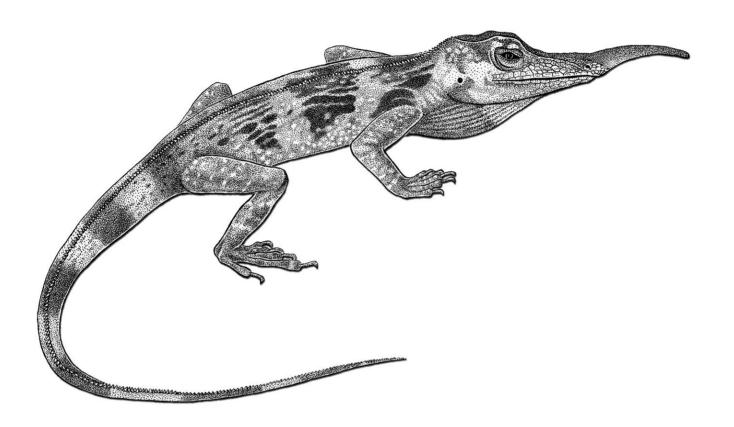
## Anolis



# Newsletter VI

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June 2, 2010

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Front cover: The enigmatic, rostrally-endowed *Anolis proboscis*, from Ecuador. Reprinted with permission from Williams (1979; Breviora 449:1-19). Illustration by Laszlo Meszoly.

#### Steven Poe

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### Finding Anolis proboscis

When we finally reached Mindo it had already been an amazing trip. We had arrived in Quito, Ecuador, two nights earlier at 10:30 PM and immediately drove east down the Amazonian slope of the Andes to the town of Baeza. I had two graduate students with me who I had come to trust to find anoles, Eric Schaad and Ian Latella, plus photographer / birder / weightlifter Dr. Tom Kennedy, neophyte undergrad Natalie Blea, and Ecuadorian student Fernando Ayala. We had driven that slope Sunday night without finding a single herp, in spite of my overexcited encouragement ("this could be the best herping night of your life!"), but had followed that disappointment up with an incredible Monday evening heading north to find innumerable *Anolis fitchi* and eight *A. orcesi*.

Anolis orcesi was described in 1969 by the great field biologist Skip Lazell, and until our evening outside of Baeza, this species was known from just two museum specimens. We had spent barely more than a night herping the eastern Andes but had secured splendid series of *fitchi* and *orcesi*, the first two goals of the trip. Our good fortune with *orcesi* meant we could move on to concentrate on the real prize, the legendary rostrally-endowed species *Anolis* 



Fig. 1. Fernando, Steve, and Ian seeking provisions outside of Quito, Ecuador. Photo by Eric Schaad.

proboscis, last reported from Mindo. This rare form seemed to hold an exalted place among anologists thanks to its ridiculous snout morphology, the tantalizing capture and release of a recent specimen after decades when it was thought possibly to be extinct, and the feature of it by Jonathan Losos in his new anole book. But because a fresh preserved specimen had not been produced, Anolis proboscis appeared on the brink of joining A. roosevelti in the annals of unobtainable anoles. The recent sighting by an ecotourist birding group notwithstanding, nobody had collected a specimen in over 40 years, and females had never been collected. In spite of my

admonitions to the newbies along ("we had great luck with *orcesi*, but...it's not always like that"), the *orcesi* success had our group pretty full of itself by the time we arrived in Mindo.

We reached the turnoff down to Mindo at about 1:30 AM after driving up and over the Andes from Baeza and stopping to meet with Fernando's contacts and then get provisions at the 24-hour liquor store just north of Quito (Fig. 1). Mindo sits at about 1400 meters elevation on the edge of cloud forest habitat on the western Andean slope. It is a famous birding site, frequented by gringo ecotourists and Ecuadorians alike, with lovely hotels and restaurants situated around a pleasant town plaza and remnant protected forest just outside of the town limits. We were exhausted during the drive over after herping all night the evening before. Poor Natalie was vomiting out the window from some just-acquired sickness, and everybody else slept intermittently until we reached the turnoff. Once there, I insisted that we drive the 7-kilometer road down to Mindo to check the available roadside forest before starting to herp. I knew we were running out of time (sunup at 6 AM), but thought it most efficient to identify the best possible habitat before proceeding. I had a feeling *proboscis* was a twig anole, like the phenacosaurs (with which it grouped in our recent phylogenetic analyses) and the Caribbean *valencienni/insolitus/occultus* species. So we searched for twiggy mats and vines below low canopy as we descended the pavement.

At the bottom of the road where the town of Mindo began, we regrouped with boots, snack food, and caffeine in preparation for our quest. Once outfitted, we passed around the rum bottle. We had developed a tradition where at the beginning of a night's searching, each herper takes a pull off the bottle and states which species he/she would like to find that night. There is usually a variety of herpetofaunal desiderata, and each statement of a target species is met with approval or derision from the peanut gallery of other herpers in the group. But on this night everybody said the same thing. "Tonight we herp for one thing and one thing only," went the Blades of Glory reference, "Anolis proboscis." We drove back up the road to the good habitat.

I did not think we would find it that night. It was too rare, and things had gone too well, and we were all tired, and it just didn't seem like we had earned it. With nighttime receding, I left the good high parts of the road to the others and moved from twiggy mass to twiggy mass as I worked my way rapidly down towards Mindo. Everybody was energized by the hundreds of *Anolis gemmosus* sleeping splayed on low ferns. But I was getting antsy as 3 AM passed, and then 4 without *proboscis*.

At around 4:30 AM I saw a strange brown anole on a horizontally-oriented twig at about 9 meters up above some trashy understory plants near a big tree. Over time an anole biologist develops a night search image for particular species. *Anolis biporcatus* has a humped back, different from other Central American green species. *Anolis frenatus* sleeps with flexed hindlimbs so you can see its form spreading out laterally from a vine. *Anolis limifrons* has a browner and plumper posterior belly than the undescribed fuscoauratid species from Panama that it resembles. You tune in to these characteristics when you look for anoles at night, and with practice you can identify virtually any sleeping anole definitively before you ever make an attempt to catch it. But I could not place this species. I wondered if it was *proboscis* as I extended the 24-foot telescoping golf ball retriever to its full extent towards the lizard. I tapped it and knocked it down, and caught it out of the air (a textbook solo "shake and bake," in the

idiom of our group). It was...something I had never seen before. Drab color...crested body and tail...white dewlap. "I *think* I got it," I yelled, still a bit unsure (nobody knew whether females had the proboscis; my captured specimen lacked one). But everybody was far up the road. Now rejuvenated, I started running back towards the others. Then I slowed and began to look for a male as I worked my way back up the road. I found our first two *Anolis aequatorialis*, a species that later turned out to be common in the area, before meeting Ian and Eric. They were walking way too fast not to have found something cool themselves.

"What's going on?" they yelled.

"proboscis," I replied.

"We got a male," they said.

"I've got a female," I shot back.

I had found the first female of the species, but Eric and Ian had collected the trophy of the trip (Fig. 2). They showed me a plastic bag with a 70 mm lizard fumbling about, bending its preposterous snout extension against the transparent walls. It was beautiful, amazing, goofylooking. I couldn't stop staring at it, marveling at its weirdness. They recounted seeing it on the twig, how it moved its head sideways when disturbed and that was how they knew it was what it was. I could not believe our good fortune.



Fig. 2. Anolis proboscis, male. Photo by Tom Kennedy.

We caught three more *Anolis proboscis* over the next two nights, two males and a female, and stayed in Mindo long enough to get good samples of all the anoles known from there (*proboscis, gemmosus, aequatorialis, fraseri*). The remaining ten days of the trip were fantastic (we caught an additional 10 species of *Anolis*), but we never reached the level of excitement of that *proboscis* night. Really, how could we?