

Genus: *Cyclemys* (Asian Leaf Turtles)© - Chris Tabaka DVM and Darrell Senneke
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Species:

Cyclemys atripons (IVERSON & MCCORD 1997) ¹

Cyclemys dentata (First described as *Emys dhor* GRAY 1831)²

Cyclemys oldhami (GRAY 1863)³

Cyclemys tcheponensis (Initially known as *Geoemyda tcheponensis* BOURRET 1939) ⁴



This care sheet is intended only to cover the general care of this species. Further research to best develop a maintenance / reproduction plan for whichever species you are caring for is essential.

Presently the genus *Cyclemys* is split into 4 species. It is almost certain that this will be further split as further research is done on this wide-ranging genus. Much like the map turtles (*Graptemys*) of the American Midwest and South, there are distinct differences between populations found in different river drainages. Though *Cyclemys* species are often called Asian leaf turtles, this often leads to some confusion with other chelonians that have the word “leaf” in their common name such as the Black-breasted or Vietnamese leaf turtle (*Geoemyda spengleri*) as well as the Vietnam leaf turtle (*Annamemys annamensis*).



Cyclemys dentata



Cyclemys tcheponensis

At the present time this species is a frequent import in the pet trade. This may change though because of its presence in the Asian food markets. The availability of Leaf turtles as wild caught specimens is certain to decline in the coming years unless rapid changes are made in the culinary and traditional medicine practices of that part of the world. For more information on this please see the "Animal Markets of China" hosted by the World Chelonian Trust at www.chelonia.org. Luckily at the present time *Cyclemys dentata* is being captive bred with some frequency and the other species are sure to follow as breeders focus more on this Genus.

Cyclemys have a rounded carapace (hence the Generic name which means “Circle turtle”) and grow to about 25 cm (10 inches) in length. The base color is usually a variation of brown with the plastron and sometimes the carapace showing radiating lines on each scute. *Cyclemys* possess a distinct vertebral keel and a serrated rear carapacial margin. This is much more pronounced in

the young and may offer some protection against predators such as frogs or fish that may opportunistically attempt to swallow the spiky shelled hatchlings. Large adults develop a transverse plastral hinge, which, in the case of females, may allow for easier egg passage during ovipositioning.



Cycllemys dentata - carapace



Cycllemys dentata - plastron

Young *Cycllemys* are fairly aquatic and can be kept much like any other basking turtle. They do appear to become more terrestrial as they age with adults spending much of their time on land. In the wild, *Cycllemys* are found in or near ponds, small rivers, and slow moving streams. They are not strong swimmers preferring instead to walk on the bottom of a body of water rather than swimming freely. According to Das⁵ adults spend their nights on land and move to water during the day.

Thanks to the success that breeders are having with the species (at least *Cycllemys dentata*) it is now possible to purchase hatchlings from captive born stock. Such specimens are much more desirable as pets as they are much healthier and well acclimated to captivity.

HOUSING LEAF TURTLES INDOORS

- The most useful form of indoor accommodation for hatchling *Cycllemys* consists of an aquarium. For hatchlings we suggest a water depth of 2 to 4 inches (5 to 10 cm) with one end built up with rocks to provide a dry basking spot. A reasonable sized aquarium for a hatchling is a 20 gallon: 30 inches by 12 inches, (75 cm by 30 cm). As the animal grows the size of this habitat should be increased.

Asian Leaf Turtles - *Cycllemys*

- **Location** - Southeast Asia, India to Borneo
- **Habitat** - In or near water ponds and slow-moving bodies of water in Southeast Asia
- **Size** - 25 cm (10 inches)
- **Diet** - Omnivorous fruits and protein via fish, carrion and invertebrates
- **Conservation Status** - No present international protection (Jan. 2003)
- **Threats** - habitat destruction, Asian food markets, pet trade
- **Alternate Names** - Striped-necked Leaf Turtle









Water quality is very important. Many problems with Leaf turtles can be averted if one spends a little time and money designing and purchasing an adequate filtration system for your pets. Hatchlings are sometimes difficult to provide good filtration for because of the depth of the water. For these a submersible foam filter or power filter and frequent water changes is the rule.

In one corner of the environment a hardware store reflector clip light lamp should be positioned over the dry basking area to provide artificial basking facilities. This should be positioned to provide a focal basking spot of 90 degrees F or so (32 degrees C) in that section of the habitat. The habitat should also be equipped with a full spectrum fluorescent light to provide for UVB. A UVB source is necessary for Vitamin D3 synthesis (necessary for calcium metabolism). If preferred to this lighting arrangement a Mercury vapor bulb may be used that fulfills both heat and UV requirements. Live or plastic aquatic plants are suggested to provide a sense of security and hiding places.

For adults an environment that is at least 50% land is recommended. The water should be at a depth that the animal may easily reach the surface while standing on the bottom.

OUTDOOR HOUSING - Predator proof outdoor habitats offer many advantages over indoor accommodations and should seriously be considered during warm weather months. A child's wading pool sunk into the ground in a secure enclosure makes for a serviceable outdoor habitat. Larger ponds with advanced filtration can be used to provide a spectacular outdoor home for your Leaf turtles.

DIET. This Genus is a true omnivore; the diet in the wild consists of figs, fruits, carrion, fish, and crustaceans. In captivity this should be duplicated as closely as possible. Be careful not to overfeed your *Cyclemys* as obesity is a common problem. Feeding 2 to 3 times a week for adult turtles and small amounts every day to every other day for rapidly growing hatchlings is appropriate. Leaf turtles will readily accept many of the commercially prepared turtle diets that exist on the market today.

The diet offered should consist of:

Commercially prepared turtle diets such as Purina Aquamax or Mazuri freshwater turtle diet

Fruits (figs and soft fruits)

Insects

Worms

Fish

Additional calcium supplementation is necessary if the commercially prepared nutritionally complete diets do not make up a large portion of the diet. Powdered calcium with vitamin D3 can be sprinkled all foods. Provision of a cuttlefish bone, which can be gnawed if desired, is also recommended.

MEDICAL: Newly imported *Cyclemys* often need immediate medical care. This species is often exposed to a number of pathogens in the Asian markets and thus needs prompt medical attention. Septicemia and protozoal infections are the norm for newly imported animals.

As dosage information available on the Internet or in hobbyist books is often dated and potentially dangerous, please work closely with your veterinarian to care for your animals.

It should be noted that turtle and tortoise care research is ongoing. As new information becomes available we share this on the World Chelonian Trust web site at www.chelonia.org. Serious keepers find it to be a benefit to have the support of others who keep these species. Care is

discussed in our free online email community, which may be joined from the web address above. Please contact us about the many benefits of becoming a member of the World Chelonian Trust.

¹ *Cyclemys atripons* and *Cyclemys pulchristriata* were described almost simultaneously. FRITZ et al. (2001) provide evidence that they are not conspecific although they are very similar.. Found in SE Thailand, Cambodia and Vietnam

² Widespread species found in N India, Bangladesh, Burma, Thailand, Cambodia, Vietnam, West Malaysia, Indonesia (Sumatra, Java, Borneo, Bali), Philippines (Palawan: Calamian Islands etc.) and China.

³ Found in India (Tarai), Burma, Thailand, Malaysia (W Borneo) and Indonesia (Sumatra, Java)

⁴ Was revised to *Cyclemys tiannamensis* by Das in 1991. Found in N Vietnam, Laos, N Thailand and Cambodia. The type locality of *Cyclemys tiannamensis* (China) is questioned by Fritz et al. who speculate that the specimen probably had been bought in a market. Removed from the synonymy of *Cyclemys dentata* by McMorris (1976).

⁵ Turtles and Tortoises of India, Indraneil Das, Centre for Herpetology, Madras Crocodile Bank Trust, Oxford University Press 1995, ISBN 0 19 563727 5

References:

The EMBL Reptile Database <http://www.embl-heidelberg.de/~uetz/LivingReptiles.html>

The Turtle Puddle, May Hopson, <http://www.turtlepuddle.org/>

⁵ Turtles and Tortoises of India, Indraneil Das, Centre for Herpetology, Madras Crocodile Bank Trust, Oxford University Press 1995, ISBN 0 19 563727 5

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