Electric eel

The electric eel (*Electrophorus electricus*) is a South American [electric fish](https://en.wikipedia.org/wiki/Electric_fish), and the [only species](https://en.wikipedia.org/wiki/Monotypic) in its genus. Despite the name, it is not an [eel](https://en.wikipedia.org/wiki/Eel), but rather a [knifefish](https://en.wikipedia.org/wiki/Gymnotiformes).

The electric eel has an elongated, [cylindrical](https://en.wikipedia.org/wiki/Cylindrical) body, typically growing to about 2 m (6 ft 7 in) in length, and 20 kg (44 lb) in weight, making them the largest species of the [Gymnotiformes](https://en.wikipedia.org/wiki/Gymnotiformes).[[2]](https://en.wikipedia.org/wiki/Electric_eel#cite_note-Albert,_2001-2) Their coloration is dark gray-brown on the back and yellow or orange on the belly. Mature females have a darker color on the abdomen. They have no scales. The mouth is square, and positioned at the end of the snout. The anal fin extends the length of the body to the tip of the tail.

As in other [ostariophysan](https://en.wikipedia.org/wiki/Ostariophysi) fishes, the swim bladder has two chambers. The anterior chamber is connected to the inner ear by a series of small bones derived from neck vertebrae called the [Weberian apparatus](https://en.wikipedia.org/wiki/Weberian_apparatus), which greatly enhances its hearing capability. The posterior chamber extends along the whole length of the body and maintains the fish's buoyancy. *E. electricus* has a well-developed sense of hearing. This fish has a vascularized respiratory system with gas exchange occurring through [epithelial](https://en.wikipedia.org/wiki/Epithelium) tissue in its [buccal cavity](https://en.wikipedia.org/wiki/Buccal_pumping).[[3]](https://en.wikipedia.org/wiki/Electric_eel#cite_note-Boutilier,_et._al._1990-3) As obligate air-breathers, electric eels must rise to the surface every ten minutes or so to inhale before returning to the bottom. Nearly eighty percent of the oxygen used by the fish is obtained in this way.[[4]](https://en.wikipedia.org/wiki/Electric_eel#cite_note-Johansen_1968-4)

Despite its name, the electric eel is not closely related to the true [eels](https://en.wikipedia.org/wiki/Eel) (Anguilliformes) but is a member of the neotropical knifefish order (Gymnotiformes), which is more closely related to the [catfish](https://en.wikipedia.org/wiki/Catfish).