

INVASIVE SPECIES ALERT!

BITTERLINGS

(*Rhodeus spp.*)

PROHIBITED IN BC

*There are over 40 species in the genus *Rhodeus*. Rosy Bitterling (*Rhodeus ocellatus ocellatus*) is the most common in the pet trade.

All species in this genus are banned from B.C.

NATIVE RANGE

The native distribution of Bitterlings extends from France and eastward to Asia and northern China.

DESCRIPTION

Bitterlings...

- Are 6-7 cm long on average
- Have a purple-blue base colour
- Have an orange-red spot on the tail fin
- Have pink-red pigment on the dorsal (back) and anal (bottom side) fins
- Have a dark teardrop band behind the gills
- Have fewer than 12 scales across the lateral line (base of tail to eye)
- Have a distinct grey-silver lateral stripe from tail base to middle of body
- Are deep bodied, appearing flattened on either side
- Have a rounded snout

Breeding male bitterlings...

- Turn iridescent along the sides, bright blue on midline, orange-blood red on fins and belly

BIOLOGY & SPREAD

Bitterlings are being spread to non-native regions through the pet trade. Wild populations have shown to have low fecundity and slowed distribution because of their dependence on freshwater mussels for reproduction. Bitterlings are still able to spread effectively, as they can survive at a wide range of water temperatures and have an omnivorous diet. Predation on bitterlings is low because of their noxious taste.



Photo: George Chernilevsky (commons.wikimedia.org)

PRIMARY IMPACT:
Bitterlings are known carriers of diseases that could potentially spread to and impact native species in B.C.

REPORT INVASIVE SPECIES
www.reportinvasives.ca

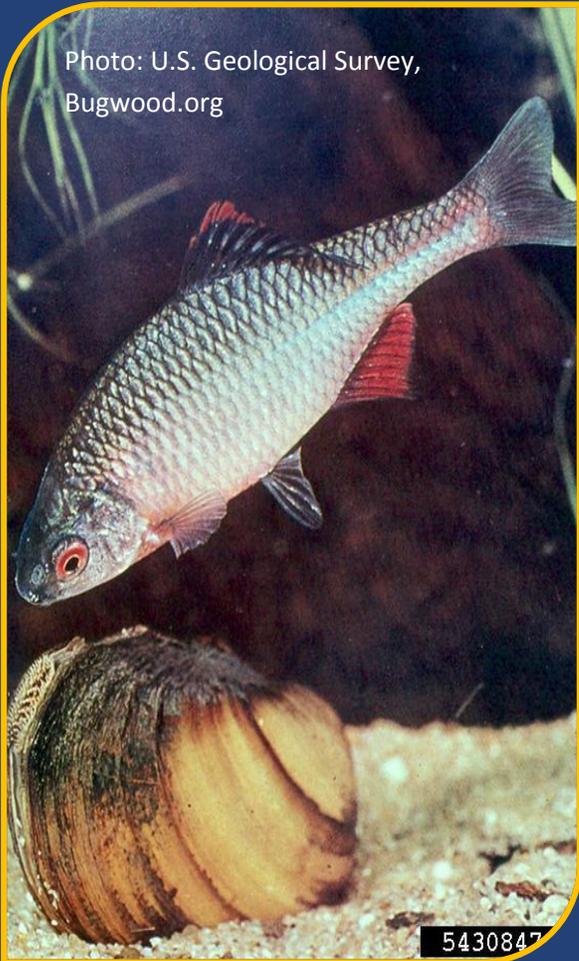
DID YOU KNOW?

Bitterlings require freshwater bivalves for spawning sites. Females deposit eggs into the mantle cavity of a mussel then males fertilize eggs from above the respiratory opening of the bivalve. Males guard eggs and newly hatched young while they remain in the mussel before maturing enough to go off on their own.

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Photo: U.S. Geological Survey,
Bugwood.org



HABITAT

Bitterlings can be found in ponds, lakes, marshes, muddy and sandy pools and backwaters of rivers. They depend on the presence of mussels for reproduction; therefore are found in habitats where freshwater mussels exist.

WHY SHOULD WE CARE?

Bitterlings...

- Could potentially impact ecosystem dynamics through high consumption of phytoplankton species
- Could potentially form large populations that would compete with native species for food, if not prevented in B.C. waters
- Are carriers of diseases that infect fresh water fish, such as black spot disease and red spot disease

ARE THEY HERE YET?

No. There have been no reports of Bitterlings in B.C. There is an established population in New York, which was first introduced in the 1930's. There have been no other reported occurrences of Bitterlings in North America.

LOOKALIKES

The Red Shiner (*Cyprinella lutrensis*) also appears in the pet trade and looks similar to bitterlings, as adults have a similar blue-purple coloration. Red shiners are usually named by pet traders as **Asian Rainbow Barbs or Rainbow Mountain Dace**. As far as visual differences to Bitterlings, Red Shiners do not have a deep compressed body shape, **their scales are diamond shaped and outlined in a crosshatch pattern, and their fins are dark red.**

WHAT SHOULD I DO IF I FIND ONE?

Report Bitterlings, or any other invasive species via the Report Invasives phone app, or via the webform available on the B.C. Inter-Ministry Invasive Species Working Group website:

www.gov.bc.ca/invasive-species

HOW CAN WE STOP THEM?

- Do not possess, breed, release, sell or transport live Bitterlings in B.C. (***It is illegal!***)
- Be aware of the species that you buy for aquariums, as it could be PROHIBITED in B.C.
- Raise awareness to avoid the spread of this species into B.C. waters

