Threatened fishes of the world: *Hippocampus erectus* Perry, 1810 (Syngnathidae)

Thelma L. Dias\(^a\), Ierecê L. Rosa\(^a\) & Julia K. Baum\(^b\)

\(^a\)Universidade Federal da Paraíba, CCEN, DSE, Campus I, João Pessoa, Paraíba 58059-900, Brasil (e-mail: thelma dias@hotmail.com)

\(^b\)Department of Biology, Dalhousie University, Halifax, Nova Scotia B3J 4J1, Canada

**Common names:** Cavalo-marinho (Por), lined seahorse (E), cabalilto-de-mar (Spa), hippocame rayé (Fr). **Conservation status:** Vulnerable according to IUCN (2000) and the List of Threatened Animals of Rio de Janeiro and São Paulo States, Brazil. **Identification:** D 18–19 (16–20); P 15–16 (14–18); rings 11 + 36 (34–39); base colour ash grey, orange, brown, yellow, red or black, often with a pattern of white lines following contour of neck and sometimes with saddle marks on dorsal surface; tiny white dots on tail. Minimum adult size 55 mm (Lourie et al. 1999), maximum 220 mm TL (personal observation, TLD, ILR). Illustration from Ginsburg (1937). **Distribution:** From Canada, southern tip of Nova Scotia to Brazil, north, Rio de Janeiro, including Gulf of Mexico (Lourie et al. 1999). According to Robins & Ray (1986) its range extends to Argentina. **Abundance:** In Brazil it is known to occur singly or in pairs; found from shallow waters of 20 cm (personal observation, TLD, ILR) to depths of 73 m (Vari 1982). A by catch study and trade research suggests that *H. erectus* is more abundant than *H. reidi* in the Gulf of Mexico and in Central America (JKB unpublished data). Underwater observations and indirect evidence from trade, however, suggests that it might be less abundant than *H. reidi* in Brazil (personal observation, TLD, ILR). **Habitat and ecology:** It is known to occur in association with seagrass (*Thalassia testudinum*, *Halophila* sp.), floating Sargassum, mangrove roots (mostly *Rhizophora* and *Avicennia* sp.), *Caulerpa* spp., *Carajoa* sp., sponges and *Ascidia* spp., usually relying on these substrates as holdfasts (personal observation). It can tolerate a marked range in salinity and temperature (Vari 1982). In Brazil it has been found in salinity of 45%. Its diet consists mainly of small copepods, amphipods and other small crustaceans (Leim & Scott 1966).

**Reproduction:** Apparently matures during the first reproductive season after birth, at age six to twelve months (Lourie et al. 1999); gestation period 20–21 days, varying with water temperature; egg diameter 1.5 mm and young approximately 9 mm long at birth (Vincent 1990). Reproductive period apparently from May to October; number of eggs/embryos inside the brood pouch of males with TL of 80–126 mm, from 97 to 1552; number of pre-hydrated oocytes in females with TL of 60–123 mm, from 90 to 1313; newborn released by ejection from the brood pouch by body contortions and pumping action of the pouch (Têixeira & Musick 2001). **Threats:** Collection for domestic folk medicine and souvenir trades, and domestic and international aquarium trades in Mexico, Brazil, and for domestic trades in Central America; by catch in shrimp trawl fisheries in U.S., Mexico and Central America, some of which is retained for export for use in the Traditional Chinese Medicine (TCM) trade; destruction of habitats. **Conservation recommendations:** Suitable sanctuary zones should be created, where fishing (target and trawling) is prohibited or strictly regulated; population parameters (including mortality estimates) and ecology should be investigated in the wild. Further taxonomic research should be undertaken to determine the status of populations throughout the species’ range. **Remarks:** The unique reproduction of seahorses and the fact that they may be regarded as a flagship species that can help to promote marine conservation provide important reasons for their conservation.

---


