

Freshwater Fish of Conservation Concern in the Isle of Man (FFoCCIoM) 2024

Eeast Awin ta Feme Coadey ayns Ellan Vannin 2024



Introducing FFoCCloM 2024

Freshwater Fish of Conservation Concern in the Isle of Man (FFoCCloM) 2024 is the first assessment of the conservation status of all native freshwater fish in the Isle of Man.

The primary purpose of this document is to highlight the importance of freshwater fish conservation, better target research and management and collate information on the threats to our native species.

The assessment uses the most recent data available from decades of research. A traffic light system of Red (greatest concern), Amber (unfavourable), and Green (least concern) is used to indicate the conservation status of each species. A list of invasive non-native species that must be monitored is also included.

Identifying the species of greatest conservation concern can assist with the prioritisation of conservation policy, strategy and funding. As an up-to-date account of the populations and ranges of all freshwater fish in the Isle of Man, FFoCCIoM 2024 is a useful resource to assist those wishing to understand and help to conserve fish populations and the habitats upon which they depend.

The full report can be found at mwt.im/FFoCCIoM

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Key findings

All nine species thought to be native were assessed for their conservation status for FFoCCloM 2024. Data deficiencies for some species make population estimates subjective, however, their presence or absence within sites surveyed for other species allows an understanding of their distribution, range and rarity. Five species were found to be of conservation concern.

species **Red-listed**

species **Amber-listed**

species **Green-listed**

known invasive species

species thought to be native

species of conservation concern

Our native species are in jeopardy, threatened by pollution, water extraction, invasive non-native species, climate change, habitat loss and change, over-fishing, physical works within the river channel (including riverbank engineering) and changes to water flow rates, either as a result of drier periods or periods of higher rainfall. This also impacts on invertebrates within the rivers too, which are important food sources for many fish.

The RED List Y Rolley Jierg

Species of freshwater fish in the Isle of Man that are of greatest conservation concern

The second	Common and Manx Name	Scientific Name	Suspected Reasons for Decline	Reason for Listing & Manx Status	Active Manx Monitoring Programme
大学 がかが かっか	European Eel Astan	Anguilla anguilla	Isle of Man/UK/International: Death on long distance migration Poaching and overfishing Potential impact of the parasitic nematode Anguillicola crassus Challenges to fish passage Climate change Habitat change	 Critically Endangered with global extinction (IUCN3.1) Included in the OSPAR list of threatened species Davies (2007) & Barry (2010) found the eel populations on the IOM appear healthy Presence/absence surveys indicate healthy populations 	Presence or absence monitoring including within salmonid survey sites
	Atlantic Salmon Braddan Atlantagh	Salmo salar	Isle of Man: Habitat change, such as reduced water flow Climate change Challenges to fish passage Poaching and overfishing UK/International: Poaching and overfishing Usease and pest transfer from salmon farms Genetics, potentially imported from accidental salmon farm escapes	 Near Threatened with global extinction, Vulnerable in Europe, Endangered in Great Britain (IUCN3.1) Included in the OSPAR list of threatened species Historic Manx decline Juvenile population trends vary between rivers Migration difficulties for the returning adult populations 	25 surveyed juvenile sites

Method

FFoCCIOM 2024 uses data collected by the Fisheries Division within the Environment Directorate of the Department of Environment, Food and Agriculture and the findings of postgraduate research. Several freshwater fish species are not monitored regularly and therefore, it is acknowledged that these species are data deficient.

The criteria used for the assessment include recent and historical population trends in the Isle of Man, the severity of threats posed to them by impacts such as habitat degradation or climate change and the importance of the Manx population in an international context. Any species listed by the IUCN as Critically Endangered with global extinction or on the OSPAR list of threatened species were automatically placed on the Manx Red List.

Only species which have an identifiable freshwater phase within their life history are included (i.e. only species known to be entirely freshwater, anadromous or catadromous).

The fish species *Salmo trutta* has been listed twice – once as the Sea Trout and once as the Brown Trout. They are both the same species, however, they have significantly different life strategies. DEFA does not currently monitor Sea Trout populations, however it is possible that they are exposed to greater risk than Brown Trout, due to their complex life cycle.

For details of references please see the full report available online at mwt.im/FFoCCIoM

Sulby Reservoir CREDIT: DEFA Fisherie



The AMBER List Y Rolley Amber

Species of freshwater fish in the Isle of Man that are of unfavourable conservation status

Common and Manx Name	Scientific Name	Suspected Reasons for Decline	Rea	son for Listing & Manx Status	Active Manx Monitoring Programme
River Lamprey Lamprey awin	Lampetra fluviatilis	Isle of Man/UK: Habitat change Climate change	•	Once thought to be locally extinct, rarely encountered but spotted in the Neb in 2007 and in the Sulby	Presence or absence monitoring
Brook Lamprey Lamprey strooan	Lampetra planeri	Isle of Man/UK:Habitat changeClimate change	•	Once thought to be locally extinct, surveys conducted since 2007, sporadic distribution throughout Manx watercourses	Presence or absence monitoring
Sea Trout* Breck gial	Salmo trutta trutta	Isle of Man: Challenges fish passage Habitat change Climate change Poaching and overfishing UK/International: Habitat change, such as reduced water flow Climate change Poaching and overfishing	•	Population estimates through the Celtic Sea Trout Project Migration influences to returning adult populations	25 surveyed juvenile sites

Three-spined Stickleback GREE

The GREEN List Y Rolley Glass

Species of freshwater fish in the Isle of Man that are of least conservation concern

	Common and Manx Name	Scientific Name	Reason for Listing & Manx Status	Active Manx Monitoring Programme
	Three-spined Stickleback Birrag ny hawin	Gasterosteus aculeatus	Shows a wide, sporadic distribution throughout many surveyed Manx watercourses although data is deficient	Presence or absence monitoring
10000000000000000000000000000000000000	Minnow Mynnag	Phoxinus phoxinus	Healthy populations known in some of the Island's reservoirs. Occasionally found downstream of these locations although data is deficient	No
	Nine-spined Stickleback Birrag nuy-yialgagh	Pungitius pungitius	Shows a wide, sporadic distribution throughout many surveyed Manx watercourses although data is deficient	Presence or absence monitoring
	Brown Trout* Breck awin	Salmo trutta fario	70% of monitoring sites showed good or excellent population density	25 survey juvenile sites

^{*}Salmo trutta has been listed twice — once as the Sea Trout and once as the Brown Trout. They are both the same species, however, they have significantly different life strategies warranting separate listings.



The NON-NATIVE List Y Rolley Quaagh

Species of freshwater fish in the Isle of Man that are considered Non-Native but known to be present

Common Name	Scientific Name	
Common Carp	Cyprinus carpio	
Koi Carp	Cyprinus rubrofuscus	
Rainbow Trout	Oncorhynchus mykiss	
Pacific Pink Salmon	Oncorhynchus gorbuscha	
European Perch	Perca fluviatilis	
Common Roach	Rutilus rutilus	
Common Rudd	Scardinius erythrophthalmus	
Roach x Rudd hybrids	R. rutilus x S. erythrophthalmus	
Tench	Tinca tinca	

FFoCCIoM 2024 is endorsed by:









mwt.im/FFoCCloM

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