

# INTRODUCED FISHES



**EASTERN GAMBUSIA**  
*Gambusia holbrooki*



**PEARL CICHLID**  
*Geophagus brasiliensis*



**GOLDFISH**  
*Carassius auratus*



**COMMON CARP**  
*Cyprinus carpio*



**SPECKLED MOSQUITOFISH**  
*Phalloceros caudimaculatus*



**REDFIN PERCH**  
*Perca fluviatilis*



**RAINBOW TROUT**  
*Oncorhynchus mykiss*



**SPANGLED PERCH**  
*Leiopotherapon unicolor*



**ROSY BARB**  
*Puntius conchonius*



**BROWN TROUT**  
*Salmo trutta*

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For more detailed information about these animals please refer to the new SERCUL publication entitled: A field guide to freshwater fishes, crayfishes & mussels of south-western Australia.

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# FRESHWATER FISHES OF SOUTH-WESTERN AUSTRALIA



# NATIVE ESTUARINE FISHES FOUND IN FRESH WATERS OF THE SOUTH-WEST

## SOUTH-WESTERN GOBY



*Afurcagobius suppositus*

**Distribution:** Found in the south-west from Moore River to Denmark; occupies rivers much closer to the coast than the Blue-spot Goby.

**Conservation status:** Not listed

## WESTERN HARDYHEAD



*Leptatherina wallacei*

**Distribution:** Common in brackish sections of major rivers of the South West Coast Drainage Division.

**Conservation status:** Not listed

## BLUE-SPOT GOBY



*Pseudogobius olorum*

**Distribution:** Common and widespread in coastal rivers from the Murchison River to south of Adelaide at the South Australia and Victoria border.

**Conservation status:** Not listed

## POUCHED LAMPREY

*Geotria australis*



Larval 'ammocoete'



Metamorphosed juvenile 'downstream migrant'



Sub-adult male swimming near the surface



Close-up of mouthparts of sub-adult female



Pouch on underside of head of sub-adult male

**Distribution:** Widespread throughout south-western and south-eastern Australia and is also found in New Zealand, Chile and Argentina.

**Biology:** Most of the anadromous life cycle is spent at sea as an external parasite on fish. It enters freshwater rivers and moves upstream during winter and spring; up to 18 months is spent in freshwater before they reach sexual maturity; lampreys die shortly after they spawn. Ammocoetes (i.e. larvae) are eyeless and live buried in sandy stream sediments for up to four years. Metamorphosis into juvenile form is followed by a downstream migration to the sea to repeat the cycle.

**Conservation status:** PRIORITY 1 (WA DEC 2010)

# THREATS TO FRESHWATER FISHES

- Salinisation of rivers and wetlands has caused major range reductions of salt-intolerant species.
- Destruction of riparian vegetation reduces food sources, instream habitat and shading of streamlines.
- Introduced feral fish species (particularly Eastern Gambusia and predatory Redfin Perch and trout) compete with, and consume, native fish and crayfish species.
- Surface and groundwater extraction reduces freshwater inputs, causes barriers to migrations (dams) and prevents access to suitable aquatic habitat.
- Eutrophication of rivers and wetlands due to nutrient inputs causes toxic algal blooms and low oxygen levels.
- Channelisation of streams in irrigation areas creates streamlines lacking suitable habitat for native species.
- Pollution of waterways by industrial, residential and agricultural waste.



Effects of salinisation at Kojonup



Algal bloom in the Vasse River



Feral fish - Eastern Gambusia



Channelised stream



A slot board barrier on Logue Brook