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# Red Footed Tortoise (Chelonoides carbonaria) and Yellow Footed Tortoise (Chelonoides denticulata)

# **Mid-Sized and Colorful Tortoises**

Red footed and yellow footed tortoises are small to medium sized tortoises with highly domed, grayish to blackish or brown carapaces (upper shell) with pale yellow or orange blotches on each scute. Scales on the head, neck, and forelimbs are often reddish orange, hence their common names. There are also many different regional variations and subspecies of these tortoises in existence as well, with minor differences in color, shell and overall size and shaping, and other anatomical differences. Red footed and yellow footed tortoises are largely omnivorous species of tortoises, feeding on a variety of plant and animal matter. These tortoises are also sexually dimorphic, with males being larger and more colorful than females and juveniles. Red footed tortoises will often construct and use communal dens indicated through scenting as well, and oftentimes may even be semi-social or semi-gregarious tortoises. All tortoises are mainly terrestrial (land dwelling) and are characterized by highly domed shells and large, elephantine like feet.

## **Taxonomy**

Life: All living, physical, and animate entities

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

Phylum/Sub Phylum: Chordata/Vertebrata

Class: Reptilia
Order: Testudines
Suborder: Cryptodira
Superfamily: Testudinoidea

Family: Testudinidae Genus: Chelonoides

Species: Chelonoides carbonaria\* and Chelonoides denticulata\*

\*Taxonomy subject to change and revision.

## **Lifespan and Longevity**

Red-footed and yellow-footed tortoises, if given the proper care, and live for 50 to 70 years and require long term care and commitment.

# **Distribution and Habitat**

Red footed tortoises are a mid-sized, terrestrial tortoise species that is indigenous to a wide range of South America east of the Andes Mountain range. This species' range specifically extends from eastern Colombia through Guiana and French Guyana, south through eastern Brazil, to Rio de Janeiro, and westward to Bolivia, Paraguay, and northern Argentina. This species is also indigenous to Panama, other areas along western mainland South America, Trinidad, and the Caribbean, where they are introduced in some portions of these areas. Within its range, red footed tortoises can occur in a variety of humid terrestrial environments, from tropical to subtropical rainforests or dry to tropical forests, temperate forests, savannahs, and grasslands, to agricultural areas and plantations.

#### **Origin/History**

Chelonoidis carbonarius (Spix, 1824); Chelonoidis denticulatus (Linnaeus, 1766).

Red-footed tortoises have had a long history of human interaction, having been kept as a pet and used for food by indigenous people of South America for thousands of years. They were also traded as a commodity during the colonial era, with large numbers of individuals being exported to Europe for their meat and shells. When it comes to the pet trade specifically, red-footed tortoises have been a popular tortoise species to maintain for man decades, as far back as at least during the 1970's and 1980's, although the exact timeline for when redfoots were first kept and imported is not known. Less is known about the specific history of the yellow-footed tortoise in captivity, although they were probably first imported during that same time period in smaller numbers than redfoots. Now, these colorful medium sized tortoises are kept and bred regularly in the U.S.

## **Experience Level Required**

Intermediate/Moderate.

#### <u>Size</u>

Adult red-footed and yellow-footed tortoises are small to medium sized tortoise species typically ranging from 10 to 15 inches in carapace, or upper shell length depending on the species, age, and gender, as well as locality. Some localities or subspecies can remain smaller as adults.

#### **Housing and Enclosure**

Enclosure System: Primarily Terrestrial. Provide a secure and escape proof enclosure. If housed indoors, a minimum of a 6 foot by 6 foot pen, tortoise table, or other enclosure should be used. Substrates that enable burrowing such as a mix of fine aspen chips, organic bark, or coconut fiber substrates are acceptable substrates to use for these mid-sized tortoises. Outdoor pens can work during the warmer months in temperate to sub-tropical climates, and can provide ample access to natural sunlight. Outdoor pens must have a perimeter at least 8 to 9 inches deep and at least 12 inches high. Be sure the enclosure is adequately sealed to prevent access by outdoor predators. Although they derive much of their water from their food, it is best to provide a shallow water dish or pan within the enclosure, which should be changed every several days or if fouled. Soaking your tortoise at least weekly in lukewarm water can also serve as added hydration. Providing an artificially heated hide box if housed in outdoor enclosures can provide for added safety and security for these tortoises.

# **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 red footed and yellow footed tortoises 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 tortoises 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 82 degrees F and the basking area should be from 90 to 95 degrees F. Maintain a light cycle of 12 to 14 hours per day, and monitor temperatures with a quality thermostat. If kept outside, move inside if daily temperatures drop below 70 degrees, and below the 50's at night. Spot clean the enclosure for urates, feces, or uneaten food at least twice per week, and be sure to periodically replace the substrate, clean, and disinfect the enclosure and its furnishings at minimum every 2 to 3 months. 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. Unlike many other tortoise species, redfoot and yellowfoot tortoises can be maintained at relatively higher humidity levels of at, or around 70 to 80%, although this may vary somewhat with the species and subspecies.

## Feeding, Diet, and Nutrition

*Herbivorous to Omnivorous*; In the wild, these tortoises are omnivorous, and will graze upon a variety of grasses, flowers, fruits, vegetable and other plant matter. They will also occasionally consume insects and other invertebrates, fungi, and some carrion, or dead and decaying plant and animal matter.

In captivity, these mid-sized tortoises can be given a mixed and varied assortment of chopped up greens and vegetables daily or as otherwise directed. Avoid spinach, citric fruits, Iceberg lettuce, and other acidic or otherwise nutritionally poor food items. More food items to avoid include most grain products, and dog and cat foods. Many flowers, dandelions, hibiscus, turnip, kale, mustard, and collard greens are also suitable choices. Ensure that all food intended for food for herbivorous to omnivorous animals is chemical, pesticide and herbicide free. Many of these are readily available in any grocer's market. Several commercially available herbivore and veggie mix diets are also available which can be used. Food items given should be sprayed with additional calcium and vitamin D3 supplementation 1 to 2 times weekly or as otherwise directed for optimal health and development. This is in order to prevent Metabolic Bone Disease (MBD), shell pyramiding, and other shell and bone growth and nutritional deficiencies and maladies. Their feeding frequency can also often depend on the age, size, and overall health of your animal. Use care as to not overfeed turtles or tortoises, as obesity and other health related issues can become an issue. 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. Some mid-sized to large tortoises can be pickier eaters than others, sometimes preferring certain foods over others, and require some trial and error to determine which foods may be preferred by your tortoise. Several books, websites, and other resources are also available that provide further in-depth detail as to proper red-footed and yellow-footed tortoise diets, and which foods are acceptable to use and which are not.

## **Handling**

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: Eric.S.Roscoe@gmail.com

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