

CAPTIVE CARE OF KENYAN SAND BOAS

(Eryx colubrinus)

Natural History

The sand boas are a group of generally small boids, mostly Asiatic, although some species are native to Africa and one species even ranges into Europe. They are related to the rosy and rubber boas of North America, and together they make up the group called the erycine boas. The East African (also known as the Kenyan) sand boa is in build a typical sand boa, but colored orange or yellow with chocolate-brown to black splotches. The belly is white or cream. In the wild, East African sand boas range through Egypt, Sudan, Ethiopia, Kenya, Libya, Chad, Niger, Yemen, Tanzania, and Somalia. They eat small rodents and lizards, which they catch by lying in wait nearly buried in the dirt or sand until a potential meal walks by. They may also search out rodent nests to dine on the young. Babies may also eat insects, but this is not thought to be common. They are most active at night, but I have seen mine prowling in the afternoon as well.

Male sand boas only reach about 15 to 18 inches in average length and about 70-100 grams in weight, although a very old male may reach as much as 24 inches. Once they reach adulthood, at about 15 months to 2 years of age depending on feeding schedules, they frequently eat very little, especially in the summer breeding season. The females will generally reach about 24-36 inches, with 28 being typical, and will weigh in the neighborhood of 400-900 + grams. They are much stockier than the males, who are rather stout snakes themselves. They can live well into their teens, with the record for a closely related species being over 30 years.

Handling

When you dig your sand boa out of its cage you should slide your hand through the substrate so that you lift the snake from underneath. In the wild its predators would attack from above, and your pet may be so scared that it jerks or even snaps if approached from above. If your sand boa does snap at you it generally won't hang on (unless it thinks you are food because you smell like a mouse) and will frequently not even break the skin. Just wash any wound well and watch for infection. I have been bitten by snakes much larger than sand boas, and a paper cut is more painful!

You should never squeeze your sand boa, but let it crawl from hand to hand, or cradle it in both hands. The larger females need a lot of support, and can be held cradled in your arms against your body, rather like a baby. If you try to put them across your shoulders they will probably fall off. They don't climb well, and will frequently fall off the edge of surfaces like tables and laps. They prefer to go downward when possible.

Housing Requirements

Housing your sand boa is relatively easy. Males can live their lives in a 10-gallon aquarium, and for a female a 20-gallon or better a 20 long is quite sufficient. If you have the room a larger terrarium can be nicely decorated and give your sand boas plenty of room. Sand boas can be housed in small groups, but if you have mixed sexes you should avoid this once they near maturity unless you want babies. They traditionally breed in the summer, but I had a pair breed in January and when the female was only 20 inches and 200 grams. I got a small litter of 3 nice babies, but I didn't want to put that much strain on my young female.

Another housing possibility is a plastic sweater box. This is cheaper but less attractive. The lid or the sides near the top should be drilled for ventilation, or a soldering iron will also melt smooth holes quickly. Care should be taken that humidity doesn't build up too much. Juveniles will climb in an attempt to explore (read escape) and can get through very small holes. It is a good idea to use hot glue to line the inside of the lid of a sweater box with fiberglass screen to prevent escapes. If you do this you can make much larger holes for the best ventilation.

You should also make sure to use clamps or large rubber bands so that the snake cannot force the lid off and escape that way. Binder clips from an office supply store work well for this.

I have recently seen a clear plastic cage marketed as a "Reptile Ranch" that makes a nice home for a smaller sand boa. It is made of clear plastic with a tightly fitted plastic lid with air vents and access doors. They are inexpensive and attractive, and are about the size of a sweater box.

The substrate that I use is Carefresh, which is not too attractive, but safe. I used to use crushed walnut shells, but heard too many reports of snakes ingesting it and becoming impacted, with fatal results. I have also heard reports of this happening with sand, so I don't advise that either. While sand boas is their common name, most sand boas don't live in sandy areas. Shredded aspen is safe, and like Carefresh it holds the burrows that the sand boas make. Many people use pine shavings, although others speculate that they may be toxic because of the volatile chemicals such as turpenes in the wood. I don't use pine, and if you choose to use it make sure it doesn't have a strong smell. Never use cedar shavings, which are definitely toxic to reptiles.

The cage needs heat at one end, most economically supplied from beneath. Heating pads made for reptiles are fine, but don't stick them to the bottom of the tank as it makes them impossible to remove. They can be regulated with a rheostat (incandescent light dimmer) either made for reptile heating or from the hardware store. I frequently use a human heating pad, which can be bought at a drugstore for around \$20. If you are using an aquarium, use something like small wooden blocks to lift the tank so that it doesn't rest directly on the heating pad, and there should be one end of the cage that is unheated. You also need a thermometer - one from a pet shop should cost about \$5 and will do the job. Place the thermometer in the substrate over the heating pad. It should be between 90 and 95 degrees F over the hottest part of the heating pad. Human heating pads usually have a hotter spot that is a lump in the pad; check the temperature directly over that. If it gets too hot even on low (and heating pads vary greatly) either raise the tank more or place a hand towel between the pad and the tank to regulate the heat. The higher the cage is raised above the heating pad, the greater the temperature fluctuation as the room temperature changes. The other end of the cage should be approximately room temperature, in the 70s. If the snake spends all the time on the cool end you might want to lower the temperature a bit, but they should have a place to go that reaches 90F in the daytime. If they don't have a place to get warm they can develop respiratory infections and digestive disturbances. The temperature on the warm end can drop into the high 70s to low 80s at night as long as it reaches 90F during the day.

Sand boas live in primarily arid areas, but in the wild they would seek out humid microclimates. You should give them this ability by supplying a humidity box. This will greatly assist them in shedding properly, and many seem to enjoy it even when not in shed. Mine frequently will stay in the humidity box for days. A humidity box is a plastic box with an access hole cut in the lid, half filled with slightly damp green sphagnum moss (not the milled brown kind). I get my green moss in the garden section of a large hardware store, but this can also be found at your local pet store. You could also use damp paper towels. These can be disposed of frequently, while the moss can be dried out and reused as long as it is not moldy or soiled. Place the humidity box where it straddles the end of the heating pad. Check it frequently for mold and droppings.

Sand boas do drink water, and should have access to fresh drinking water at least periodically. If you use a screen-topped tank you can keep a small water dish always available on the cool end. If you use a plastic box you may want to only place a small water dish in with the snake at night 2 or 3 times a week. This is to avoid excess humidity building up where the snake can't escape it. When I put my sand boas back in their cages I frequently put their heads over the water dish and am sometimes rewarded by getting to watch them drink. Some snakes may have trouble finding the water at first, so this is a good practice to make sure they don't become dehydrated.

That does it for the mandatory furniture. You may want to try laying a piece of plate glass with smooth edges on the substrate and see if your sand boa will burrow under it and lie where you can see him. They like the feeling of something over them and don't seem to realize that it is transparent. They don't need hide boxes since they usually bury themselves in the substrate or use the humidity box, but they may use a low one at times. A flat piece of tree bark works well.

You could also landscape your pet's home if it is large enough with potted succulents (remove to water), driftwood, a ceramic water dish molded to look like a rock pool, or other items. You can disguise the humidity

box by burying it and covering the top with a flat piece of bark or a similar object. Remember that sand boas will move things around as they burrow, and won't make use of any climbing opportunities, unless it is to escape!

Feeding

Young sand boas will eat young mice, which you can purchase frozen. The rule of thumb is to feed a meal which is about as big around as your snake at mid-body. For sand boas that means that babies get pink mice and adult males get fuzzies, with a mature female able to eat hoppers or adults. Some may prefer smaller prey than what you think they may take. You should never feed in the cage, as ingested substrate can cause death. Sand boas, being mostly nocturnal, feed best at night. I feed in a cloth snake bag, which can be placed in the cage for warmth and safety. To thaw a frozen mouse place it in a cup of hot tap water for 10-20 minutes until it is thoroughly thawed and warm. My sand boas don't seem to care if their mice are wet, but you can thaw them in a sealed plastic bag, or skip the water altogether and wrap them in a heating pad. Microwaving is hard to control, and an exploded mouse isn't much fun to clean up. Place the warm mouse in the snake bag, wash your hands so you don't smell like a mouse, add the sand boa, and leave it undisturbed inside the snake's cage for a couple of hours. For picky eaters I put a folded towel on top or bury the bag in the substrate, only leaving a couple of square inches exposed for air exchange. They seem to like the weight on top of them. If the mouse is still there when you check you can leave it overnight. Instead of using a snake bag you can place the mouse and snake in a deli cup, but sand boas seem to feel more secure with the feeling of the bag over them and usually eat more readily. If you use a deli cup you might want to put in a piece of damp paper towel that they can hide under. The pinkies and fuzzies that young sand boas eat are not old enough to damage your snake and so can be fed live without harm to the snake, but that is a matter of personal ethics (and economics - frozen is generally cheaper.) Older mice can kill a snake if left alone for any length of time. There are very few sand boas that will only eat live prey. Sometimes a neonate will insist on live for the first few feedings, but if given one live and one pre-killed when they are hungry they will usually switch fairly easily.

Babies should be fed every 5-7 days, and adults every week to every month, depending on the snake and the size of the meals. It is hard to get babies actually fat, but there is a belief that feeding baby snakes a lot so they grow fast will shorten their life spans. On the other hand, a hungry snake may be grouchy and if kept underfed they will always be stunted. Watch your snake, and adjust the amount and frequency of food as necessary. Adult females are prone to obesity if overfed. If this happens cut back a bit - obesity shortens lives for snakes as well as humans. If your sand boa consistently refuses food it may be stressed from too much handling. Try leaving it alone more to see if that will bring back its appetite. You should not handle your snake unnecessarily for 24 hours after eating, as it may regurgitate. If it does regurgitate, wait a few days before feeding again, so that the irritation to the esophagus has a chance to heal.

Shedding

Your snake may refuse a meal because it is in shed. You will know this by the dulling of the color, and your snake may be more jumpy. If they seem jumpy they should be handled as little as possible until they have completed their shed, and if fed should only be offered small meals. This prevents a large meal from stretching out the delicate new skin and causing injury. Many snakes will not eat until the shed is complete.

The shed process usually lasts between one and two weeks. The skin will look dull for a few days to a week, then it will look almost normal, but a close look at the belly shows that it looks slightly yellowish instead of white. A few days after this the snake will shed, frequently in the evening. If the snake does not shed completely you can place it in a damp cloth snake bag placed inside its cage for a few hours. This usually does the trick. If there are a few stubborn spots you can apply a little contact lens wetting solution, let it soak, then gently peel the skin off.

You should check the shed skin if possible to see that the eye caps have shed. If they are retained for more than a couple of sheds they can damage the eye. If your snake retains an eye cap you should first try the damp snake bag. If that doesn't work you can take a piece of scotch tape or masking tape (not something as sticky as duct tape) and reduce the stickiness a bit by sticking it to your finger a couple of times, then gently placing it over the eye cap and lifting, using a rolling motion. If this doesn't work either wait until the next shed to see if it comes off then, or consult a reptile vet. If the eye cap is only retained for one shed it is very unlikely to cause problems, but people have blinded their snakes by trying to use forceps to remove retained eye caps. If you provide a humidity box there is every likelihood that your snake will never have a bad shed.

Sanitation and Health

Your snake cage will be easy to clean. Sand boas produce their uric acid in a solid form as a small white lump of urates. Their feces are also dry and not terribly odorous, unless left in the humidity box for some time. The humidity box should have fairly frequent cleanings, every week to two weeks if not soiled. Of course if it is soiled or the moss molds it should be cleaned immediately! The rest of the cage is easier. I just throw away the lumps I find in the substrate as I search for my snake, and replace the substrate and clean the cage about 2-3 times a year. If you use aspen or other substrate it may need to be replaced more frequently. You can disinfect the cage and furnishings with a 10% bleach solution or a commercial disinfectant like Quatricide. All of these must sit on the surface for 10 minutes to be effective. Make sure to follow directions and rinse thoroughly. Pinesol has ingredients that are toxic to reptiles, so avoid it and similar products.

Your sand boa, just by being a reptile, may be harboring a strain of *Salmonella*. A few simple precautions in handling your pet will make sure this never causes any problems. Never let your snake crawl on the kitchen counters, and use the bathroom for washing the cage and furnishings, disinfecting all surfaces afterward. Don't kiss your snake, or let it tongue-flick your lips. Wash your hands well after handling, or use a disinfectant gel. Disinfect any surface that your snake touches which may touch food, or that a young child may touch. Infants and people with impaired immune systems should probably not have contact with any reptiles, but chicken from the supermarket causes far more cases of *Salmonella* than do pet reptiles.

If you get a new snake it should be quarantined for six months, to prevent transmission of parasites and diseases. Sand boas are normally hardy snakes and seldom get sick, but symptoms such as excess mucus, gaping to breathe, repeated regurgitation, or anything else out of the ordinary should be investigated by a vet. Remember, if you have any questions, ask someone - the only stupid question is the one not asked!

More Information

I am only aware of one book with much sand boa care information, *Boas: Rosy and Ground* by Walls, published by TFH Publications. For more information on the Internet, see the sand boa forum at Kingsnake.com (<http://www.kingsnake.com/forum/rosyboa/>) or the newsgroup rec.pets.herp. There is a page dedicated to sand boas and their relatives at <http://www.kingsnake.com/sandboa/sandboa.html> which has information and pictures. If you are interested in breeding, refer to *The Reproductive Husbandry of Pythons and Boas* by Ross and Marzec.

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