



# CARE OF SOFT-SHELLED TURTLES

*Our Turtle & Tortoise Care Sheets are meant as a general guideline to caring for your Turtle/Tortoise. Every specific species requires its own unique care - while many species are overlapping and can be kept with other species that have similar needs.*

*For even more details about the needs of a specific species - or for ideas about which different species will go well together (many do), please contact us by phone or email. Thank you!*

## **GENERAL**

Soft-shelled turtles make great display animals. Though they may bury in the sand, they are quick, alert, and many are graceful swimmers. A big display tank with Spiny, Smooth, or Florida Soft-shelled turtles is hard to beat for entertainment value.

## **DISTRIBUTION**

Soft-shelled turtle species are found throughout most of North America (Apalone), Africa (Trionyx), Asia (Amyda, Aspideretes, Chitra, Dogania, Palea, Pelodiscus and Rafetus), and New Guinea (Chitra and Pelochelys). Spiny, Smooth, and Florida Soft-shells are commonly available in the pet trade. Most of the other species are quite rare or just get too big for most hobbyists.

## **SIZE**

Spiny and Smooth Soft-shells usually grow to 14 inches and Florida Soft-shells can grow up to 24 inches or larger.



## **ENVIRONMENT & ENCLOSURE**

Hatchling soft-shelled turtles are probably the most sensitive turtles in captivity with regards to their captive care. They can be set up in 20-gallon long aquariums similar to other hatchlings, but they must be offered water of highest quality. This water should be free of chlorine, slightly acidic, filtered, and oxygenated. They should be kept warm (70s F) by a submersible aquarium heater or an under-tank heater. Add a substrate of clean, washed river sand and add lots of driftwood and live plants to enhance their environment. Add a variety of small fish such as guppies, platies, and mosquito fish. Feed them live invertebrates such as redworms, earthworms, and black worms once or twice a week. Most species will begin taking a pelleted aquatic turtle food quite soon after acclimating and feeding on live prey. We have found Reptomin® floating sticks to be especially appealing to young soft-shelled turtles.

Successfully keeping soft-shelled turtles is very difficult... They require a soft, sandy substrate and ultra-clean water. Soft-shelled turtles spend a great deal of time buried in the sandy bottoms of rivers and therefore enjoy this activity in captivity. Use of the finest grade of sandblasting sand or thoroughly rinsed play or river sand is recommended. Larger grade sand and pebbles can abrade their soft plastrons and lead to sores and infections.

Most species of soft-shelled turtles will have to be kept individually or in small groups spread out in a large, creatively designed enclosure. If you overcrowd soft-shelled turtles, you are asking for trouble.

For soft-shelled turtles, don't be afraid to go overboard on the filtration! Large enclosures with water in the 72-75° F (22-25° C) range and in the neutral to slightly acidic (6.5 to 7.0) pH range are great for all North American species and most of the exotic species. (At the bottom of the deep rivers where many of these turtles live, the water is quite cool, even in hot, tropical climates.) The addition of live aquatic plants will make the enclosure more interesting and they will also help "acclimate" the water and add oxygen to the system. Most small to medium specimens of soft-shelled turtles, especially North American species, will bask if given the appropriate area. Sand banks and large fallen trees are used in the wild, but most will crawl onto a piece of driftwood or slate (or even a mat of floating aquatic plants) if these are all that are available. Again, be careful to build a system that prevents abrasions or injuries to the turtles' shells.

Many soft-shelled turtle species are found in brackish (salty) water in nature, especially Florida Soft-shells. Salt inhibits the growth of fungus and certain bacteria. Therefore, the addition of salt can be beneficial to keeping them healthy.

## **DIET**

Soft-shelled turtles are carnivores. They feed readily on fish (avoid carp and catfish), worms, crickets, pink mice, crayfish, and shrimp. Once acclimated, most soft-shelled turtles will eagerly accept floating commercial diets, but the key is a "balanced" diet!



## HEALTH

Scratches or scrapes can easily become infected if soft-shelled turtles are kept in enclosures with poor water quality. Prepare their cage furnishings carefully and thoughtfully. Use a couple of tablespoons of sea salt or aquarium salt per gallon of water and keep some Acriflavine and Silvadene® cream on hand for emergencies. Be careful. Many tropical fish keepers using Acriflavine suggest treating animals with an accompanying rise in the water temperature. Warm water temperatures in the suggested 85-88° F range can be deadly to soft-shelled turtles!

Silvadene® is an antibiotic cream formulated for use with human burn victims. It requires a physician's prescription, but is an important part of a turtle keeper's arsenal of tools. It has proven very effective in treating sores and shell problems in both soft-shelled and hard-shelled turtles.

Betadine (iodine) is toxic to some soft-shelled turtles, especially members of the genus *Aspideretes*. To be safe, we do not use iodine-containing products with any of our soft-shelled turtles.

### Spiny Soft-shelled Turtles

Spiny Soft-shelled Turtles (*Apalone spinifera*). As the name suggests, these turtles have many spiny processes on the anterior of the carapace. There are seven subspecies of *A. spinifera* ranging from Canada to Mexico and as far west as California.

### Smooth Soft-shelled Turtles

Smooth Soft-shelled Turtles (*Apalone mutica*) have smooth carapaces and lack the spiny processes seen in *A. spinifera*. They are beautifully marked with vermiculations and large spots. They are found from Minnesota south to Florida and west to Texas and New Mexico.

### Florida Soft-shelled Turtles

The Florida Soft-shelled Turtle (*Apalone ferox*) is a large species (females to 20 inches, males smaller) that is quite prolific. A large female can lay two clutches each year totaling as many as 70 eggs.

## RECOMMENDED READING

- Ernst, C. H., J. E. Lovich, and R. W. Barbour. 1994. *Turtles of the United States and Canada*, Smithsonian Institution Press.
- Gurley, R. 2003. *Keeping and Breeding Freshwater Turtles*. Living Art publishing. Ada, Oklahoma.



- Gurley, R. 2005. Turtles in Captivity. ECO Herpetological Publishing and Distribution. Lansing, Michigan.
- Korolev, A. V., S. V. Kudrayavtsev, and V. E. Frolov. 1983. Some special aspects of the husbandry of soft-shell turtles (Reptilia, Testudinae, Trionichidae) at the Moscow Zoo. 7th Annual Reptile Symposium on Captive Reproduction & Husbandry, Dallas, TX, p. 54-58.
- Plummer, M. V. 1977. Notes on the courtship and mating behavior of the softshell turtle, *Trionyx muticus* (Reptilia, Testudines, Trionychidae). J. Herp. 11: 90-92.
- Pritchard, P. 1979. Encyclopedia of Turtles. TFH, Inc. Neptune, New Jersey.