

**Lighting**

Like most reptiles, red-foots require ultraviolet B lighting (UVB) for vitamin D3 synthesis and the absorption of calcium. Nothing can replace natural sunlight as the best form of UVB, but if the tortoise is housed indoors for any length of time, a special fluorescent bulb can be purchased to provide appropriate UVB. These bulbs are labeled specifically as providing UVB, not just "full spectrum." A bulb should emulate natural sunlight as much as possible. Natural sunlight has a Color Rendering Index (CRI) of 100, so look for a bulb with a CRI of 90 or better. Another measurement is Apparent Color Temperature (ACT). Midday sunlight has an ACT of 5000K, so finding a bulb with a value around 5000K will also work well. While the bulb will continue to provide light, it should be changed every 6 months as the UVB fades. Place the bulb on a timer to coincide with the seasonal photoperiod, usually 12 hours in the winter and 14 hours in the summer. The bulb must be placed no further than 12 inches from the basking area. Placing the bulb farther away will not allow the UVB to reach the tortoise. The bulb should not be blocked by any type of screen or solid cage covers, as these can filter the UV light.

**Enclosure Set-Up**

A good rule of thumb to follow for minimum enclosure size is three times the length of the shell and four times the width. This will allow for an adequate temperature gradient, room for a wading dish, basking area, and to be able to maintain proper humidity. Aquarium tanks are generally too tall and too restrictive of airflow. Kiddie pools and several styles of plastic storage boxes make excellent, durable enclosures for young red-foots.

**Substrate**

The substrate should be able to retain moisture, be fairly resistant to mold and bacteria, safe, and easy to clean. Cypress mulch is an ideal substrate for a red-foot enclosure. "Forest bark" products marketed for reptiles also work well. Both of these substrates can be mixed with sphagnum moss as well to help retain moisture.

**Cage Decoration**

The tortoise will need a place to be able to retreat and hide, especially at night. This allows them to feel secure from potential predators and decreases stress.

A hide box is all that is needed in the enclosure. This can be made from an opaque plastic storage container, ceramic flowerpot cut in half and laid on its side, or any number of items.

**Additional Reading**

**Redfoots and Yellowfoots: The Natural History, Captive Care, and Breeding of *Chelonoidis carbonaria* and *Chelonoidis denticulate*.** A. Ebenhack.

**Tortoises of the World Volume 4: The Great Red-Foot Tortoise.** RC Paull.

**The Redfoot Manual: A Beginner's Guide to the Redfoot Tortoise.** M. Pingleton.

**South American Tortoises: *Chelonoidis carbonaria*, *Chelonoidis denticulata*, and *Chelonoidis chilensis*.** S Vinke, H Vetter, T Vinke, S Vetter.

**Other Tips For a Happy, Healthy Tortoise:**

- Take your tortoise to a reptile veterinarian for a physical examination and an evaluation of diet and environment
- Feed high-quality foods; monitor intake
- Do not feed dog food or cat food to your tortoise
- Protect your pet well if housed out-side from predators and adverse environmental conditions
- Prevent direct contact with heat or light sources
- Avoid sand, aquarium or pea gravel, ground corncocks, walnut shells or artificial grasses, as well as cedar or other wood chips as these items can be ingested and cause intestinal obstructions
- Avoid allowing full house freedom; tortoises can "disappear" easily and become trapped
- Carefully avoid dogs, raccoons, rats, and other predators
- Avoid temperature extremes
- Avoid exposing your tortoise to pesticides
- Avoid having young children handle your tortoise; they can learn a lot from careful observation and discussions surrounding proper tortoise care instead

**Most Common Diseases of Red-Footed Tortoises**

- Parasites
- Trauma
- Respiratory infections
- Shell rot
- Dehydration
- Metabolic disorders (including nutritional secondary hyperparathyroidism, or "metabolic bone disease")

Many commonly seen conditions are the result of malnutrition and/or inadequate housing and are preventable.

Regular visits to your reptile veterinarian should be scheduled to check for parasites and other early signs of disease and to promote a long, satisfying relationship with your Red-Footed Tortoise. For help in finding a reptile/amphibian veterinarian in your area, contact the Association of Reptilian and Amphibian Veterinarians ([www.ARAV.org](http://www.ARAV.org)) or contact the American Board of Veterinary Practitioners ([www.ABVP.com/diplomate](http://www.ABVP.com/diplomate))

# HOW TO KEEP YOUR RED-FOOTED TORTOISE HEALTHY, HAPPY AND SAFE!



Published by



Text by Kristi Krause, DVM, Dipl ABVP (Feline), 2018

\_ARAV\_trifold\_Red-FootedTortoise.indd



## RED-FOOTED TORTOISE

The red-footed tortoise (*Chelonoidis carbonaria*) is a medium sized tortoise from South America. They are found in Panama, Columbia, Guyana, Brazil, Argentina, Chile, Suriname, French Guiana, Bolivia, Paraguay, and Venezuela. They live in a very diverse habitat across these countries, including dry grasslands, forest areas, and tropical forests. They are now protected from importation from the wild from most countries, but are still imported from farms in their native habitat. When there are not enough farm-raised tortoises to meet the demands of the pet trade, tortoises may be smuggled in from neighboring countries to help meet these demands. While all red-footed tortoises are recognized as the same species, a wide variety of colors and shell patterns exist. Each geographical region may have a slightly different variation. The most commonly recognized variation is the "cherry-head" from Argentina. They have a deep scarlet color on the head, limbs, and shell.

Following purchase, a tortoise should be taken to a veterinarian experienced with exotic animals for a general health check and fecal exam.

### What to Expect From Your Tortoise

Red-footed tortoises are gentle tortoises and have a lot of personality. They are fast learners and very aware of their surroundings. They will learn to identify a primary caregiver and will soon come looking to see if they have food. Many individuals enjoy their head and neck lightly rubbed. Red-foots are not highly social and do well as a single tortoise, but will also do fine with other tortoises and are not prone to territorial fighting.

When handled gently and regularly, they can be docile and interactive. Routine cleanliness and hygiene is essential when handling any reptile, as all reptiles are potentially infected with Salmonella, which can be transmitted to humans.

### Is Your Tortoise a Male or Female?

Males are larger than females, have a concave plastron (the shell on the bottom), and a longer tail than females.

### What and When to Feed Your Tortoise

Red-foots are different than most tortoises and have a more varied dietary requirement. They are omnivores, and require a certain amount of protein and fruit in their diet. They do best with a varied diet and not just a typical grass and hay diet. In the wild, red-footed tortoises will eat a variety of animal matter. A protein source should be fed once a week. The majority of the diet should be comprised of greens and vegetables. Offer fruit in addition to the greens and vegetables two to three times per week. Juvenile and egg-laying female red-footed tortoises require calcium supplementation (without added phosphorus or vitamin D) three times a week. Other adult red-foots should be supplemented weekly. These should be sprinkled on and mixed into the food. The following is a list of commonly fed foods that are readily accepted by most red-footed tortoises. Remember to feed a variety of these items from each category. Mazuri Tortoise Diet or Zoo Med Natural Forest Tortoise Food can be used to supplement the diet, it helps to soak the pellets and mix them in with the salad.

#### GREENS:

Romaine lettuce, Red & green leaf lettuce, Endive, Escarole, Chicory, Radicchio, Turnip greens, Mustard greens, Collards, Dandelion greens, Grape leaves, Mulberry leaves.

## WHAT YOUR VETERINARIAN LOOKS FOR IN A HEALTHY RED-FOOTED TORTOISE

### Vital Statistics:

#### Body length

8–14 inches (20–36 cm)

#### Age of sexual maturity

8–12 years

#### Longevity

55–65 years in captivity

- Legs should be well muscled and allow for the tortoise to lift its body from the ground



- Vent area should be clean

- Shell should be smooth and firm without evidence of injuries or "pyramiding of scutes"

- Skin and scales should be clean and brown in color with red to orange scales on face and legs

- Eyes and nose should be clean and free from discharge.

- Beak should be smooth and at a length to allow for mouth to open wide



**NOTE: Most, if not all, reptiles carry Salmonella bacteria in the intestinal tract and intermittently or continuously shed these bacteria in their feces. Good hygiene must always be maintained, particularly with young children or those with a compromised immune system. Good hygiene must always be practiced around all reptiles, including red-footed tortoises. For more information, please see the handout, Salmonella Information for Reptile Owners at <http://arav.org/special-topics/>.**



#### FRUIT:

Papaya, Mango, Apple—seedless, Strawberry, Blackberry, Cactus fruit, Kiwi, Cantaloupe

#### OTHER:

Roses (no thorns), Hibiscus, Ice Plant, Dandelion, Chickweed (no thorns) and Prickly Pear flowers, leaves and fruit (no spines).

#### VEGETABLES:

Yellow squash, Zucchini, Winter squash, Pumpkin, Sweet potato, Bell pepper, Carrots (limited)

#### PROTEIN SOURCE:

Steamed/boiled chicken/shrimp, Hard-boiled egg, Pinkie mouse (frozen thawed, not live), Butter worms, Superworms, Phoenix worms, Night crawlers

#### Water

A shallow dish that is large enough for the tortoise to soak in should be provided. The water should be deep enough for the tortoise to sit with the legs tucked up and come up just under the nostrils. Tortoises will often defecate in their water, so it must be replaced daily. The bowl should be disinfected at least once a week using a dilute 1:10 bleach solution and rinsed thoroughly.

#### Temperature and Humidity

Since red-foots come from such a wide variety of habitats, it is difficult to know what the optimal temperature for an individual is going to be. Most red-foots prefer a temperature of 84–86°F (29–30°C). A temperature gradient should be provided so it can find the heat it needs to bask and cooler temperatures if it is too warm. An ideal daytime range of 80–92°F (27–33°C) is preferred. Nighttime temperatures are typically in the 70's (21–26°C), which is consistent with most home environmental temperatures. A secondary heat source of a ceramic heat emitter, under tank heater, and/or red heat lamp will be needed with temperatures below 60°F (15.5°C). At least two "dial-type" or digital read thermometers will need to be placed on the tank to monitor the warm and cool ends of the tank. Place the thermometers lower in the tank where the tortoise is so the temperature being monitored is the environment around the tortoise, not higher near the lamps and warmer air.

If housing a tortoise outdoors, a heated shelter will need to be provided when temperatures drop below 65°F or the tortoise should be brought indoors. Pig blankets are a good source of heat for outdoor enclosures. If housing your tortoise outdoors, provide a secure enclosure to prevent predator attacks and escape of your tortoise.

Red-foots require relatively high humidity compared to other tortoises, averaging 70%. There needs to be a balance between moisture in the substrate and the air. Too much moisture, especially in the substrate, will lead to bacterial and fungal growth and subsequent infections of the tortoise. Add lukewarm water to the substrate on a regular basis, allowing it to dry out before adding more. A hide box with moist sphagnum moss can also be used to maintain a moist microclimate. Good ventilation is essential.