

Redfoot Tortoise Scientific Name: *Geochelone carbonaria* 

Written by Dr. Scott Medlin

**Background:** Redfoot tortoises are native to south Central America and northern South America. They tend to live in humid forests but can also be found at forest edges and savanna environments. They are primarily herbivorous, but have been observed eating small amounts of carrion and insects in the wild.

They can grow up to 18 inches in length (carapace) with ideal husbandry, but most will be 12-16 inches in length when fully grown. Males can have an almost hourglass shape to their carapace as adults.

Redfoots have been documented to live for up to 30 years in captivity. All owners will not be able to achieve this level of success, but some will and some individuals could potentially live even longer given an exceptional environment.

**Enclosure:** Redfoot tortoises can be kept in both outdoor and indoor environments. The normal temperatures of southern Florida are well suited for this species to thrive and reproduce while living outdoors, but may still need to be brought inside or provided with supplemental heat during the winter. Because tortoises can be quite persistent with their digging, it is highly recommended that if you plan to keep your tortoise outside that you provide a well secured enclosure to ensure that they do not escape. Tortoises that are kept indoors can be started in a moderate to large-sized Rubbermaid or Tupperware container or in an aquarium. As they grow they will need increasingly larger enclosures. Some owners have been known to dedicate one room of their household to their full-grown tortoises.

<u>Substrate</u>: There are many suitable substrates for this species. One of the easiest, cheapest, and least complicated substrates is to simply use reptile carpet, newspaper, or even paper towels. These substrates are non-toxic, easy to clean, and virtually eliminate the risk of impaction due to ingestion of substrate while eating.

Nevertheless, some owners prefer to appearance of a particulate substrate such as cypress mulch or a shredded coconut bark. When using a particulate substrate, your tortoise will need to be fed on a slab of rock (slate, etc) or on a clean plate or dish that can be sanitized between feedings to reduce the risk of substrate ingestion. Additionally, some particulate substrates may clump in and around the eyes. Sometimes it can even become lodged between the eyelid and the eye itself. Unfortunately this can cause corneal irritation and inflammation which may require veterinary attention.

*Light cycle:* Keep your tortoise at a cycle of 12-14 hours of light per day. Seasonal fluctuations in the light cycle may contribute to seasonal shifts in hormone levels and is not recommended for those wishing to avoid breeding. Using a timer that automatically turns the lights on and off every day is the easiest way to stay consistent for most owners.

*Heat:* Like a large number of reptile species, Redfoots are from a very warm part of the world. Tortoises that are kept indoors should have a basking area of 95° F. The cold portion of the cage can be in the mid 70's. Ceramic heat emitters work well, but heat lamps and under tank heaters can be used as well.



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<u>UVb</u>: Tortoises living outdoors will get plenty of natural UVb from sunlight, even on cloudy days. For those tortoises kept indoors it is recommended that they have a special UVb light installed above their enclosure. Use caution though, because not all lights that advertise themselves as being UV lights will emit UVb, so it is important to verify that the lamp emits sufficient amounts of UVb light prior to purchasing it (Usually 5 to 10% percent is sufficient depending on the enclosure.) Most fluorescent UVb bulbs will stop emitting sufficient amounts of UVb after 6 months even though they continue to emit visible light. Because of this, remember to change out your UVb bulb every 6 months.

**Diet:** Redfoot diets should consist largely of dark leafy greens that are high in calcium. Good examples include kale, mustard greens, collard greens, and dandelion greens. Kale has the added benefit of containing Vitamin A as well, an essential vitamin needed by most reptile species. Romaine, swiss chard, cauliflower, and broccoli are also acceptable. Small amounts of fresh fruits and starchy vegetables are fine as long as they represent less than 10% of the diet (sweet potato, carrots, cantaloupe, papaya, strawberries, blueberries, raspberries, etc). Lastly, a high quality pelleted diet fed two to three times per week can provide some of the essential vitamins and minerals that are not present, or present in low amounts, in the plant portion of the diet. Some good brands of tortoise pellets include Rep-Cal, Pretty Pets, Mazuri, Mozaic, and Zieglers. Briefly soaking the pellets in water before offering them will improve their acceptance of them.

**Supplementation:** Tortoises are susceptible to hypocalcemia, especially when young, so if you opt to not provide a pellet as a part of the diet, then it is important that you provide vitamin supplements on their food. First and foremost, you will need to add a calcium supplement to their food 3 to 4 times per week. Additionally, it is recommended that you provide a multivitamin (with preformed vitamin A) once per week to once every other week.

**Water Intake:** Your tortoise is adapted to a relatively high-humidity ecosystem. It is recommended that you help to maintain appropriate hydration levels by soaking your tortoise once to twice weekly. The soak water should be lukewarm to warm (up to 95° F). Your tortoise should soak in this water for 10-15 minutes. The water level should be high enough to completely cover the cloaca, but never be so high that your tortoise's head is completely covered. The tortoise should never have difficulty maintaining their nostrils above the water level easily and comfortably.