

Conclusions from the HELCOM workshop on migratory waterbirds, in Helsinki, Finland, 20-22 November 2018

Background

The HELCOM workshop on migratory waterbirds was held on 20-22 November 2018, at the HELCOM Secretariat, Helsinki, Finland. This document contains the conclusions from the workshop. The full outcomes, as well as supporting information on specific species are contained in Annexes 1-7. *Please note that the maps presented in the annexes are example maps and not yet ready to be used in spatial planning.*

STATE&CONSERVATION 8-2018 agreed to arrange a workshop at the HELCOM Secretariat, and in cooperation with JWG BIRD, in autumn 2018, to collate data and draft a regional map of seabird migratory routes and identify potential data gaps in relation to this. The meeting welcomed the information that Sweden has personnel resources to support the work and invited co-leads Sweden and Germany, in cooperation with the Secretariat, to take the organization of the workshop forward.

STATE&CONSERVATION 9-2018 took note on the information regarding Workshop on Seabird migratory routes as present by Germany (document 3N-16 to that meeting). The meeting noted that the Workshop will take place 20-22 November 2018 in Helsinki. The meeting noted that Contracting Parties that have not already nominated national experts were requested to do so, and the nominated experts were asked to register to the workshop as soon as possible.

The meeting welcomed the information by Finland, Estonia, Denmark and Sweden that they have nominated experts and that Poland is exploring the possibility to nominate an expert.

The meeting took note of the information by Germany that the Co-lead countries have been working on collating data and literature to support the work at the workshop. The Meeting further noted the information by the Secretariat that a data call to support the work at the workshop is being elaborated and that to the extent possible Contracting Parties are invited to submit all relevant data before the workshop.

Workshop focus:

The aim of the workshop was to produce a map with migration routes of waterbird species (e.g. seabirds, ducks, waders) covering the entire Baltic Sea Region. Such a map shall provide background for the HELCOM Recommendation 34E/1 'Safeguarding important bird habitats and migration routes in the Baltic Sea from negative effects of wind and wave energy production at sea'. The workshop will bring together data from i) coastal migration counts, ii) waterbird counts at staging/stopover sites, iii) tracking data (satellite telemetry, GPS data loggers) and iv) radar observations.

Call for data: All Contracting Parties were encouraged to support the delivery of relevant data from national monitoring schemes, research institutions and conservation organizations before the workshop; a data call was submitted in advance of the workshop.

The Workshop agreed that maps produced in the Workshop and the supporting information for the maps will be made available for the State and Conservation in the form of a meeting document. This document

contains the conclusions, identified gaps and recommendations from the workshop, as well as draft maps and supporting information for 6 species (Annexes 1-6). The full outcome of the Workshop can be found in [document 3N-1](#).

The Workshop agreed that, based on quality and incorporated data, the migration route maps produced for the following species can already be published in the HELCOM Map and data service: Caspian Tern, Lesser Black-backed Gull and Velvet Scoter. **However, these should be presented with a clear notification that these are example maps and not yet ready to be used in spatial planning.**

The Workshop agreed that the results produced during the workshop are a valuable start and expressed hope that HELCOM will continue the work on implementing the recommendation. The Workshop suggested that a designated working group as a sub group of JWG Bird could take the work forward, and that Workshop participants will be informed about the continuation of the work.

Outcome of HELCOM workshop on migratory seabirds

The HELCOM workshop on migratory waterbirds, was held on 20-22 November 2018, at the HELCOM Secretariat, Helsinki, Finland.

The aim of the workshop was to produce a map with migration routes of waterbird species (e.g. seabirds, ducks, waders) covering the entire Baltic Sea Region. Such a map shall provide background for the HELCOM Recommendation 34E/1 'Safeguarding important bird habitats and migration routes in the Baltic Sea from negative effects of wind and wave energy production at sea'. The workshop will bring together data from i) coastal migration counts, ii) waterbird counts at staging/stopover sites, iii) tracking data (satellite telemetry, GPS data loggers) and iv) radar observations.

All Contracting Parties were encouraged to support the delivery of relevant data from national monitoring schemes, research institutions and conservation organizations before the workshop; a data call was submitted in advance of the workshop.

The Workshop agreed that maps produced in the workshop and the supporting information for the maps will be made available for the State and Conservation in the form of a meeting document. This document contains the conclusions, identified gaps and recommendations from the workshop, as well as draft maps and supporting information for 6 species (Annexes 1-6). The full outcome of the Workshop can be found in Annex 7.

The Workshop agreed that, based on quality and incorporated data, the migration route maps produced for the following species can already be published in the HELCOM Map and data service (MADS): Caspian Tern, Lesser Black-backed Gull and Velvet Scoter. Of these the Caspian Tern and Lesser Black-backed Gull have not yet been finalized by the experts and are not included in the annexes to this document. All the maps in MADS should be presented with a clear notification that these are example maps and not yet ready to be used in spatial planning.

The Workshop agreed that the results produced during the workshop are a valuable start and expressed hope that HELCOM will continue the work on implementing the recommendation. The Workshop suggested that a designated working group as a sub group of JWG Bird could take the work forward, and that Workshop participants will be informed about the continuation of the work.

Conclusions from the Workshop

31. The Workshop emphasized that in their current form the maps are not ready to be used for planning, but that they represent examples of what can be produced with significantly higher quality, given more time and resources.

32. The Workshop agreed that as a first step a common data form and methodology for producing the maps should be developed. The work to elaborate a common data form should be done in cooperation with representatives from national planning authorities, responsible for spatial planning and offshore windfarms to ensure that their needs are accounted for.

34. The Workshop agreed that, based on quality and incorporated data, the migration route maps produced for the following species can already be published in the HELCOM Map and data service: Caspian Tern, Lesser Black-backed Gull and Velvet Scoter. However, these should be presented with a clear notification that these are example maps and not yet ready to be used in spatial planning. The Workshop noted that metadata will be attached to each map that will be published in the HELCOM Map and data service.

35. The Workshop highlighted that the maps produced in the workshop represent the initial steps in the process to map migration and represent the available information and the most common routes for the respective birds, but they do not mean that there are no birds migrating outside of the delineated areas. Due to lack of time, no buffers, sensitivity scores nor weighting has been added to the layers.
36. The Workshop emphasized that the produced maps focus only on the migration that takes place over the sea, migration taking place over land is not presented.
37. The Workshop noted that migration of terrestrial birds across the Baltic Sea also needs to be taken into account in spatial planning, but is out of the expertise of the present experts. The importance of migration of terrestrial birds needs to be made clear in the products of this workshop.
38. The Workshop noted that when final maps are released for the purposes of spatial planning, also lower numbers of birds need to be shown along the main routes, with weighting based on densities.
39. The Workshop emphasized that a vital part of continued work will be including dedicated experts on the needs and requirements of end users of the product, including authorities and wind industry, to ensure the products fit for purpose.
40. The Workshop noted that the final sensitivity maps should be based on multiple layers and have a geographical scale that is viable for national planning processes.
41. The Workshop agreed that separate aggregated sensitivity maps should be produced for resting areas and migratory routes but that this task is outside the scope of this work shop.
42. The Workshop considered the way forward, and discussed data deficiency and methods of regular monitoring. Tracking was highlighted as the most widely utilizable method for the maps. It was acknowledged that tracking is presently confined by very low sample size and, thus, poor representativeness of biogeographical populations.
43. The Workshop also considered ways forward to improve the quality of the maps for those species for which there is enough data available.
44. The Workshop highlighted the complexity of the work and the need to invest proper time in sorting the data and combining it in a useful way. The Workshop concluded that the planned work is a major undertaking and, in order to improve spatial and thematic coverage, additional time and financing is required. The Workshop further noted the comment by Denmark that EU has an intergovernmental forum dealing with matters concerning offshore windfarms, and that collaboration with the forum could be explored.
45. The Workshop agreed that the results produced during the workshop are a valuable start and expressed hope that HELCOM will continue the work on implementing the recommendation.
46. The Workshop suggested that a designated working group as a sub group of JWG Bird could take the work forward, and that Workshop participants will be informed about the continuation of the work.

Gaps identified by the workshop

- a) For part of the species risks of collision with offshore windfarms can be higher during foraging flights, which can be over 100 km per day, compared to migration flights, and shifts of the location in the wintering area also need to be taken into account.

- b) Further information is needed on species-specific behavior on e.g. the flying altitudes, of the migration occurring at night and day time and the numbers of birds using the routes.
- c) Gaps in data coverage include too low number and narrow spatial distribution of data for several migratory and wintering species. There is also lack of publications on bird migration in the Baltic Sea area.
- d) Need to set definitions for how to weigh the tracks.
- e) Need to set definitions for how to evaluate confidence and uncertainty.
- f) Develop structured supporting information.
- g) Need to link routes to staging areas
- h) Need for more tracking data and for the tracking efforts to be spread out across the distributional range of the species (to account for that sub-populations might have different migration behavior).
- i) For the recording devices to collect increasing number of fixes and register additional information, e.g. flight altitude.
- j) Need to broaden the spectrum to include other species etc to make the maps useful for planning purposes.
- k) Calculate the required number of taggings in order to get proper coverage for statistical analyses.
- l) More information is needed with regards to bird behavior when facing barriers or obstacles (e.g. windfarms), as well as more specific information on density and timing of migration, as well as bird behavior under varying weather conditions etc.
- m) There is a lack of expertise for the northernmost Baltic Sea area.
- n) Need to take citizen science into account, but quality-checking and quantifying the data (the effort behind the data is difficult to estimate).

Recommendations made by the Workshop

- a) For Contracting Parties, Lead countries, JWG BIRD etc. to initiate work in line with the gaps and recommendations identified by the workshop.
- b) Establish a designated subgroup dealing with migration (and implementation of the Recommendation) under JWG BIRD.
- c) For JWG BIRD (or possible subgroup) to identify species that are clear broad-front migrants vs. those for which tracking would yield good results.
- d) Cooperate closer with the planners, e.g. through a scoping workshop to share information, challenges and needs.
- e) That final maps should include several types of data sources.
- f) That the ultimate goal of the work should be detailed maps, also representing the sensitivity of a given area to e.g. wind power construction. These maps should be regularly updated.
- g) To map the overall level of available knowledge for each species in order to produce an overview (including whether the species is relevant for planning and why, altitude information etc.),
- h) To complement the list of species information with a non-exclusive list of non-seabird priority species.
- i) Prepare a publication of migration in the Baltic Sea, including gaps and recommendations, for submission to a scientific journal.
- j) In accordance with the Recommendation, complement the information on migration with similar information on resting birds, to be presented as separate sensitivity maps (for reasons of transparency and detail).
- k) Contracting Parties are recommended to organize coordinated projects to collect and interpret data and to ensure the data find their way into the migration maps.
- l) Identify funding possibilities for a dedicated project to support the work and look into possibility to form a consortium to prepare and submit an application.
- m) Ensure that effort is logged (hours etc) when conducting and including citizen science in the information.
- n) Joint data management on a regional level is critical for the success of the work and effort towards this goal should be prioritized.
- o) At bottleneck sites visual migration counts are important to support the migration route information and maintaining this kind of monitoring is highly encouraged.
- p) JWG BIRD (or subgroup or workshop) are recommended to produce more detailed recommendations on how to conduct monitoring of migratory birds, possibly producing best-practice guidelines.
- q) To produce more specific species maps and to produce a sensitivity map of the area aggregating the species layers.