Neoarius graeffei, Blue Salmon Catfish

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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Actinopterygii	Siluriformes	Ariidae

Taxon Name: *Neoarius graeffei* (Kner & Steindachner, 1867)

Synonym(s):

- *Ariopsis graeffei* (Kner & Steindachner, 1867)
- *Arius australis* Günther, 1867
- *Arius curtisii* Castelnau, 1878
- *Arius graeffei* Kner & Steindachner, 1867

Common Name(s):

- English: Blue Salmon Catfish

Assessment Information

Red List Category & Criteria: Least Concern [ver 3.1](#)

Year Published: 2019

Date Assessed: February 12, 2019

Justification:

Listed as Least Concern because it is widespread, common and there are no major threats.

Geographic Range

Range Description:

This species distribution spans southern New Guinea and adjacent coastal-marine and fresh waters of northern and south-eastern Australia (Pusey *et al.* 2004, Rimmer 1985). This species is found from the Ashburton River in the Pilbara region of Western Australia, north and east around to the Hunter River in New South Wales. The Hunter River represents the southern limit of this species, however this species hasn't been recorded from this region in a number of years (Pusey *et al.* 2004).

Country Occurrence:

Native: Australia (New South Wales, Northern Territory, Queensland, Western Australia); Papua New Guinea (Papua New Guinea (main island group))

Distribution Map

Neoarius graeffei

Range

Extant (resident)

Compiled by:

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

Population

It is common throughout most of its range.

Current Population Trend: Stable

Habitat and Ecology (see Appendix for additional information)

This species occurs in freshwater and estuarine habitats, including muddy lowland and corridor lagoons, but may penetrate into marine waters (Pusey *et al* 2004). This species can tolerate temperatures ranging from 11-38 degrees Celsius (Allen 2002). This anadromous species undertakes extensive breeding migrations, and breeds annually from early November to early December when water temperatures reach 26 degrees Celsius, and daylength averages 13.7 hours (Rimmer 1985). It is a mouth brooder.

Systems: Freshwater, Marine

Use and Trade

There are small commercial fisheries for this species in New South Wales and the Gulf of Carpentaria in Queensland. This species is locally harvested by indigenous people in the Daly River in the Northern Territory, however such small scale subsistence harvesting is unlikely to pose a threat to this species (Jackson *et al.* 2012). It is also harvested on a small scale for the aquarium trade.

Threats

Dams and weirs in south-eastern Queensland may pose a hazard to this species, particularly individuals of a smaller class size which appear less able to navigate these structures. Dissociation of freshwater habitats from estuarine reaches may have consequences for the maintenance of populations in some rivers. Given that this species prefer warm waters, impoundments that alter a river's thermal regime are likely to impact on this species, particularly those rivers in the south-eastern portion of its range where its lower thermal tolerance may be just above winter minima. Further, river regulation that reduces flood frequency and magnitude, and hence floodplain inundation, or restricting movement between floodplain habitats and the main channel is likely to impact this species. This effect has been recorded in the Burdekin River delta where reductions in the extend an integrity of riparian forests and poor water quality are correlated with the absence of this species. However, in spite of the potential impacts of water infrastructure, this species generally does well in impound waters. This species also appears as by-catch in near-shore and estuarine fisheries, where it is frequently among the most abundant species in the by-catch (Pusey *et al.* 2004). Ingestion of exotic cane toad (*Rhinella marina*) tadpoles may pose a threat to this species at a local scale during the cane toads' breeding season (Somaweera *et al.* 2011).

Conservation Actions (see Appendix for additional information)

This species occurs in several protected areas.

Credits

Assessor(s): Butler, G. & Kennard, M.

Reviewer(s): Brooks, S.

Facilitators(s) and Chanson, J.S.
Compiler(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)	-	Suitable	-
5. Wetlands (inland) -> 5.2. Wetlands (inland) - Seasonal/Intermittent/Irregular Rivers/Streams/Creeks	-	Suitable	-
9. Marine Neritic -> 9.10. Marine Neritic - Estuaries	-	Suitable	-
10. Marine Oceanic -> 10.1. Marine Oceanic - Epipelagic (0-200m)	Resident	Suitable	-
13. Marine Coastal/Supratidal -> 13.4. Marine Coastal/Supratidal - Coastal Brackish/Saline Lagoons/Marine Lakes	-	Suitable	-

Conservation Actions in Place

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

Conservation Actions in Place
In-Place Research, Monitoring and Planning
Action Recovery plan: No
In-Place Land/Water Protection and Management
Occur in at least one PA: Yes

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