather this baseline If no HPAI is detected, then a further trip is planned for July to do monitoring work as usual. Given substantial mortality last year, subject to licensing there are plans to increase the number of colour-rings on breeding birds to boost the population of colour-ringed birds. Plan to do this in summer but depends on the situation on the ground. Some tags were deployed in April last year, but not all tags were used so there is an aim to put these out in April this year to collect high-resolution data from within development footprints (as last year). Blood sampling of handled birds will also be carried out, outwith the FTRAG monitoring work, to aid understanding of virus spread and levels of immunity in the population.

<u>Grassholm</u>

PT - Discussions and planning with Steve Votier from Heriot-Watt University and RSPB around trying to













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increase both resighting and colour-ringing effort at Grassholm this year. The picture on Grassholm is less certain as to what happened with HPAI last year. HPAI hit later in season (compared to the Bass Rock) and the colony is frequented less by researchers as the first boat charters are available in early May. Steve is actively discussing heading out in early April/May to do ringing and resighting work. This has historically been undertaken much later in the season when chicks are more mature. Plans will depend on how the HPAI situation evolves. The RSPB are applying for funding from NRW to charter a boat early in the season to aid the monitoring of HPAI in colony. The hope is to enhance the colour-ringed population and to resight early and late in the season.		
Seabird Interactions Study (NnG)		
PT - Brief update. Current focus is on technology side - testing of equipment before it is boxed and shipped ready for installation on jackets. Factory Acceptance Tests (FAT) have been undertaken on cameras to ensure the system works as expected. These are now boxed and ready for shipping (still in Portugal). Now testing the BirdTrack system (combined radar and camera) – ongoing discussions around a detailed design risk assessment e.g. installation requirements, and need for manuals. The radar support structure is bespoke for the NnG site so lots to discuss between the project and STRIX. Further FAT test on the BirdTrack system will be undertaken in Portugal in April/May. Plan is to install the first systems at the back end of the summer (Sep 23) in line with first commissioning - phased installation in line with phased commissioning. Planning a scientific kick-off meeting with the Advisory Panel in May. AL - are you still looking for responses on proposed meeting dates? PT - waiting for STRIX and then will issue a placeholder. [post meeting note: invite issued for 23 rd May, 11:00am]		
Digital Aerial Survey (NnG and BB)		
AL – Agenda item added as it is likely to be useful for the FTRAG and researchers, particularly ECOWINGS to have better sight of Digital Aerial Surveys (DAS) plans across Forth and Tay developers. PT – Monthly DAS at NnG plus 12 km continuing through construction and beyond. Once other Forth and Tay developers are ready, will engage to see if it is		
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	possible to get combined post-construction surveys up and running as per pre-construction. AL - BB assuming a need for one year of pre-construction surveys. Would look to commence in October or slightly later this year subject to discussion and agreement on methods – this would cover the 2024 breeding period. Happy to pull together a high-level overview of plans if needed? AG - POSEIDON also looking to find out about ongoing DAS in Forth and Tay, project is sister to ECOWINGS. FD - query on POSEIDON? AG - offline chat with FD to see what POSEIDON are looking for. KT — NatureScot would welcome an overview of start and end dates for planned DAS in the Forth and Tay. AL — Are there any issues for ICOL and/or Seagreen on providing a DAS overview? No issues raised by SA or EN. ACTION — Developers to pull together an overview of		Developers/
	DAS plans.	Open	AL
7.0	Strategic monitoring updates (MSS)		
	AG - cannot speak on MSS behalf, but can provide an update on ScotMER. Tagging feasibility study will be published in next few months. Open tender on strategic DAS - ITT was not successful with no high quality applications to take forward. Parked for now. ScotMER Project Steering Group met last year to discuss future projects. These are now subject to internal funding approvals before projects can be progressed. SZ - what was the proposed coverage of the strategic DAS ITT?		
	AG – Scotland east coast and ScotWind sites of high ornithological constraint. MSS colleagues not available today to provide further comment.		
8.0	[Standing item] Lessons learnt / results sharing (All)		
	Nothing was raised under this agenda item		
9.0	AOB (AII)		
	AL – AL to circulate slides and finalise meeting minutes from today's call. PT – There is a placeholder in for the FTRAG-O November 2023 meeting - 14 November. More efficient to organise this way. Please can everyone check that this was received.		













ACTION – Developers to circulate a placeholder for the FTRAG-O March 2024 meeting.	Open	Seagreen
AL – Is there any update on Glen Tyler's replacement at NatureScot?		
KT - nearly completed recruitment and new staff should start end of March. Should have someone in place for next meeting.		