

Diet

In the wild, Savannah monitors are known to consume a variety of insects, small mammals, other reptiles, birds and carrion. Insects compose the majority of diets for juveniles. Juveniles should be fed a variety of insects daily, as much as they will eat in one sitting. Food items should not be larger than the space between your lizard's eyes or longer than the length of your lizard's head. Adults should be fed every other day to every three days to avoid obesity. Adults should be fed a variety of whole prey food items including captive raised or commercially available insects (such as crickets, roaches, superworms, silkworms, and hornworms), snails, mice, rats, frozen-thawed quail hatchlings, and frozen-thawed baby chickens. Mice and rats should be frozen-thawed only. Avoid pinkie mice and rats due to their very high fat content. All live insects need to be gut-loaded at least three days prior to offering them to your Savannah monitor. Raw lean meats such as chicken and turkey and soft-boiled or scrambled eggs can be provided to vary the diet. Raw meats carry the risk for bacterial contamination and should be offered with extreme caution. Avoid ground beef and other meats that are high in fat. Do not feed commercial dog or cat food, processed or seasoned meat, feeder reptiles, wild caught animals, and live fish (especially goldfish that can be toxic). In general, trying to mimic the foods these lizards would likely encounter in the wild is the best approach to providing a good diet in captivity.

Water

A water dish should be provided at all times. A large cat litter box can be used. Water should be provided at room temperature and should be filtered and dechlorinated. Water should be replaced daily.

If your Savannah monitor is not shedding all of his or her skin, you can use over-the-counter shedding agents or soak in warm water once a day. If soaking, always supervise your animal and make sure his or her head is able to be held out of the water.

Supplements

Calcium supplementation without Vitamin D3 should be dusted on food prior to every meal. Dusting should be done immediately before feeding so the insect cannot groom off the supplement.

Tips for a Happy, Healthy Animal

- Take a newly purchased Savannah monitor to a reptile veterinarian for a wellness examination that includes a fresh fecal examination
- Quarantine any newly acquired reptiles in a separate area of the house for at least 30-90 days
- Make sure any branches, rocks, or furnishings in the enclosure are clean and free of bugs, insects and parasites
- Limit stress. Keep Savannah monitors physically and visually separate from other reptiles and animals for at least the first few weeks
- Provide natural sunlight as much as possible. Make sure your Savannah monitor is supervised and secure from predators and potentially other harmful agents while outside. Ensure your Savannah monitor does not get too cold or too hot while outside

It is Important to Avoid

- Housing together with another reptile species or animal species in general
- Dangers in the enclosure that can injure your animal such as sharp edges and unsecured furnishing that can fall on your animal
- Free or unsupervised roaming of the house
- Exposure to dogs, cats, or other animals that may harm your animal
- Excessive handling (especially at the beginning)
- Handling by inexperienced people and small children
- Unsanitary or dusty conditions in the enclosure
- Allowing the enclosure to get too hot or too cold
- Overfeeding and feeding foods high in fat content
- Avoid stress or agitation

Common Disorders

- Obesity
- Malnutrition
- Nutritional Secondary Hyperparathyroidism (or Metabolic Bone Disease)
- Infection secondary to wounds, burns, poor shedding
- Respiratory disease
- Dehydration
- Shedding problems

Additional Reading:

Reptiles Magazine Article: 5 Tips For Keeping The Savannah Monitor by Robert G. Sprackland: <http://www.reptilesmagazine.com/Lizards/5-Tips-For-Keeping-The-Savannah-Monitor/>

Reptiles Magazine Article: Breeding Savannah Monitors by Robert G. Sprackland: <http://www.reptilesmagazine.com/Reptile-Magazines/Reptiles-Magazine/February-2010/Breeding-Savannah-Monitors/>

Savannah Monitors: A complete guide to Varanus exanthematicus and others by Mark K. Bayless

Varanoid Lizards of the World by Eric R. Pianka and Dennis H. King with Ruth Allen King

Monitor Lizards: Natural History, Biology & Husbandry by Daniel Bennett

Regular visits to your reptile veterinarian should be scheduled to check for parasites and other early signs of disease and to promote a long, satisfying relationship with your Savannah monitor. For help in finding a reptile/amphibian veterinarian in your area, contact the Association of Reptilian and Amphibian Veterinarians (www.ARAV.org) or contact the American Board of Veterinary Practitioners (www.ABVP.com/diplomate)

Published by



Contributors
Justin Oguni DVM
Louisa Asseo DVM DABVP (canine/feline)

HOW TO KEEP YOUR SAVANNAH MONITOR HEALTHY, HAPPY AND SAFE!



NATURAL HISTORY

The Savannah monitor (*Varanus exanthematicus*) naturally occurs in eastern and southern Africa. They are most often found in the African savannah and grasslands, but can be found in a variety of habitats including dry rocky areas and forested areas. These lizards are primarily ground-dwelling and utilize burrows for shelter, but they occasionally can be found in low trees and vegetation. The average size of this species is 2.5-3.5 feet (0.75-1.0 meters) in total length with a maximum size of 5 feet (1.5 meters) in total length with males usually being larger than females of the same age.

What to Expect from My Animal

The Savannah monitor is a commonly available lizard in the pet trade, but is not considered a beginner pet lizard because of their housing needs. They are active lizards and require a very large enclosure that allows them to roam around. This size of enclosure is usually not found commercially for purchase. They have a good temperament and a more laid-back demeanor than other monitor species which can make them good pets. Although they are not known to readily bite or whip their tail, large adults can inflict an injury if they feel threatened and therefore, should be respected.

Is My Animal Male or Female?

Savannah monitors reach sexual maturity as early as 1.5 years of age. Sexing outwardly can be difficult in this species and almost impossible in hatchlings. Males tend to have larger and more robust heads with smaller eyes and nares. Behaviorally, males tend to be bolder in nature than females. Males have more pronounced bulges located under the base of their tail than females because of the paired hemipenes (male reproductive organs) located there. For smaller animals, transillumination using a bright light to shine through the tail from the top to bottom can be used to try to visualize the hemipenes. Hemipenes appear as two paired red dots or ovals extending from the vent down the tail when transilluminated. An experienced reptile veterinarian may be able to help determine the presence of hemipenes, which may require sedation to evert the hemipenes. Males may voluntarily evert hemipenes during defecation or if stressed.

Housing and Substrate:

Savannah monitors should be housed individually except for breeding purposes. They require large enclosures that allow them plenty of room for roaming. Juveniles can be housed in a 40 gallon breeder terrarium and adults require an enclosure that measures at least 6-8 feet long x 6-8 feet wide x 6-8 feet high (1.8-2.4 meters long x 1.8-2.4 meters wide x 1.8-2.4 meters high). As a general rule, the height, width, and length of the enclosure should be twice the length of your monitor. Ventilation for the enclosure should be provided on both sides to allow for airflow to the substrate and to allow for better control of the temperature gradient in the enclosure. A screened top is not ideal for this species. Savannah monitors enjoy burrowing and should be provided a substrate that will hold the shape of burrows such as Zoo Med™ Excavator Clay Burrowing Substrate. Substrate should be at 5-6 inches (13-15 cm) deep for juveniles and at least 15 to 20 inches (38-50 cm) deep for adults. Substrate should be misted or sprayed as needed to keep it from becoming too dry. Paver stones from a

WHAT YOUR VETERINARIAN LOOKS FOR IN A HEALTHY SAVANNAH MONITOR

Vital Statistics:

Body length

2.5-3.5 ft (.75-1.0 meters)

Maximum 5 ft (1.5 meters)

Females typically smaller than males

Body weight

1-13 lbs (5-6 kg)

Females typically smaller than males

Age of sexual maturity

1.5 years of age

Longevity

10-15 years

● Bright clear eyes

● No nasal discharge

● Clean vent

● Rough clean scales free from discoloration or wounds

● Strong muscular legs



NOTE: Most, if not all, reptiles and amphibians carry *Salmonella* bacteria in their intestinal tract and intermittently or continuously shed these bacteria in their feces, so they are unsuitable pets for very young children and those with compromised immune systems. Good hygiene must always be practiced around all reptiles and amphibians, including Savannah monitors. For more information, please see the handout, *Salmonella* Information for Reptile Owners at <http://arav.org/salmonella-bacteria-reptiles>.



hardware store may be a good option for basking sites and the mildly rough surface may help with wearing down nails and for helping your monitor to shed its skin. There should be a shallow feeding dish that allows easy access to food without allowing the substrate to get onto the food. The feeding dish should be one that is not easily tipped over.

A variety of hides should be provided in the enclosure that allow for the whole body to be concealed and a secure basking rock such as a paver stone (not a heat rock) should be provided at the hot end. Juveniles can be provided with furnishings that allow for climbing (e.g. cork bark, branches, or small live trees). Newspaper is a good substrate for a newly acquired reptile because it is easily replaced, makes disinfecting the enclosure easy, and allows for monitoring or collecting feces. Provide a humid hide if newspaper is used as a substrate.

Temperature and Humidity Requirements

Ambient air temperatures should range from 95-110° Fahrenheit (35-38° Celsius) on the hot end and from 78-85° Fahrenheit (25-29° Celsius) on the cool end. Nighttime ambient air temperatures should range from 70-80° Fahrenheit (21-27° Celsius). Temperatures should be maintained with overhead heating using basking bulbs,

mercury vapor bulbs or ceramic heat emitters. Temperature should be monitored with digital thermometers placed at the cool and hot ends of the enclosure. Ceramic heat emitters should be connected to a rheostat to help regulate and adjust heat output and temperatures within the enclosure. Humidity should be maintained between 40-50%. Maintaining humidity in captivity should not be a major concern as long as a water bowl is always in the enclosure and the enclosure is lightly sprayed or misted twice a day. Savannah monitors should be provided with increased humidity inside their shelters, or humid hides. Burrows or humid hides should be sprayed twice daily until damp. Avoid too much moisture in the humid hide and enclosure. Standing water should never be present.

Lighting Requirements

UVB lighting should be provided for 12-14 hours daily and managed with a digital timer. A high UVB output bulb is recommended in the form of a mercury vapor bulb that provides light and heat, or a fluorescent UVB bulb. An incandescent basking bulb should be used alongside a fluorescent or mercury vapor UVB bulb over the basking area to provide more heat.