

TELLING STORIES THAT BRING SCIENCE TO LIFE

Even as a little girl, I've always been fascinated by wildlife. Here, I'm watching a female bushbuck in Satara, Kruger National Park.

Dr Mariette van der Walt of the Wilderness organisation shared how she brings science to life with stories.

In November last year, Stellenbosch University's Centre for Research on Evaluation, Science and Technology (CREST) organised the Communicating Discovery Science Symposium. Sponsored by the Kavli Foundation, the symposium aimed to deepen understanding of effective public engagement with foundational science. Despite its vital role in advancing knowledge, basic science has historically been overlooked in science communication and public engagement, which tend to focus on applied research, emerging technologies or controversial topics. To bridge this gap, the symposium brought together scientists and science communication experts to discuss the nuances of communicating basic science. One of the speakers at the symposium was Dr Mariette van der Walt, experienced science communicator, bat expert and biodiversity coordinator for the Wilderness organisation. Quest asked her to tell us how she brings science to life with stories.

When I was a little girl, I was lucky enough to regularly visit the Kruger National Park for holidays with my parents. I'll never forget the moment that a huge male

lion came strolling past our car while I sat fascinated in my little kid's chair. For a moment, our eyes met, his deep amber ones and my wide blue ones, and I felt a shiver of both fear and wonder.

Since then, every visit to the Park deepened my fascination with nature and sparked a dream: One day, I would don a khaki uniform, drive around in a Land Rover, and "protect the animals." I didn't know how I'd do it, but I had all the hope of a child who believes anything is possible.

At school, my curiosity was fuelled by every wildlife documentary I could find on television. Afternoons spent watching Animal Planet and Sir David Attenborough felt like windows into an incredible world that I was itching to be part of. By the time I reached university, the path seemed clear: I would study Zoology and dedicate my life to wildlife and conservation.

University was thrilling. Learning about ecosystems, species interactions and all the hidden wonders of our African wildlife filled me with a sense of purpose. My



Working with bats as a postdoctoral fellow at the Centre for Viral Zoonoses, University of Pretoria.

studies led to a PhD and eventually a postdoctoral fellowship focusing on bats. I'd clamber through huge caves, catching bats and collecting data on their biology, behaviour and health to better understand how to protect them. During this time, I authored several scientific papers about bats and their conservation.

Although I loved this work, I'd soon realised that somewhere along the way, I lost something. The stories that first sparked my love for nature had faded into piles of academic papers, statistics and technical jargon. The wonder I once felt was being smothered under the weight of my academic duties.

Everything changed when, on a whim, I applied for a filmmaking and storytelling fellowship. That experience reignited my passion for wildlife, not just as a scientist but also as a storyteller. I had an 'aha' moment when I realised that data alone can't inspire people to care about conservation. Only stories can.

Driven by this realisation, I took a leap of faith. I left academia and threw myself into the world of science communication. It was a scary decision, especially in South Africa, where science communication is still an emerging field and jobs are scarce, but I trusted that my passion for storytelling, and my determination to succeed, would win out.

Until recently I was science communications officer for Genus Palaeosciences, where I got to combine my scientific training with my love of creativity. Through writing, photography and filmmaking, I learned to share stories about science and nature to help others feel the same sense of wonder and to demystify jargon and science for everyone.

One of the most powerful tools I've discovered is photographs. During my years as a bat ecologist, I'd often hear negative reactions when I mentioned my research. "Bats are creepy!" some would say, or "Don't they get stuck in your hair?" (They don't, by the way.) It wasn't until I started showing people photos of bats, especially baby bats, that their attitudes began to shift. Instead of fear, I'd see fascination. That's the power of a single image: it can challenge perceptions and spark conversations.

If you're passionate about wildlife or science and want to share your stories, here are some of my tips to get started:

 Follow your curiosity – Don't limit yourself to just one area of study. Take advantage of workshops, fellowships, talks or any creative opportunities outside your chosen field. For me, it was a filmmaking fellowship that opened a whole new world. You never know what might spark your next adventure.

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- 2. Start small You don't need fancy equipment or a lot of money to make an impact. Most of us carry smartphones, which are perfect for photography. Start by capturing small moments. You never know where these pictures might come in useful, and it gives you the opportunity to practise your skills. The more you practise, the more comfortable you'll become.
- 3. Forget perfection It's easy to get caught up in wanting everything to be flawless, but perfection isn't the goal. Authenticity matters more. Share what you have, even if it's rough around the edges. The important thing is to tell your story.

One of the questions I often get is, "How do you find time to capture photos and videos when you're busy with research?" My answer is simple: I treat it as part of the process, not an extra task. Snapping a quick photo doesn't take much time but adds incredible value later, for presentations, social media, or just sharing your work with friends and family at a party. Once you make it a habit, it feels natural and doesn't disrupt your work.

As a science communicator, I've also learned that the value of storytelling isn't measured in likes or views. Real impact is harder to quantify. Can your story inspire a young learner to pursue a career in science? Can it teach someone something new or make them care about an issue they'd never thought about before?

Those moments of connection are what make it all worthwhile. By sharing our work through stories, we can inspire everyone and create a deeper appreciation for the natural world, and that's where the change, and conservation, will start.

I often think back to that little girl sitting in her chair, watching the lion pass by. That moment was a spark for everything I've done since. Now, through storytelling, I hope to pass that spark of inspiration on to everyone else.

Article written by Mariette van der Walt, Biodiversity Coordinator at <u>Wilderness</u>.

Ka Ngwaga wa go feta ka Ngwaga, Seteišenare sa Dipatlisiso tša Tekolo, Saense le Theknolotši (CREST) sa Yunibesithi ya Stellenbosch se be se rulagantše Simposiumo ya Go Bolela ka Saense ya Dikutollo.O mongwe wa diboledi e be e le Dr. Mariette van der Walt, setsebi sa phetisetšo ya saense, setsebi sa dinonyana tša maphemelana, le molamodi wa phapamollo ya tlhago mokgatlong wa Wilderness.

Translated into North Sotho by Prof. Walter Matli