

African Spurred Tortoise Geochelone/Centrochelys sulcata

- All tortoises are mainly terrestrial (land dwelling) and are characterized by highly domed shells and large, elephantine like feet.
- African spurred tortoises are indigenous to the semi-arid desert, grassland, and scrubland regions of northern Africa and Middle East.
- Sulcatas are a large species of tortoise with a large, broad carapace, distinctly serrated front and rear marginal scutes, 2-3 bony projections near the hind limbs, and conspicuous, enlarged scutes/scales on their front limbs. These tortoises can range in shell and skin color from light brown, yellowish brown, to sandy brown.
- African spurred tortoises are the third largest terrestrial tortoise/chelonian species in the world!
- These tortoises, IF given the proper care, can live for 70-80 years or more and require long term care and commitment. Please consider the long term responsibilities and housing requirements for these tortoises prior to obtaining one.

Size

Hatchling sulcatas are typically $1 \frac{1}{2}$ to $2 \frac{1}{2}$ " in size, but have the potential to become very large. Growth rate depends on their environment and level of care, but an adult sulcata typically reaches 18-34" carapace length, and up to 150 lbs.

Housing

African spurred tortoises are a popular and widely kept species, but thorough consideration should be given to their housing requirements before acquiring one. This is a species that will eventually require customized enclosures and/or housing in order to be properly accommodated, and are perhaps best maintained in outdoor enclosures for all, or parts of the year depending on what one's state or area's climate/outdoor temperatures can allow or provide. Below are some basic setup guidelines for housing sulcatas both indoors and outdoors. We recommend that additional information and resources beyond only this care sheet be researched when considering a Sulcata, and the information below are by no means complete or thoroughly detailed accounts for maintaining these tortoises.

If Housed Outdoors: Outdoor housing for all, or parts of the year depending on what your area's climate will permit is perhaps the most ideal scenario for keeping and maintaining sulcatas. Once subadults to adults, a custom designed backyard enclosure of appropriate size and specifications can be designed depending on the age and size of the tortoise(s). A perimeter fence should be at least 24" in height. Perimeter fencing can be as simple or as eloquent as one may like, but must be opaque (non-transparent) and extremely sturdy & secure, and can include wooden walls, concrete, or masonry blocks or slabs. Additional substrate beyond the natural substrate already provided is typically not required, but should not have been treated or exposed to any chemicals or pesticides. Sulcatas are also extremely powerful burrowers, and must be provided an adequately size custom hide box to provide burrowing opportunities, as well as to seek refuge in. To prevent, or at least discourage possible escape through digging elsewhere in the enclosure, one can ensure that perimeter fencing extends at least 18-24" below the ground level, by providing an aforementioned shelter/hide, or filling in other burrows with solid material. Temperature wise, sulcatas that are housed outdoors are exposed to a wider range of temperatures, and must be provided with shaded, as well as heated refuges/hides when temperatures drop too drastically. Areas that maintain nighttime temperatures of a minimum of 55-60 degrees F should be considered. In climates where nighttime temperatures begin to

consistently fall below these ranges, moving the tortoise(s) into indoor accommodations may also become necessary. Lastly, a shallow water bowl that should be cleaned or monitored daily should be provided in an outdoor sulcate enclosure.

If Housed Indoors: Hatchling and juvenile sulcatas can be maintained indoors throughout the year for at least the first few years of their lives. One, or groups of hatchlings/juveniles can be maintained in appropriately sized, sturdy, escape proof enclosures including many of the traditional commercially available enclosure brands, or appropriately sized plastic totes, containers, or "tortoise tables". A tortoise table is a custom built open top form of indoor housing for turtles and tortoises that can have many different sizes, scopes, and specifications depending on the age and size of the turtle/tortoise, space available, or other factors. Because there is so much design variability in constructing a tortoise table, additional information and resources beyond the scope of this care sheet can also be provided, if desired, for maintain a sulcata tortoise. As adults, this is a species that, alternatively, requires customized enclosure or housing in order to be maintained indoors, which can include all or part of a heated spare room, basement, garage, or other structure or outbuilding. Acceptable substrates for indoor housing must be non toxic and can include cypress mulch, many various types of straws or hays, or sphagnum moss to maintain some humidity and burrowing opportunities in a required indoor hide. Providing the proper and correct overhead UVA and UVB lighting and heating is also critical for maintaining the health and adequate growth of these tortoises in an indoor **environment.** Calcium is an important requirement for these, as well as other tortoise species in order to be maintained at acceptable health. Without the proper lighting and temperatures, sulcatas are very susceptible to MBD (Metabolic Bone Disease) and other shell and growth deficiencies or abnormalities. Ambient room temperature should be maintained at around 68-75 degrees F and also be provided with a basking area of within a 100 degree F range on a 12 to 14 hour day/night cycle. For indoor hydration, a shallow water bowl can be provided, but is often more prone to frequent soiling and cleaning. Alternatively, soaking in warm water for 15-20 minutes 2-3 times weekly (or more frequently for hatchlings) is also beneficial for these tortoises.

Spot clean any enclosure for urates, feces, or uneaten food at least twice per week. Be sure to periodically replace the substrate, clean, and disinfect the enclosure and its furnishings at minimum every 2-3 months as well.

Feeding/Diet

In the wild, African spurred tortoises are primarily herbivorous grazers. They will feed on a variety of grasses and plant material, and much less frequently, other foods.

When maintained in captivity, providing the proper diet and nutrients is essential for ensuring and maintaining adequate health of these tortoises. An improper diet can lead to many possible ailments that these tortoise are very susceptible to including bone and shell growth deficiencies and abnormalities, gout, renal failure, and other diseases or disorders seen in captive tortoises. Calcium and vitamin D are both important nutrients to be provided in their diet. Foods that should be provided should be pesticide and herbicide free, and the bulk of their diets can include various freshly cut grasses such as Bermuda grasses and Lawn fescues. Other acceptable foods to provide include spineless prickly pear pads, clovers, and limited amounts of greens (including collard, romaine lettuce, mustard, and turnip greens). These types of "dark greens" should make up 25% or less of a sulcata's diet. Hibiscus, dandelions, roses, and some other very small amounts of fruit or vegetable can also be provided as treats on a sparingly basis. Sulcatas should never be provided animal based proteins (such as feeder insects, fish, or pre killed rodents), and other foods high in proteins, sugars, and/or fats should be provided on an extremely sparingly basis, or not at all. Do not provide iceberg lettuce as well, as this is very nutritionally poor for sulcate tortoises. Further information on proper African spurred tortoise diets, and which foods to use or avoid can be provided as supplementation to this care sheet if desired upon request.

Handling

Also be sure to practice basic cleanliness and hygiene associated with proper husbandry after touching or handling any animals or animal enclosures to prevent the possibility of contracting salmonellosis or any other zoonotic pathogens