



Gillian Bowser

Research Scientist and Affiliated Faculty

**Natural Resource Ecology Laboratory
Colorado State University**

“Find something or someone that gives you strength.” Gillian Bowser, 2006.

Overview

Dr. Gillian Bowser is a research scientist and faculty member in the Natural resource Lab at Colorado State University. Her research interests include the intersections of ecology and society, especially human communities and their perceptions of change to ecosystem services. She also researches ecological indicators following IUCN protocols where ecological indicators have both ecological and societal relevance. Her work is based in Brazil, Peru, and Grand Teton National Park in Wyoming, USA. She has also worked as an ecologist for the National Park Service working on endangered species and wildlife management. She considers her greatest scientific achievement to be assisting with taxa surveys of all the national parks, working in partnership with her colleague Keith Langdon at Great Smoky Mountains National Park.

Early Life and Career

Growing up in Brooklyn, New York, Gillian Bowser’s exposure to environmental issues or the natural world centered around Prospect and Central Parks—two remarkable urban parks within New York City. However, her New York upbringing did provide her with something that helped her succeed as an African American woman in the environmental field. “New Yorkers are just so darn proud of who they are”, says laughing. “Living there, you’re introduced to so many different things and cultures, that it’s easy to see things as challenges rather than barriers.”

Bowser attended high school at the LaGuardia School of Music and the Arts in New York City, and started out majoring in medical illustration at Northwestern University in Chicago. She soon realized how much she enjoyed biology, and it ended up as her major. Her career interest in the environment and conservation was also launched in college, when she had a seasonal job at the front desk of the Mammoth Hot Springs Hotel in Yellowstone National Park. She was introduced to the National Park Service (NPS) by friendly park staff, and started as a wildlife biologist at Yellowstone through the NPS in 1980. Bowser continued to work at Yellowstone through the NPS cooperative education program as an undergraduate and beyond; by 1984, she was a full-time employee, doing research on elk, bison, mice, and butterflies.

NPS has sponsored Bowser's research ever since, including her master's work in zoology at the University of Vermont, and her doctoral research in population genetics at Badlands National Park through the University of Missouri-St. Louis. Contrary to her original plans, "I've been an ecologist and wildlife biologist my whole career", Bowser says.

In her current position, Bowser works for Colorado State University as a research scientist in the Natural Resource Ecology Laboratory. She also holds an affiliate appointment with the Department of Ethnic Studies and the Department of Ecosystem Science and Sustainability. She teaches graduate and undergraduate courses on sustainability including a new course on women and sustainability. Bowser has received a Fulbright Scholarship with Peru on ecological indicators and was an AAAS Science and Diplomacy Fellow with the US Department of State Office of Marine Conservation. Bowser relishes the opportunities a university setting allows her, especially her ability to mentor students coming up in the field. She calls her mentoring opportunities "the greatest joy of being back at a university" especially when she gets to work with minority students. "The university field at the grad level is very white—there's not much diversity in the student ranks" Bowser laments. "It's important for them to have diverse mentors. It can be a different, strange environment for them, and I like to make sure they feel ok and they know that their challenges are understood."

Importance of Mentoring to Career

Bowser recognizes the importance of minority mentoring at least in part because of her own experience moving up in the field. Her biggest mentor, spanning her career at NPS, is J.T. Reynolds, the Superintendent of Death Valley National Park. "When I started at NPS, there were no blacks," she says. "He was the first black person I met in a Park Service uniform. He immediately took me under his wing as a mentor, and has been a guiding force for me ever since." Bowser says Robert Stanton, the first black NPS director, was also a tremendous role model. She worked as Stanton's assistant in Washington, D.C., and says that seeing Stanton handle the political pressures that accompany conserving national park lands was tremendously influential. "It was eye-opening to be in D.C., and see the pressures on the parks from all sides," Bowser says. "And it was amazing to watch Mr. Stanton do his job. He is such a gentleman, so committed and so poised. Most people say he was the most incredible director we ever had."

Bowser also credits her major advisor, Bette Loiselle, and post-doc advisor, Jill Baron, for their commitment to diversity in science as well as their continuing friendship. Bowser says that Loiselle "developed a lab that was so multi-cultural that we all felt welcomed, challenged, and groundbreaking at the same time. Of fourteen people there, only two were Caucasians. The environment was so supportive for me, to have that background, and to know that you can help people foster that strength." Baron ran a similarly multicultural lab that thrived on diversity and support.

Bowser still keeps in touch with all her mentors, and draws on their examples in her own mentoring endeavors. "The people that nurture you throughout your career are just so critical," she notes. Bowser is especially proud of her involvement in a Student Conservation Association internship program that matches students with a mentor and places them in national parks. She is mentoring two female African American students from Prairie A&M University through the program. "Neither of them had ever been in a national park—it was so fun to see them, and the other students, go and get excited about stewardship of our natural resources", Bowser says. "I got them together with my mentor J.T. Reynolds, and they plan

to go on to grad school. I hope they go into conservation as a career, but even if they don't, maybe they will take their own kids to a park, and know the kind of possibilities that it offers."

Contributions

In addition to the mentoring opportunities, Bowser says she remains happy in her field, because she can study a subject that she loves and make a visible difference. She considers her greatest scientific achievement to be assisting with tax surveys of all the national parks, working in partnership with her colleague Keith Langdon at Great Smoky Mountains National Park. "It helped the parks understand the importance of invertebrates, how much things like bugs are the linchpins of complicated ecological systems", Bowser explains. Even a project that she initially thought of as a career low point eventually had its rewards. "They decided to run a highway construction project through an area where we were trying to protect the desert tortoise in Joshua Tree National Park," she says. "It was very discouraging, and I left while the project was still going on." However, the builders eventually took Bowser's groups' advice and put passages in cubs to protect the tortoises and the low turned into a high. "It was really neat" Bowser says. "Seeing those returns is what is cool about the environmental field. You can take people places and show them what you've accomplished."

Bowser says that for minorities especially, learning to view certain circumstances as challenges rather than barriers is critical to success as a minority in the non-diverse environmental field. "The majority has given us images of who we are—images that blacks don't use the natural environment, that there's a cultural history of blacks being intimidated by the natural environment" she says. "As African American women, we're taught to think that things like spiders and snakes are scary. But you can work through that, and realize that these things are not so scary. You can grow and become much stronger." She emphasizes the importance of a supportive network to the process of growing and facing those challenges. "Find something or someone that gives you strength—whether that be church, family, or mentors," she says. "You can also draw strength from being a pioneer. Even though it feels far from the civil rights movement, if you can get one more minority out there, it's an accomplishment. Take advantage of that...use it as a strength."

For More Information

Email: gbowser@colostate.edu

Website: <https://rmsgn.wordpress.com/about-2/bios/>

This interview was conducted in 2015.