

Template for Submission of Scientific Information to Describe Areas Meeting Scientific Criteria for Ecologically or Biologically Significant Marine Areas

Title/Name of the area: *Coastal area of Eastern Gotland*

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Abstract

Very important area for seabirds both during the wintering and the breeding periods. Some key species occurring are the Vulnerable Long-tailed Duck *Clangula hyemalis* (with estimates of more than 150 000 individuals during the winter) and the Near Threatened Common Eider *Somateria mollissima* (ca. 10 000 breeding pairs occur here).

Introduction

The *Coastal area of Eastern Gotland* is a very important area for seabirds in the Baltic Sea, with seven species using the area during the breeding or the wintering periods (BirdLife International 2018a). It is particularly important for wintering sea ducks such as Long-tailed ducks *Clangula hyemalis*, smews *Mergellus albellus*, Tufted ducks *Aythya fuligula* and Greater scaups *Aythya marila*. Common Eiders *Somateria mollissima* use the area during the breeding season; Little Tern *Sternula albifrons* and Caspian Tern *Hydroprogne caspia* also occur in the area during the breeding season.

The population of Long-tailed Duck *Clangula hyemalis* is particularly relevant. This species has been listed as Vulnerable by IUCN (BirdLife International 2018b) because of an apparent severe decline detected in the wintering population in the Baltic Sea between the early 1990s and late 2000s (Bellebaum et al. 2014, BirdLife International 2018b). It is classified as Endangered in the HELCOM Red List (HELCOM Red List Bird Expert Group 2013a). This is a migratory species with a circumpolar distribution during the breeding season (BirdLife International 2018b); the species can be found in the Baltic Sea during the winter period (October to May). The *Coastal area of Eastern Gotland* has been identified as one of the most used areas within the Baltic by the species (Skov et al. 2011; Figures 1 and 2).

Location

The *Coastal area of Eastern Gotland* is a 1500 km² area located in the Central Baltic Sea (57.6°N/18.9°E) (Figure 1)

Feature description of the proposed area

(This should include information about the characteristics of the feature to be proposed, e.g. in terms of physical description (water column feature, benthic feature, or both), biological communities, role in ecosystem function, and then refer to the data/information that is available to support the proposal and whether models are available in the absence of data. This needs to be supported where possible with maps, models, reference to analysis, or the level of research in the area)

Feature condition and future outlook of the proposed area

(Description of the current condition of the area – is this static, declining, improving, what are the particular vulnerabilities? Any planned research/programmes/investigations?)

Assessment of the area against CBD EBSA Criteria

CBD EBSA Criteria (Annex I to decision IX/20)	Description (Annex I to decision IX/20)	Ranking of criterion relevance (please mark one column with an X)			
		No information	Low	Medium	High
Uniqueness or rarity	Area contains either (i) unique (“the only one of its kind”), rare (occurs only in few	X			

	locations) or endemic species, populations or communities, and/or (ii) unique, rare or distinct, habitats or ecosystems; and/or (iii) unique or unusual geomorphological or oceanographic features.				
Special importance for life-history stages of species	Areas that are required for a population to survive and thrive.				X
<p>The area is an important wintering area for the Long-tailed Duck <i>Clangula hyemalis</i> in the Baltic region (Skov et al. 2011). Birds traveling from western Siberia congregate here between October and May (HELCOM Red List Bird Expert Group 2013a), using these waters and foraging grounds. The area is also used during the winter by other sea ducks such as Smew <i>Mergellus albellus</i>, Tufted duck <i>Aythya fuligula</i> and Greater scaup <i>Aythya marila</i>.</p> <p>The area holds globally important number of Common Eiders <i>Somateria mollissima</i> during the breeding season. Other species occurring here during the breeding period are the Little Tern <i>Sternula albifrons</i> and the Caspian Tern <i>Hydroprogne caspia</i>.</p>					
Importance for threatened, endangered or declining species and/or habitats	Area containing habitat for the survival and recovery of endangered, threatened, declining species or area with significant assemblages of such species.				X
<p>The area holds a very important concentration of Long-tailed Duck <i>Clangula hyemalis</i> in the Baltic Sea, a species listed as Vulnerable by BirdLife/IUCN (BirdLife International 2018b) and as Endangered in the HELCOM Red List (HELCOM Red List Bird Expert Group 2013a). The site is also important for the Near Threatened Common Eider <i>Somateria mollissima</i>; this species is considered Vulnerable (breeding population) and Endangered (wintering population) in the Baltic (HELCOM Red List Bird Expert Group 2013b).</p>					
Vulnerability, fragility, sensitivity, or slow recovery	Areas that contain a relatively high proportion of sensitive habitats, biotopes or species that are functionally fragile (highly susceptible to degradation or depletion by human activity or by natural events) or with slow recovery.				X
<p>The area is of high importance to Long-tailed Duck <i>Clangula hyemalis</i> (BirdLife International 2018a), a species listed as Vulnerable because of a severe decline detected in the wintering population in the Baltic Sea between the early 1990s and late 2000s (Bellebaum et al. 2014, BirdLife International 2018b). Surveys of the wintering population in the Baltic sea indicate that the species has undergone a precipitous decline there, from c.4,272,000 individuals in 1992-1993 to c.1,486,000 individuals in 2007-2009 (Skov et al. 2011). The species is very sensitive to disturbance by ship traffic and are particularly at risk of colliding with offshore wind turbines and other obstacles (HELCOM Red List Bird Expert Group 2013a). It is also threatened with direct mortality from oil pollution (Gorski et al. 1977, del Hoyo et al. 1992, Kirby et al. 1993) and from drowning through entanglement in fishing nets (del Hoyo et al. 1992, Kirby et al. 1993).</p>					
Biological productivity	Area containing species, populations or communities with comparatively higher natural biological productivity.	X			
<i>Explanation for ranking</i>					
Biological	Area contains comparatively higher diversity	X			

diversity	of ecosystems, habitats, communities, or species, or has higher genetic diversity.				
<i>Explanation for ranking</i>					
Naturalness	Area with a comparatively higher degree of naturalness as a result of the lack of or low level of human-induced disturbance or degradation.	x			
<i>Explanation for ranking</i>					

Sharing experiences and information applying other criteria (Optional)

Other Criteria	Description	Ranking of criterion relevance (please mark one column with an X)			
		Don't Know	Low	Medium	High
<i>Add relevant criteria</i>		x			
<i>Explanation for ranking</i>					

References

Bellebaum, J., J. Kube, A. Schulz, H. Skov, & H. Wendeln. (2014). Decline of Long-tailed Duck *Clangula hyemalis* numbers in the Pomeranian Bay revealed by two different survey methods. *Ornis Fennica* 91:129–137.

BirdLife International (2018a) Important Bird Areas factsheet: Coastal area of Eastern Gotland. Downloaded from <http://datazone.birdlife.org/site/factsheet/coastal-area-of-eastern-gotland-iba-sweden/details> on 12/02/2018.

BirdLife International (2018b) Species factsheet: *Clangula hyemalis*. Downloaded from <http://datazone.birdlife.org/species/factsheet/long-tailed-duck-clangula-hyemalis> on 05/02/2018.

Gorski, W.; Jakuczun, B.; Nitecki, C.; Petryna, A. (1977). Investigation of oil pollution on the Polish Baltic coast in 1974-1975. *Przegląd Zoologiczny* 21(1): 20-23

HELCOM Red List Bird Expert Group (2013a). Species Information Sheet: *Clangula hyemalis* (wintering). Downloaded from <http://helcom.fi/Red%20List%20Species%20Information%20Sheet/HELCOM%20Red%20List%20Clangula%20hyemalis.pdf> on 05/02/2018

HELCOM Red List Bird Expert Group (2013b). Species Information Sheet: *Somateria mollissima* Downloaded from <http://helcom.fi/Red%20List%20Species%20Information%20Sheet/HELCOM%20Red%20List%20Somateria%20mollissima.pdf> on 05/02/2018

del Hoyo, J., Elliot, A. and Sargatal, J. (1992). Handbook of the Birds of the World, Vol. 1: Ostrich to Ducks. Lynx Edicions, Barcelona, Spain.

Kirby, J.; Evans, R.; Fox, A. D. (1993). Wintering seaducks in Britain and Ireland: Populations, threats, conservation and research priorities. *Aquatic Conservation: Marine and Freshwater Ecosystems* 3(2): 105-137.

Skov, H., S. Heinänen, R. Žydelis, J. Bellebaum, S. Bzoma, M. Dagys, J. Durinck, S. Garthe, G. Grishanov, M. Hario, J.J. Kieckbusch, J. Kube, A. Kuresoo, K. Larsson, L. Luigujõe, W. Meissner, H.W. Nehls, L. Nilsson, I.K. Petersen, M. Mikkola Roos, S. Pihl, N. Sonntag, A. Stock & A. Stipnice (2011). Waterbird populations and pressures in the Baltic Sea. *TemaNord* 550, 201 pp

Maps and Figures

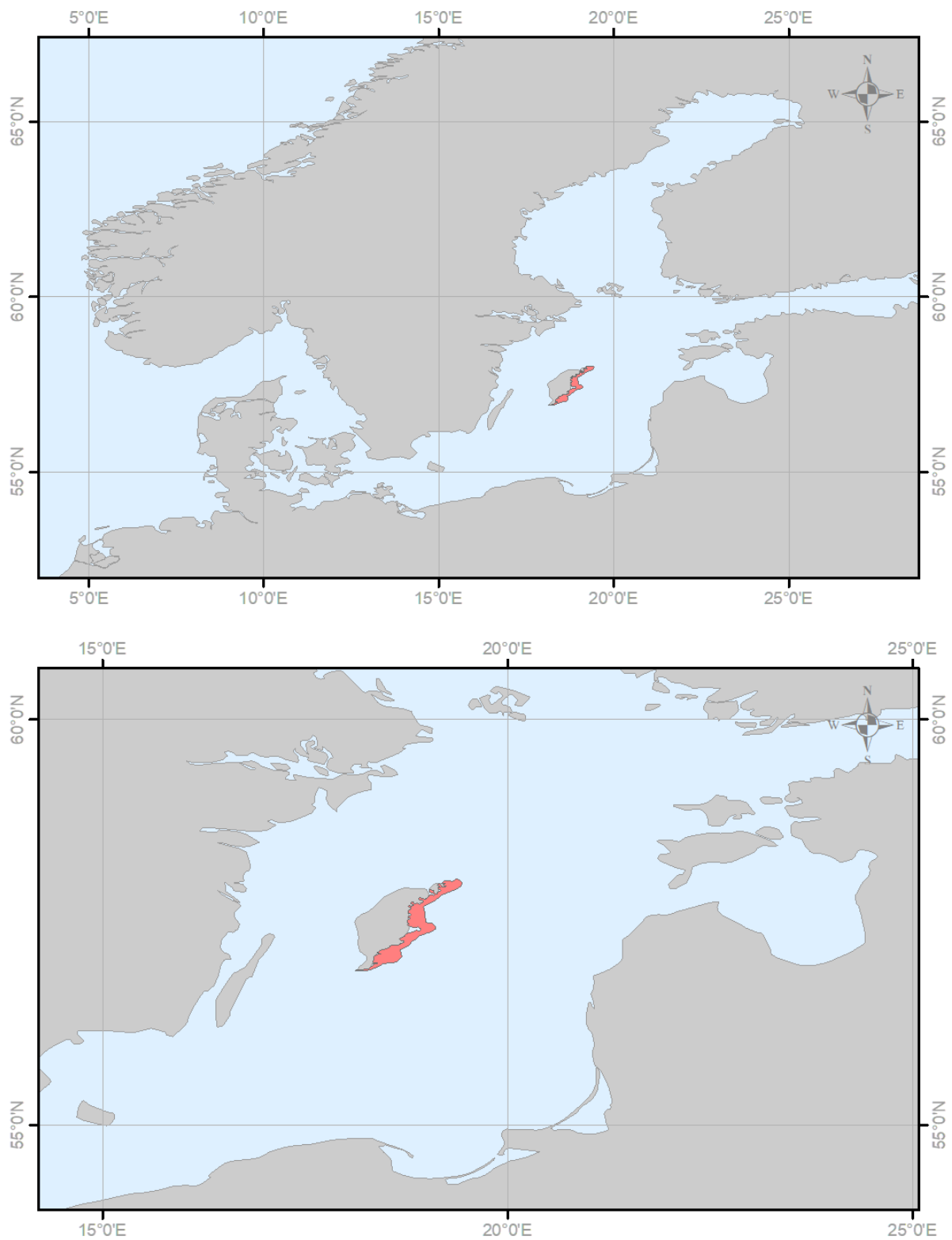


Figure 1: Location of *Coastal area of Eastern Gotland*. More details at <http://datazone.birdlife.org/site/factsheet/coastal-area-of-eastern-gotland-iba-sweden/details>

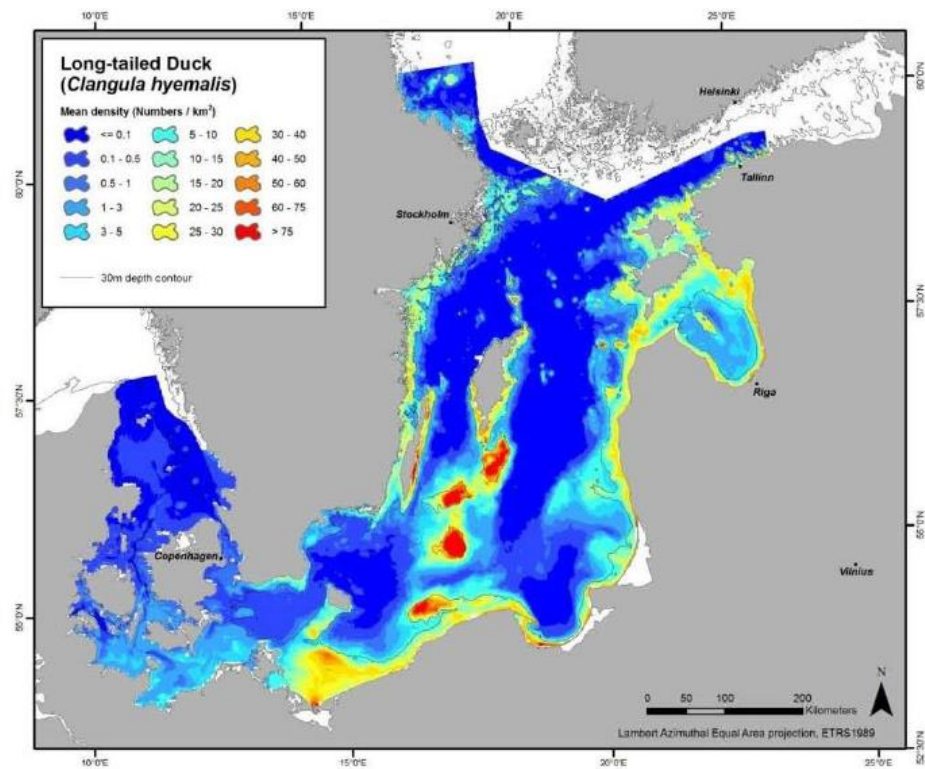


Figure 2. Distribution and density of wintering long-tailed duck *Clangula hyemalis* in the Baltic Sea, 2007 – 2009. From Skov et al. (2011) and HELCOM Red List Bird Expert Group (2013a).

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