

# Red-Footed Tortoise

**Class:** Reptilia. **Order:** Testudines. **Family:** Testudinidae.

**Other names:** Red-legged tortoise, Red-foot tortoise, carumbe (“slow moving”).

**Physical Description:** Red-footed tortoises are medium-sized tortoises from Central and South America that have a dark-colored, loaf-shaped **carapace**, speckled with light-centered patches in the middle of each **scute**. Their dark limbs are mottled with brightly colored scales, ranging from bright yellow to red (hence the name). Their head is relatively small, containing large eyes with black irises. Males are larger than females and have a concave carapace that is slightly thinner toward the middle, giving them the appearance of a waist. They generally average around one foot in length (although one was recorded at 2 feet in length!) and can weigh up to 60 pounds!



One of the most unique features of turtles and tortoises is their protective shell. Because of the shell, flight, running, and climbing are not evolutionary options! But some adaptive radiation occurs within the order. Turtles and tortoises inhabit marshes, lakes, rivers and the open sea, as well as forests, grasslands and deserts. The top shell is called the **carapace** and the bottom shell the **plastron**. The carapace develops from a layer of skin and the backbone and ribs are fused to the carapace. The plastron is developed from the bones of the shoulder girdle. The shell is so successful that it is the cornerstone of turtle design and lends to the lineage’s longevity while at the same time limiting species diversity.

**Diet in the Wild:** Red-footed tortoises are **omnivorous**, consuming a wide variety of plants (mostly fruit) and invertebrates.

**Diet at the Zoo:** Tortoise biscuits, mustard greens, collard greens, escarole, romaine, sweet potato, carrot.

**Habitat & Range:** Moist transitional zones, such as savannah to forest edges around the Amazon basin. Native to Central and South America, from Panama south through Columbia and Ecuador into Bolivia, Paraguay, and Argentina. It is also present (from human introduction) on multiple Caribbean Islands.

**Life Span:** Around 50-60 years, although sometimes longer.

**Perils in the wild:** Eggs, hatchlings, and young tortoises are preyed upon by rats, mongooses, lizards, snakes, as well as a variety of predatory birds and mammals. Adults are threatened by jaguars, which will pry apart their shell, and humans, which hunt them for food and collect them for pets.

## Physical Adaptations:

- Dark-colored carapace aids in camouflaging tortoise from predators.
- Sharp beak-like mouth aids in grasping and tearing vegetation and other food sources.

## Behavioral Adaptations:

- **Diurnal** in habit.

- Will seek out shelters for protection and for **(behavioral) thermoregulation** -They seek shelter in locations that aid in thermoregulation, often burrows of other animals (armadillos), tree falls, debris piles, hollow logs, and heavily vegetated areas.
- Multiple individuals will inhabit a communal shelter, and although they may not return to the same shelter regularly, the red-footed tortoise seems to exhibit semi-social behavior, including lack of aggression at feeding sites and a lack of territorial behavior.

#### **Reproduction and Development:**

- Reach sexual maturity around 4-5 years of age.
- Peak courtship occurs during April and May, although breeding can occur throughout the year.
- Males and females identify possible mates based on coloration of the head. Once mating begins, males produce chicken-like “clucking” sounds.
- Several weeks after mating, the female will dig a shallow nest into which she lays a clutch of 5-15 roughly spherical, 2” long eggs. Females can produce several clutches each year. After a 150 day incubation period, the young will hatch and dig their way to the surface. Sex of the offspring is temperature-dependent.

#### **Additional Information:**

- Red-footed tortoises are consumed as a delicacy in many South American cities.
- In undeveloped regions, indigenous people often harvest and consume red-footed tortoise eggs, which are protein-rich.
- Catholics in Latin America consume red-footed turtle meat during Lent, when it is prohibited to consume other types of meat.

#### **Conservation Status: (IUCN Status)**

The IUCN has not assessed this species, although it is protected by CITES (the Convention on International Trade in Endangered Species) and cannot be exported abroad.

#### **Conservation Efforts:**

Habitat destruction is a large concern for this species, as is over-collected for food and the pet trade. International trade is restriction on this species, although smuggling does still occur. One way to reduce such smuggling is for reptile buyers to insist upon captive-bred tortoises.

**Glossary:** List of definitions of the most important recurrent technical terms used in the text.

**Behavioral thermoregulation-** How a reptile may regulate its body temperature by its behavior. By basking in the sun to warm and moving to the shade to escape the heat of the day allows these animals to maintain a relatively stable temperature of 97-102 degrees.

**Carapace** - The top shell of a turtle. The carapace develops from a layer of skin and the backbone and ribs are fused to the carapace.

**Diurnal** – Active during daytime hours.

**Omnivorous** - Feeding on both plants and animals.

**Plastron** - The lower shell of a turtle, developed from the bones of the shoulder girdle.

**Scute** - Any enlarged scale on a reptile; sometimes called a "plate".

**Sources:**

- Cincinnati Zoo & Botanical Gardens
- <http://www.buzzle.com/articles/red-footed-tortoise.html>
- [http://en.wikipedia.org/wiki/Red-footed\\_tortoise](http://en.wikipedia.org/wiki/Red-footed_tortoise)
- <http://www.zoo.org/page.aspx?pid=1948>