

estimates that he was deposed 400–500 times, almost always for civil suits that hinged on when the asbestos industry learned about health concerns associated with its products. Although he routinely undercharged clients and sometimes worked pro bono, the income he earned during those 30 years helped to send his children through private school and university.

No one should expect to get wealthy from working as an expert witness. Ozonoff was able to devote time to many cases because his university allowed him to spend one day per week consulting. But some institutions, such as RTI International in Research Triangle Park, North Carolina, stipulate the terms under which an employee can serve as an expert witness; for example, he or she can testify only on research results performed by the institute. Other institutions, including the Natural History Museum in London, allow their employees to spend time on cases, but take the fee to offset the lost hours.

Hall has not benefitted financially from his work as an expert witness, but his experiences have stimulated research ideas. He is often called on to use his knowledge of blow-fly development to help police to establish the latest possible time of death. He worked on a case in which bodies were found in suitcases, but he struggled to find research that would help him to determine how long it would have taken insects to find the bodies. So he did the experiments himself and found that it depends on weather: in summer, flies would take a day or two to get to the body; in winter, it could take two weeks. “My MSc student got beautiful video of an ovipositor [an insect’s egg-laying organ] pushing through the zippers of a suitcase,” he says.

Ultimately, serving in this capacity is about making a contribution to society, researchers say. Ozonoff recalls that only once did a colleague suggest that anyone who testified in court was for sale. “My testimony was true,” he says. “And my expertise was being put to good use.”

That is the most fundamental reason for a scientist to accept the request, says Owen Jones, director of the MacArthur Foundation Research Network on Law and Neuroscience at Vanderbilt Law School in Nashville, Tennessee. It is an opportunity to make science matter in a broader sphere. “The legal system will never be better informed than when scientists take the time to help it move in a more constructive and accurate direction,” he says.

Edersheim views serving as an expert in the courts as both an honour and a duty. “The legal system is the underpinning of democratic society,” she says. “If a scientist participates with integrity, it is as high a calling as any other.” ■

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TURNING POINT

Nathalie Pettorelli

Nathalie Pettorelli has pioneered the use of satellite imagery to inform conservation policy. The Zoological Society of London ecologist received an award this year from British Prime Minister David Cameron for her guerrilla efforts to promote women in science.

How did you come to use satellite imagery for conservation?

I was very interested in conservation but found that more data would be available if I focused on wildlife management. For my PhD at the Laboratory of Biometry and Evolutionary Biology in Lyons, I studied the habitat quality of a roe-deer population in southwest France that is managed by national hunting offices. Two months later, I started a postdoc at the University of Oslo to study the impact of climate on vegetation and deer-population dynamics. It was then that I started to look at satellite data to quantify vegetation productivity. I trained myself in the use of remote-sensing data, for example, those collected from aircraft or satellites.

Were they easy to apply to conservation?

No. Experts told me it would be extremely difficult, if not impossible, to use these tools to study wildlife. I thought the best way was to see for myself. At the time, no one I knew was working with remote sensing; it was taught in geography, not biology. The turning point was when NASA released free satellite data. I wrote a review on the satellite data I wanted to use, and started to meet people in that community. Now I am well connected.

How did you first apply these techniques?

I did a postdoc at Laval University in Quebec, Canada, using satellite data to monitor dynamics in ungulates. Then a job at the Zoological Society of London took me on several trips to the Serengeti National Park in Tanzania to work on cheetah dynamics. Although that work did not lead to real-world conservation measures, other projects have.

What successes are you most proud of?

I used satellite data to show that the vegetation dynamics of a game reserve in Chad could sustain a reintroduction of Scimitar-horned oryx (*Oryx dammah*). I am also proud of my work to highlight how the declining health of mangroves in Bangladesh and India has contributed to erosion of the coastline — of up to 100 metres in 2 years. I have also been working to improve policymakers’ use of satellite data to inform decision-making.



L'OREAL FOR WOMEN IN SCIENCE

What is Animove?

Together with colleagues, we wanted to train people to work at the interface of biological monitoring and remote sensing. Animove is our programme to build that capacity. We have taught a hands-on course every year since 2013 in North America and Europe, and the goal is to bring it to Africa, Asia and South America.

What is Soapbox Science?

Seirian Sumner, a behavioural biologist at the University of Bristol, UK, and I founded Soapbox Science in 2011. By then, we had each won a L’Oreal-UNESCO women in science fellowship and were interested in science communication, yet had noticed fewer female colleagues as we progressed in our careers. I found myself working on issues involving hunters, which was not female-friendly. We wanted to change perceptions of what a scientist looks like. We organize events to showcase 12 female scientists who speak about their work in busy areas of cities — such as the South Bank in London or near a tube exit in Newcastle. The women present their work, and the public can heckle or ask questions. We were surprised to get a call from the prime minister’s office this year announcing that we had won a Point of Light award for making a change in the community.

Did landing a permanent position make a big difference?

It took me years to get it. But even before I had job security or a title, I wrote a book, started Soapbox Science and have been pushing at an international level for greater use of satellite imagery. Success is not a one-way road. It’s possible to achieve a lot even when a job situation isn’t stable. ■

INTERVIEW BY VIRGINIA GEWIN

This interview has been edited for length and clarity.