

Marbled Lungfish

Protopterus aethiopicus



ANIMAL FACTS



Physical Characteristics

- Physical description: This lobe-finned fish is smooth, elongated, and cylindrical with deeply embedded scales. The tail is very long and tapers at the end.
- Coloration: These fish have a yellowish gray or pinkish-toned ground color with dark slate-gray splotches, creating a marbling or leopard effect over their bodies and fins. The color pattern is darker along the top and lighter below
- Other defining characteristics: The pectoral and pelvic fins are very long and thin, almost spaghetti-like, used for gliding through the water.

Size

- Length: between 3 and 6 ft
- Weight: up to 25 lbs

Lifespan

- Wild: Unknown
- Zoos: 20-25 years

Behaviors

- Activity Cycle: (Nocturnal, diurnal, crepuscular.)
- Lifestyle: Mainly aquatic but adult lungfish can live in riverbeds and other areas with no rain for portions of the year due to the ability to burrow into the ground and form an air bubble and hole to breathe out of their mud cocoon (estivate)

Diet

- Wild: mollusks, some insects and larvae
- Zoo: Insects, larvae, fish food

Reproduction

- Incubation/Gestation Period: 8 weeks
- Fledging/Parenting: One or more females use the same pit nest. The females lay the eggs then leave and the males will guard the eggs for the next 8 weeks. The males will also fill the nest with air to help the eggs survive.
- Clutch/Litter Size: N/A
- Breeding Behaviors: Breeding generally occurs during the flood season which is when males prepare a pit nest.

Habitat and Range

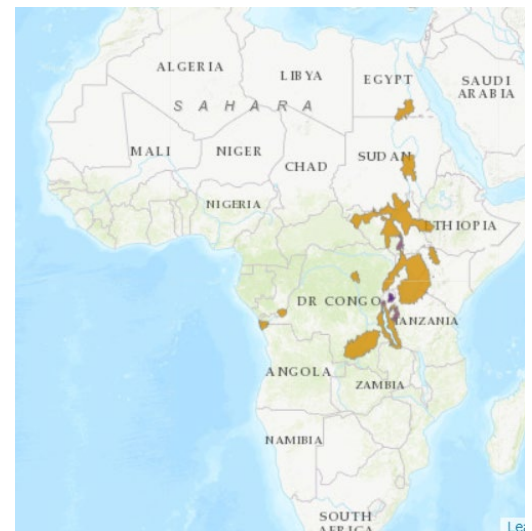
- Habitat: wetlands, river and lake edges, flood plains
- Range: African wetland areas extending from Egypt to the Republic of Congo.

Conservation

- IUCN Status: Least Concern
- Contributing factors: Agriculture, aquaculture, mining, fishing, dams & water pollution

Classification

- Kingdom: Animalia
- Phylum: Chordata
- Class: Sarcopterygii



- Order: Lepidosireniformes
- Family: Protopteridae
- Genus: *Protopterus*
- Species: *Protopterus aethiopicus*

Interesting Facts

- It withstands desiccation by going into torpor for extended periods in cocoons until the next rains, breathing air by a small passage leading to the outside
- The lungfish secretes a thin layer of mucus around itself that dries into a cocoon. It can live out of water in this cocoon for up to a year, breathing through its lungs until rains refill its waterway.
- Lungfish appeared in the fossil record in the Devonian period, around 400 million years ago. Some scholarship has discussed lungfish as 'living fossils', because their morphology barely changed over millions of years
- Lungfish are therefore crucial for understanding the evolution and preadaptations that accompanied the transition of vertebrate life from water to land. This major evolutionary event required a number of evolutionary innovations, including in respiration, limbs, posture, the prevention of desiccation, nitrogen excretion, reproduction and olfaction.
- Show the alternating gait in fin motion that is typical of terrestrial locomotion.
- Lungfish are more closely related to amphibians, reptiles, birds, and mammals than they are to any other living fish.
- The lungfish genome is the largest animal genome that has ever been deciphered. At 43 billion base pairs, it is 14 times larger than that of humans.
- Also called the African Lungfish or the Leopard Lungfish
- Newly hatched young have branched external gills much like those of newts. After 2 to 3 months the young Leopard Lungfish transforms (called metamorphosis) into the adult form, losing the external gills for gill openings.