#### **About**

Goldfish are one of the most widespread invasive fish in British Columbia. Goldfish typically make their way into BC waterways as released pets. They easily adapt to life in the wild, growing to many times their original size. If they reproduce, they can quickly overrun lakes and ponds, taking away habitat and food sources from native aquatic species.

## Legal Status

Goldfish are an invasive species in BC and are designated as a Regional Containment/Control species by the Inter-Ministry Invasive Species Working Group.

#### Distribution in BC

Goldfish have been found throughout southern BC and are typically found in lakes and streams near populated areas. Since 2016, Goldfish have been reported in waterways throughout the Fraser Valley and Kelowna, in Dragon Lake near Quesnel, in Pinecrest Lake near Squamish, in White Lake near Okanagan Falls, in Lost Lake near Terrace and in Alta Lake and other waterbodies in the Whistler area.



#### **Identification**

Despite their name, Goldfish come in a variety of colours, from olive to silvery-white to gold and orange. Recently released Goldfish may still resemble Goldfish sold in pet



stores but can grow up to 60 cm long and weigh between 100-300 g. Goldfish can interbreed with invasive carp, leading to a variety of different body forms.

Goldfish have scales on the body but not the head and a dorsal fin that goes from the middle of the back to the base of the tail. To differentiate Koi from Goldfish, Koi have barbels (feelers that resemble whiskers) around their mouths while Goldfish do not have barbels.

## **Ecological Characteristics**

**Habitat:** Goldfish can survive in most freshwater bodies, but prefer to swim in shallow, slow-moving waters. Groups of Goldfish may gather at the shoreline of lakes and ponds. They can survive in water temperatures between 0–41°C and tolerate extremely low levels of dissolved oxygen.

**Reproduction:** Female Goldfish will typically lay eggs in shallow, still water, where they are fertilized by males. Goldfish can reproduce asexually at times, where females produce eggs that do not need to be fertilized. These eggs hatch into identical genetic clones of the mother. Because of this, the release of a single female Goldfish into a waterway could potentially lead to an infestation.

**Dispersal:** Goldfish have been primarily introduced into BC waterways as discarded pets. Once released, they can easily swim to other water bodies through connecting streams. Goldfish may be inadvertently transported between water bodies in boating equipment, or illegally used as live bait.

## **Impacts**

**Ecological:** Goldfish have a broad omnivorous diet. They feed on aquatic plants, small invertebrates, plankton, and the eggs and fry of other fish. Their variable diet, combined with their ability to survive in a variety of habitats, means they can quickly spread and reduce native prey populations in a water body.

Goldfish feeding activity disturbs silt, increasing the turbidity of water, which prevents sunlight from reaching aquatic plants. This limits the growth and development of aquatic plants, removing food and habitat for many aquatic species. Goldfish can significantly reduce the biological diversity of a pond or lake.

**Economic:** Goldfish use the same food and habitat as juvenile trout. An infestation of Goldfish in a lake could reduce trout populations, making the lake less desirable for fishing.

## **Best Management Practices**

**Prevention:** It is illegal to move fish between waterways in BC. The use of live finfish as bait is strictly prohibited in BC. Always follow the guidelines of Clean, Drain, Dry to prevent the accidental spread of Goldfish between water bodies.

If you are unable to care for a pet Goldfish, Don't Let It Loose! Instead, contact a pet store or the BCSPCA for guidance on how to dispose of or rehome your pet.





**Reporting:** If you suspect you have found Goldfish in BC waters, you can report them using the <u>Report Invasives App</u>, available for Apple or Android devices, or by contacting the ISCBC at info@bcinvasives.ca or 1-888-933-3722.



# **References/Informative Links**

ISCBC: https://bcinvasives.ca/invasives/Goldfish/

Provincial Factsheet: <a href="https://www2.gov.bc.ca/assets/gov/environment/plants-animals-and-ecosystems/invasive-species/alerts/Goldfish\_alert.pdf">https://www2.gov.bc.ca/assets/gov/environment/plants-animals-and-ecosystems/invasive-species/alerts/Goldfish\_alert.pdf</a>

Goldfish in Dragon Lake: https://infotel.ca/newsitem/in-photos-Goldfish-are-rapidly-taking-over-this-bc-lake/it73895

Clean, Drain, Dry: <a href="https://bcinvasives.ca/play-your-part/clean-drain-dry/">https://bcinvasives.ca/play-your-part/clean-drain-dry/</a>

US Geological Service: <a href="https://nas.er.usgs.gov/queries/factsheet.aspx?SpeciesID=508">https://nas.er.usgs.gov/queries/factsheet.aspx?SpeciesID=508</a>



