**WHAT IS A FRESHWATER FISH?**

Fishes have a backbone, scales, are cold blooded and have gills. The majority of freshwater fishes found in Australia have migrated from marine environments many years ago. Freshwater is critical to their survival, as all or some of their life cycle is in freshwater. Australia does not have many species of freshwater fish compared to other countries, Lake Malawi in Africa has more species than the whole of Australia.

Compared to the rest of Australia, the Kimberley is a biodiversity hotspot for freshwater fish with 52 species. There are more species of freshwater fish found in the Ord River than the entire Murray-Darling Basin!

**WHAT'S IN YOUR BACKYARD?**

**Giant Glassfish**

- **Parambassis gulliveri**
- **Size:** Maximum about 24 cm
- **Distinguishing features:** Humped forehead, relatively large mouth, small scales and distinctive lined colouration. Yellowish anal and pelvic fins.
- **Habitat:** Large rivers, waterholes usually in turbid water
- **Diet:** Small crustaceans and fishes
- **Distribution:** Freshwater, relatively common across Northern Australia

Ref: Murdoch University, 2002 “Fishes of Lake Kununurra”
www.canetoads.com.au

**Macleay’s Glassfish**

- **Ambassis macleayi**
- **Size:** Maximum about 9 cm
- **Distinguishing features:** Semi-transparent with dark scale edges, relatively deep body, dark patch at pectoral fin base.
- **Habitat:** Margins of streams and swamps, likes dense aquatic vegetation
- **Diet:** Micro-crustaceans, aquatic and terrestrial insects and algae
- **Distribution:** Freshwater, Kimberley to Cape York

Ref: Murdoch University, 2002 “Fishes of Lake Kununurra”
www.canetoads.com.au
<table>
<thead>
<tr>
<th>Fish</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Northwest Glassfish</strong></td>
<td><img src="image" alt="Northwest Glassfish" /></td>
</tr>
<tr>
<td><em>Ambassis sp.</em></td>
<td>Size: Maximum size 5.5 cm</td>
</tr>
<tr>
<td>Distinguishing features: Semi-transparent with dark scale edges. Spinous dorsal fin taller than other species, 28% of standard length.</td>
<td></td>
</tr>
<tr>
<td>Habitat: Variety of flowing and still water from rivers, creeks, irrigation channels, swamps, billabongs and semi-stagnant ponds.</td>
<td></td>
</tr>
<tr>
<td>Diet: Micro-crustaceans, aquatic and terrestrial insects, algae</td>
<td></td>
</tr>
<tr>
<td>Distribution: Freshwater</td>
<td></td>
</tr>
<tr>
<td>Ref: Murdoch University, 2002 “Fishes of Lake Kununurra”</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.canetoads.com.au">www.canetoads.com.au</a></td>
<td></td>
</tr>
<tr>
<td><strong>Freshwater Eel</strong></td>
<td><img src="image" alt="Freshwater Eel" /></td>
</tr>
<tr>
<td><em>Anguilla bicolor</em></td>
<td>Size: Maximum about 60 cm</td>
</tr>
<tr>
<td>Distinguishing features: Snake-like body, elongate and tubular head, jaws reach well past eyes, scales are indistinct. Spawning site located off Sumatra, Indonesia.</td>
<td></td>
</tr>
<tr>
<td>Habitat: Rocky pools of freshwater creeks, also in brackish estuaries and tidal flats, often buried in the mud bottom.</td>
<td></td>
</tr>
<tr>
<td>Diet: Crustaceans, fish, frogs and small birds</td>
<td></td>
</tr>
<tr>
<td>Distribution: Only eel occurring in freshwaters of the Kimberley</td>
<td></td>
</tr>
<tr>
<td>Ref: Murdoch University, 2002 “Fishes of Lake Kununurra”</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.canetoads.com.au">www.canetoads.com.au</a></td>
<td></td>
</tr>
<tr>
<td><strong>Mouth Almighty</strong></td>
<td><img src="image" alt="Mouth Almighty" /></td>
</tr>
<tr>
<td><em>Glossamia aprion</em></td>
<td>Size: Maximum about 18 cm, commonly to 12 cm.</td>
</tr>
<tr>
<td>Distinguishing features: Stout body, with large cavernous mouth. Mottled in colour, dark brown to reddish brown blotches. Diagonal stripe through eye.</td>
<td></td>
</tr>
<tr>
<td>Habitat: Still or slightly flowing streams, well vegetated fringes.</td>
<td></td>
</tr>
<tr>
<td>Diet: Fishes, crustaceans, aquatic and terrestrial insects</td>
<td></td>
</tr>
<tr>
<td>Distribution: Freshwater in Kimberley, NT, QLD and NSW</td>
<td></td>
</tr>
<tr>
<td>Ref: Murdoch University, 2002 “Fishes of Lake Kununurra”</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.canetoads.com.au">www.canetoads.com.au</a></td>
<td></td>
</tr>
</tbody>
</table>
**Bottle-nose Catfish**

*Lesser salmon catfish*

*Arius graeffei*

**Distinguishing features:** Forked tail. Shape of palatal teeth, first row complete broken in centre. Blue/grey and white underneath. Similar to silver cobbler, smaller mouth and different palatal teeth. Male raises young in mouth. Three spikes, very painful when stung! **Habitat:** Freshwater rivers, lagoons and brackish estuaries **Diet:** Omnivorous, includes small fish, plant material, prawns insects molluscs and detritus **Distribution:** Freshwater **Ref:** Murdoch University, 2002 “Fishes of Lake Kununurra” Allen, Midgley and Allen, 2002, “Field Guide to the Freshwater Fishes of Australia” [www.canetoads.com.au](http://www.canetoads.com.au)

---

**Silver Cobbler**

*Silver cobbler, shovel-nosed catfish*

*Arius midgleyi*


---

**Black Catfish, Butter Jew**

*Black catfish, Butter Jew, Narrow-fronted Tandan*

*Neosilurus ater*

**Distinguishing features:** Relatively elongated snout, grey to blackish overall, sometimes mottled with paler belly. **Habitat:** Likes bottom of swift flowing sections of rivers and streams, also found in still water **Diet:** Molluscs, insects crustaceans and worms **Distribution:** Freshwater, relatively common across Nth Australia **Ref:** Murdoch University, 2002 “Fishes of Lake Kununurra” Allen, Midgley and Allen, 2002, “Field Guide to the Freshwater Fishes of Australia” [www.canetoads.com.au](http://www.canetoads.com.au)
**Hyrtyl's Tandan**

*Neosilurus hortii*

- **Size:** Maximum about 34 cm, commonly to 20 cm.
- **Distinguishing features:** Evenly rounded snout and relatively short barbels are characteristic. From dark brown to pale silvery/grey, with dark brown/yellowish fins.
- **Habitat:** Diverse range of habits including still or flowing water of streams, billabongs and pools.
- **Diet:** Insects, molluscs, small crustaceans and worms
- **Distribution:** Freshwater in WA, NT, QLD and NSW

Ref: Murdoch University, 2002 “Fishes of Lake Kununurra”
www.canetoads.com.au

---

**False-spined Catfish**

*Neosilurus pseudospinosus*

- **Size:** Maximum about 35 cm
- **Distinguishing features:** Lacks a rigid spine at the front of the dorsal and pectoral fins and has shorter nasal barbels. Dark grey to black on the body, black fins, whitish underside.
- **Habitat:** Pools and flowing streams, swimming close to rocky or sandy substrates. Diet: Omnivorous, terrestrial and aquatic insects, molluscs, detritus, algae
- **Distribution:** Freshwater, uncommon species between Kimberley and Daly River (NT)

Ref: Murdoch University, 2002 “Fishes of Lake Kununurra”
www.canetoads.com.au

---

**Rendahl’s Catfish**

*Porochilus rendahl*

- **Size:** Maximum about 24 cm
- **Distinguishing features:** Concave head and nape profile. Eyes are in close proximity to snout. Mottled grey to pale yellowish brown, with a golden sheen.
- **Habitat:** Mud-bottoms, flowing creeks, backwaters near aquatic vegetation. Diet: Bottom feeder, aquatic insects, micro-crustaceans, molluscs and detritus
- **Distribution:** Freshwater, patchy never common across Nth WA, NT and QLD

Ref: Murdoch University, 2002 “Fishes of Lake Kununurra”
www.canetoads.com.au
<table>
<thead>
<tr>
<th>Fish Name</th>
<th>Image</th>
<th>Scientific Name</th>
<th>Size</th>
<th>Distinguishing Features</th>
<th>Habitat</th>
<th>Diet</th>
<th>Distribution</th>
<th>Reference</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toothless Catfish</td>
<td><img src="image1.png" alt="" /></td>
<td><em>Anodontiglanis dahli</em></td>
<td>Maximum about 40cm</td>
<td>Different from other eel-tailed catfish by the position of the caudodorsal fin, in line with pelvic fins (further back in other species).</td>
<td>Sandy bottoms around the cover of wood debris, in clear, flowing water of rivers and streams, also found in flooded lagoons.</td>
<td>Aquatic insect larvae, detritus, molluscs and prawns</td>
<td>Freshwater, not particularly common, scattered distribution from Kimberley to Cape York</td>
<td>Allen, Midgley and Allen, 2002, &quot;Field Guide to the Freshwater Fishes of Australia&quot;</td>
<td><a href="http://www.canetoads.com.au">www.canetoads.com.au</a></td>
</tr>
<tr>
<td>Drysdale Hardyhead</td>
<td><img src="image2.png" alt="" /></td>
<td><em>Craterocephalus helenae</em></td>
<td>Maximum about 8 cm, commonly to 5 - 6 cm</td>
<td>Dull, golden in colour. Dusk along back. Silver mid-lateral stripe and silver belly.</td>
<td>Still or flowing streams over sandy channels and rocky pools.</td>
<td>Aquatic insects, small crustaceans and algae</td>
<td>Freshwater, Drysdale River system only. Abundant near Kalumburu Road crossing.</td>
<td>Allen, Midgley and Allen, 2002, &quot;Field Guide to the Freshwater Fishes of Australia&quot;</td>
<td><a href="http://www.canetoads.com.au">www.canetoads.com.au</a></td>
</tr>
<tr>
<td>Prince Reagent Hardyhead</td>
<td><img src="image3.png" alt="" /></td>
<td><em>Craterocephalus lentiginosus</em></td>
<td>Maximum about 8 cm, commonly to 5.5 cm</td>
<td>Golden-brown to greenish overall, paler on sides with a golden and black mid-lateral strip from snout through eye to pectoral fin.</td>
<td>From still or flowing streams over sandy, muddy or rocky bottoms, even brackish isolated pools on tidal mud flats.</td>
<td>Likely aquatic insects, small crustaceans and algae</td>
<td>Freshwater only in the Kimberley</td>
<td>Allen, Midgley and Allen, 2002, &quot;Field Guide to the Freshwater Fishes of Australia&quot;</td>
<td><a href="http://www.canetoads.com.au">www.canetoads.com.au</a></td>
</tr>
</tbody>
</table>
**Strawman**

*Strawman, Blackmast*

*Craerocphalus stramineus*

*Size: Maximum about 6.5 cm, commonly to 4 cm*

*Distinguishing features: First dorsal fin taller (with black on anterior section) much higher than second fin. Body semi-transparent with yellowish hue. Black mid-lateral stripe.*

*Habitat: Near surface of well-vegetated streams and lakes*

*Diet: Variety of invertebrates and algae*

*Distribution: Freshwater. Ord, Daly, Finnis, Katherine and Gregory rivers*


www.canetoads.com.au

---

**Freshwater Longtom**

*Freshwater longtom*

*Strongylura kreffii*

*Size: Maximum about 85 cm, commonly to 30-40 cm*

*Distinguishing features: Long and slender elongated jaws of equal length, sharp spiky teeth.*

*Habitat: Still or flowing waters of large rivers, from tidal to far inland. Shelters in vegetation. Diet: Small fish, insects, crustaceans*

*Distribution: Freshwater, widespread across northern Australia, not abundant*

*Ref: Murdoch University, 2002 "Fishes of Lake Kununurra"
Allen, Midgley and Allen, 2002, "Field Guide to the Freshwater Fishes of Australia"*

www.canetoads.com.au

---

**Bull Shark**

*Bull Shark*

*Carcharhinus leucas*

*Size: Maximum about 300 cm*

*Distinguishing features: Large broad-headed shark, grey above and white underneath. Young sharks have black tip dorsal and tail fin. Can travel up to 180 km in 24 hours. Takes 10-15 years before bull sharks reach sexual maturity.*

*Habitat: Occurring in estuaries and major coastal rivers, can become stranded in large river pools*

*Diet: Carnivore, crabs, urchins, fish*

*Distribution: Marine/estuaries worldwide, not abundant*


www.canetoads.com.au
Northern River Shark

*Glyphis sp.*

**Size:** Maximum 150 cm

**Distinguishing features:** Small eye, large dorsal and pectoral fins, well defined sensory organs. Grey, no distinctive markings.

**Habitat:** Coastal turbid environments

**Diet:** Carnivorous

**Distribution:** Marine/estuaries. Rare: Adelaide River (NT), Fitzroy River (WA) and Bizant River (QLD)

Ref: Allen, Midgley and Allen, 2002, "Field Guide to the Freshwater Fishes of Australia"

www.canetoads.com.au

---

Barramundi

*Lates calcarifer*

**Size:** Maximum about 180 cm, commonly to 120 cm

**Distinguishing features:** Distinct shape, Silvery in colour. Juveniles, mottled brown with three white stripes on head.

**Habitat:** Young found in upper reaches of freshwater rivers, favouring undercut banks, debris. Adults in or near estuaries. 

**Diet:** Carnivorous, eating only fish and crustaceans

**Distribution:** Marine and estuary species, common and widespread across northern Australia

Ref: Allen, Midgley and Allen, 2002, "Field Guide to the Freshwater Fishes of Australia"

www.canetoads.com.au

---

Bony Bream

*Nematalosa erebi*

**Size:** Maximum 32 cm, commonly to 15–20 cm.

**Distinguishing features:** Deep body, blunt snout. Long filament on dorsal fin. Silver in colour.

**Habitat:** Variety, most common in shallows or slow flowing streams, likes turbid conditions.

**Diet:** Benthic algae, detritus and small invertebrates

**Distribution:** Freshwater Australia wide

Ref: Murdoch University, 2002 “Fishes of Lake Kununurra”


www.canetoads.com.au
Freshwater Whipray

Himantura chaophrya

Size: Maximum disc width 200 cm

Distinguishing features: Easily recognised on the basis of shape, the only freshwater stingray in Australia.

Habitat: Bottom dwellers, fresh and brackish water, lie motionless in shallow water, partially buried in the mud.

Diet: Unknown

Distribution: Marine/estuaries, unknown. Daly and Sth Alligator, Fitzroy, Ord and Pentecost Rivers. Travels inland, has been found in Geikie George.


Barnett River Gudgeon

Hypseleotris kimberleyensis

Size: Maximum about 6 cm

Distinguishing features: Small, slender, compressed gudgeon. Tan/brown overall with dusky brown irregular blotches on the sides.

Habitat: Streams and pools with moderate flow in clear water, with aquatic vegetation and large sandstone boulders.

Diet: Little known

Distribution: Freshwater, only found in upper Barnett River, Manning Creek and Calder River.


Prince Regent Gudgeon

Hypseleotris regalis

Size: Maximum about 5 cm

Distinguishing features: Small, slender, compressed gudgeon. Dark brown head; dark edge to each scale. Fins speckled with whitish spots, clear towards ends.

Habitat: Rocky pools in slow flowing streams. Found near crevices, woody debris or plants.

Diet: Little known

Distribution: Freshwater, only found in Roe and Prince Regent Rivers


www.canetoads.com.au
Mitchell Gudgeon

Kimberleyeleotris hutchinsi

Size: Maximum about 4 cm

Distinguishing features: Small, slender, compressed gudgeon. Pale orange brown, with dark spots scattered on sides. First dorsal fin is blackish with blue to white edge and orange base, second fin is orange with blue to white spots. Anal fin orange with white blue edge. Similar to Drysdale Gudgeon but does not have stripes/bars.

Habitat: Rocky streams and pools in still or flowing streams near boulders.

Distribution: Freshwater, only found upstream of Mitchell Falls


www.canetoads.com.au

Drysdale Gudgeon

Kimberleyeleotris notata

Size: Maximum about 4 cm

Distinguishing features: Small, slender, compressed gudgeon. Light brown to purplish brown. Distinctive set of narrow vertical bars at front of body. Fins are clear to grey, base of dorsal fins are blackish.

Habitat: Clear pools of slow flowing streams over sand or rock

Diet: Not known

Distribution: Rare. Only found short distance upstream of junction of Drysdale and Forest Creek in Drysdale National Park.


www.canetoads.com.au

Northern Trout Gudgeon

Mogurnda mogurnda

Size: Maximum about 12 cm

Distinguishing features: Dark brown to purplish along back. White/cream belly with tinge of blue/purple. Dark brown/red spots all over body and base of fins. Head has 3 bands radiating from eye across cheek and gills.

Habitat: Quiet sections of rivers, creeks, billabongs. Often amongst vegetation or rocks.

Diet: Insects, larvae, worms, gastropods and sometimes algae

Distribution: Freshwater, widely distributed across Nth Australia

Ref: Murdoch University, 2002 “Fishes of Lake Kununurra”


www.canetoads.com.au
Kimberley Morgurnda, False-spotted Gudgeon
Morgurnda oligolepis
Size: Maximum size to at least 8 cm
Distinguishing features: Similar to Northern Trout Gudgeon but has generally less and larger brown/red spots. Cheek bands also present. Protruding lower jaw.
Habitat: Quiet sections of rivers, creeks, billabongs. Often amongst vegetation or rocks.
Diet: Insects, larvae, worms, gastropods and sometimes algae
Distribution: Freshwater, common, only within the Kimberley
Ref: Allen, Midgley and Allen, 2002, "Field Guide to the Freshwater Fishes of Australia"
www.canetoads.com.au

Kimberley Morgurnda
ONLY IN THE KIMBERLEY

“WHAT'S IN YOUR BACKYARD?”