

# Sulcata (African Spurred Tortoise) Care Dayna Willems, DVM

#### **Brief Description**

Sulcata tortoises, also known as African Spurred tortoises, start off small and adorable so it's easy to be fooled into thinking they are easy pets. But sulcatas can grow to be over 100 lbs! They require a lot of space and a lot of food as adults and can be destructive due to their size and strength. Native to African Sahara region they can dig burrows 10 feet or longer underground to escape the brutal heat. Since they do not hibernate, they are a challenging species to keep in Colorado as they must be kept warm all winter long to avoid illness or death, which means keeping a large, strong, destructive species indoors. This species is not recommended unless you area experienced in tortoise care and have enough room to properly house them during all the seasons.



# Sexing

It is difficult to tell the gender of sulcata tortoises even as adults. It is impossible to tell when they are babies.

# Lifespan

With proper care the average expected lifespan is 70+ years on average.

# Caging

As babies Sulcatas can be kept in a 20-40 gallon tank but they will outgrow it after about 3-5 years. At that point they will need a larger enclosure, ideally in a protected outdoor enclosure for the warmer months. During the winter they have to be kept indoors where it is warm as they cannot hibernate. A large tub or trough will work when they are juveniles but eventually (after about 7-10 years) they will need an area as large as a room or part of a garage as long as it can be kept appropriate temperatures. It should be at least 100 square feet per adult tortoise. Be aware that sulcatas are strong enough to push washing machines and go through drywall with ease. Enclosures need to be fortified to keep them within and also protect surrounding structures.

### **Lighting and Temperature**

Reptiles need a warm place to bask (95-105 degrees) on one side of the cage in order digest food and nutrients properly. The other side of the cage should be cooler (80-85 degrees) so they don't overheat. A thermometer should be placed at both ends of the cage to accurately measure temperatures. Lights should be on for 10-12 hours each day and then total darkness at night. Night temperatures should not drop below 70 degrees so a night time heat source may be necessary. Care must be taken that the tortoise cannot knock over any heating devices as they can be burned, especially by a space heater they can get too close to. Multiple lamps should be used to heat a larger radius to account for the large body size and to avoid burns from a single lamp with a narrow zone of high heat.

Tortoises MUST have UVB light to survive and a lack of UVB will lead to Metabolic Bone Disease, severe deformation, and death. A commercially available UVB bulb is necessary as UVB does not penetrate glass or plastic so having the cage near a window does not work. Look for UVB listed specifically on retail packaging before buying.

 After about 6 months of use most bulbs will stop emitting adequate levels of UVB, even though they are still shining, so it's important to change the bulb every 6 months.

## **Humidity**

Humidity is extremely important during growth (the first 10 years at least) to prevent pyramiding (abnormal growth) of the shell. In the wild sulcatas spend a lot of time in their underground burrows where humidity levels are high. Recreating this can be difficult in the dry Colorado climate with air conditioning/heating and heat lamps. The enclosure overall should be 50-60% and should be measured by a hygrometer. There should also be a humidity chamber that provides humidity around 80%. This can be accomplished with a plastic box with an opening cut for the tortoise to enter/exit with moist substrate within. A half wooden log hide can also be soaked in water every other day to raise humidity as it evaporates from the wood. Providing appropriate humidity as they outgrow their hides presents a challenge.

#### Substrate

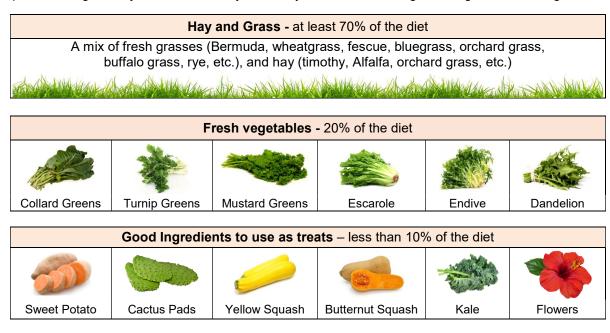
Tortoises should be able to make shallow burrows in the substrate so a mixture of several of the following is best: organic soil, coco coir, peat moss, sphagnum moss, dead leaves. Cypress mulch or alfalfa pellets can be used successfully although it typically quite dry and molds easily. Avoid cedar/pine/aspen mulches, sand, carefresh bedding, and sand. Live plants can be planted directly in the substrate or kept in pots to provide cover and enrichment for your turtle.

# Hibernation

Sulcata tortoises cannot hibernate and should remain within appropriate temperature ranges throughout the year. Heating sources should be used during colder seasons to maintain appropriate environment. Attempts to hibernate will quickly cause illness and death in this species.

#### Food

Tortoises are herbivores and need a variety of high quality hay, grasses, and vegetables. Hay and grasses should be the mainstay of your tortoise's diet to ensure proper growth and fiber intake. Hay is extremely important to integrate early in life. Grasses can be grown in the enclosure itself or in shallow dishes (like pie plates) and then offered to your tortoise to graze on when they are young. Mazuri tortoise pellets (soaked in water until mushy) can be offered once or twice a week in addition to hay and vegetables. A small amount of fruit can be offered once weekly or less. Uneaten food should be removed after 24 hours. The following is a short list of commonly used food. Babies and juveniles should be fed a pile of food at least as large as their body as they are growing. As adults they should eat a pile of food about a quarter as big as they are at least every other day in addition to being able to graze on fresh grass every day.



Avoid These Ingredients (Low in calcium and/or high in phosphorus, oxalates, goitrogens)

Cabbage, iceberg lettuce, spinach, broccoli, tomatoes, corn, grains, beans, bread, cereal, meat, eggs, dog food, cat food, fish food, vertebrates (pinkies, lizards).

### Supplementation

A powdered calcium supplement (without phosphorus) should be used lightly sprinkled over the food 1-2 times weekly. A multivitamin can be used less frequently (once or twice a month) if desired but with good nutrition this is not always necessary. A piece of cuttlebone in the enclosure will provide calcium and keep the beak short.

#### Water

A shallow water dish at least as big as your tortoise with fresh water must be available at all times. It should be stable, so it cannot be spilled, and it should be easy to climb in and out of from all sides. The dishes used under potted plants are excellent for water dishes and inexpensive for young sulcatas. Adults often need a shallow pool or pond available. Tortoises enjoy full body soakings but often defecate in their water so it needs to be cleaned often.