

Venomous fishes of southern Australia: an introduction

What's the first thing that comes to mind when someone mentions dangerous fish? Few people probably think beyond sharks. However, far more people are killed each year by innocuous-looking fish species than there have been shark attacks throughout history. In fact, more people die in Australia from the effects of a honey bee sting each year than from a fatal shark attack.



Estuary Catfish, *Cnidogobius macrocephalus*
Photographer: Rudie Kuitert. Source: Aquatic Photographics

Apart from the many fishes with sharp fin-spines, serrated gill-covers and wicked teeth that regularly inflict painful punctures or cuts, many fishes discourage predators by injecting venom as a form of defence. A few tropical fishes, such as the sabre-toothed blennies, even have venom glands at the base of their fang-like jaw teeth, which appear similar to the fangs of venomous snakes.

Although the sting from most species can be extremely painful, only a few species, such as the tropical Stonefish (*Synanceia*), possess venom that is considered to be life threatening to humans. The Stonefish has highly developed venom glands at the base of stout dorsal spines. These spines are grooved to help the venom flow into the wound. An antivenom has been developed to treat stonefish stings.



The Little Scorpionfish, *Maxillacosta scabriceps*, a type of Stonefish.

Photographer: Rudie Kuitert. Source: Aquatic Photographics

In southern Australian waters, venomous spines are found in many unrelated fish species, including sharks, stingrays, chimaeras, catfishes, scorpionfishes, flathead, velvetfishes, old wives, boarfishes and stargazers.



Smooth Stingray, *Dasyatis brevicaudata*
Photographer: Rudie Kuitert. Source: Aquatic Photographics

The Information Sheets in the *Venomous fishes of southern Australia* series cover examples of dangerous fish from the southern region of Australia, including:



[\(/discoverycentre/infosheets/venomous-fishes-of-southern-australia/scorpionfishes-and-their-allies/\)](http://discoverycentre/infosheets/venomous-fishes-of-southern-australia/scorpionfishes-and-their-allies/)

[Scorpionfishes and their allies \(/discoverycentre/infosheets/venomous-fishes-of-southern-australia/scorpionfishes-and-their-allies/\)](http://discoverycentre/infosheets/venomous-fishes-of-southern-australia/scorpionfishes-and-their-allies/)

Scorpionfish and their close relatives have venomous spines that can deliver a painful sting.



[\(/discoverycentre/infosheets/venomous-fishes-of-southern-australia/sharks-and-chimaeras---large-venomous-spines/\)](http://discoverycentre/infosheets/venomous-fishes-of-southern-australia/sharks-and-chimaeras---large-venomous-spines/)

[Sharks and Chimaeras \(/discoverycentre/infosheets/venomous-fishes-of-southern-australia/sharks-and-chimaeras---large-venomous-spines/\)](http://discoverycentre/infosheets/venomous-fishes-of-southern-australia/sharks-and-chimaeras---large-venomous-spines/)

Some sharks and their close relatives have venomous spines that can deliver a painful sting.



[\(/discoverycentre/infosheets/venomous-fishes-of-southern-australia/10301/\)](http://discoverycentre/infosheets/venomous-fishes-of-southern-australia/10301/)



[\(/discoverycentre/infosheets/venomous-fishes-of-southern-australia/10301/\)](http://discoverycentre/infosheets/venomous-fishes-of-southern-australia/10301/)

Old Wives ([/discoverycentre/infosheets/venomous-fishes-of-southern-australia/10301/](http://discoverycentre/infosheets/venomous-fishes-of-southern-australia/10301/))

The Old Wife is a dangerous fish that has long spines that can inject painful venom.

Stargazers ([/discoverycentre/infosheets/venomous-fishes-of-southern-australia/stargazers/](http://discoverycentre/infosheets/venomous-fishes-of-southern-australia/stargazers/))

Stargazes have venomous

[fishes-of-southern-australia/stargazers/](http://discoverycentre/infosheets/venomous-fishes-of-southern-australia/stargazers/))



[\(/discoverycentre/infosheets/venomous-fishes-of-southern-australia/stingrays-watch-out-for-that-tail/\)](http://discoverycentre/infosheets/venomous-fishes-of-southern-australia/stingrays-watch-out-for-that-tail/)

spines that can inflict painful wounds.

Stingrays ([/discoverycentre/infosheets/venomous-fishes-of-southern-australia/stingrays-watch-out-for-that-tail/](http://discoverycentre/infosheets/venomous-fishes-of-southern-australia/stingrays-watch-out-for-that-tail/))

Rays and Skates have a sharp venomous spine at the base of their tails that can deliver a painful wound.

Further Reading

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Paxton, J. R. and Eschmeyer, W. N. (Eds). 2003. *Encyclopedia of Fishes*. 3rd Edition. Fog City Press, San Francisco.

Sutherland, S. & Sutherland, J. 1999. *Venomous Creatures of Australia*. Oxford University Press, South Melbourne, Victoria.