

Northern Blue-Tongued Skink

Tiliqua scincoides intermedia

Class: Reptilia. **Order:** Squamata **Family:** Scincidae

Other names:

Other subspecies:

There are 3 subspecies of *Tiliqua scincoides*, Australian blue-tongued skink [1]

- *T. s. chimaerea*, Tanimbar blue-tongued skink
- *T. s. intermedia*, northern blue-tongued skink
- *T. s. scincoides*, eastern blue-tongued skink

Other Relatives:



Brandywine Zoo Skink 0.1

'Bluebeard' 0.1 – female

DOH: 2000-2001 Aq: 4/11/2004

About Bluebeard

Bluebeard was a relinquished pet. Bluebeard weighs 2 lb. 4 oz.

Status Not evaluated

Geographic Region

Native to Australia, the Northern Blue-Tongued Skink is found also in New Guinea, and Tasmania. The blue-tongued skink originates from Australia.

Habitat

Savanna, grassland, forest

Characteristics

Size: Up to 22" [2]. The Eastern Blue-tongued Skink is the largest (heaviest) member of the skink family [3]. Note: Prehensile-tailed skinks are longer (up to 35").

Longevity: 20 years [3]



Physical Description

- The Blue-tongued skink is characterized by its long blue tongue which is used in defensive displays. The skin is relatively smooth, covered by overlapping scales with a fish-like appearance. Short legs make it hard for this animal to dig its own burrows. Blue-tongues tend to live in burrows made by other animals, in hollow logs or in leaf litter [4].
- The tongue serves as a sense organ by capturing biochemical particles present in the environment emitted by food, predators, mates, etc. Inside the mouth these chemicals are analyzed by a sensory organ in the palate called the **Jacobson's organ**. This structure is lined with cells which connect directly to the brain, enabling blue-tongued skinks as well as other lizards and snakes to detect very subtle ingredients in their immediate surroundings. Skinks may flick their tongues as many as 300 times per hour [6].
- Their ear holes are also on the back of their head to protect them from debris while hunting in burrows [7].

Dimorphism

There is no obvious secondary sexual characteristic that allow for instant determination of sex, however:

Males:

Females: typically larger than males.

Diet: Omnivore

Diet in the Wild: Omnivorous. Consumes many snails (including the shells which it crunches, apparently with great relish) and other invertebrates, carrion, native fruits and berries, wildflowers.

Diet at the Zoo: salad greens, canned dogfood, dry dogfood, carrot, squash, sweet potato, apples, berry, dark greens, occasional mealworms

Behavior

- *Diurnal*, day active
- Blue-tongued skinks are specially designed to crawl into burrows to find their food [7].
- Blue-tongued skinks show little aggression. They are very docile creatures that tame easily. They are shy and secretive and seldom stray far from their shelters, which consist of hollow logs and ground debris. They use claws to cling to logs and rocks. [5]
- Lizards regulate their body temperature by basking in the sun's warm rays and during mid-day heatseek refuge in the cool shade. This type of **behavioral thermoregulation** helps to maintain a steady body temperature of 97-102 degrees. The term "cold-blooded" clearly does not apply here! [6]

Defense Mechanisms

- The most peculiar behavior is use of their bright blue tongue. When disturbed, it gapes its mouth open, sticks out its blue tongue, puffs up its body, and hisses loudly. This again is used as a defensive behavior. By puffing out its body this helps the animal look bigger than it really is, and the blue tongue is a warning in that this animal may be distasteful to some [5].
- Some scientists believe that BTS is a mimic of the venomous Death Adder, which shares some of the skink's range. This is because both animals share similar coloration and because the short legs of the BTS help it to look like a snake [5].
- Another behavior possessed by the Blue-Tongued Skink is **autotomy**, or the ability to lose its tail during a confrontation, which it can regenerate [5].
- When they move, they use a *serpentine* (snake-like) movement [9].

Reproduction

- **Ovoviviparous**, live-bearing
- Female blue-tongued skinks gestate their young, who develop within egg sacs that hatch inside the mother's body, so that they appear to be born alive [3].
- The female then will "lay"/give birth to about 10-15 live young. Survival rate increases because all the young are born.
 - Adults may pair up for many years although they will only spend time together during the mating season [6]
 - Internal fertilization [6]
 - Newborns are approximately 5" long and are miniature versions of the adults. They are born ready to take care of themselves [6]

Conservation

- **Use & Trade:** Blue-tongued skinks are one of the most popular pet lizards in Australia. This is due to their gentle disposition, longevity, overall beauty and ease of care.
- **Threats:** Wild populations of blue-tongued skinks remain stable. This cannot be said, however, for many wild reptile species. Many species of snakes, lizards, crocodiles and turtles are removed from the wild for the pet trade or are killed to make products for sale. As a result, many reptiles are endangered or are declining rapidly.
- **Predators:** Predators include Tasmanian devils, native cats, dingoes, and kookaburras. They may also fall prey to domestic cats and dogs, garden chemicals, and lawn mowers [9].

Did You Know?/Fun Facts

- In general, skinks have rather heavy tails and short or missing limbs, adaptations that enhance their ground-dwelling and burrowing lifestyle [9].
- All species of blue-tongue skinks are found in Australia except for *Tiliqua gigas*, which occurs from New Guinea west to Sumatra [9].
- With around 800 species, the skinks constitute one of the largest saurian families.
- BTS's are not native to Delaware. Here, we have three species of skink: the Broad Headed Skink, the Little Brown Skink, and the Common Five-Lined Skink [8]
- They ingest small stones to help digest their food [9].

Glossary: List of definitions of the most important recurrent technical terms used in the text.

Autotomy – The breaking off of a part of the body by the organism itself.

Behavioral thermoregulation- How a reptile may regulate its body temperature by its behavior. By basking in the sun to warm and moving to the shade to escape the heat of the day allows these animals to maintain a relatively stable temperature of 97-102 degrees.

Jacobson's organ- A pair of pit-like organs on the roof of the mouth that are lined with olfactory cells and nerves that interpret chemical stimuli in an animal's surroundings.

Ovoviviparous- Reproduction in which the egg sacs develop within the maternal body without additional nourishment from the parent and hatch within the parent or immediately after laying.

References

- [1] Wikipedia, "Blue-tongued skink," [Online]. Available: http://en.wikipedia.org/wiki/Blue-tongued_skink. [Accessed August 2014].
- [2] Woodland Park Zoo, "Common Blue Tongued Skink," Woodland Park Zoo, 2014. [Online]. Available: http://www.zoo.org/page.aspx?pid=1932#.VEK0u_14qt0. [Accessed October 2014].
- [3] Cosley Zoo, "Blue Tongued Skink," Cosley Zoo, [Online]. Available: http://www.cosleyzoo.org/species/eastern_blue_tongued_skink.htm. [Accessed August 2014].
- [4] American Museum of Natural History, "Blue-tongued skink," American Museum of Natural History, 2014. [Online]. Available: <http://www.amnh.org/exhibitions/past-exhibitions/lizards-and-snakes-alive/nose-hounds/a-world-of-smells/blue-tongue-skink>. [Accessed August 2014].
- [5] Animal Diversity Web, "Tiliqua scincoides," Animal Diversity Web, [Online]. Available:

http://animaldiversity.ummz.umich.edu/accounts/Tiliqua_scincoides/. [Accessed August 2014].

- [6] Cincinnati Zoo, "Blue-tongued skink," Cincinnati Zoo, [Online]. Available: <http://cincinnati-zoo.org/wp-content/uploads/2013/03/Blue-Tongued-Skink.pdf>. [Accessed August 2014].
- [7] Sacramento Zoo, "Animal Profile- Blue Tongued Skink," Sacramento Zoo, 2014. [Online]. Available: <http://www.saczoo.org/page.aspx?pid=550>. [Accessed November 2014].
- [8] "Delaware Reptiles," Delaware Envirothon, [Online]. Available: <http://www.delawareenvirothon.org/2008%20web%20updates/DE%20Herps%20ID%20cards.pdf>. [Accessed August 2014].
- [9] Rosamond Gifford Zoo, "Northern Blue Tongued Skink," Rosamond Gifford Zoo, 2014. [Online]. Available: <http://www.rosamondgiffordzoo.org/assets/uploads/animals/pdf/NorthernBluetoungedSkink.pdf>. [Accessed November 2014].