Neosilurus mollespiculum

Assessment by: Ebner, B., Brooks, S. & Kennard, M.

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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Actinopterygii	Siluriformes	Plotosidae

Taxon Name: *Neosilurus mollespiculum* Allen & Feinberg, 1998

Taxonomic Source(s):

Eschmeyer, W.N., Fricke, R., and Ven der Laan, R. (eds.). 2017. Catalog of Fishes: genera, species, references. Updated 01 November 2017. Available at: <http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp>.

Assessment Information

Red List Category & Criteria: Vulnerable B1ab(v)+2ab(v) [ver 3.1](#)

Year Published: 2019

Date Assessed: February 13, 2019

Justification:

Listed as Vulnerable because the Extent of Occurrence is around 9,000 km², the Area of Occupancy is estimated to be less than 100 km², it is known from only one location when considering the threat of invasive species, and there is an observed decline in the number of mature individuals possibly due to introduced species.

Geographic Range

Range Description:

This species is known only from the Burdekin River System, Queensland, Australia.

Country Occurrence:

Native: Australia (Queensland)

Distribution Map

Neosilurus mollespiculum

Range

Extant (resident)

Compiled by:

Lintermans, M. and colleagues 2019 IUCN Red List assessment for Australian freshwater fish.

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

Population

In the late 1980s and early 1990s sampling showed it was a moderately common species. More recent sampling (by A. Davis JCU) indicates it may have undergone a decline in range and abundance.

Current Population Trend: Decreasing

Habitat and Ecology (see Appendix for additional information)

This species inhabits rocky freshwater pools in main river channels and larger creeks. The diet of this species consists of terrestrial and aquatic insects, crustaceans, molluscs, detritus and algae. Little is known of the reproductive biology of this species. Spawning is likely to occur in the wet season. (Pusey *et al.* 2004)

Systems: Freshwater

Use and Trade

No trade or use for this species.

Threats (see Appendix for additional information)

Potential threats to this species include flow regulation and introduced species. The dam has caused loss of lotic habitat in the impounded area. Flow regulation may reduce rises in water levels which possibly triggers spawning, while the translocated *Oxyeleotris lineolata* may prey on this species (Pusey *et al.* 2004), and the recently introduced *Tilapia* may compete with this species. Lack of ecological information regarding this species makes it difficult to determine current threats.

Conservation Actions (see Appendix for additional information)

It may occur in a protected area, and is primarily found in unprotected areas.

Credits

Assessor(s): Ebner, B., Brooks, S. & Kennard, M.

Reviewer(s): Butler, G. & Hammer, M.

Contributor(s): Pusey, B.

Facilitators(s) and Compiler(s): Chanson, J.S.

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External Resources

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)	Resident	Suitable	Yes

Threats

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

Threat	Timing	Scope	Severity	Impact Score
7. Natural system modifications -> 7.2. Dams & water management/use -> 7.2.10. Large dams	Ongoing	Minority (50%)	Slow, significant declines	Low impact: 5
8. Invasive and other problematic species, genes & diseases -> 8.1. Invasive non-native/alien species/diseases -> 8.1.2. Named species (Oreochromis mossambicus)	Ongoing	-	-	-
8. Invasive and other problematic species, genes & diseases -> 8.2. Problematic native species/diseases -> 8.2.2. Named species (Oxyeleotris lineolata)	Ongoing	-	-	-

Conservation Actions in Place

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

Conservation Actions in Place
In-Place Land/Water Protection and Management
Occur in at least one PA: Unknown

Research Needed

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

Research Needed
1. Research -> 1.2. Population size, distribution & trends
1. Research -> 1.3. Life history & ecology
1. Research -> 1.5. Threats

Additional Data Fields

Habitats and Ecology
Movement patterns: Unknown

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