

Freshwater fish of Moggill Creek

A field identification guide



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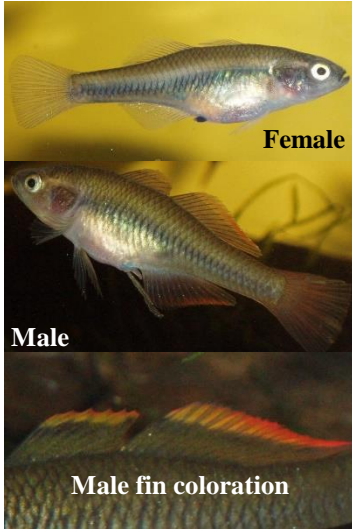
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Photos: All photos taken by Timothy Howell except; juvenile ornate rainbowfish (Leo Lee), adult barred grunter (Glynn Aland) and tank photo of guppy (nature.com). With the exception of the adult ornate rainbowfish, Hyrtl's tandan, Rendahl's catfish, carp, Koi, goldfish, tilapia, banded grunter and guppy all photographs of fish are of specimens collected from Moggill Creek.

Native fish species



Firetail Gudgeon (*Hypseleotris galii*)

Status in Moggill Creek:	Abundant
Habitat:	Bottom to mid-water species
Distinguishing features:	Fin margin is tipped with red coloration for mature males. Larger males (> 4 cm) develop rounded heads. Females have a black spot near the anal vent
Max size:	5.5 cm
Typical size:	< 5 cm
Potential confusion:	Western carp gudgeon (see below), juvenile empire gudgeon (see below)



Western Carp Gudgeon (*Hypseleotris klunzingeri*)

Status in Moggill Creek:	Abundant
Habitat:	Surface to mid-water species
Distinguishing features:	Fin margin coloration for mature males. Females similar to female firetails but lack the black spot on the anal vent
Max size:	4.5 cm
Typical size:	< 4 cm
Potential confusion:	Firetail gudgeon (see above), juvenile empire gudgeon (see below)



Empire Gudgeon (*Hypseleotris compressa*)

Status in Moggill Creek:	Abundant
Habitat:	Surface to mid-water species
Distinguishing features:	Typically have criss-cross patterns on the side. Mature males have distinct coloration, however, they can quickly lose this after being captured. Generally much larger than other <i>Hypseleotris</i> species. Juveniles the size of the other two species are much slimmer in the body
Max size:	12 cm
Typical size:	5 – 8 cm. large numbers of juvenile (< 4 cm sometimes observed)
Potential confusion:	Firetail gudgeon (see above), western carp gudgeon (see above)

Native fish species



Flathead Gudgeon (*Philypnodon grandiceps*)

Status in Moggill Creek:	Common
Habitat:	Bottom dwelling species
Distinguishing features:	Broad mouth and wide head. Several dark bands radiating from the eye. Typically larger than dwarf flathead gudgeon
Max size:	12 cm
Typical size:	< 8cm
Potential confusion:	Dwarf flathead gudgeon, particularly smaller specimens. Other gudgeons



Dwarf Flathead Gudgeon (*Philypnodon maculatus*)

Status in Moggill Creek:	Common
Habitat:	Bottom dwelling species
Distinguishing features:	Difficult to distinguish from flathead gudgeon for small specimens. Mature males may be identifiable by the distinct red lips and blotchy coloration shown in the picture
Max size:	5 cm
Typical size:	< 4 cm
Potential confusion:	Dwarf flathead gudgeon, particularly smaller specimens. Other gudgeons



Striped Gudgeon (*Gobiomorphus australis*)

Status in Moggill Creek:	Abundant
Habitat:	Bottom dwelling species
Distinguishing features:	5 - 7 stripes down the side. Lines may pale considerably in a bucket but are still detectable.
Max size:	18 cm
Typical size:	< 12 cm
Potential confusion:	Purple-spotted gudgeon, flathead gudgeon, Cox's gudgeon (rare in S-E Qld)



Purple-spotted Gudgeon (*Mogurnda adspersa*)

Status in Moggill Creek:	Abundant
Habitat:	Bottom dwelling species
Distinguishing features:	Adults have a blue sheen down the sides. Scattered red and whites spots on the sides. Juveniles often less pronounced blue sheen on sides. 2 - 3 diagonal stripes across the cheeks
Max size:	15 cm
Typical size:	< 10 cm
Potential confusion:	Striped gudgeon, flathead gudgeon

Native fish species

Agassiz's Glassfish (*Ambassis agassizii*)

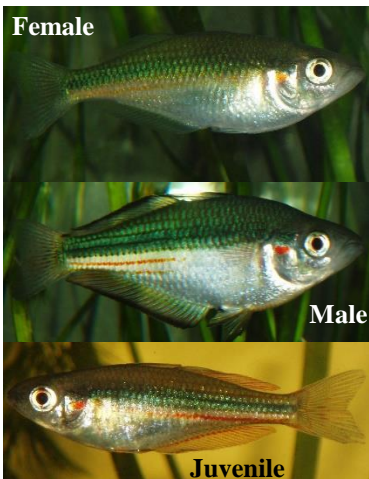


Status in Moggill Creek:	Common
Habitat:	Mid-water species, often around aquatic plants.
Distinguishing features:	Olive in colour. Fork-tail. Perch shape
Max size:	7.5cm
Typical size:	3 - 5 cm
Potential confusion:	Possibly mouth almighty, but generally smaller and does not have brown blotches on the body. Estuary perchlet found in the lower reaches

Mouth Almighty (*Glossamia aprion*)



Status in Moggill Creek:	Common
Habitat:	Mid-water species. Aquatic plants and submerged wood
Distinguishing features:	Brown blotch coloration. Round tail. Perch shape.
Max size:	18 cm
Typical size:	< 12 cm
Potential confusion:	Agassiz's glassfish



Crimson-spotted Rainbowfish (*Melanotaenia duboulayi*)

Status in Moggill Creek:	Abundant
Habitat:	Surface to mid-water species
Distinguishing features:	Red spot on the cheek. Green/blue sheen across the top half of the body
Max size:	11 cm
Typical size:	< 8 cm
Potential confusion:	Ornate rainbowfish

Ornate Rainbowfish (*Rhadinocentrus ornatus*)



Status in Moggill Creek:	Rare. First recording in April 2011
Habitat:	Surface to mid-water species
Distinguishing features:	No red spot on cheek. Often has two dark stripes down each side of the body. Less triangular in shape than crimson-spotted rainbowfish.
Max size:	6 cm
Typical size:	< 4 cm
Potential confusion:	Juvenile crimson-spotted rainbowfish, Pacific blue-eye

Native fish species



Fly-speckled Hardyhead (*Craterocephalus stercusmuscarum*)

Status in Moggill Creek:	Abundant
Habitat:	Surface to mid-water species
Distinguishing features:	A distinct black stripe extending down the side of the body. The black stripe may not be apparent in fish kept in buckets and may be a more distinct gold line
Max size:	10 cm
Typical size:	< 6 cm
Potential confusion:	Australian smelt



Australian Smelt (*Retropinna semoni*)

Status in Moggill Creek:	Common
Habitat:	Surface to mid-water species
Distinguishing features:	A largely transparent fish with a distinct silver belly. Less pointy nose than the fly-speckled hardyhead
Max size:	10 cm
Typical size:	< 6 cm
Potential confusion:	Fly-speckled hardyhead



Pacific Blue-eye (*Pseudomugil signifer*)

Status in Moggill Creek:	Abundant
Habitat:	Surface to mid-water species
Distinguishing features:	Eye has a blue sheen when reflected off direct sunlight. Typically have a row of diamond like reflections down the sides. Often criss-cross patterns on sides. Males develop extended fins which often have a white coloration
Max size:	7 cm
Typical size:	< 4 cm
Potential confusion:	Mosquito fish, juvenile crimson-spotted rainbowfish



Spangled perch (*Leiopotherapon unicolor*)

Status in Moggill Creek:	Common
Habitat:	Mid-water species
Distinguishing features:	Silvery-grey to bluish. Numerous reddish-brown spots on head and body
Max size:	30 cm
Typical size:	< 20 cm
Potential confusion:	Barred grunter

Native fish species



Blue catfish (*Arius graeffei*)

Status in Moggill Creek:	Common in estuarine reaches
Habitat:	Bottom species
Distinguishing features:	Distinct whiskers, forked tail
Max size:	60 cm
Typical size:	< 30 cm
Potential confusion:	None

DANGER – SPINES ON SOME FINS CAN IMPART A PAINFUL STING



Eel-tailed catfish (*Tandanus tandanus*)

Status in Moggill Creek:	Common
Distinguishing features:	Eel like tail, fins extend along top and bottom of tail
Habitat:	Bottom species, juveniles < 10cm may be caught in aquatic plants
Max size:	90 cm
Typical size:	< 45 cm
Potential confusion:	Hyrtl's tandan, Rendahl's catfish (see below)

DANGER – SPINES ON SOME FINS CAN IMPART A PAINFUL STING

Rarer catfish – not yet recorded in Moggill Creek

Both these species can be distinguished from an eel-tailed catfish by having a tail fin that extends below the tail only (not above). Have been recorded in the broader Brisbane River catchment.

DANGER – SPINES CAN IMPART A PAINFUL STING

Hyrtl's tandan (*Neosilurus hyrtlii*)

Status in Moggill Creek:	Not yet recorded
Distinguishing features:	Tail fin extends along bottom only. Convex head profile.
Habitat:	Bottom species
Max size:	34 cm
Typical size:	< 20 cm
Potential confusion:	Eel-tail catfish, Rendahl's catfish

Rendahl's catfish (*Porochilus rendahli*)

Status in Moggill Creek:	Not yet recorded
Distinguishing features:	Tail fin extends along bottom only. Concave head profile.
Habitat:	Bottom species
Max size:	24 cm
Typical size:	< 20 cm
Potential confusion:	Eel-tail catfish, Hyrtl's tandan



Native fish species



Long-finned eel (*Anguilla reinhardtii*)

Status in Moggill Creek:	Abundant
Habitat:	Bottom species but may be visually observed swimming in open water in Moggill Creek
Distinguishing features:	Dark blotches, typically dark green in colour
Max size:	150 cm
Typical size:	10 - 1 00 cm
Potential confusion:	Short-finned eel



Short-finned eel (*Anguilla australis*)

Status in Moggill Creek:	Rare
Habitat:	Bottom species but may be visually observed swimming in open water in Moggill Creek
Distinguishing features:	Uniform colour, usually brown but sometimes greenish brown
Max size:	90 cm
Typical size:	10 - 80 cm
Potential confusion:	Long-finned eel



Sea mullet (*Mugil cephalus*)

Status in Moggill Creek:	Common
Habitat:	Surface to mid-water pelagic species. Unlikely to be captured but may be observed
Distinguishing features:	Silvery large bodied fish
Max size:	75 cm
Typical size:	10 - 30 cm
Potential confusion:	None



Bullrout (*Notesthes robusta*)

Status in Moggill Creek:	Rare
Habitat:	Bottom dwelling species
Distinguishing features:	Stonefish-like shape. Brown blotchy coloration, many spines
Max size:	30 cm
Typical size:	< 20 cm
Potential confusion:	None

DANGER – SPINES ON SOME FINS CAN IMPART A PAINFUL STING

Common exotic fish species



Mosquito Fish (*Gambusia holbrooki*)

Status in Moggill Creek:	Common
Habitat:	Surface to mid-water species
Distinguishing features:	Females larger than males and typically have a dark spot near the anal vent (although so can female swordtails and platys)
Male size:	< 3.5 cm
Female size:	< 6 cm
Potential confusion:	Platy, Pacific blue-eye

Swordtail (*Xiphophorus helleri*)



Status in Moggill Creek:	Common
Habitat:	Mid-water species
Distinguishing features:	Both males and females usually have a purple-red strip down the side against a blue sheen. Males have a distinctive sword-like tail. Females are similar to the platy but lack the dark blotch near the tail
Max size:	12 cm
Typical size:	< 8 cm
Potential confusion:	Mosquito fish, platy

Platy (*Xiphophorus maculatus*)



Status in Moggill Creek:	Common in estuarine reaches
Habitat:	Mid-water species
Distinguishing features:	More stocky than mosquito fish and swordtails of the same size. Triangular head and dark blotch near the tail. Can exhibit variation in colours, but are typically light brown with a feint blue sheen
Male size:	< 6 cm
Female size:	< 4cm
Potential confusion:	Mosquito fish, swordtail

Carp (koi) (*Cyprinus carpio*)



Status in Moggill Creek:	Small numbers of adult koi strain carp in the lower Moggill Creek near Kenmore High School
Habitat:	Surface to mid-water species
Distinguishing features:	Large scales. Four small whiskers on the mouth. Specimens observed in Moggill Creek to date are of the koi variety and do not appear to be breeding. More likely to be observed than caught.
Size:	50 - 70 cm
Potential confusion:	Smaller specimens (< 30 cm) may be confused with feral goldfish. Feral goldfish do not have whiskers on the mouth

Other exotic species

Goldfish (*Carassius auratus*)



Status in Moggill Creek:	Not yet recorded
Habitat:	Mid-water species
Distinguishing features:	Wild fish usually olive bronze. Sometimes reddish. Easily distinguished from carp by the lack of barbels (whiskers) around mouth
Size:	40 cm
Typical size:	< 20 cm
Potential confusion:	Carp



Tilapia (*Oreochromis mossambicus*)

Status in Moggill Creek:	Reproductive pair sited behind Kenmore high school
Habitat::	Mid-water species
Distinguishing features:	Greenish on back, silvery on sides. Dorsal (top) fin extends along most of the back ridge. Often has black bars along the sides
Max size:	36 cm
Typical size:	< 20 cm
Potential confusion:	Barred grunter

Barred Grunter (*Amniataba percoides*)



Status in Moggill Creek:	Not yet recorded
Habitat:	Mid-water species
Distinguishing features:	Silvery white to light gold in colour with 5 - 6 black bars on the sides
Max size:	18 cm
Typical size:	< 12 cm
Potential confusion:	Spangled perch, tilapia
Note:	Barred grunter are an Australian species but are not native to the Brisbane River catchment and are considered an invasive pest outside their natural range

Guppy (*Poecilia reticulata*)



Status in Moggill Creek:	Previously recorded but have not been recorded for many years
Habitat:	Surface to mid-water species
Distinguishing features:	Males have highly variable colour combinations of red, orange, yellow, blue and green blotches on the body
Female size:	< 6 cm
Male size:	< 3 cm
Potential confusion:	Gambusia, Pacific blue-eye

Freshwater fish species that have been identified to date from Moggill Creek Catchment

Common name	Species	Occurance	Status
Agassiz's Glassfish	<i>Ambassis agassizii</i>	Abundant	Native
Estuary perchlet	<i>Ambassis marianus</i>	Abundant in lower reaches	Native
Short-finned eel	<i>Anguilla australis</i>	Rarely caught	Native
Long-finned eel	<i>Anguilla reinhardtii</i>	Abundant	Native
Blue catfish	<i>Arius graeffei</i>	Rarely caught	Native
Snub-nosed Garfish	<i>Arrhamphus sclerolepis</i>	Rare	Native
Silver perch	<i>Bidyanus bidyanus</i>	Single specimen	Translocated
Fly-speckled hardyhead	<i>Craterocephalus stercusmuscarum</i>	Abundant	Native
Koi	<i>Cyprinus carpio</i>	Small numbers	Exotic/pest
Gambusia	<i>Gambusia holbrooki</i>	Abundant	Exotic/pest
Mouth Almighty	<i>Glossamia aprion</i>	Common	Native
Striped gudgeon	<i>Gobiomorphus australis</i>	Common	Native
Empire gudgeon	<i>Hypseleotris compressa</i>	Abundant	Native
Fire-tailed gudgeon	<i>Hypseleotris gallii</i>	Abundant	Native
Western carp gudgeon	<i>Hypseleotris klunzingeri</i>	Abundant	Native
Spangled perch	<i>Leiopotherapon unicolor</i>	Common	Native
Crimson spotted rainbowfish	<i>Melanotaenia duboulayi</i>	Abundant	Native
Purple-spotted gudgeon	<i>Mogurnda adspersa</i>	Abundant	Native
Sea mullet	<i>Mugil cephalus</i>	Abundant	Native
Bullrout	<i>Notesthes robusta</i>	Probably occurs	Native
Mozambique tilapia	<i>Oreochromis mossambicus</i>	Two specimens	Exotic/pest
Flathead gudgeon	<i>Philypnoden grandiceps</i>	Common	Native
Dwarf flathead gudgeon	<i>Philypnoden macrostomas</i>	Common	Native
Guppy	<i>Poecilia reticulata</i>	Not recorded for many years	Exotic/pest
Pacific blue-eye	<i>Pseudomugil signifer</i>	Abundant	Native
Speckled goby	<i>Redigobius bikolanus</i>	Rare, mainly estuarine	Native
Australian smelt	<i>Retropinna</i>	Rare	Native
Ornate rainbowfish	<i>Rhadinocentrus ornatus</i>	Rare, single record	Native
Eel-tail catfish	<i>Tandanus tandanus</i>	Abundant	Native
Swordtail	<i>Xiphophorus helleri</i>	Abundant	Exotic/pest
Platy	<i>Xiphophorus maculatus</i>	Abundant	Exotic/pest

Freshwater fish species that have been recorded from Brisbane River Catchment but not Moggill Creek

Common name	Species	Likely occurrence	Status
Goldfish	<i>Carassius auratus</i>	Possible	Exotic/pest
Barred grunter	<i>Amniataba percoides</i>	Possible	Translocated/pest
Marjorie's hardyhead	<i>Craterocephalus marjoriae</i>	Possible	Native
Midgley's Carp Gudgeon	<i>Hypseleotris</i> Sp 1	Possible	Native
Australian bass	<i>Macquaria novemaculeata</i>	Unlikely	Native
Freshwater mullet	<i>Myxus petardi</i>	Unlikely	Native
Cox's gudgeon	<i>Gobiomorphus coxii</i>	Possible	Native
Bony Bream	<i>Nematalosa erebi</i>	Probably occurs on occasion	Native
Hyrtyl's tandan	<i>Neosilurus hyrtlii</i>	Possible	Native
Rendahl's catfish	<i>Porochilus rendahli</i>	Possible	Native
Common jollytail	<i>Galaxias maculatus</i>	Unlikely	Native
Golden perch	<i>Macquaria ambigua</i>	Unlikely	Native
Crimson tip gudgeon	<i>Butis butis</i>	Probably occurs	Native
Australian lungfish	<i>Neoceratodus fosterii</i>	Possible/unverified sightings	Native