

Document 4-4: Database for seals

The Meeting is invited to take note of the current status of HELCOM Seal database.



HELCOM

Database for seals: Background

- Overall requirement for HELCOM core indicators:
 - Monitoring guidelines
 - Quality assurance for collected data
 - Data collected from monitoring programs stored in a database
- BalticBoost project 2015-2016
 - <http://www.helcom.fi/helcom-at-work/projects/completed-projects/baltic-boost>
 - Theme1, Biodiversity, focused on developing a biodiversity assessment tool and improving data arrangements for selected biodiversity elements (e.g. coastal fish, birds and seals) so that a comprehensive assessment of biodiversity in the Baltic Sea can be carried out by 2018.
 - WP1.2 "Biodiversity databases"
 - Partners for seal related database work:
 - HELCOM Secretariat, NRM, Sweden; Århus University, Denmark (subcontractor)



Database for seals: Background

- Tasks of WP1.2
 - Develop a format for reporting data by making use of existing equivalent formats, e.g. OSPAR/ICES and developing a Baltic localisation of it, to feed data into following indicators:
 - Distribution of Baltic Seals
 - Population trends and abundance of seals
 - Establish a database based on the defined format
- The database and format
 - Presented to SEAL EG 10-2016. Meeting agreed to further develop the reporting format for the seal database to agree on the level of detail requested for the data within a drafting group
 - The drafting group had an online meeting in 20 October 2016 and came to a conclusion that the format had to be modified so that it makes possible reporting of individual sites, aggregating sites or gridding to make possible reporting on more coarse detail level than points in cases where it is needed or feasible



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Database for seals: Data policy

- As outlined in the data call for seal abundance/distribution (Document 4-1 Att1), and in [HELCOM data and information strategy](#), the general practice is that all data collected for HELCOM assessment purposes, including core indicators, should be openly accessible.
- For transparency and replicability of the assessment, the underlying data used in indicator-based assessment should be publicly available on a relevant level of aggregation and documented with proper metadata on data source.
- However, as mentioned in [HELCOM data and information strategy](#), access to data used in assessment or by an expert group can be flagged as restricted. This could be for example aggregating specific species observation to coarser level or using data from non-public sources in the assessment.
- The plan is to make non-restricted count data submitted by national data providers publicly available as a HELCOM dataset using HELCOM seal database and via [HELCOM Map and Data service](#) as spatial dataset in relevant aggregation level. The relevant level of aggregation could be the resolution in which the data has been submitted, unless other aggregation level has been requested by the national data provider.



Database for seals: Data model/format

- Requirements for reporting format
 - Enabling pointwise collection of data in areas where data is collected in this detail level
 - Be harmonized with OSPAR equivalent format as much as possible to make reporting less cumbersome for CPs both members of both OSPAR and HELCOM
 - Make possible reporting of aggregated counts (aggregated site or reference grid):
 - Site value can be text field in case of gridded data (e.g. Grid ID)
 - Lat/Lon coordinates can be point or center point of an aggregated site (e.g. multiple skerries)
 - New value was introduced to Count_type codelist: Aggregated site (to enable reporting of aggregated sites)
- Reporting template was developed and submitted with the latest data call (Document 4-1, Attachment 1)
 - Excel file, flat table
 - Some flexibility has been requested by national data providers



Database for seals: Data model/format

Parameter	Data type (description)
Species	Text (Codelist: Species as abbreviation: GS=Grey seal, HS=Harbour seal, RS=Ringed seal)
Country	Text (Codelist: Country as in European union two character country designation)
Site	Free Text (Name of count site)
Latitude	Number (Latitude coordinate of count site OR center point of area/grid in WGS84 decimal degrees, 6 decimals)
Longitude	Number (Longitude coordinate of count site OR center point of area/grid in WGS84 decimal degrees, 6 decimals)
Natura2000ID	Text (If the count site is inside Natura2000 area, specify the Natura2000 code, e.g. "DK00EY133")
Year	Number (Year as in YYYY)
Month	Number (Month in MM)
Day	Number (Day as in DD)
Count	Number (Count of individuals as integer)
Count_type	Text (Codelist: Site, Transect observation, Aggregated site)
Estimate_type	Text (Codelist: Minimum, maximum, modelled)
CV_Estimate	Number (In case of repeated count, please provide any available estimates of the variability in repeated counts in the form of the coefficient of variation (standard deviation / mean) of replicate counts)
Number_surveys	Number (Number of surveys as integer)
Method	Free text (Survey method text description)
Source	Free text (Data provider organization)

Database for seals: Online database

- <http://bio.helcom.fi/seals>
- Contains count data reported for 2016 data call
- Table for counts (points), sites, species and map presented
- Map tool will be updated, can contain points and grids

HELCOM Login

Home Abundance / Distribution (Counts) Site Species Map IndicatorResults

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edit	Country	Site	Helcom subbasin	Area	Management unit	Source	Species	Year	Month	Day	Count	Age	Cv estimate	Number of surveys	Method	Latitude	Longitude
-	Denmark	Hesselo	Kattegat	Kattegat	-	Aarhus University	Harbour seal	2009	8	19	1701	-	-	1	Aerial survey	56.201778	11.68800
-	Denmark	Hesselo	Kattegat	Kattegat	-	Aarhus University	Harbour seal	2010	8	27	1401	-	-	1	Aerial survey	56.201778	11.68800
-	Denmark	Hesselo	Kattegat	Kattegat	-	Aarhus University	Harbour seal	2015	8	19	1377	-	-	1	Aerial survey	56.201778	11.68800
-	Denmark	Anholt, Totten	Kattegat	Kattegat	-	Aarhus University	Harbour seal	2013	8	19	1363	-	-	1	Aerial survey	56.736250	11.66102
-	Denmark	Hesselo	Kattegat	Kattegat	-	Aarhus University	Harbour seal	2014	8	27	1358	-	-	1	Aerial survey	56.201778	11.68800
-	Denmark	Svanegrunden	Great Belt	Kattegat	-	Aarhus University	Harbour seal	2014	6	13	1353	-	-	1	Aerial survey	55.829500	10.35033
-	Denmark	Hesselo	Kattegat	Kattegat	-	Aarhus University	Harbour seal	2010	8	23	1311	-	-	1	Aerial survey	56.201778	11.68800
-	Denmark	Hesselo	Kattegat	Kattegat	-	Aarhus University	Harbour seal	2013	8	21	1311	-	-	1	Aerial survey	56.201778	11.68800
-	Denmark	Anholt, Totten	Kattegat	Kattegat	-	Aarhus University	Harbour seal	2013	8	20	1307	-	-	1	Aerial survey	56.736250	11.66102
-	Denmark	Hesselo	Kattegat	Kattegat	-	Aarhus University	Harbour seal	2006	8	25	1271	-	-	1	Aerial survey	56.201778	11.68800