

Savannah Monitor: *Varanus exanthematicus*

In the Wild

Description:

- Size: Adults generally reach up to about 4 feet (1.5 m) long
 - Some may reach lengths of 5-6 feet
- Weight: Can weigh up to about 150 lbs. (70 kg)
- Large lizard with a wide head and stocky neck, powerful tail, and muscular legs with strong claws
- Are gray to brown in color with rows of yellow spots on the back, alternating brown and yellowish rings on the tail, a yellowish belly, and a blue, snake-like tongue

Habitat and Range:

- Are found throughout most of Africa south of the Sahara
- Live in a variety of habitats – prefer savannah or grassland areas, but are also found in rocky, semi-deserts, open forests, and woodlands
- Are primarily terrestrial (live on the ground), but are able to climb trees and swim

Diet:

- Carnivorous: Adults eat large amounts of snails in addition to small mammals, birds, snakes, toads, lizards, eggs, insects, and carrion
- Juveniles are mainly insectivores because they lack the teeth to eat snails

Adaptations:

- Males are very territorial and defend their territories aggressively
 - Males try to intimidate each other by hissing, thrashing their tails, and inflating their throats
 - If one of the males does not back away, they will wrestle and bite each other, sometimes inflicting serious wounds
- If threatened, will hiss loudly, thrash their tail, and strike – if a predator continues to approach, some have been known to play dead
- Highly sensitive forked tongue and Jacobson's organ
 - Odor particles are collected by the forked tongue and transported back to the Jacobson organ in the top of the mouth
 - The Jacobson's organ is a patch of sensory cells (chemoreceptor) that detects both social chemical communication by pheromones and helps snakes and lizards hunt and track their prey
 - Flick their tongue 20-40 times every 2 minutes on average
 - If a prey item tries to escape, tongue flicking increases to about 160 flicks every 2 minutes to help the monitor locate and catch the prey
- Adults have blunt teeth to crack the shells of snails
- Feeding habits depend on the season
 - Eat a great deal of food during the wet season when food is plentiful and easy to find – during the 8 month wet season, are able to eat up to one-tenth of their body weight in a single day

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- Live off of fat reserves during the dry season

Lifespan:

- About 10-20 years

Ecosystem relationships:

- Predators: Snakes, large birds of prey, and humans
- Monitors play an important role in the food chain within their habitats – eat a variety of food items, including small mammals such as mice

Reproduction:

- Mating occurs during the wet season when there is an abundance of food
- Males will follow a female, sometimes biting and scratching her neck and legs with his claws, until the female allows him to mate
- The female will dig a nest in the ground and lay 20-50 eggs and leave them to incubate for 5-6 months
 - Some females will lay their eggs in termite mounds
- The eggs hatch in March, with an unusually high hatch rate, sometimes with nearly all eggs hatching
- Juveniles grow very quickly during their first 2 months

Activity:

- Diurnal: Are most active during the day, but often find cover in burrows during the hottest part of the day

Other “fun facts”:

- The name “monitor” comes from the belief that Nile monitor lizards watched for Nile crocodiles and warned people of their approach – Nile monitor lizards were most likely searching for crocodile eggs
- Are also called Bosc's monitor
- Until 1989, the white-throated monitor and the savannah monitor were considered to be the same species

Conservation Status and Threats:

- Listed on IUCN Red List as Least Concern
- Listed on CITES Appendix II
- Common threats:
 - This species is often killed for many lizard skin leather products
 - Are regularly exported for the pet trade
 - Are very common in pet stores in the United States
 - Estimated that more than 100,000 wild individuals are exported from Africa every year

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- Are hunted for food in some west African countries and are sometimes used in traditional medicine

At the Zoo

Bosco (male) was originally a pet before he was donated to the Forgotten Friend Reptile Sanctuary in Pennsylvania. He was acquired by the Maryland Zoo's Embassy collection in 2013. It is estimated that he was born in 2010.

What We Can Do

- Make environmentally responsible lifestyle decisions to help conserve habitat – conserve energy, reduce litter and pollution
- Make sure you know the origin of the products you buy – buying something imported illegally supports the black market by sustaining demand
 - Ex. Rosewood is still being illegally imported from Madagascar despite bans on logging because people are still buying it
- Do your research before buying a pet
 - Make sure you are not purchasing a wild-caught individual – captive-bred species are often easy to find
 - Make sure you know how to properly care for any animal before you decide to buy it as a pet
 - Some things to consider include adequate housing, diet, temperature requirements, and lifespan
 - Some pets also require a lot of time and money to be properly cared for

References:

- http://animaldiversity.ummz.umich.edu/accounts/Varanus_exanthematicus/
- <http://www.stlzoo.org/animals/abouttheanimals/reptiles/lizards/savannamonitor/>
- <http://www.zoomontana.org/index.php/meet-our-animals/2-uncategorised/116-savannah-monitor-meet-our-animals>
- <http://www.iucnredlist.org/details/178346/0>