

So plentiful were the American eel that in 1913, a scientist caught 1,500 in one scoop of a small dip net and 545 with a few grabs of his bare hand!

The long-finned eel is one of the largest freshwater eels in the world and it is found only in the rivers and lakes of Aotearoa, New Zealand.

On average, an electric eel can produce 350 to 550 volts of electricity. The shock consists of four to eight separate charges, which last two-to three-thousandths of a second each and can be repeated up to 150 times per hour without any visible fatigue to the eel.

Very occasionally, long-finned eels found in the wild are partially or even wholly bright yellow in colour - often referred to as "banana" eels.

The larvae of eels are called leptocephalus and look nothing like an eel - they are transparent, flat, and leaf-shaped.

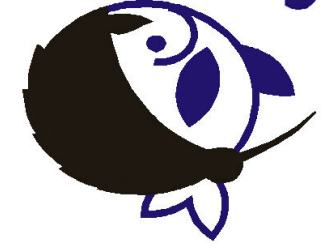
In 1975, eels were the New Zealand's most valuable fish export after spiny rock lobsters.

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Did you know? 6



Eels



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There are over 730 species of eels within the Order Anguilliformes.

All eels are characterized by the following traits: a reduced skeleton, dorsal and anal fins that are continuous with the caudal fin, the absence of pelvic fins, and a lack of gill rakers.

The majority of eels live in shallow tropical and subtropical marine habitats, although they can also be found in the deep sea, the open ocean, and freshwater lakes and streams.

An electric eel is not actually an eel!

The form of the eel, perhaps due to its resemblance to that of the serpent, has long excited a prejudice against it, which exists in some countries even to the present time.

Although they feel as smooth as silk eels do have a great many tiny scales embedded deeply within their thick, leathery skin.

Horse-hair from the tail of a stallion, when deposited in water, was formerly believed to be a never-failing source of a supply of young eels.

Young American Eel (*Anguilla rostrata*) migrate down rivers to the Atlantic Ocean, and then make their way to the Sargasso Sea off Bermuda to spawn.

There are approximately 200 species in 15 genera of the family Muraenidae (Moray eels).

Eels (European) are among the most prolific fish, ordinary females averaging 5 to 10 million eggs and the largest ones certainly 15 to 20 million.

The morays (Muraenidae) are readily distinguished by the small, round gill opening, the absence of pectoral fins and powerful jaws armed with knife-like or molar-like teeth.

Some species of Moray eel cause ciguatera poisoning when eaten.

The larvae of American species stick so consistently to the western side of the Atlantic, and those of the European to the eastern side that no specimen of the former has ever been taken in Europe, or of the latter in America.

The most powerful electric eel is found in the rivers of South America and its shock is powerful enough to kill a horse!

The largest Moray eel is the slender giant moray (*Strophidon sathete*) at up to 4 metres in length.

Aristotle believed that they sprang from the mud; Pliny, from fragments which were separated from their bodies by rubbing against rocks; others supposed that they proceeded from the carcasses of animals.

Long-finned eels breed only once, at the end of their life. When they are ready to breed, they leave New Zealand and swim five thousand kilometres up into the tropical Pacific to spawn, probably in deep ocean trenches somewhere near Tonga.

The American eel takes only about one-third as long as the European to pass through its larval stage; ie hardly a year, as against 2 to 3 years.

For at least 65 million years, long-finned eels (*Anguilla dieffenbachii*) have been swimming up and down New Zealand's waterways.

It is not unheard of for an eel to climb a waterfall of up to 20 metres!

A long-fin eel may grow only 15-25mm a year.