

Sexy Speedos

By Frederick Boyce

The six-lined racerunner

Last month we learned about the possibility of a future invasion of North Carolina by the Argentine black and white tegu lizard, a favorite of the exotic pet trade that has managed to escape into the wilds of Florida (imagine that) and has since established a presence there with at least two breeding populations. As these large lizards are more cold tolerant than other exotics, such as the infamous Burmese pythons of the Everglades, there is significant concern that they could continue to migrate up the coast and survive as far north as the Carolinas.

The Argentine tegu, which ranges far south into the temperate climate of Argentina, is the largest member of its family, the Teiidae, a family of swift, long-tailed and often colorful lizards that are found only in the New World, mostly in South America. Commonly known as the whiptails, their long tails are encased in rough scales and have an appearance similar to that of a plaited whip. By contrast, their upper bodies are covered in thousands of very tiny scales of a granular nature, actually quite soft to the touch, while the belly is covered in large plates.

Around 20 whiptails are native to the United States, with all but one of them occurring west of the Mississippi River. The one species east of the Mississippi and native to North Carolina is the six-lined racerunner, *Aspidozelis sexlineatus*. All of the North American whiptails until fairly recently belonged to the genus *Cnemidophorus*, but are now in the genus *Aspidozelis*. I include this rather clunky and cumbersome taxonomic information by way of conveying that a herpetology graduate student in Texas, frustrated by the difficulty of catching live specimens, began referring to whiptails as “speedos,” which he had distilled from the “-spido” contained in the genus name.

That nickname has since caught on among herpetologists, and so I suppose our native six-lined racerunners could be referred to as “sexy speedos.” They are handsome little lizards, and their granular skin does seem to fit them very well. They are found only in open, dry and sandy habitats with full exposure to the sun, often along the wide shoulders of roads or at the edges of fields. Not surprisingly, they are more common in the Coastal Plain and Sand Hills region, but can also be found in suitable habitats in the Piedmont—and have been seen as far west in our state as the banks of the Toxaway River in Transylvania County.

As their name suggests, there are six narrow yellow lines running down the back, and while they might bear a superficial resemblance to our five-lined skinks, they lack the glossy finish, more uniform scales and bright blue tails of skinks. With their longer limbs, racerunners also stand more erect and raised up off the ground, whereas skinks tend to sprawl flat on their bellies. Six-lined racerunners look very much like miniature dinosaurs, making them irresistible to herpetologically inclined children. As a kid living in Forsyth County, I chased after them alongside the road that ran in front of our family farm long ago and can attest that, while many lizards are known for speed, these make all the others seem slow by comparison. Anyone who thinks of reptiles as being slow and sluggish has never tried to catch a racerunner.

In Memoriam

Harold Brown

Mary Duff

Paul Phipps

About half the whiptails native to the U.S. have the very interesting attribute of being unisexual, meaning that they are all female and reproduce by parthenogenesis, which in most cases is basically a form of cloning in which the offspring are genetically identical to the mother. This lack of genetic diversity can make parthenogenic animals much less adaptable to changing conditions and more vulnerable to disease. But with speedos, twice the usual number of chromosomes are produced during meiosis, giving the offspring a standard pair of chromosomes, but from a single parent. This means that the eggs get a full chromosome count and have genetic variety and breadth (known as heterozygosity) rivaling that of a sexually reproducing lizard. Our six-lined racerunners, however, are bisexual and reproduce the usual way, with a male and female. I have always thought however that *Jurassic Park* would have been more convincing had Michael Crichton's fictional scientists used lizard rather than frog DNA to fill in the gaps of their ancient dinosaur strands.

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Sources: *Reptiles of North Carolina* by Palmer and Braswell, National Geographic Resource Library—“How an Asexual Procreates Alone”



—Photos by David Busch