An Interview With Twan Leenders – Part 2 – Nanpa®



Twan Leenders and His Camera

Interview by Dave Huth

This is the continuation of a conversation between Dave Huth, who serves as co-chair of NANPA's Conservation Committee and Twan Leenders, an accomplished herpetologist and photographer, who serves as RTPI's Senior Director of Science and Conservation. He has authored several books, including *Amphibians of Costa Rica - A Field Guide* and *Reptiles of Costa Rica - A Field Guide*, both through Cornell University Press. See part one of the conversation here.

Leenders' field guides present new and innovative forms of delivering scientific information, alongside stellar photography, in ways that are both beautiful and educational.



Photo courtesy of Twan Leenders

Huth:

We seem to be entering a "golden age" of science communication, with many nature photographers collaborating with scientists.

Leenders:

I believe that environmental literacy is everybody's responsibility - not just experts and special interests.

Unfortunately, we live in a world where there is a huge disconnect between the people who have this knowledge and those who do not. Environmental literacy often seems hard to find among the general public. Bridging the knowledge gap will require well-planned, very targeted, and persistent baby steps.

The skills and long-term commitments needed to launch effective messaging and outreach campaigns generally don't align well with the professional pressures faced by academics and other experts. Also, expert scientists aren't necessarily expert communicators.

Nevertheless, it will be an expert's knowledge that we will need to rely on, to close that environmental literacy gap.

Huth:

How important is it for scientists to learn communication skills like photography, and for photographers to become scientifically literate in the conservation field?

Leenders:

There is a critical need for improved and engaging science communication and I'm enjoying seeing more photographers getting involved in this field.

Such collaborations would undoubtedly help researchers better understand how their work is perceived by the general public, and how they can improve their ability to communicate their findings outside of academia. Additionally, photographers stand to gain a lot from having a rare front-row seat on the latest findings.

Huth:

As a person who does both scientific research and photographic documentation, what do you see as the ideal cooperative relationship between science and photography?

Leenders:

In my experience, the most satisfying collaborations have been with photographers who understand research enough to understand and be sensitive to the constraints that researchers often face.

It is easy to get excited about a new discovery, grab some images, and get the word (and images) out. However, if such discoveries are part of an ongoing research project, prematurely releasing critical information can jeopardize the outcome of someone's studies, result in loss of funding, and undermine efforts that a researcher may have put much time and effort into.

It seems to me that the communication of any research or scientific discovery should be the result of a true partnership between researcher and photographer.

This would require a collaboration with a jointly-agreed-upon media strategy and set of outcomes. I have been through plenty of interviews and photoshoots where a reporter and accompanying photographer simply swoop in with too little time to truly grasp what is going on, repackage their top-level understanding of a brief conversation into a few sound bites, crank out an article, and move on to the next topic.

There rarely is a chance for a final review on my part to verify that they have their facts straight, nor is there generally an outline presented of

what exactly will be covered by the resulting article and how details will be presented.

The result is often a less-than-stellar article filled with preventable errors that can reflect poorly on me or on the work I am doing. I am very much aware of everyone's time and budget constraints, but I can tell you that this concept of quickly skimming the surface is not working. We need much more close collaborations of mutual understanding and trust.



Photo courtesy of Twan Leenders

Huth:

Roger Tory Peterson was a powerful force of innovation and education, whose passion was to connect people to the natural world. What is it that made him such a force for conservation education?

Leenders:

I love the notion that Roger Tory Peterson, a young boy with a passion for nature but without any formal education in the subject matter had the dedication and tenacity to stick with his talents and ultimately educated and inspired literally tens of millions of people with his life's work.

He did not grow up in, say, the Everglades, but in a small steel-belt city instead. One that is seemingly no different than hundreds of other cities scattered throughout the country just underscores that it wasn't Roger Tory Peterson's surroundings that made him who he became, but rather his talent and his ability to see and document what others around him did not even notice.

It gives me such hope to know that a talented youth from no particularly unique background can still make the kind of difference Roger Tory Peterson made.

Huth:

Now you're Senior Director of Science & Conservation at the Roger Tory Peterson Institute of Natural History (RTPI) which carries on his work. Do you see your field guides, and the communication projects of others, in continuity with the innovations RTP began nearly a century ago?

Leenders:

It is even more remarkable to think that Peterson's first field guide was published in 1934, right in the midst of the Great Depression, when people had far more important priorities than getting to know their backyard birds.

It makes me wonder about the current state of the world as we all struggle through the COVID-19 pandemic and its economic fallout, because here, too, we are seeing people increasingly engaging in nature study and outdoor recreation.

Maybe the time is right for a new field guide revolution? Maybe this is indeed the time for talented young people to rise to the occasion and use their specific talents to connect people with nature?

It is RTPI's mission to honor Roger Tory Peterson's legacy and to continue his important work of connecting people with nature in their own backyard - wherever that backyard may be. Giving people the tools that teach them how to do this is critical in my mind.

As an aside, Roger Tory Peterson was not just an accomplished writer and artist, but also a highly respected nature photographer who used all his creative skills to further people's awareness of nature. Among his very many accomplishments is his critical role in the formation of NANPA, which was founded at RTPI in 1994.

Huth:

Your field guides seem to have both an education and conservation purpose.

Leenders:

What really excites me is that in complex ecosystems like those found in Costa Rica, it quickly becomes clear how little we really know about the local amphibian and reptile fauna.

My attempt to level the playing field and share with a broad audience everything we know to-date, and to challenge readers to help me fill in the blanks on the knowledge we so badly need has really paid off.

Since the release of my *Amphibians of Costa Rica* field guide in 2016, no fewer than eight new species of amphibian have been described from the country. Having access to comprehensive and useful tools has sparked a new generation of young, dedicated Costa Rican naturalists who are constantly outdoors, looking to improve our understanding and knowledge of these cool animals.

And they are clearly successful in their efforts, given the number of new species that have been added recently. And I love that I am in constant communication with so many of them, receiving proud messages of exciting finds, or pictures of obscure frogs they cannot identify almost every day!



Photo of Twan, courtesy of Twan Leenders.

Huth:

What role do you hope these guides might play in the conservation of amphibians, reptiles, and their habitats?

Leenders:

In my field guides, I attempt to replace as much text as possible with photographs, and have the images tell their story. The books become

more visually appealing but also present critical information in an easily accessible manner.

By combining high-key photography with technical drawings, I have been able to highlight diagnostic identification features, show variation within species, or illustrate developmental changes, while using only limited text.

The books are written in English to cater to the largest audience, but I wished that it would have been feasible to produce Spanish-language versions also. The extensive use of clear, self-explanatory images makes the information much more easily accessible to non-English speakers.

I am very active on list serves, citizen science platforms (e.g. iNaturalist), and social media groups that help local folks identify amphibians and reptiles they find. A recently formed Facebook group dedicated to snake identification quickly grew past 10,000 members and has helped not only prevent people getting hurt during potentially dangerous snake encounters, but also has saved the lives of countless harmless snakes through collective outreach and education.

Huth:

What message do you have for photographers who might be inspired to help close the knowledge gap in environmental literacy?

Leenders:

The one factor that unites these communications and the collective growth in nature awareness is photography.

My photography communicates important information to the public. But the photography of many other people (either with a cell phone or more professional gear) is also part of the growing body of scientific knowledge. There are many ways for photography to support education and conservation of my favorite creatures.

Nature photography truly has the power to be the go-to tool for raising the public's environmental literacy and to support an expert's conservation efforts.

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Dave Huth is a teacher, storyteller, picture maker, and whistler of jaunty tunes. He works as a professor of visual communication and media arts at Houghton College in western New York state. Dave is obsessed with finding new and effective ways to draw people into deep thinking and even deeper feeling about ecology and human life. He lives way out in the country where he rarely mows his lawn or rakes his leaves - which keeps opinionated humans at a distance and draws all other animals close. This is just the way he likes it.