

\*Photo Credit: Toronto Zoo.

# Mata Mata Turtle (Chelus fimbriata)

## Is it a Leaf or a Turtle?

Mata matas are a highly cryptic, sedentary ambush predator species with appearances strongly resembling fallen and submerged bark, leaves, or other woody material. This species of turtle feeds primarily by suction feeding, opening its very large, wide mouth to act as a vacuum for any nearby small fish, aquatic crustaceans, other invertebrates, and occasionally smaller reptiles and amphibians. Excess water is then expelled back out through their mouths. Mata matas have a long, oblong brown to blackish-brown carapace with raised scutes, lending to their highly cryptic appearance. The plastron is narrow, reduced, and hingeless. The skin on the head, neck, and limbs is grayish to grayish-brown, and the head is very large, flattened, and triangular with a single tubular "horn" or snout. The skin on the head, neck, and limbs also has numerous tubercles and skin flaps lending to its cryptic appearance, and 3 to 4 barbels each on the upper and lower jaw and chin.

## **Taxonomy**

**Life:** All living, physical, and animate entities

**Domain:** Eukaryota **Kingdom:** Animalia

Phylum/Sub Phylum: Chordata/Vertebrata

Class: Reptilia
Order: Testudines
Suborder: Pleurodira
Family: Chelidae
Subfamily: Chelinae
Genus: Chelus

**Species:** *Chelus fimbriata*\*

\*Taxonomy subject to change and revision.

#### **Lifespan and Longevity**

Mata matas are a long lived species of turtle, commonly reaching of 40 to 75 years or more under proper care.

#### **Distribution and Habitat**

The mata mata, or matamata, is a species of large, primarily aquatic freshwater turtle indigenous to the Amazonian and Orinoco riverway basins of South America. This species is found in the slow moving, backwater rivers and streams, stagnant pools, marshes, and swamplands of

Bolivia, Peru, Ecuador, Colombia, and Venezuela to Brazil.

## **Origin/History**

Chelus fimbriata (Schneider, 1783). The name Chelus fimbriatus was given by Mertens and Muller in 1934, meaning "fringed turtle".

Unverified reports have existed for at least a couple of decades of this large, unusual appearing species of freshwater turtle in Broward County Florida in south Florida since the 1960's as a result of escaped or released specimens. This suggests that Mata Matas have occurred in the pet industry for many decades, since around that time.

## **Experience Level Required**

Advanced.

#### **Size**

Mata matas are a large turtle species, commonly reaching adult sizes of up to 14 to 18 inches in carapace length. This species occasionally reaches sizes of up to 24 inches in carapace length.

## **Housing and Enclosure**

Enclosure System: Primarily Aquatic. Water quality is perhaps one of the most important aspects for maintaining mata matas happily and healthily. The water's PH levels should not be too acidic or too basic, and should be moderate, within 5.0 to 5.6 in pH, with moderate to heavy filtration to maintain water clarity and quality. Mata matas in general are also fairly sedentary turtles, and are not overly active as many other turtle species are. Any enclosure that is provided must be secure and escape proof. Small specimens 5 to 10" in size can be adequately housed in a 40 to 60 gallon aquarium or similar sized tub or enclosure, but will outgrow these accommodations, and larger accommodations should be provided accordingly. 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. At minimum, appropriately sized plastic or galvanized totes, troughs, or some forms of commercially available turtle tubs may be more suitable and easier to clean and maintain. Up to an 800 gallon stock tank or trough is recommended for very large turtles. Mata matas are also best housed individually or separately from other turtles or other animals to prevent the risk of potential predation or injury among them. A high power pump and water filtration canister system must also be set up and installed to maintain enclosure clarity and quality. Unlike many other turtles, mata matas seldom will bask out of the water, often opting to floating near the surface, and do not require a dry land area as long as they are able to reach the surface for air. Substrates that can be utilized can include bare bottomed enclosures, or non-abrasive aquarium sand or gravel that cannot be easily ingested. Substrate should be agitated weekly to clear out lodged debris. Additional furnishings and accessories can also be provided in the enclosure for added safety and security including commercially available hides or slabs, live or artificial plants, which should be planted firmly to prevent uprooting, driftwood, peat or sphagnum moss, leaves, rocks, or other similar furnishings.

## **Temperature, Lighting, and Humidity**

Providing the correct amounts of UVA/UVB overhead incandescent and florescent lighting, and calcium-to-phosphorus ratios is essential for ensuring the health and overall well-being of mata matas 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. Mata matas 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 80 to 85 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. Water temperatures should be maintained at around 78 to 82 degrees F as well. More specific lighting, heating, and humidity product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well. Overall relative humidity is not as important for these turtles, as mata matas are primarily aquatic.

### Feeding, Diet, and Nutrition

*Carnivorous;* In the wild, mata matas are primarily carnivorous. They are highly aquatic, sedentary ambush predators that use suction feeding as a vacuum to capture any nearby small fish, aquatic insects, invertebrates, smaller turtles, other smaller reptiles and amphibians, carrion, or other animals close enough to within striking or suction range.

In captivity, mata matas prefer largely live feeder fish. These turtles can be given commercially available turtle diets, as well as appropriately sized live feeder fish of appropriate nutritional value such as platies, mollies, guppies, and minnows. Avoid goldfish, which are not nutritionally staple. Other food items that can be given can include nightcrawlers, red worms, earthworms, crayfish, small, frozen-thawed rodents, and some other fresh meats as well such as chicken, turkey, fish slabs, and/or beef. Feed prey items that are high in fat or protein sparingly, if at all. Feeding frequency can depend on the age, size, and overall health of your turtle, but typically should be twice to three times weekly for most adult turtles. Commercially available canned or pelleted turtle diets are not good staples for feeding aquatic to semi-aquatic turtles, and should not exceed roughly 25% of their diets; Variety is always best.

Do not overfeed them, however as obesity and other health related issues can become a concern. These turtles must feed and ingest food underwater, and any excess or uneaten food should be cleaned or removed regularly daily to every other day. Mata mata turtles also require proper calcium and multi vitamin or vitamin D3 at least two to three times weekly for their optimal health and well-being. Without the proper supplementation, they can be susceptible to MBD, or Metabolic bone disease, pyramiding, and other health, bone, and growth maladies. 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**

Mata matas are by no means a beginner's turtle and are best maintained by the more advanced turtle or reptile enthusiast able to provide the proper amount of space and housing for this species. Imported specimens should be handled very sparingly, if at all until they are well-acclimated. Captive born, or captive hatched mata matas can be handled more frequently, but should still be able to acclimate, and require careful and experienced handling, as they can reach out with their very long, dexterous necks to bite if handled inappropriately or provoked.

\*\*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: Eric.S.Roscoe@gmail.com

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 responsibility. We cannot make any claims or guarantees regarding any information in this care sheet therein. This care sheet may be reprinted or redistributed only in its entirety.

\*Copyright, 2023