

GIANT TOROISES RESEARCH TASK - FACTS

Website 3 - <http://www.bristolzoo.org.uk/learning/animals/reptiles/giant-tortoise>

Scientific name: Dipsochelys dussumieri

Country: Seychelles

Continent: Africa

Diet: Grasses- graminivore, herbs- forbivore, dead turtles and tortoises

Food & feeding: Omnivore

Habitats: Tropical grassland, coast

Conservation status: Vulnerable

Relatives: Egyptian tortoise, Galapagos giant tortoise

Family & friends: Aldabran giant tortoises can be found crammed together, often stacked on top of each other, beneath the shade of the sparse trees and bushes on their island.

Keeping in touch: Tortoises are usually silent, although mating males make a hollow groaning sound that can be heard hundreds of metres away.

Growing up: These tortoises mature at about 20-25 years. When she is ready to lay, the female will dig a large hole in the shallow soil using her back legs and then deposits about 5-19 eggs, before covering them over and departing. After about two months, the 6 cm young hatch.

Description: Their lifespan is at least 100 years, possibly up to 150. The Zoo's male is thought to be over 80 years old - a survivor from an almost extinct species. Giant tortoises grow steadily for the first 40 years of their lives and, given enough food, can weigh up to 254 kg.

Lifestyle: There are over 100,000 on the island of Aldabra. So many graze the grass on the island that the grasses themselves have adopted a special low-growing form to avoid being killed completely by the tortoises. The tortoises start to feed early in the morning, before it is too hot, when the dew is thick on the grass. By mid-morning they are still feeding, but now with their heads faced away from the sun to keep their heads cool.

Website 4 - http://www.thebigzoo.com/Animals/Galapagos_Giant_Tortoise.asp

Description

The Galapagos tortoise is the largest living tortoise. It can weigh over 500 pounds and measure 6 feet from head to tail. It is a very slow-moving animal, moving only 0.16 miles per hour. The Galapagos tortoise has a very large shell made of bone. The shell can be domed, saddle-backed, or somewhere in between. Domed shells are found on tortoises that live in areas with lush vegetation. Saddle-back shells allow the tortoise to reach vegetation higher off the ground. This shell is more common in areas with less vegetation.

Food

The Galapagos tortoise is an [herbivore](#) that eats prickly pear cactus and fruits, bromeliads, water ferns, leaves, and grasses. They have tremendous water storage capacities, enabling them to survive the long arid season.

Habitat

The Galapagos tortoise is found on the Galapagos Islands just west of Ecuador in South America. Spanish explorers, because of the 250,000 tortoises that inhabited the island, named the islands Galapagos (Spanish for tortoise). Today only 15,000 are left.

Social structure

The social structure of the Galapagos tortoise is a dominance

[hierarchy](#) based on the height to which the tortoise can stretch its head.

Birth and Offspring

The Galapagos tortoise matures at 20-25 years of age. Compared to most tortoises, the birth rate of Galapagos tortoises is extremely low. Most tortoises can lay hundreds of eggs at a time. However, the Galapagos tortoise only lays between 2 and 16 eggs. These eggs are laid in a hole

dug by the mother. Then they are buried for [incubation](#). The

mother leaves, and the eggs hatch 4-8 months later. It takes the baby tortoises one month to dig out of the nest.

Senses

The Galapagos tortoise has a good sense of smell and smells all of its food before eating it.

Website 1 – http://en.wikipedia.org/wiki/Giant_tortoise

Size, Weight & Height

They can weigh as much as 300 kg (660 lbs) and can grow to be 1.3 m (4 ft) long.

Where they are found

They occur (some [species](#) are now [extinct](#)) in such places as [Madagascar](#), the [Seychelles](#), [Mauritius](#), [Réunion](#), the [Galápagos Islands](#), [Sulawesi](#), [Timor](#), [Flores](#) and [Java](#). However, giant tortoises also once lived on the mainland of Asia and Australia, as follows from fossil finds in the [Shivalik Hills](#) in [India](#). Today, the world's largest population inhabits [Aldabra Atoll](#) in Seychelles, where there are approximately 100,000.

Time dates

These [animals](#) belong to the most ancient group of [reptiles](#), appearing about 250 million years ago. In the [Upper Cretaceous](#), 70 or 80 million years ago some already became gigantic and about 1 million years ago these reptiles reached the Galápagos Islands. Until 100,000 years ago most of the gigantic species began to disappear for unknown causes and only 250 years ago there were at least 20 species and subspecies in islands of the [Indian Ocean](#) and 14 or 15 species in the Galapagos Islands. From those, only one of the species of the Indian Ocean survives in the wild, the Aldabra Giant Tortoise (two more are claimed to exist in captive or re-released populations, but some genetic studies have cast doubt on the validity of these as separate species) and 11 in Galápagos.

They are one of the world's longest-living animals, with an average lifespan of 100 years or more. Harriet the Turtle, ([Charles Darwin's](#) turtle) as reported by the [Australia Zoo](#) was 175 years old

Website 2 - <http://www.geo.cornell.edu/geology/GalapagosWWW/Tortoise.html>

Size and Longevity

A male of the larger variety of tortoises can grow to over 200 kg (400-500 pounds) and could quite easily carry a full grown man on its back. The exact life expectancy of a wild Galapagos tortoise is uncertain, but is probably 100 to 150 years. An adult Madagascar tortoise presented as a gift to the Queen of Tonga in the 1770's died in 1966. They reach sexual maturity only at age 20 to 30.

Inhabitant and Habitat

Another rather interesting aspect is the difference in the various races inhabiting the different islands. Originally there were 14 races, each inhabiting a different island, and on Isabela, a different volcano. Two of the races, those of Floreana and Santa Fe, were extinct by the middle of the eighteenth century; the Fernandina race became extinct in the twentieth century. Only one individual, a male named "Lonesome George" survives from the Pinta race. The Espanola race was very near extinction but is recovering due to the breeding program of the Darwin Research Station. The shells of the tortoises come in two basic varieties, dome-shaped and saddle-backed. The dome-shaped ones are larger and inhabit islands where vegetation is more abundant. The smaller saddlebacks inhabit islands with less vegetation, such as Pinzon and Espanola. The saddleback shape is an adaptation that allows the tortoise to extend its neck higher, allowing it to browse higher than their dome-shaped cousins.

Other information

Tortoises were highly prized by the pirates and whalers who frequented the islands from the seventeenth through nineteenth century since they could be kept alive on ships for months, thus providing fresh meat and supplementing what must have been a very dull diet. Darwin reported that "*the breast-plate roasted, with the flesh on it, is very good; and the young tortoises make excellent soup; but otherwise the meat to my taste is indifferent.*" The females were particularly devastated because they come to lower elevations to nest, whereas males tend to remain in the moister highlands. As many as 200,000 tortoises may have been taken in the nineteenth century. Several races became extinct and the numbers of other races vastly reduced. There are now only about 15,000 surviving in the Galapagos. Of these, about 3000 live on Volcan Alcedo. Tortoises are herbivores, feeding on grasses and the leaves of shrubs and cacti. Today, their greatest threat comes from competition with feral cattle, burros, and particularly goats. Wild dogs, cats, rats, and pigs also attack the eggs and young.

Website 5 - <http://www.helicopterseychelles.com/seychelles-turtles.html>

Originate and Population

The giant tortoise is known to originate from two locations - the [Galapagos Islands](#) off the coast of Equador, and the Seychelles. Both are very similar yet distinct species.

The Seychellois turtle was almost eradicated by plundering buccaneers who used the turtles as a food source - these turtles were in high demand amongst sailors due to their ability to survive aboard ships for up to six months without food and water.

This activity persisted until 1840 when the only survivors were either in captivity or inhabiting Aldabra - which now hosts a population of approximately 150,000 turtles.

Discovery of turtles

It was previously believed that the Aldabran tortoise was the only species to survive, these are often seen in zoo's around the world.

That was until 1995 when a strange looking turtle in a hotel garden on Mahé was brought to the attention of the [Nature Protection Trust of Seychelles](#).

What they discovered was that this turtle may be a survivor of a once previously considered extinct species. This prompted a genetic study in 1997 which revealed that actually two types still survived: 1) the Seychelles giant tortoise, and 2) Arnold's giant tortoise - both are easily distinguished by the shape of their shell.

Giant Tortoises today

Today, the Seychelles Giant Tortoise Conservation Project is dedicated to the continued survival of the Seychelles giant turtles. Ron and Gill Gerlach presently maintain a turtle breeding farm at Silhouette Island located next to the old Dauban Coconut Plantation. Dedicated volunteers run this charity project which depend on International fund raising and sponsorship.

If you would be interested in visiting their facility they would be pleased to show you around the centre and introduce you to these charismatic giants. After 150 years of "extinction" this conservation project offers a last chance of survival for these rare animals.