

# YELLOW-BELLIED WATER SKINK

## *Eulamprus heatwolei*

### Conservation status

The yellow-bellied water skink is listed as Vulnerable in South Australia.

### Description

The yellow-bellied water skink is a small olive-brown skink with dark flecks on the upper body and tail. The flanks are dark brown with lighter spots. A pale stripe extends from behind the mouth to the front of the ear opening. A narrow pale golden or yellowish stripe extends a short distance from behind the eye. The belly is immaculate bright yellow extending up to the throat, which is white with black marbling. Snout-vent length up to 90mm.

Yellow-bellied water skinks can be distinguished from the similar eastern water skink (*E. quoyi*) by the presence of the black-marbling on the throat, and the pale yellow stripe ending behind the eye rather than extending well beyond it.

### Distribution

Predominantly a species of Australia's east coast, where it extends from eastern Victoria along the Great Dividing Range to northern NSW. A disjunct population occurs in South Australia on the northern shores of Lake Alexandrina at the mouth of the Murray River and on the southern Fleurieu Peninsula, where its distribution extends from Strathalbyn south west to Cape Jervis (see map below).

### Ecology

A ground-dwelling species which feeds on a variety of invertebrates, small vertebrates and fruits. The species is inactive over winter, emerging in spring, when mating takes place. Females give birth to a litter of up to eight young in late summer.

Yellow-bellied water skinks are 'shuttling heliotherms', they move between patches of sun and shade, with a pattern of short basking and non-basking periods. Basking is more extensive in the early morning and late afternoon, with extended foraging periods during the heat of the day.

### Habitat requirements

Yellow-bellied water skinks occur in a variety of vegetation types, however two habitat characteristics appear to be critical. They require a moist microclimate and access to shelter sites. On the Fleurieu Peninsula they are most common in riparian areas, typically occurring within one to two metres of water. Rocky watercourses with pools, rather than fast flowing streams, appear to be most suitable. They have also been found to occur in forested habitats without free water,

although access to large moist rotting logs, where they are protected from desiccation, appears to be important.

On the ground, skink distribution is closely linked to the distribution of logs and rocky crevices, with animals rarely found more than a couple of metres from them. They tend to prefer large moist partially decayed logs, close to the ground, with cracks and hollows sufficiently large to allow entry. The stable, moist microclimate within such logs may be critical to effective thermoregulation in this species, and it is within such logs that skinks typically overwinter and shelter overnight.

The highest density of skinks appears to occur in riparian areas where fallen, low logs are common, in association with a moderate canopy cover and dense understorey vegetation, providing a mosaic of sun and shade, thereby facilitating effective thermoregulation. Dense understorey is also thought to provide effective shelter from predators.

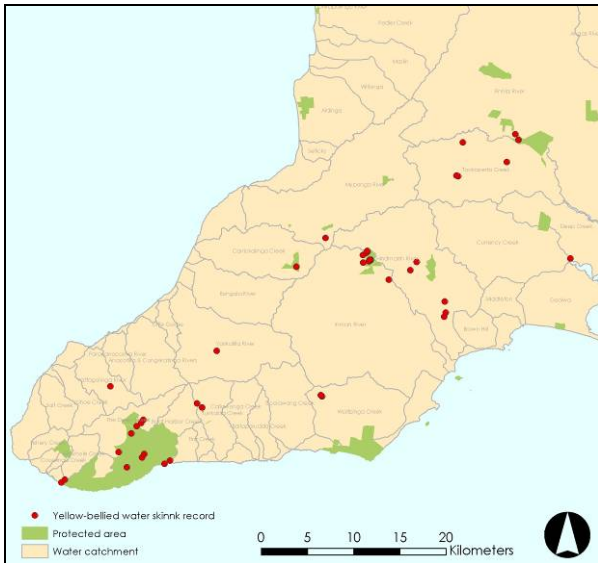
### Threats

Primary threats to yellow-bellied skinks appear to be habitat loss and modification. In particular the loss of woody debris from riparian and moist forested areas is likely to substantially reduce habitat suitability by reducing basking and shelter sites. Similarly the loss or reduction in density of understorey vegetation is likely to result in a drier microclimate, increasing the chances of desiccation and predation.

The loss or reduction in the area of exposed rocky surfaces in streams as a result of siltation may also negatively affect yellow-bellied water skinks.



Photo: © Peter Canty



Yellow-bellied water skink distribution on the Fleurieu Peninsula

**Yellow-bellied water skink habitats**



Yellow-bellied water skink basking on log in close proximity to moist dense understorey.



Note abundance of low fallen logs, dense fringing vegetation, pools of water and moderate canopy.



Note absence of water, but the presence of large decaying log and dappled light.



Note abundance of crevices associated with pattern of sun and shade, and moist microclimate despite lack of canopy cover.

**What you can do**

- Protect riparian areas and gullies that retain a dense understorey with fallen logs and branches, under a moderate canopy
- Restore habitat in riparian areas, ensuring suitable understorey density and the retention of fallen timber and logs
- Exclude grazing from riparian areas and restore riparian habitat
- Prevent siltation of creeks and streams through the effective prevention and management of erosion
- Report sightings of yellow-bellied water skinks to DENR's Threatened Fauna Ecologist: [DENRthreatenedwildlife@sa.gov.au](mailto:DENRthreatenedwildlife@sa.gov.au)

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