

SPECIES INFORMATION SHEET

Cobitis taenia

English name: Spined loach	Scientific name: <i>Cobitis taenia</i>	
Taxonomical group: Class: Actinopterygii Order: Cypriniformes Family: Cobitidae	Species authority: Linnaeus, 1758	
Subspecies, Variations, Synonyms: –	Generation length: 4.2 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: Annex II	
Previous HELCOM Red List Category (2007): VU		
Protection and Red List status in HELCOM countries: Denmark –/LC, Estonia <i>Protected by the law (III category) / DD</i> , Finland –/VU, Germany –/D (Data deficient, Baltic Sea), Latvia –/–, Lithuania –/–, Poland <i>Prohibited to kill, catch or disturb this species under strict protection / –</i> , Russia –/–, Sweden –/LC		

Distribution and status in the Baltic Sea region

Spined loach was believed to be a more widespread species in the past but according to Bohlen & Rab (2001) it represents a species complex, with the nominal species *C. taenia* mainly restricted to the Baltic Sea drainages. This freshwater species occurs in drainages all over the Baltic Sea except for the Gulf of Bothnia. In the Baltic Sea it is restricted to coastal waters below 5 psu. The spined loach is abundant in the Estonian archipelago area, in the eastern part of the Gulf of Finland and also in the Curonian lagoon. It also occurs in the Vistula lagoon. The population is increasing in freshwaters of Germany while considered stable in Estonia, Latvia, and Lithuania. The status in Finland changed from EN to VU in the Red List 2010. In Sweden this species has in surveys turned out to be common in soft, muddy substrates in many kinds of lakes from hypereutrophic to dystrophic (Delling et al. 2000).



Spined loach. Photo by Timo Moritz, Deutches Meeresmuseum.

RE

CR

EN

VU

NT

DD

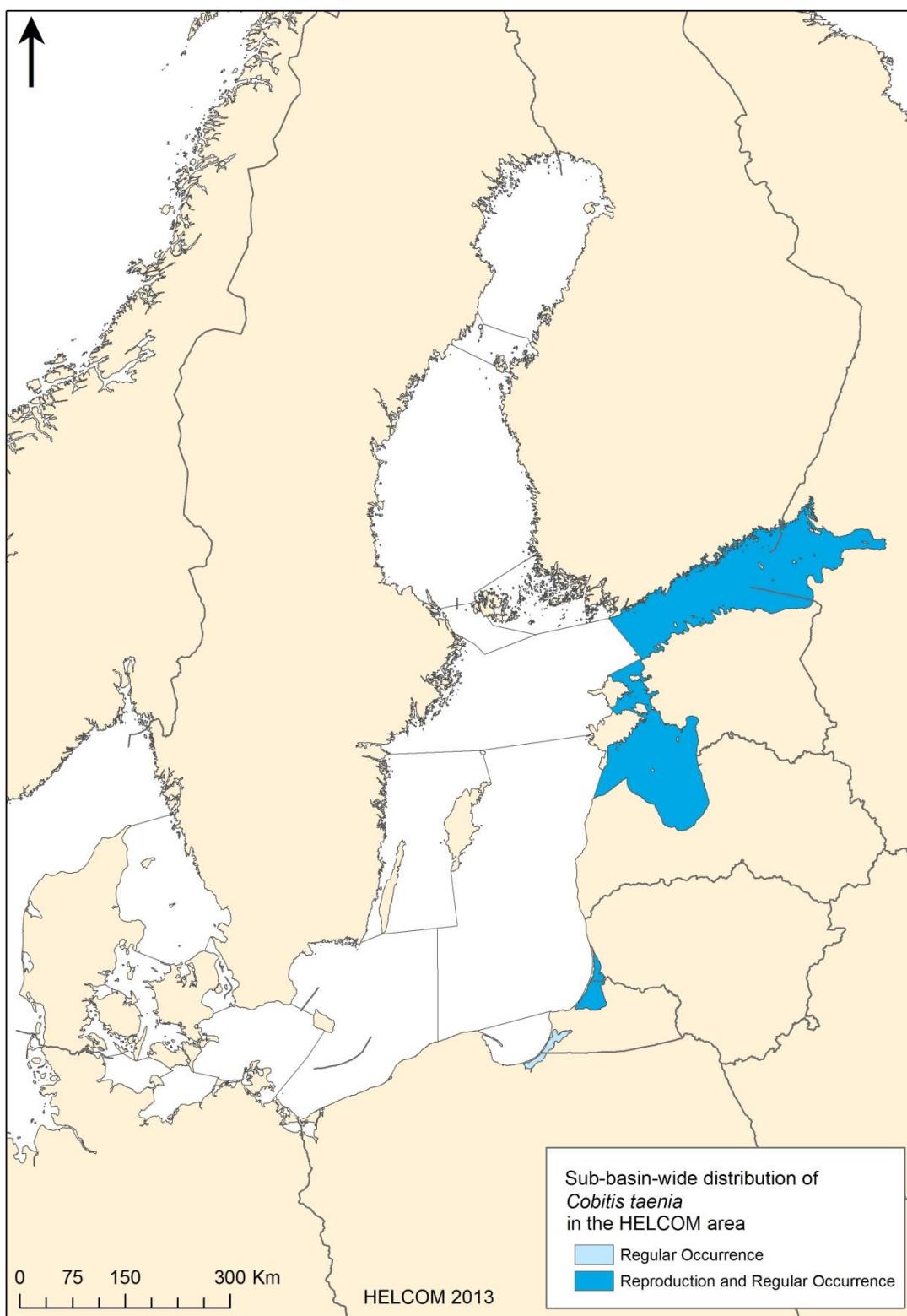
LC

SPECIES INFORMATION SHEET

Cobitis taenia

Distribution map

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



SPECIES INFORMATION SHEET

Cobitis taenia

Habitat and ecology

The spined loach *Cobitis taenia* lives benthic in slow-flowing and still waters, lagoon and lake habitats and estuaries, on soft substrate. In the Baltic Sea this freshwater fish is found in salinities up to 5 psu. The species is active at night, staying hidden under rocks or burying in the substrate during the day. Spined loach spawns in spring or summer and the eggs are deposited scattered into plant material, attached to rocks or macrophytes in shallow, flowing water. Females live up to five years and males up to three and can reach a maximum length of 13.5 cm. Females spawn for the first time at the age of 2–3 years, males already at the age of 1–2 years.

Description of major threats

No major threats perceived at the moment.

Assessment justification

As the species can live in several different habitats and there are no perceived threats and no suspicion of decline, this species is considered LC. The area of occupancy within the Baltic Sea is restricted but this species does not fulfill the sub-criteria of being either severely fragmented, showing extreme fluctuations in population size or habitat availability, or having continuing decline in population size or habitat. The population size is also estimated to be well above the threshold of a small population (<20 000), as evidenced by a beach seine survey in the Curonian lagoon that caught at least few individuals per 1 000m².

Recommendations for actions to conserve the species

No protection actions currently needed in HELCOM area but information on habitat requirements and population size especially in the basin of the Gulf of Finland should be collected.

Common names

D - Steinbeißer; GB – Spined loach; EST - Hink; DK - Pigsmerling; FIN – Rantanuoliainen; LV - Akmengrauzis; LT - Kirtiklis; PL - Koza pospolita; RUS - Obiknovennaja schipovka; S - Nissöga

References

- Aleksejevs, E., Birzaks, J. (2011). Long-term Changes in the Ichthyofauna of Latvia's Inland Waters. Scientific Journal of Riga Technical University 7: 9–18.
- Bohlen J., Rab, P. (2001). Species and hybrid richness in spined loaches of the genus *Cobitis* L. (Teleostei: Cobitidae), with a checklist of European forms and suggestions for their conservation. Journal of Fish Biology 59: 75–89.
- Delling, B., Kullander, S.O., Tengelin, B. (2000). Sällsynta fiskar i östergötland. Fiskefunktionen, Rapport 2000:2. Länsstyrelsen i Östergötland. 48 pp. [in Swedish]
- Freyhof, J. (2011). *Cobitis taenia*. In: IUCN 2011. IUCN Red List of Threatened Species. Available at: www.iucnredlist.org.
- Gaigalas, K. (2001). Fishes in the Curonian Bay basin, their resources and fishery. Klaipėda, Eglė. 372 pp.
- HELCOM (2007). HELCOM Red list of threatened and declining species of lampreys and fish of the Baltic Sea. Baltic Sea Environmental Proceedings No. 109. Helsinki Commission, Helsinki. 40 pp.
- HELCOM (2012). Checklist of Baltic Sea Macro-species. Baltic Sea Environment Proceedings No. 130. Helsinki Commission, Helsinki. 203 pp.
- Kottelat, M., Freyhof, J. (2007). Handbook of European freshwater fishes. Publications Kottelat, Cornol,



SPECIES INFORMATION SHEET

Cobitis taenia

- Switzerland. 646 pp.
- Ojaveer, E., Pihu, E., Saat, T. (eds.) (2003). Fishes of Estonia. Estonian Academy Publishers, Tallinn. 416 pp.
- Online report on Article 17 of the Habitats Directive: conservation status of habitats & species of Community interest (2001–2006). Available at <http://bd.eionet.europa.eu/article17>.
- Plikšs, M., Aleksejevs, E. (1998). Fishes of Latvia. Gandrs, Riga. 304 pp.
- Shibaev, S. V., Khlopnikov, M. M. and Skolov, A. V. (eds.) (2008). Fischery cadastre of transboundary reservoirs of Russia (the Kaliningrad region) and Lithuania. Mishutkina Co, Kaliningrad. 200 pp.
- Thiel, R., Winkler, H., Böttcher, U., Dänhardt, A., Fricke, R., George, M., Kloppmann, M., Schaarschmidt, T., Ubl, C. & Vorberg, R. (2013). Rote Liste und Gesamtartenliste der etablierten Neunaugen und Fische (Petromyzontida, Elasmobranchii & Actinopterygii) der marinen Gewässer Deutschlands. 5. Fassung, Stand August 2013. Naturschutz und Biologische Vielfalt 70(2): 11–76.
- Urho, L., Lehtonen, H. (2008). Fish species in Finland. Finnish Game and Fisheries Research Institute, Helsinki. 34 pp.
- Urho, L., Pennanen, J. T. & Koljonen, M.-L. (2010). Kalat Fish, Pisces. In Rassi, P., Hyvärinen, E., Juslén, A. & Mannerkoski, I. (eds.). Suomen laijien uhanalaisuus – Punainen kirja 2010. Ministry of the Environment & Finnish Environment Institute, Helsinki. P. 336–343.
- Vetemaa, M., Ložys, L., Minde, A. (2009). LIFE Nature project “Marine Protected Areas in the Eastern Baltic Sea”. Action A5 – Fish community inventory. Final report. Available at: http://www.balticseaportal.net/media/upload/File/Deliverables/Action%20reports/A5_final_report.pdf.
- Vilbaste, K. (ed.) (2004). Hink, Cobitis taenia. In: Internationally important species in Estonia: Natura 2000. Eesti Vabariigi Keskkonnaministeerium, Tallinn.
- Virbickas, J. (2000). Fishes of Lithuania. Trys žvaigždutės, Vilnius. 192 pp.
- Wind, P. & Pihl, S. (eds.). (2004–2010). The Danish Red List. - The National Environmental Research Institute, Aarhus University [2004]-. <http://redlist.dmu.dk> (updated April 2010). Species information available at <http://bios.au.dk/videnudveksling/til-myndigheder-og-saerligt-interesserede/redlistframe/soegart/>