



African Sideneck or West African Mud Turtles

(*Pelusios castaneus*)

African Helmeted Turtle (*Pelomedusa subrufa*)

Long Necked Oddities

Sideneck turtles belong to the smaller of two major groups of turtles known collectively as the Pleurodira (or side necked turtles), in which their heads and necks are withdrawn sideways. Most other turtles belong to the group Cryptodira, where their heads and necks are withdrawn in straight “S” shaped fashions. A largely aquatic to semi aquatic group of turtles, side necks and helmeted turtles have a fairly smooth, streamlined carapace ranging from uniformly blackish, grayish black, brownish, to reddish brown in color depending on the species. They are also among the most diverse group of freshwater turtles, and most often can be observed walking or swimming weakly on or near the bottoms of slow moving bodies of water and wetlands. Most members of these genera are primarily carnivorous, and use their heads and long necks to forage and capture smaller aquatic prey from a distance, and may also occasionally use suction feeding as well. In addition to their jaws, these turtles will also use their claws to break food apart for consumption. During periods of excessive warm or cold temperatures or otherwise dry weather and drought, they will also move overland to seek out new waterways or other wet areas, or will aestivate underground until conditions improve.

Taxonomy

Life: All living, physical, and animate entities

Domain: Eukaryota

Kingdom: Animalia

Phylum/Sub Phylum: Chordata/Vertebrata

Class: Reptilia

Order: Testudines

Suborder: Pleurodira

Family: Pelomedusidae

Genus: *Pelusios* and *Pelomedusa*

Species: *Pelusios castaneus** and *Pelomedusa subrufa**

*Taxonomy subject to change and revision.

Lifespan and Longevity

If provided the correct care, side necked and helmeted turtles can attain longevity of 20 to 30 years or more.

Distribution and Habitat

These turtles are indigenous to the western and central regions of Africa in rivers, streams, lakes, and other fresh and stagnant water bodies and wetlands. Other, separate genera and species of side-necked and snake-necked turtles can also be found in northern Australia and New Guinea as well as some in Argentina, Uruguay, Paraguay, and Brazil in South America (such as the South American Snake Necked Turtle, *Hydromedusa tectifera*).

Conservation Status

IUCN Red List Least Concern (LC). *P. subrufa* Not Evaluated for the IUCN Red List (NE) or otherwise Data Deficient (DD).

Experience Level Required

Novice/Beginner to Intermediate/Moderate.

Size

Adult sideneck and helmeted turtles usually reach a carapace, or upper shell length of 7 to 12 inches, with females being larger.

Housing and Enclosure

Sideneck and helmeted turtles are semi-aquatic turtle species. Provide a sturdy, escape-proof aquarium or commercially available plastic or galvanized stock tank or turtle tub of sufficient size with an elevated dock or basking area/access to dry land using a substrate dam. The latter are perhaps preferred for maintaining aquatic to semi-aquatic turtles in, as they are easier to clean, move/transport, and maintain than aquariums. Provide a minimum of 10 gallons of space per inch of shell, or about 50 to 120 gallons for most adult sideneck and helmeted turtles. A general rule of thumb to follow for most aquatic to semi-aquatic turtles is to provide water that is at least 1 ½ to 2 times the turtle's height in depth to allow for complete submersion, and at least two to three times the carapace length for adequate swimming and movement. A powerful water filter rated at least twice that of the amount of water in the enclosure is highly recommended for aquatic turtles, as they are messy and require frequent cleaning and regular water changes. Use a submersible water heater with a guard to maintain water temperatures of 75 to 85 degrees F. Substrate is optional, and foregoing it makes for easier cleaning and maintenance, but small to medium-sized gravel can be used. Additional rocks, logs, live or artificial foliage can also be provided for additional foraging, basking, and hiding opportunities.

Temperature, Lighting, and Humidity

Providing the correct amounts of UVA/UVB overhead incandescent and fluorescent lighting, and calcium-to-phosphorus ratios is essential for ensuring the health and overall well-being of sideneck and helmeted turtles in captivity. Without UVA/UVB, or adequate amounts of it, they can be susceptible to the abnormal bone and shell growth and development known as Metabolic Bone Disease (MBD), and other health and development maladies. Pyramiding of the scutes and shell can also occur due to poor or improper diet, lighting, or heating. Always be sure to spot clean the enclosure for urates, feces, or uneaten food at least twice per week. Be sure to periodically replace the substrate, clean, and disinfect the enclosure and its furnishings at minimum every 2 to 3 months. These turtles require a thermal gradient using a ceramic or radiant heat emitter, UTH (or under tank heating pad), and UVA/UVB overhead lighting. Ambient and cool end temperatures should be within 70 to 80 degrees F and the basking area from 85 to 95 degrees F. Also be sure to maintain a light cycle of 12 to 14 hours per day, and monitor temperatures with a quality thermometer. Be sure to provide a basking area or platform for your turtle to emerge completely from the water. More specific lighting, heating, and humidity

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product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well.

Feeding, Diet, and Nutrition

Primarily Omnivorous to Carnivorous; In the wild, African sideneck and helmeted turtles are primarily omnivorous to carnivorous, feeding on aquatic to semi-aquatic insects, crustaceans, mollusks, and other invertebrates, as well as smaller vertebrates including small fish, amphibians, and carrion, or dead and decaying plant and animal material. Some algae and other aquatic plants may also be consumed. In captivity, variety is important with most aquatic to semi-aquatic turtle's diets. Sideneck and helmeted turtles can be given feeder insects of appropriate size including crickets, roaches, mealworms, waxworms, superworms, or other invertebrates. They can also eat small, frozen-thawed rodents of appropriate size, but offer these sparingly, if at all. Other food items that will be accepted by these turtles can include many of the commercially available aquatic to semi-aquatic turtle or omnivore mix diets, small feeder fish of appropriate nutritional value, earthworms, redworms, freeze dried shrimp or krill, or some other meats. Dog and cat foods can also be used, but use these sparingly, if at all as well. They can also be fed some chopped greens, fruits, and vegetable material as well. Gutloading any feeder insects and providing additional calcium and vitamin D3 is essential for these turtle's optimal health and well-being. Without proper supplementation, they are susceptible to Metabolic Bone Disease, pyramiding of the shell, and other abnormal bone, growth, and health maladies. Feeding frequency will depend on the age, size, and overall health of your turtle, but typically in most cases should be twice to three times weekly. Do not overfeed them, though as obesity and other health related issues can become a concern. More specific dietary and supplementary product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well.

Handling

Captive born and raised sidenecks and helmeted turtles can become very tame and personable pets, often even approaching their keepers for food. Most small to mid-sized turtle and tortoise species that are not aggressive or prone to biting can be picked up and handled either by placing both hands along both sides of the shell, or from the rear of the carapace with the thumb on the carapace and index through pinky fingers on the plastron to reduce the chances of being kicked, scratched, or nipped when they are threatened. Although most species of chelonians are not outwardly aggressive, defensive, or dangerous, they can become stressed as a result of over-handling, however, and some species, and even individual animals can be shyer than others. These are some considerations to keep in mind when handling any chelonian species.

****Also be sure to practice basic cleanliness and hygiene associated with proper husbandry after touching or handling any animals or animal enclosures to prevent the possibility of contracting salmonellosis or any other zoonotic pathogens****

Contact

Authored by Eric Roscoe. For any additional questions, comments, and/or concerns regarding this animal, group of animals, or this care sheet, please email and contact the Madison Area Herpetological Society at info@madisonherps.org

Disclaimer: Note that the information provided in these, or any care sheets, are not intended to be all-exhaustive, and further research and care should always be sought and provided when it comes to any species one may prospectively be interested in. These care sheets are also not intended to serve as substitutes for professional veterinary medical care and husbandry should any animal require it. Always seek proper and professional veterinary care for any animal should the need arise, and be prepared ahead of time for any and all husbandry costs and expenses that may occur with any animal beyond the initial purchase. Any animal owned is ultimately a matter of personal/individual care and

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