Taxonomy [top]

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Actinopterygii	Salmoniformes	Salmonidae

Scientific Name:	Hucho hucho
Species Authority:	(Linnaeus, 1758)
Common Name(s):	
English – Danube Salmon, Huchen	

Assessment Information [top]

Red List Category & Criteria:	Endangered B2ab(ii,iii) <u>ver</u> <u>3.1</u>
Year Published:	2008
Date Assessed:	2008-01-01
Assessor(s):	Freyhof, J. & Kottelat, M.
Reviewer(s):	Bogutskaya, N., & Smith, K. (IUCN Freshwater Biodiversity Unit)

Justification:

The species is severely fragmented within the Danube drainage, where most populations exclusively depend on stocking and natural reproduction is very limited due to habitat alterations and flow regime changes. The main current threat to the species is the flow regulation from hydropower dams which impact the species, and their prey's, habitat and pollution. Documented self-sustaining populations are very few. For example, these include the Drau, Mur, Melk, Pielach, and lower Gail rivers in Austria. Globally, they will have a combined area of occupancy of less than 500 km² (based on spawning areas).

Previously published Red List assessments:

1996 – Endangered (EN) 1994 – Endangered (E) 1990 – Endangered (E)

Geographic Range [top]

Range Description: Native only in the Danube drainage, where it has a very fragmented distribution. Very locally introduced in some headwaters of Odra, Vistula (Poland), Lake Constance (Germany), Tagus Rhône (France) and probably other drainages where it apparently maintains only by stocking.		
Countries occurrence:	re: ia; Bosnia and Herzegovina; Croatia; Czech Republic; Germany; Hungary; Montenegro; Poland; Romania; Serbia (Serbia); Slovakia; Slovenia; Ukraine	
Additional data:		
Range Map:	Click here to open the map viewer and explore range.	

Population [top]

Population:	The species has undergone a massive decline starting over 100 years ago. More recently the majority of the stocks rely upon re-introductions (from farmed stock and ranched) for angling and conservation. It is almost impossible to identify if any stocks are self sustaining.	
Current Population Trend:	? Unknown	
Additional data: ♦ Population severely fragmented: No		

Habitat and Ecology [top]

	Habitat and	Habitat:	
	Ecology:	Montane and submontane reaches of large streams and swift rivers with gravel beds, well oxygenated,	
		fast-flowing water and temperatures rarely above 15°C. Prefers deep pools and shady water under	
		overhanging vegetation. Spawns in very clean gravel in fast-flowing water, usually in small river	
		tributaries.	
		Biology:	
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		Lives more than 20 years. Males reproduce for the first time at 3-4 years and about 1 kg, females at 4-	
		5 years and 2-3 kg. Spawns every year in early spring, usually March-April, rarely early May, when	
		temperatures reach 6-10°C. Commonly migrates upriver for spawning in upper reaches of tributaries.	
		Males arrive first at spawning sites. Males guard females against other males. Both sexes excavate a	
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	against other individuals. Usually spawns during daytime. During spawning act, both sexes cover the eggs with substrate. Both sexes may defend the spawning site up to two weeks after spawning. Eggs usually hatch after 25-40 days. Larvae remain in gravel until yolk sack is absorbed after 8-14 days. Juveniles inhabit fast-flowing waters and feed on drifting invertebrates, becoming piscivorous after 1-3 years. Adults feed on fishes as well as small terrestrial vertebrates. Juveniles and adults are territorial.		
Systems:	Freshwater		
Movement patterns:	Full Migrant		

Threats [top]

Major Threat(s):	(s): Historically overfishing, pollution and dam construction caused the decline of the species. Currently	
	the main the threats are hydropower stations which heavily regulate flow regime (which impacts upon	
	their prey and habitat), and pollution in some countries (Bosnia and Croatia).	

Conservation Actions [top]

	Conservation	Restocking, fishing regulations. A EU LIFE project in Austria to improve habitat conditions (now	
Actions: finished and seems to have been successful). Listed on Appendix III of the Bern Convention.		finished and seems to have been successful). Listed on Appendix III of the Bern Convention.	
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