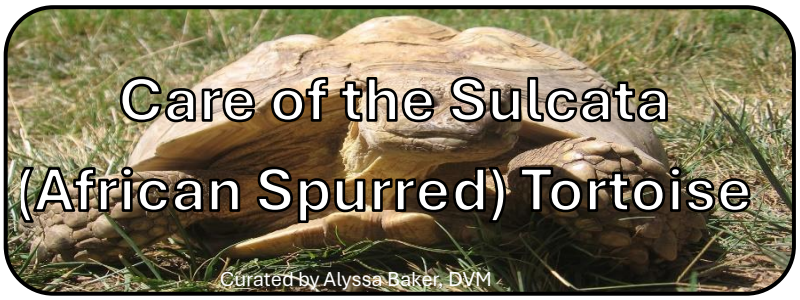
Craven Animal Hospital
4603 Old Cherry Point Road
New Bern, NC 28560 US
Phone: (252) 637-4541
Fax: (252) 637-3658



This handout is intended to provide only very general guidelines. Consult with your veterinarian about other aspects of advanced care that can be considered to ensure adequate health.

General Information

Sulcata tortoises, also known as African Spurred tortoises, 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 the African Sahara, their natural environments include hot, arid deserts, scrubland, and savannah. 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 as they must be kept (very) warm all winter long to avoid illness or death.

Lifespan

The average lifespan of the sulcata tortoise ranges from 50-80 years, however, there are some living well into their 100's!

Sexing

Once mature, males will have an indent on their plastron (bottom of the shell) and a longer, more pointed tail. Males may exhibit a more open "U" shape in the shell notch around the tail compared to the "V" shape of females.

Housing

Baby Sulcatas can be kept in a 20-40 gallon tank while young, but will quickly outgrow them after about 3-5 years. Adults will eventually need a larger enclosure, ideally outdoors in the warmer months. During the winter months they will need to be kept indoors where it is warm as they cannot hibernate. Enclosures should be at least 100 square feet per adult tortoise and secure – sulcatas are strong enough to push washing machines and go through drywall with ease. Outdoor enclosures should be secured to keep predators out.

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. Avoid cedar/pine/aspen mulches, carefresh bedding, and sand. Live plants can be planted directly in the substrate or kept in pots to provide cover and enrichment for your tortoise.

Lighting and temperature

Sulcata tortoises need a warm place to bask (95-100 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 can escape the heat. A thermometer should be placed at both ends of the cage, or a laser thermometer may be used to measure temperatures. The lights should be on for 10-12 hours each day and then total darkness at night. Night temperatures can safely drop to 70 degrees so a nighttime heat source may be necessary. Be sure heat sources are not able to be knocked over or cause burns.

Sulcata tortoises MUST have UVB light to survive and a lack of UVB may lead to Metabolic Bone Disease which causes severe deformation, pathologic fractures, or even 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. Over time, most bulbs will stop emitting adequate levels of UVB, so it's important to change the bulb every 6-12 months. Nothing beats natural sunlight however, so if your tortoise can get real sunlight in a protected area this is always preferred.

Humidity

Humidity is extremely important during the growth phase (the first 10 years at least) to prevent pyramiding (abnormal outward growth) of the shell. In the wild, sulcatas spend a large amount of time in underground burrows where humidity levels are high. The enclosure overall should be 50-60% humidity and should be measured by a hygrometer. There should also be a humidity chamber that provides a higher humidity of 80%. A half wooden log hide can also be soaked in water every other day to raise humidity as it evaporates from the wood.

Diet

Tortoises are herbivores and require a variety of high-quality hay, grasses, and vegetables. Hay and grass should be the mainstay of your tortoise's diet to ensure proper growth and fiber intake and can be grown in the enclosure itself. 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 hoursBabies 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.

Hay and Grass- at least 70% of diet					
A mix of fresh grasses (Bermuda, wheatgrass, fescue, bluegrass, orchard grass, buffalo grass, rye, ect) and hay (timothy, alfalfa, orchard, ect)					
Staple Vegetables (high in calcium and other necessary nutrients)					
Collard Greens 	Turnip Greens 	Mustard Greens 	Swiss Chard 	Bok Choy 	Dandelion Greens 
Occasional foods/treats – less than 10% of the diet					
Sweet Potato 	Papaya 	Kale 	Butternut Squash 	Flowers 	Cactus 
Foods to avoid (low in calcium and/or high in phosphorous, oxalates, or goitrogens)					
Idaho potatoes, cabbage, iceberg lettuce, spinach, broccoli, tomatoes, corn, grains, beans, bread, meat, eggs, dog food, cat food, canned or dried insects, pinky mice/small lizards.					

Supplementation

A powdered calcium supplement (without phosphorus) should be lightly sprinkled over the food 1-2 times weekly. A piece of cuttlebone in the enclosure will also provide extra calcium and help your toritoise file their beak to avoid excessive growth.

Water

A shallow water dish at least as big as your tortoise with fresh water must always be available. The dishes used under potted plants are excellent for water dishes since they have shallow sides and they're inexpensive. Terra cotta dishes also help keep toenails short as they crawl in and out. Adult sulcatas may require a shallow pool or pond if available. Water should be spot cleaned daily.

Common Medical Conditions

Vitamin A deficiency

- This is a common condition that occurs in many captive reptiles and may lead to secondary infection in your tortoise. Abscesses/pus may develop in the tortoise's ears and cause visible swelling of the eyes, ears, or head.

Metabolic Bone Disease

- Insufficient calcium supplementation causes a deficiency in calcium in many reptile species. When calcium is insufficient, some animals mobilize calcium from the bone. This causes the bone to become brittle and prone to fractures.

Bladder stones

- Tortoises convert this ammonia (a normal waste product of protein metabolism) to uric acid
- If the uric acid builds up in high enough levels, a situation that might happen if the tortoise is dehydrated, the uric acids combine with electrolytes to form urates.
- These urates can become big enough that they need to be removed surgically

Reproductive Disease

- Egg binding/dystocia – eggs become too large or misshapen and are unable to be delivered
- Coelomitis - a ruptured egg releases yolk into the body cavity resulting in a severe bacterial infection
- Follicular stasis - egg development stops, and inactive follicles take up space in the body cavity

Prolapse

- This is the everting of the cloacal, GI, or reproductive structures through the cloacal opening.
- If noticed, we recommend applying a dilute sugar solution to help reduce swelling and contacting your veterinarian right away as if left untreated, the prolapsed tissue can die which can lead to a serious life-threatening infection.

References

Animal Hospital in Centennial, CO. Aurora Animal Hospital. (n.d.). https://www.auroraanimalhospital.com/

Divers, S. J., & Stahl, S. J. (2019). *Mader's reptile and Amphibian Medicine and Surgery*. Elsevier.

For Exotic Animal Veterinary Medicine Professionals. LafeberVet. (2025, April 25). https://lafeber.com/vet/