Radiated Tortoise

Habitat

- **In the Wild:** The radiated tortoise prefers dry forest, specifically thorn (Diderae) forests and woodlands of southern Madagascar.
- **Exhibit Location:** Diversity of Birds

Characteristics

- **Weight:** up to 35 pounds; **Length:** 13-16 inches
- The radiated tortoise has the species-specific body shape: the high-domed carapace (upper shell) with yellow lines running down from the center of the dark plate of the shell. This pattern appears to radiate from the shell, hence the name, radiated tortoise. The radiating lines extend down the scutes, the shell’s plates.
- Its legs and feet are yellow as is its head, except for a black patch on top.
- Males have slightly longer tails and more protruding scutes.
- They are the largest of the starred tortoises. (A group of seven species having a “star” or “radiating” pattern on their carapace.)
- **Lifespan:** In the Wild 40-50 years; In Captivity up to 100 years

Behaviors

- It lets out hisses and grunts as a way of communicating. When caught, it will let out a high-pitched cry that can last up to an hour after capture.
- The tortoises do drink quite a bit, do not like warmth, and will dig holes to avoid dehydration.
- The radiated tortoise is diurnal (active during the day) and lives a solitary life (lives alone).
- This tortoise moves very slowly on 4 legs.

Reproduction

- Males reach breeding capabilities once the carapace length reaches 12 inches (30 cm). Females need to be a few inches longer.
- During courtship, the male tortoises will fight for the females by attempting to roll one another on their backs. They also ram each other with the front section of their shells. Head bobbing and smelling of the female’s hind area initiates courtship.
- A female will lay from 3-12 eggs in a prepared hole up to 8 inches deep. The eggs are left alone to incubate for between 145-231 days, a rather long period of time.
- The hatchlings are usually between 32-40 mm (1.3-1.6 inches) long and are a whitish color. The high-domed carapace is attained soon after hatching.

Diet

- **In the Wild:** grasses, fruit, Opuntia (prickly pear) cactus
- **At the Zoo:** Herp herb diet – various greens, alfalfa sprouts, yam, ground alfalfa pellets
**Conservation Status**

- **IUCN status:** Vulnerable; **CITES:** Appendix I
- The radiated tortoise is severely endangered due in large part to habitat destruction, as well as being poached for food and over exploited in the pet trade. Because the tortoise is listed on Appendix I of the CITES list, the import or export of the species, under most conditions, is prohibited.
- A Species Survival Plan (SSP) was established for the radiated tortoise by the American Zoo and Aquarium Association (AZA) in 1985.
- Predators: humans

**Did You Know?/Fun Facts**

- The radiated tortoise will graze in the same area for an extended period of time, keeping the vegetation in that area trim.
- This tortoise prefers new growth rather than mature plants due to the high protein and low fiber content of the vegetation.
- The tortoise’s shell contains blood vessels and nerves and can feel when touched.
- The radiated tortoise is considered to be one of the world’s most beautiful tortoises.
- The radiated tortoise is one of the rare tortoises in the world.

**Sources:**