scwibles

GK-12

Santa Cruz-Watsonville
Inquiry-Based Learning in Environmental Sciences

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BETH BASTIAANS

ESNR SCIENTIST IN RESIDENCE, 2010-2011

Weighing a lizard I caught in the field

Some stuff about me:

- Age: 26
- Where I grew up: Ames, Iowa
- High school: Ames High School
- Favorite subjects in high school: Biology, Spanish
- College (undergraduate): University of Chicago
- Some of my favorite things: Hiking, traveling, trying to see as many species of lizards as possible, learning new things about evolution, baking, crocheting.
- What makes me laugh: Watching the lizards I keep in the lab try to catch crickets. The lizards I study won't eat anything that's not moving, so if a cricket holds still, the lizard gets confused and seems to be wondering, "Hey, where'd my dinner go?"
- What I do when I get frustrated: I usually take a break, go for a walk or read a silly novel, and then get back to whatever was making me frustrated once I'm in a better mood.

One of my favorite field sites: the ruins of an old hacienda near San Juan Ixtenco, Tlaxcala, in Mexico

The graphic spiny lizard (*Sceloporus grammicus)* lives in trees, prickly pear cacti (nopales), and magüeyes in chaparral and forest habitats in the mountains of central and northern Mexico. Some high-altitude populations are freeze-resistant; these lizards can be frozen completely solid and still survive!

Volcán Popocatépetl, from inside Izta-Popo National Park, another place I went to sample in Mexico

What I study

I study how new species form, focusing on lizards.

In particular, I try to understand variation in the signals males and females use to communicate during mating. I've traveled all over Mexico as part of my sampling, and it's been quite an adventure at times.

In addition to learning about how new species arise, I work to preserve existing species that are threatened by things like climate change and habitat loss.
This can be as simple as revisiting places where past researchers had found a given species of lizard, to see if that species is still there.

Once we know that a species is in trouble, we can try to figure out what's wrong and come up with strategies to keep it from going extinct.

Along with the students at WHS, I want to learn more about environmental issues and the science behind them, especially those that affect us in California.

I also hope to share my love of scientific research – what could be better than a job where you're paid to travel to beautiful parks and catch lizards?

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