

SPECIES INFORMATION SHEET

Triglopis quadricornis

English name: Fourhorn sculpin	Scientific name: <i>Triglopis quadricornis</i>	
Taxonomical group: Class: Actinopterygii Order: Scorpaeniformes Family: Cottidae	Species authority: Euphrasen, 1786	
Subspecies, Variations, Synonyms: <i>Myoxocephalus quadricornis</i> (Linnaeus, 1758)	Generation length: 7.2 years	
Past and current threats (Habitats Directive article 17 codes): –	Future threats (Habitats Directive article 17 codes): –	
IUCN Criteria: –	HELCOM Red List Category:	LC Least Concern
Global / European IUCN Red List Category LC/LC	Habitats Directive: –	
Previous HELCOM Red List Category (2007): VU		
Protection and Red List status in HELCOM countries: Denmark –/–, Estonia –/DD, Finland –/LC, Germany –/–, Latvia –/–, Lithuania –/–, Poland –/–, Russia –/–, Sweden –/LC		

Distribution and status in the Baltic Sea region

The fourhorn sculpin is distributed in the Baltic coast of Sweden, Finland, Russia and southwestwardly to eastern Poland. Landlocked populations are also known in Sweden, central Finland and Karelia. The fourhorn sculpin is often caught in the Russian part of the Gulf of Finland.

Fourhorn sculpin is caught in high numbers in Swedish monitory net surveys in three areas, representing the Western Gotland basin, Northern Baltic Proper and Åland Sea. No negative trend is seen over the assessment period 1990–2010 in any of the areas. There is possible indication of decrease in the southern parts of the Baltic Sea due to deterioration of habitat quality.



Fourhorn sculpin. Photo: by Natalia Chernova, Zoological Institute, St. Petersburg.

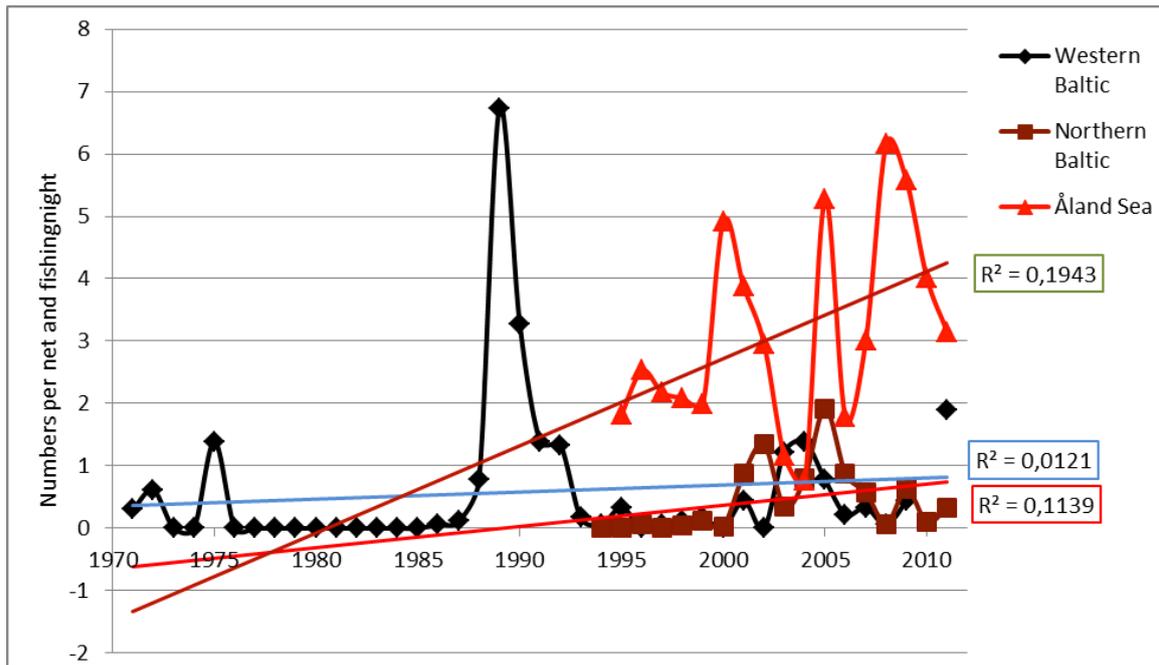
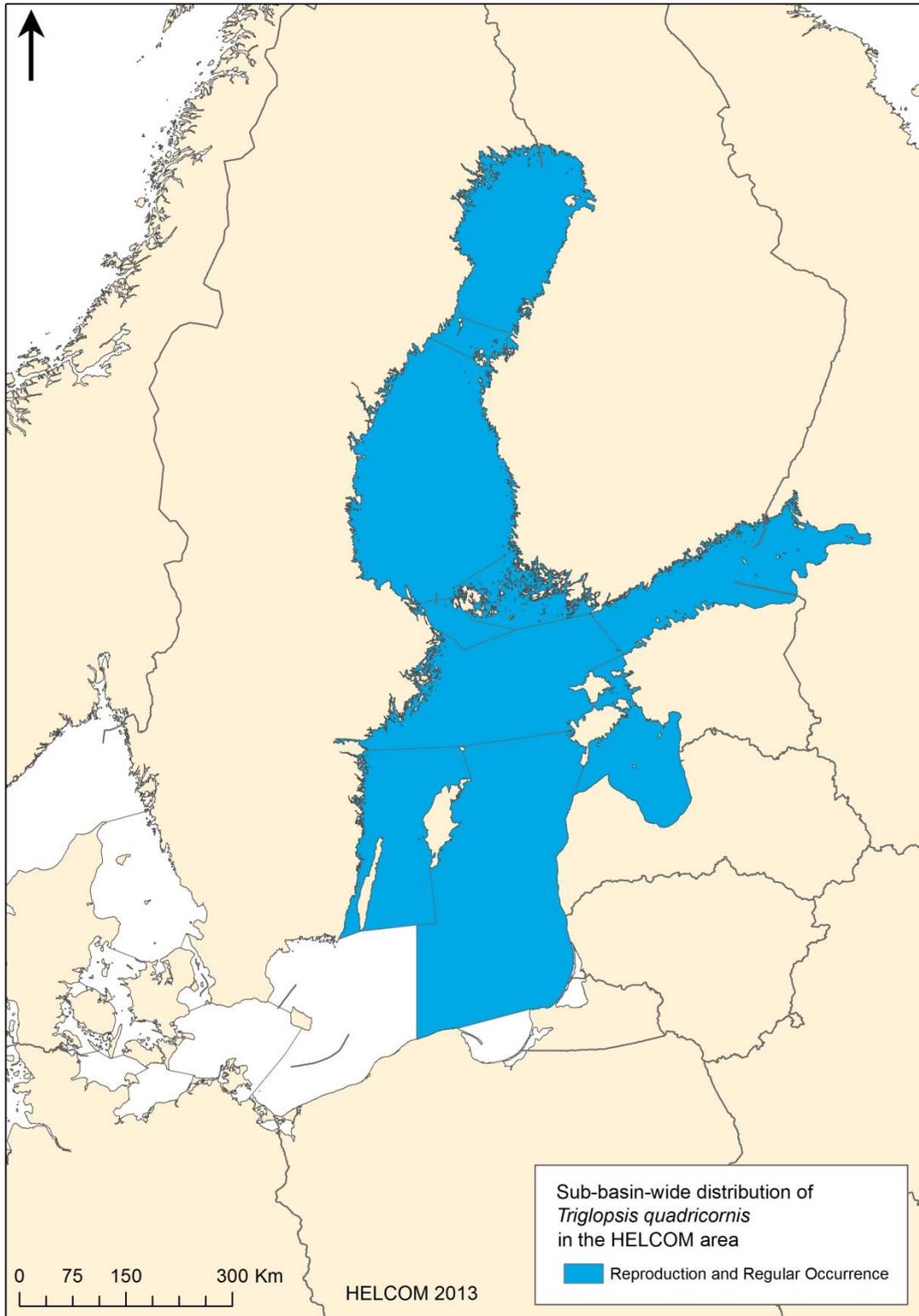


Fig. 1. Catch per unit effort (numbers per net and night) in three different Swedish gillnet fish monitoring series from the western Gotland basin, Northern Baltic Proper and Åland Sea. The lines represent linear regression and R^2 the correlation coefficient of these.

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

The fourhorn sculpin occurs in cold brackish and moderately saline coastal waters or as landlocked subpopulations in lakes. The species is benthic and movements are limited to short onshore-offshore seasonal migrations and mass movements of fry into shallow water in autumn. It is diurnal from November to April but is largely nocturnal the rest of the year. It feeds on small crustaceans, fish and molluscs. Spawning takes place in shallow waters where the male digs a groove in the gravel where pairing and egg laying occur. In spring they move to deeper water as the water temperatures rise, and stay there during summer. (Fedorov 1986, Westin 1971, Kottelat & Freyhof 2007)

Description of major threats

No major threats are identified at present. In the future, eutrophication and global warming are most likely the most predominating threats. Continuing eutrophication will harm the species, as it needs clean water and sediments especially for spawning, egg deposition, and larval habitats (Martin & Bridges 1999). Climate change or more specifically rising water temperatures will also have a negative effect on the species as it needs cold bottom water to thrive.

Assessment justification

The number of mature individuals exceeds the limit for red listing. The extent of occurrences (EOO) and the area of occurrence (AOO) exceed the limits for red listing. Available data from monitory fishing show no signs of decline during the assessment period. However, there is a suspicion of population reduction that relates to decreased quality of the habitat in the southern part of the distribution area. Overall the population size decrease in the HELCOM area is believed to be less than 15%. This means that the species does not qualify for being red-listed according to the IUCN system and is hence classified as Least Concern (LC).

Recommendations for actions to conserve the species

No protection actions currently needed in the HELCOM area.

Common names

D - Vierhörniger Seeskorpion; ES – Merihärg; GB – Fourhorn sculpin; DK - Hornulk; FIN – Härkäsimppu; LV - Četrtragu buļzivis; LT - Ragys; PL - Kur rogacz; RU - Chetyrekhrogij bychok; S – Hornsimpa

References

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SPECIES INFORMATION SHEET

Trigloporus quadricornis

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