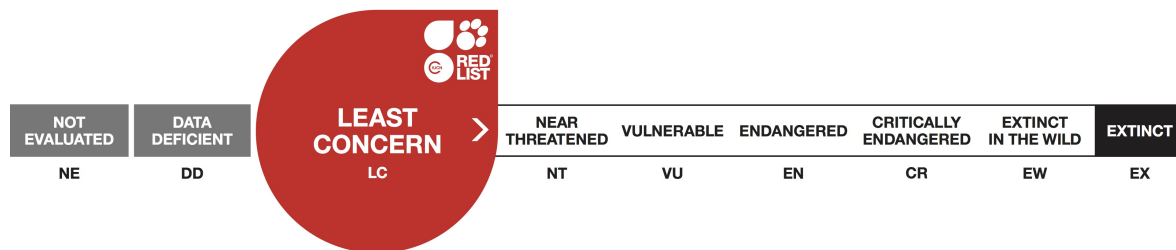


Gobius paganellus, Rock Goby

Assessment by: Carpenter, K.E., Smith-Vaniz, W.F., de Bruyne, G. & de Morais, L.



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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Actinopterygii	Perciformes	Gobiidae

Taxon Name: *Gobius paganellus* Linnaeus, 1758

Synonym(s):

- *Gobius albosignatus* Kessler, 1874
- *Gobius bicolor* Gmelin, 1789
- *Gobius capito* Valenciennes, 1837
- *Gobius capitonellus* Kessler, 1874
- *Gobius melanopterus* Walbaum, 1792
- *Gobius nigrofuscus* Lacepède, 1800
- *Gobius punctipinnis* Canestrini, 1862
- *Gobius nigellus* Bonnaterre, 1788

Regional Assessments:

- [Europe](#)
- [Mediterranean](#)

Common Name(s):

- English: Rock Goby
- French: Gobie Paganel
- Spanish: Bobi

Assessment Information

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

Year Published: 2015

Date Assessed: July 15, 2014

Justification:

Gobius paganellus is common in museum collections and locally abundant. *Gobius paganellus* occurs inshore and intertidal, under stones and in pools on sheltered rocky shores. Use in the aquarium trade needs to be confirmed. There are no known conservation actions for *Gobius paganellus*, but its distribution overlaps several marine protected areas. Therefore, *Gobius paganellus* is listed as Least Concern.

Geographic Range

Range Description:

Gobius paganellus occurs in the Eastern Central Atlantic from Senegal to Mauritania (Miller 1986, Eschmeyer 2013). It also occurs in the Mediterranean and Black Sea (except the northwestern portion), the Gulf of Eilat and the Red Sea (Miller 1986). *Gobius paganellus* occurs to a depth of five metres (Dunne 1978). However, in the Azores, *Gobius paganellus* occurs to 15 m in depth (Patzner *et al.* 1992).

Country Occurrence:

Native: Albania; Algeria; Belgium; Benin; Bulgaria; Croatia; Cyprus; Egypt; France; Georgia; Gibraltar; Greece; Guernsey; Ireland; Israel; Italy; Jersey; Jordan; Lebanon; Liberia; Libya; Malta; Mauritania; Monaco; Montenegro; Morocco; Portugal (Azores, Madeira, Portugal (mainland)); Romania; Russian Federation; Saudi Arabia; Senegal; Serbia (Serbia); Slovenia; Spain (Canary Is., Spain (mainland)); Syrian Arab Republic; Togo; Tunisia; Turkey; Ukraine; United Kingdom; Western Sahara

FAO Marine Fishing Areas:

Native: Atlantic - eastern central, Atlantic - northeast, Indian Ocean - western, Mediterranean and Black Sea -

Distribution Map

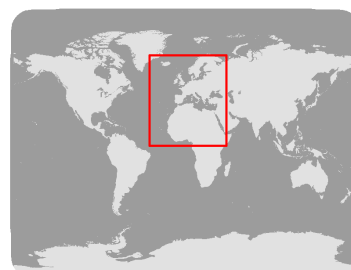


Gobius paganellus

Range

Extant (resident)

Compiled by:
International Union for
Conservation of Nature



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



Population

Gobius paganellus is common in museum collections and locally abundant (147 lots with a maximum of 45 specimens in a lot; accessed through the Fishnet 2 Portal, www.fishnet2.org, 2013-02-11). *Gobius paganellus* is common in intertidal pools of rocky shores in the Isle of Man, on Irish shores, and intertidally in Galway Bay and Connemara (Miller 1961, Dunne 1978).

Current Population Trend: Stable

Habitat and Ecology (see Appendix for additional information)

Gobius paganellus is benthic (Miller 1990) and predominantly marine, however, it occasionally enters freshwater (Maugé 1986). *Gobius paganellus* occurs inshore and intertidal, under stones and in pools on sheltered rocky shores with dense weed cover (Miller 1986). The maximum recorded total length is 13 cm (Dunne 1978). Miller (1961) concluded *Gobius paganellus* have a lifespan of up to ten years. Mortality rate of *Gobius paganellus* is highest during the first two years in life. The rate declines once the age of potential sexual maturity is reached (Miller 1961). The adult diet consists of crustaceans such as larger amphipods, isopods, small crabs (Azevedo and Simas 2000, also found gastropods), as well as polychaetes, while juveniles feed upon harpacticoid copepods, amphipods, polychaetes and mites (Miller 1986). Miller (1986) noted varying spawning periods throughout *Gobius paganellus* range: Naples (January-June), Isle of Man, Irish Sea (April-June), and Varna, Black Sea (March-mid-May). *Gobius paganellus* undergo repeated spawning during these periods, reproducing two to possibly three times. Miller (1961) found females between 4.85-8.8 cm in length (SL) have the ability to produce 1,054-8,978 eggs. Eggs are fusiform and arranged in patches of up to several thousand under stones, shells, polychaete tubes, or *Ciona* mantles. Eggs develop for 20 days, after which they hatch (0.36-0.48 cm). Miller (1961) determined sexual maturity is reached at two to three years of age in males and females. Size at sexual maturity for males is 5.05 cm and for females, 4.85 cm.

Systems: Freshwater, Marine

Use and Trade

Use in the aquarium trade needs to be confirmed.

Threats

There are no known major threats for *Gobius paganellus*.

Conservation Actions (see Appendix for additional information)

There are no known species-specific conservation measures for *Gobius paganellus*, but its distribution overlaps several marine protected areas.

Credits

Assessor(s): Carpenter, K.E., Smith-Vaniz, W.F., de Bruyne, G. & de Morais, L.

Reviewer(s): Polidoro, B. & Corley, B.

Facilitators(s) and Stump, E.
Compiler(s):

Bibliography

Azevedo, J.M.N. and Simas, A.M.V. 2000. Age and growth, reproduction and diet of sublittoral population of the rock goby *Gobius paganellus* (Teleostei: Gobiidae). *Hydrobiologia* 440: 129-135.

Dunne, J. 1978. Littoral and benthic investigations on the west coast of Ireland - IX. Section A (faunistic and ecological studies). The biology of the Rock-Goby, *Gobius paganellus* L., at Carna. *Proceedings of the Royal Irish Academy. Section B, Biological, Geographical, and Chemical Science* 78: 179-191.

Eschmeyer, W.N. 2013. Catalog of Fishes. Updated 11 February 2013. Available at: <http://research.calacademy.org/research/ichthyology/Catalog/fishcatmain.asp>.

FishNet 2 Portal. 2013. FishNet 2 Portal. Available at: <http://www.fishnet2.net/>.

IUCN. 2015. The IUCN Red List of Threatened Species. Version 2015-4. Available at: www.iucnredlist.org. (Accessed: 19 November 2015).

Maugé, L.A. 1986. Gobiidae. In: J. Daget, J.-P. Gosse and D.F.E. Thys van den Audenaerde (eds), *Check-list of the freshwater fishes of Africa (CLOFFA)*. Vol. 2, pp. 358-388. ISNB, Brussels; MRAC, Tervuren; and ORSTOM, Paris, Brussels, Tervuren, and Paris.

Miller, P.J. 1961. Age, growth, and reproduction of the Rock Goby, *Gobius paganellus* L., in the Isle of Man. *Journal of the Marine Biological Association of the United Kingdom* 41: 737-769.

Miller, P.J. 1986a. Gobiidae. In: P.J.P. Whitehead, M.-L. Bauchot, J.-C. Hureau, J. Nielsen and E. Tortonese (eds), *Fishes of the north-eastern Atlantic and the Mediterranean*, pp. 1019-1085. UNESCO, Paris.

Miller, P.J. 1990. Gobiidae. In: J.C. Quéro, J.C. Hureau, C. Karrer, A. Post and L. Saldanha (eds), *Check-list of the fishes of the eastern tropical Atlantic (CLOFETA)*, pp. 925-951. JNICT, Lisbon, SEI, Paris; and UNESCO, Paris, Paris.

Patzner, R.A., Santos, R.S., Ré, P. and Nash, R.D.M. 1992. Littoral fishes of the Azores: An annotated checklist of fishes observed during the "Expedition Azores 1989". *Life and Earth Sciences* 10: 101-111.

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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?
12. Marine Intertidal -> 12.1. Marine Intertidal - Rocky Shoreline	Resident	Suitable	Yes
12. Marine Intertidal -> 12.6. Marine Intertidal - Tidepools	Resident	Suitable	Yes

Conservation Actions in Place

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

Conservation Actions in Place
In-Place Land/Water Protection and Management
Conservation sites identified: Yes, over part of range
Occur in at least one PA: Yes

Additional Data Fields

Distribution
Lower depth limit (m): 15
Upper depth limit (m): 0

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