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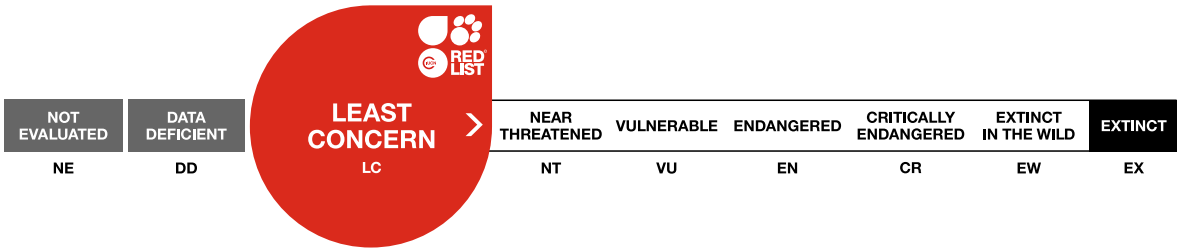
Gobio lepidolaemus, Central Asian Gudgeon

Assessment by: Mamilov, N. & Karimov, B.



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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Actinopterygii	Cypriniformes	Cyprinidae

Scientific Name: *Gobio lepidolaemus* Kessler, 1872

Synonym(s):

- *Gobio fluviatilis* ssp. *lepidolaemus* Kessler, 1872

Common Name(s):

- English: Central Asian Gudgeon

Taxonomic Source(s):

Vasili'eva, E.D., Vasili'ev, V.P. and Kuga, T. 2004. On taxonomy of gudgeons of the genus *Gobio* (Gobioninae, Cyprinidae) of Europe: a new gudgeon species *Gobio kubanicus* from the basin of the Kuban River. *Voprosy Ikhthiologii [Journal of Ichthyology]* 44 [44](6 [0]): 766-782 [716-731] In Russian [English translation].

Assessment Information

Red List Category & Criteria: Least Concern ver 3.1

Year Published: 2020

Date Assessed: December 28, 2019

Justification:

This is a widespread but poorly known species. It is thought to occur in many more then 10 independent populations and is not believed to be declining at a rate fast enough to qualify for Near Threatened or a threatened Category, with populations probably stabilising within the last 10 years. It is therefore assessed as LC.

Geographic Range

Range Description:

This species is widespread in the Syr and Amu Darya drainages in in Central Asia. *Gobio* populatons found in north-flowing rivers of the Kopetdag, Murgab and Tedzhen rivers and in Karakum Canal in Turkmenistan might belong to this species. It is expected to occur in many more than 10 populations and in more than 3000 km of river (Митрофанов 1988, Rustamov, Shakirova, 2013, Bekkozhayeva and Mamilov 2017).

Country Occurrence:

Native, Extant (resident): Afghanistan; Kazakhstan; Kyrgyzstan; Tajikistan; Turkmenistan; Uzbekistan

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Distribution Map

Legend

EXTANT (RESIDENT)

Compiled by:

IUCN (International Union for Conservation of Nature) 2020

The boundaries and names shown and the designations used on this map do not imply any official endorsement, acceptance or opinion by IUCN.

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Population

This species seem to have vanished from lowland sections of rivers during the second half of the 20th century due to the introduction of invasive species (Мамилов *et al*. 2007, Мамилов *et al*. 2014). Many populations are severely impacted by dam construction and water pollution. However, this species is still very widespread in many hillstream rivers where its populations seems have stabilised within the last 10 years.

Current Population Trend: Stable

Habitat and Ecology **(see Appendix for additional information)**

This species inhabits a wide range of streams, rivers, and lakes, including canals and reservoirs (Митрофанов 1988).

Systems: Freshwater (=Inland waters)

Use and Trade **(see Appendix for additional information)**

This species is not used or traded.

Threats **(see Appendix for additional information)**

Invasive species is the major threat to this species. Water abstraction, agriculture, pollution, mining and water retention by dams and climate change are other threats in the area that are suspected to affect this species (Kamilov *et al*. 2013, Мамилов *et al*. 2014, Karimov 2015, Karimov *et al*. 2017).

Conservation Actions

There are no conservation actions in place for this species, and none are thought to be needed.

Credits

Assessor(s): Mamilov, N. & Karimov, B.

Reviewer(s): Bogutskaya, N., Timirkhanov, S. & Doukravets, G.M.

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External Resources

For Supplementary Material, and for Images and External Links to Additional Information, please see the Red List website.

Appendix

Habitats

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Habitat	Season	Suitability	Major Importance?
5. Wetlands (inland) -> 5.1. Wetlands (inland) - Permanent Rivers/Streams/Creeks (includes waterfalls)	-	-	-
5. Wetlands (inland) -> 5.5. Wetlands (inland) - Permanent Freshwater Lakes (over 8ha)	-	-	-
15. Artificial/Aquatic & Marine -> 15.1. Artificial/Aquatic - Water Storage Areas (over 8ha)	-	-	-

Threats

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Threat	Timing	Scope	Severity	Impact Score
2. Agriculture & aquaculture -> 2.1. Annual & perennial non-timber crops -> 2.1.1. Shifting agriculture	Ongoing	-	-	Low impact: 3
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
2. Agriculture & aquaculture -> 2.1. Annual & perennial non-timber crops -> 2.1.2. Small-holder farming	Ongoing	-	-	Low impact: 3
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
2. Agriculture & aquaculture -> 2.1. Annual & perennial non-timber crops -> 2.1.3. Agro-industry farming	Ongoing	-	-	Low impact: 3
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
3. Energy production & mining -> 3.2. Mining & quarrying	Ongoing	-	-	Low impact: 3
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
3. Energy production & mining -> 3.3. Renewable energy	Ongoing	-	-	Low impact: 3
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
7. Natural system modifications -> 7.2. Dams & water management/use -> 7.2.1. Abstraction of surface water (domestic use)	Ongoing	-	-	Low impact: 3
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		

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7. Natural system modifications -> 7.2. Dams & water management/use -> 7.2.2. Abstraction of surface water (commercial use)	Ongoing	-	-	Low impact: 3
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
7. Natural system modifications -> 7.2. Dams & water management/use -> 7.2.3. Abstraction of surface water (agricultural use)	Ongoing	-	-	Low impact: 3
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
7. Natural system modifications -> 7.2. Dams & water management/use -> 7.2.5. Abstraction of ground water (domestic use)	Ongoing	-	-	Low impact: 3
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
7. Natural system modifications -> 7.2. Dams & water management/use -> 7.2.6. Abstraction of ground water (commercial use)	Ongoing	-	-	Low impact: 3
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
7. Natural system modifications -> 7.2. Dams & water management/use -> 7.2.7. Abstraction of ground water (agricultural use)	Ongoing	-	-	Low impact: 3
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
7. Natural system modifications -> 7.2. Dams & water management/use -> 7.2.9. Small dams	Ongoing	-	-	Low impact: 3
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
8. Invasive and other problematic species, genes & diseases -> 8.1. Invasive non-native/alien species/diseases -> 8.1.1. Unspecified species	Ongoing	-	-	Low impact: 3
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality 2. Species Stresses -> 2.2. Species disturbance		
9. Pollution -> 9.1. Domestic & urban waste water -> 9.1.3. Type Unknown/Unrecorded	Ongoing	-	-	Low impact: 3
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation		
9. Pollution -> 9.2. Industrial & military effluents -> 9.2.3. Type Unknown/Unrecorded	Ongoing	-	-	Low impact: 3
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation		
9. Pollution -> 9.3. Agricultural & forestry effluents -> 9.3.4. Type Unknown/Unrecorded	Ongoing	-	-	Low impact: 3
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation		
11. Climate change & severe weather -> 11.1. Habitat shifting & alteration	Ongoing	-	-	Low impact: 3
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		

11. Climate change & severe weather -> 11.3. Temperature extremes	Ongoing	-	-	Low impact: 3
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		

Additional Data Fields

Distribution
Continuing decline in area of occupancy (AOO): Unknown
Extreme fluctuations in area of occupancy (AOO): No
Continuing decline in extent of occurrence (EOO): No
Extreme fluctuations in extent of occurrence (EOO): Unknown
Continuing decline in number of locations: No
Extreme fluctuations in the number of locations: No
Population
Extreme fluctuations in subpopulations: Yes
Habitats and Ecology
Movement patterns: Not a Migrant
Congregatory: Congregatory (and dispersive)

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