

Photo: Amber McEwan

#### Gambusia

Gambusia were introduced to NZ in the 1930's from Mexico in a failed attempt to control mosquito larvae. Gambusia has been declared an unwanted organism under the Biosecurity Act. They are small fish with a greenish silvery sheen. Mature females grow to 6cm, males to 3.5cm. They mature at six weeks old and give birth to live young. Hence a single pregnant female is all that is needed to start a new infestation, which can then rapidly build up in numbers. Gambusia prefer the shallow margins of slow flowing ponds, wetlands and streams especially around aquatic plants. They can tolerate poor water quality and a wide range of temperatures. They are widespread throughout Northland, Auckland, Waikato, and the Bay of Plenty; and isolated infestations have been found in Hawkes Bay, Wanganui and Tasman. Gambusia populations quickly expand to outnumber other species. They attack native fish by nipping their fins and eyes and eat their eggs. Whitebait species are especially vulnerable as they live in similar habitats.

# Catfish

Catfish were introduced from North America in the 1870's. They are robust fish with eight distinctive whisker-like barbels (feelers) around the mouth. They have sharp spines at the front of the pectoral and pelvic fin. They grow up to 50cm and can weigh up to 3kg. They can survive in a wide range of temperatures and tolerate poor water quality. They are able to survive for long periods out of water and are difficult to kill. Catfish prefer slow flowing streams and the edges of lakes, often amongst aquatic plants. They are widespread in the Waikato River system, but are also found in Northland, and at two isolated South Island sites. Catfish stir up sediment and prey on small native fish and their eggs and are known to eat and compete with koura (native freshwater crayfish).

#### **Control**

The spread of pest fish into new waterways is entirely by people illegally releasing fish or accidentally transporting fish eggs. Do not intentionally release fish or dispose of unwanted aquarium or pond fish into any waterways. Ensure that your garden pond is isolated from natural waterways, even during floods. The best way to rid your pond of pest fish is to temporarily drain it, removing and destroying the fish. DO NOT empty pond water into the storm water system or waterways; instead drain it onto the grass. Thoroughly clean all fishing equipment when moving beween waterways to prevent the accidental spred of eggs. Report any sightings of pest fish in natural waterways to the Marlborough District Council or Department of Conservation who will investigate controlling these pests. Various options can give effective control of pest fish and have been used in Marlborough to control a pest fish incursion.

# Caution

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For more information on plant and animal pests phone:
Marlborough District Council (03) 520 7400
Department of Conservation Sounds
Area Office(03) 520 3002
Department of Conservation South
Marlborough Area Office (03) 572 9100



## **Pest fish**



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#### **Status**

Some exotic freshwater fish are serious pests within our waterways. Several species are listed as unwanted organisms by Biosecurity NZ. The Marlborough District Council and Department of Conservation are concerned about the risk exotic pest fish pose to the aquatic environment. They welcome any information about the occurrence of pest fish within the district and will attempt to control incursions when they occur. If you see rudd, tench, koi carp, perch, gambusia, catfish or any other freshwater fish you don't recognise in any water body or garden pond please report it immediately to the Marlborough District Council or Department of Conservation.

#### Threat

Exotic pest fish pose a significant threat to our natural aquatic environment and reduce indigenous aquatic biodiversity. They are prolific breeders and can quickly build up to large numbers. They eat aquatic invertebrates, out competing and predating on native fish species as well as reducing plant growth. Some species such as koi carp and catfish are known to affect water quality, turning pristine lakes, ponds and rivers muddy. There is concern that pest fish could reduce whitebait stocks in areas they establish.

Pest fish are being spread by people. Although their off-spring may disperse downstream the only way for them to establish in new catchments is by deliberate illegal releases. It is an offence to release any fish into a waterbody where the species doesn't already exist. Do not release any fish into Marlborough's waterways, or dump unwanted aquarium plants or fish into waterways. Heavy fines apply for unauthorised release of fish, plants or other aquatic life.



Rudd is native to Europe, Russia and central Asia and was illegally introduced to NZ in 1967 to start a recreational fishery. Outside the Auckland Waikato region, Rudd is classified as a noxious fish. They are a stocky deep bodied fish growing up to 40cm and weighing up to 2kg. Rudd are silvery orange, with a white belly, and have bright orange fins. The dorsal fin, is small and does not extend to the tail fin as on goldfish. The lateral line curves downwards. Rudd prefer ponds, lakes and slow flowing streams. They are widespread in Auckland and Waikato with isolated infestations in Northland, Wanganui, Wellington and Christchurch. They feed voraciously on insects, aquatic plants and other fish, competing with other species for food and degrading native fish habitat. They interfere with fishermen's ability to catch trout, because they take the lure or fly more readily.

#### **Tench**

Originating from Europe and Asia,

Tench was illegally introduced to NZ to create a recreational fishery. In some regions it is a sports fish. They are stout olive to golden green fish that grow to 40cm long and can weigh up to 4kg. They have a single small barbel (feeler) at each corner of their mouth. They have very small scales and are slimy. Tench prefer still or gently flowing waters with a muddy bottom and rich aquatic plant growth. Widespread infestations occur throughout the North Island, and in several sites in the South. Tench are prolific breeders and quickly build up high numbers, feeding on aquatic invertebrates, and predating native fish and their eggs.

## Koi carp

Originating from
Europe and Asia, Koi
carp resemble goldfish
but have two pairs of
barbels (feelers) at
the corners of their



mouth. Their colours are highly variable, often with irregular black, red, gold, orange and white blotching. In New Zealand they are known to grow up to 75cm long and weigh up to 10kg. Koi carp prefer lakes, backwaters in rivers and ponds and are widespread in Auckland and Waikato, and are also found in isolated places in Northland, Wanganui, Hawkes Bay and Wellington. They are not known to be in the South Island and is listed as an unwanted organism in the Biosecurity Act. Koi carp feed by stirring up the muddy bottom, eating insects, spawn, juvenile fish, aquatic plants and other organic matter. They cause habitat loss for plants, native fish and waterfowl and cause significant declines in water quality.



#### **Perch**

Perch were introduced from Europe in 1868 to create a recreational fishery. In some regions it is a sports fish. They are attractive olive-green fish with prominent vertical strips. A distinctive feature is the bright reddish-orange colouring of the pelvic and anal fins. They often grow to 67cm and weigh up to 2kg, but some populations become dwarfed and are much smaller. They prefer slow-flowing streams, rivers, ponds and lakes. Infestations are found throughout both the North and South Island. Perch feed on a wide range of aquatic invertebrates, small fish and their eggs and have the potential to significantly alter native freshwater communities.

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## Goldfish

Goldfish are fine

in contained garden ponds and aquariums but shouldn't be released into stock ponds and other waterbodies. In the wild they can establish large populations and become obese and eat the food that native species rely on.