

Manx Red



Freshwater Fish of Conservation Concern in the Isle of Man (FFoCCIoM) 2024
Eeast Awin ta Feme Coadey ayns Ellan Vannin 2024



Sulby River
CREDIT: John Collister

Introducing FFOCCIoM 2024

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

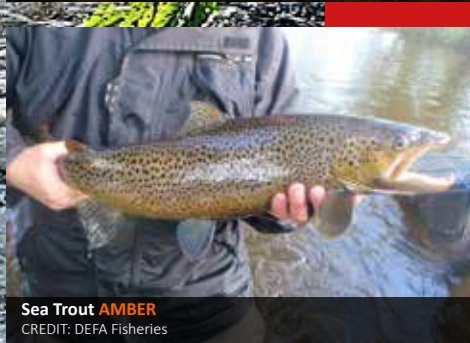
The full report can be found at mwt.im/FFoCCIoM

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Lara Howe (MWT) and David Bellamy (MWT).



Key findings

All nine species thought to be native were assessed for their conservation status for FFoCCIoM 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.



2
species
Red-listed

3
species
Amber-listed

4
species
Green-listed

9
known
invasive
species

9
species
thought to
be native

5
species of
conservation
concern

Our native species are in jeopardy, threatened by pollution, 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 Jiarg

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

Common and Manx Name	Scientific Name	Suspected Reasons for Decline	Reason for Listing & Manx Status
European Eel Astan	<i>Anguilla anguilla</i>	Isle of Man/UK/International: <ul style="list-style-type: none">• Death on long distance migration• Poaching and overfishing• Potential impact of the parasitic nematode <i>Anguillicola crassus</i>• Challenges to fish passage• Climate change• Habitat change	<ul style="list-style-type: none">• 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
Atlantic Salmon Braddan Atlantagh	<i>Salmo salar</i>	Isle of Man: <ul style="list-style-type: none">• Habitat change, such as reduced water flow• Climate change• Challenges to fish passage• Poaching and overfishing UK/International: <ul style="list-style-type: none">• Poaching and overfishing• Disease and pest transfer from salmon farms• Genetics, potentially imported from accidental salmon farm escapes	<ul style="list-style-type: none">• Near Threatened with global extinction (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



Method

Active Manx Monitoring Programme

Presence or absence monitoring including within salmonid survey sites

25 surveyed juvenile sites

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

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	Reason for Listing & Manx Status	Active Manx Monitoring Programme
River Lamprey Lamprey awin	<i>Lampetra fluviatilis</i> .	Isle of Man/UK: <ul style="list-style-type: none"> Habitat change Climate change 	<ul style="list-style-type: none"> Once thought to be locally extinct, rarely encountered but spotted in Neb in 2007 and in the Sulby 	Presence or absence monitoring
Brook Lamprey Lamprey strooan	<i>Lampetra planeri</i>	Isle of Man/UK: <ul style="list-style-type: none"> Habitat change Climate change 	<ul style="list-style-type: none"> Once thought to be locally extinct, surveys conducted since 2007, sporadic distribution throughout Manx watercourses 	Presence or absence monitoring
Sea Trout* Breck gial	<i>Salmo trutta</i>	Isle of Man: <ul style="list-style-type: none"> Challenges fish passage Habitat change Climate change Poaching and overfishing UK/International: <ul style="list-style-type: none"> Habitat change, such as reduced water flow Climate change Poaching and overfishing 	<ul style="list-style-type: none"> Population estimates through the Celtic Sea Trout Project Migration influences to returning adult populations 	25 surveyed juvenile sites

Three-spined Stickleback GREEN
CREDIT: Canva



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	<i>Gasterosteus aculeatus</i>	Shows a wide, sporadic distribution throughout many surveyed Manx watercourses although data is deficient	Presence or absence monitoring
Minnow Mynnag	<i>Phoxinus phoxinus</i>	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	<i>Pungitius pungitius</i>	Shows a wide, sporadic distribution throughout many surveyed Manx watercourses although data is deficient	Presence or absence monitoring
Brown Trout* Breck awin	<i>Salmo trutta</i>	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	<i>Cyprinus carpio</i>
Koi Carp	<i>Cyprinus rubrofuscus</i>
Rainbow Trout	<i>Oncorhynchus mykiss</i>
Pacific Pink Salmon	<i>Oncorhynchus gorbuscha</i>
European Perch	<i>Perca fluviatilis</i>
Common Roach	<i>Rutilus rutilus</i>
Common Rudd	<i>Scardinius erythrophthalmus</i>
Roach x Rudd hybrids	<i>R. rutilus</i> x <i>S. erythrophthalmus</i>
Tench	<i>Tinca tinca</i>

FFoCCIoM 2024 is endorsed by:



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Droghys Saa sheaghteyn



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