

SPECIES INFORMATION SHEET

Merlangius merlangus

English name: Whiting	Scientific name: <i>Merlangius merlangus</i>	
Taxonomical group: Class: Actinopterygii Order: Gadiformes Family: Gadidae	Species authority: (Linnaeus, 1758)	
Subspecies, Variations, Synonyms: –	Generation length: 6.7 years	
Past and current threats (Habitats Directive article 17 codes): Fishing (F02.01.02;F02.01.03;F02.02.01;F02.02.02)	Future threats (Habitats Directive article 17 codes): Fishing (F02.02;F02.03)	
IUCN Criteria: A2bd	HELCOM Red List Category:	VU Vulnerable
Global / European IUCN Red List Category: NE/NE	Habitats Directive: –	
Previous HELCOM Red List Category (2007): RA		
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/–, Finland –/–, Germany –/* (Not threatened, Baltic Sea), Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden <i>Minimum landing size of 23 cm in Kattegat. TAC regulation by EU</i> / VU		

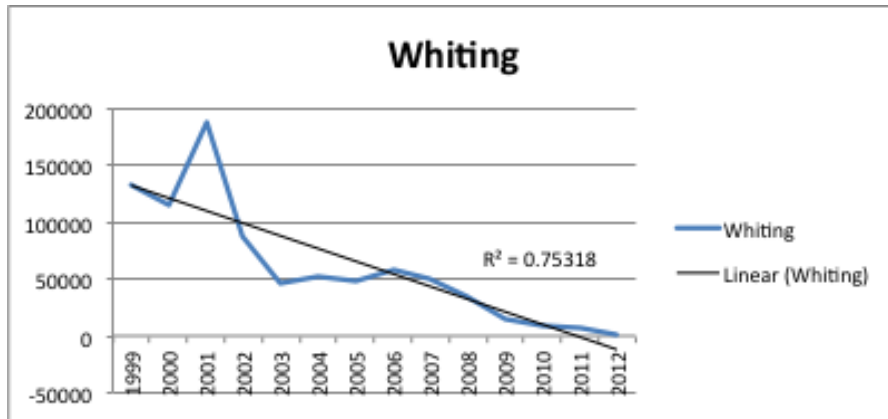
Distribution and status in the Baltic Sea region

Whiting occurs in the western Baltic, the Belt Sea, the Sound and the Kattegat. Whiting spawns in the Kattegat, which is the core area for whiting within the HELCOM area. Landing statistics indicate a sharp decline in abundance in the Skagerrak and the Kattegat (ICES 2011). Swedish landing statistics for the last 12 years in the Kattegat indicate a continuous decline that is even sharper (99% decline). However, it remains unclear to what extent the drastic reduction in landings was due to a decline in the whiting stock biomass or to changed fishing patterns. On the other hand, the fishery independent survey, International Bottom Trawl Survey (IBTS), shows a decline in whiting abundance in the Kattegat by 30% over the last three generations. Furthermore IBTS data on whiting in the Kattegat for sizes above 300 mm in total length indicate that the occurrence of adult whiting has become very scarce.

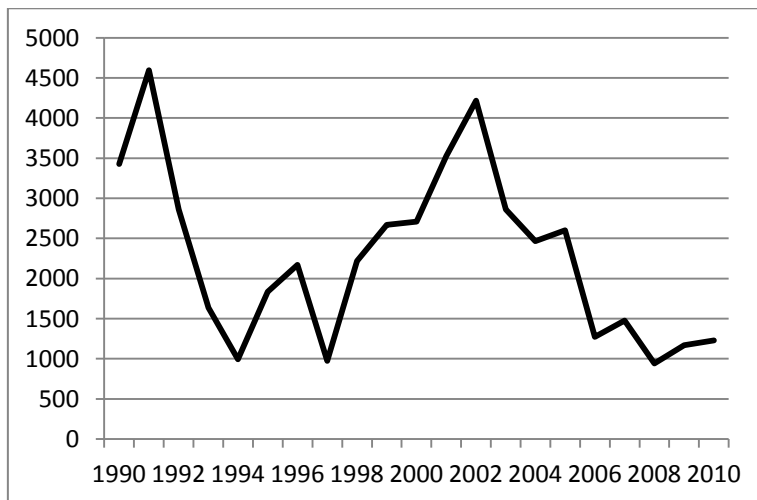


Whiting. Photo by Vivica von Vietinghoff, Deutsches Meeresmuseum.

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Swedish landings of whiting (kg) between 1999–2011 in the Kattegat (Sweden Statistics).



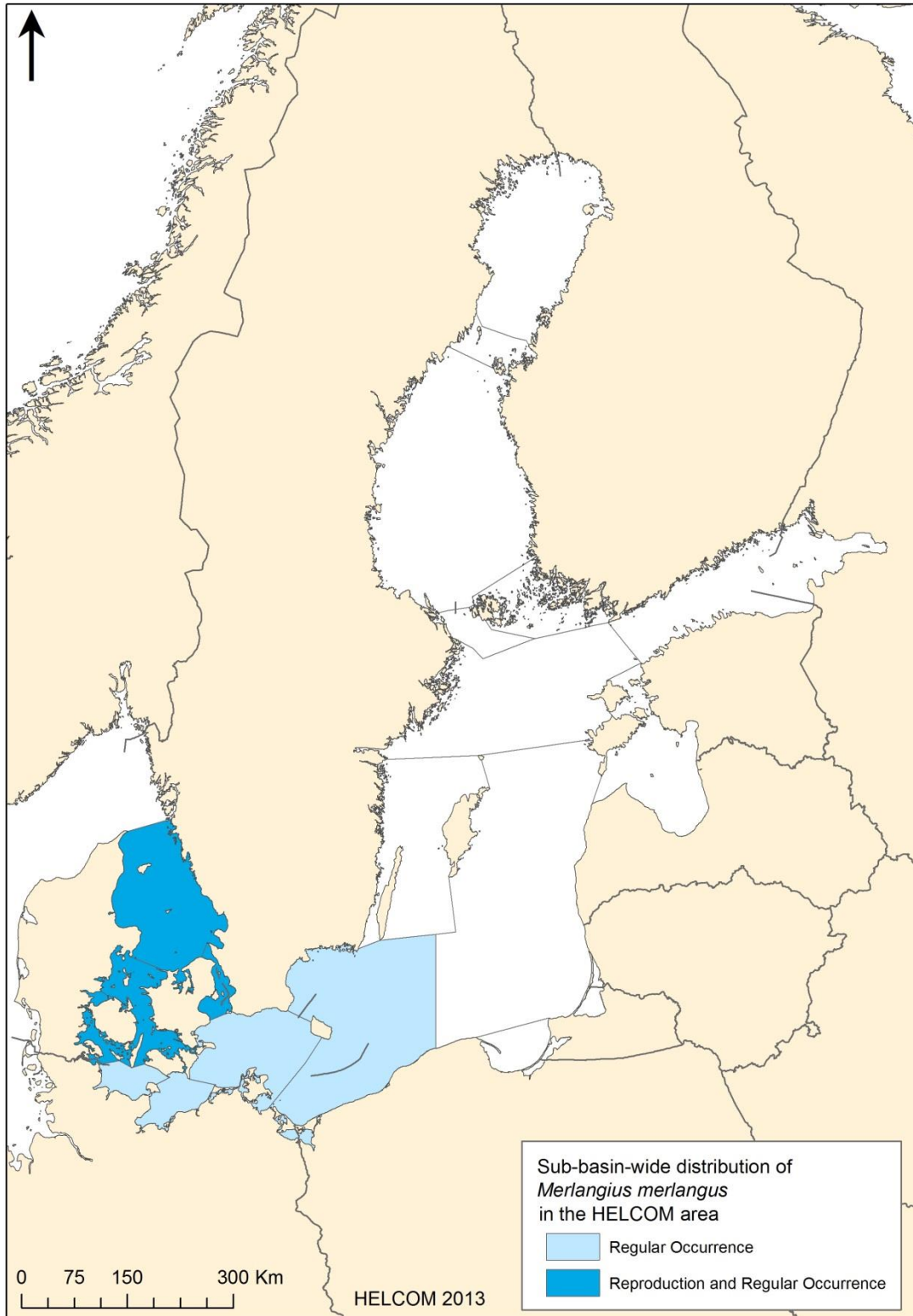
IBTS data from Kattegat in the first quarter of the year: Cpue of whiting (numbers per trawling hour).

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Distribution map

The map shows the sub-basins in the HELCOM area where the species is known to occur regularly and to reproduce (HELCOM 2012).



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Habitat and ecology

Whiting is a benthopelagic gadoid often appearing in shoals. Whiting occurs between 10 and 200 m depths, but is commonly found from 30 to 100 meters. It matures sexually at ages of 2–3 years. Egg and larvae are planktonic. Spawning occurs between January and July. It reaches a maximum length of 70 cm. Whittings forage on herring, sprat, sandeel, and crustaceans (Froese & Pauly 2012).

Description of major threats

Commercial passive fishing (i.e. netting, longlining) and active fishing (i.e. demersal and pelagic trawling) are the major threats. Furthermore, climate changes with synergistic effects of eutrophication that may lead to oxygen depletion is a potential threat.

Assessment justification

Whiting spawns in the Kattegat, which is the core area for whiting within the HELCOM area and hence only data from this area are used in the assessment. Available landing data provide insufficient information on the whiting stock status (ICES 2011), however taken as a face value the landing statistics indicate a sharp decline in abundance in ICES division IIIa, corresponding to the Skagerrak and Kattegat. Swedish landing statistics for the last 12 years in the Kattegat indicate a continuous decline that is even sharper (99% decline, Fiskeriverket 2011). However, it remains unclear to what extent the drastic reduction in landings was due to a decline in the whiting stock biomass or to changed fishing patterns.

The fishery independent survey, International Bottom Trawl Survey (IBTS), indicates a decline in whiting abundance in the Kattegat by 30% over the last three generations. IBTS data on whiting in the Kattegat for sizes above 300 mm in total length indicate that the occurrence of adult whiting has become very scarce, although for the last time period equal to three generations (c. 20 years as generation time has been set to 6.7 years for whiting) no trend is discernible. Conclusively, the situation for whiting in the HELCOM area is worrying, with a possible decrease between 30 and 99%.

Given the concern that the decrease in landings could to some extent reflect a changed fishing pattern and not be proportional to the decrease of the stock itself, less weight is put on the decrease in landings and more on the decrease in IBTS surveys. This results in an estimate of possible decrease of 30–50% which fulfils the A2bd criteria for the category VU. This should not be degraded to NT due to immigration from the North Sea since also the landings in whole IIIa have decreased drastically since 1980s.

Recommendations for actions to conserve the species

More biological knowledge is needed, especially concerning stock structure and migration.

Common names

D – Wittling; DK – Hvilling; GB – Whiting; FIN – Valkoturska; LV - Merlangis; LT - Paprastasis merlangas; RUS - Merlang; S – Vitling

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