

Badru's Story



Badru Mugerwa is part of an international effort to monitor changes in vegetation and animal composition from climate change. His piece of the puzzle is in Bwindi Impenetrable National Park in Uganda, where he sets dozens of camera traps designed to record the movements and habits of animals, which range from agile felines to stolid primates and from tiny deer to giant elephants. It's a job that connects Mugerwa not only to Bwindi's animals, and to local biodiversity concerns, but also to a global issue of the most profound significance — climate change.

Discussing the Film:

The following questions are intended to be used post-film screening to spark discussion and activities related to both the content and storytelling elements of this particular film.

1. What were some of the most interesting images from *Badru's Story*? What sights and sounds do you remember the most about the film?
2. Do you think Badru is an interesting subject for the film? Why or why not?
3. The scientists and researchers in the film use hidden forest cameras to gather data on animals in the jungle. If you had a choice, what animal or environment would you want to study in this way? Why? What would you hope to discover?

4. In a related project in Malaysia, the hidden forest cameras captured the image of a rare marble cat, which no one had ever seen in the Pasoh Forest Reserve. Do you think it is better that we know about these animals, or better that they stay hidden? Give reasons.
5. What is an ecosystem? Are there parts of your school that function in any ways like ecosystems? Give some examples and explain. (Follow up: Do a weeklong monitoring exercise where groups in your classroom collect data on different places in the school and how they are used.)
6. Is there a wilderness area in your own community that you think should be preserved? What do you think the purpose/importance of that area is to your community at large?
7. Do you think global climate change is a critical contemporary issue? Why or why not? What do you think you can do, personally, to help the planet?

Extensions:

1. Rewatch *Badru's Story* online, or watch the follow-up films from TEAM: *Patricia's Story* or *Christine's Story* (January 2014 releases). Go online: bdsjs.com/portfolio/ci/badrus-story/
2. Visit TEAM's education portal (<http://education.teamnetwork.org/>) to get more free lessons for middle and high school science classrooms, incorporating authentic scientific data. Two new lessons based around *Badru's Story* and *Patricia's Story* were published online in December 2014.
3. Teachers: TEAM leads a two-week teacher professional development experience to their site in Costa Rica (Go to the ECO Classroom site: <http://www.northropgrumman.com/CorporateResponsibility/CorporateCitizenship/Education/ECOClassroom/Pages/default.aspx>). While in Costa Rica, teachers work with TEAM scientists to get hands-on experience collecting ecological data and to create group projects for their students back home.

Filmmaker Conversation: **Benjamin Drummond (Co-Director) of *Badru's Story***

Where did you get the idea for *Badru's Story*?

B: Well, the TEAM Network came to us. They invited us to attend a TEAM network site managers' meeting. Every few years the researchers come together and talk with each other and we got to be there. There are a lot of reasons we picked Badru for the first film. His work in Uganda is a really great example of how a local scientist has really grown and reached to contribute to the project. He's going through school with the help of TEAM. It's a phenomenal example of how this is helping to build local capacity in Uganda.

Did you face any challenges? What was the filming process like?

B: Overall, it's been a fairly amazing experience. It's been an opportunity to travel to places we would never usually get to visit. There were several challenges with shooting in the jungle, such as no flat areas for the cameras. There was also a ton of bugs and the insect noise is unbelievable. Trying to do interviews was almost impossible sometimes. Also, we got a thumb drive of 30,000 images from the forest cameras and worked it down to about 30 seconds of images for the actual film. It was never boring. Every image was magic. I came across so many animals that I had no idea what they were. Badru even came across a golden cat on one of the cameras that the researchers didn't even know was there.

Tell us more about TEAM and their role in tropical biodiversity.

B: There's this big organization called the Intergovernmental Panel on Climate Change (IPCC). They're a really slow-moving, consensus-based data gathering organization. They utilize 30,000 different data sets annually and only 13 come from tropical forests. So, the TEAM Network and the work you see Badru doing in the film is really a response to gathering more data in these tropical forests. TEAM is really interested in building local monitoring by long-term crews. And, unlike some sources, like IPCC, the data the TEAM collects is immediately put up into an online public depository so that anyone can use it.

On a more basic level, biodiversity is not just about conservation. The things the tropical forests provide for these communities are really important. The forest is a huge source of fresh water for the local people. The Bwindi Impenetrable National Park in *Badru's* also holds one of the world's largest populations of mountain gorillas.

Do you think the film is successful? What do you hope your audience will take from it?

B: Ultimately we were trying to answer the question of “where do these numbers come from?” There are people and hours of blood, sweat and science that go into collecting important data. We wanted to tell the story of people who were out there year-round. I mean, we wouldn’t have even found our way out of the forest without a local guide.

I think one thing audiences really react to is seeing these forests come to life. That’s why we animated all the still life photos that we gathered from the forest cameras. And what’s amazing is that all those wonderful photographs are important data as well.

What piece of advice would you give to a student who wants to get into filmmaking?

B: Well, I came into filmmaking as a photographer and was told this piece of advice: stand in front of interesting stuff. I think that applies to filmmaking too. Find things that you have a lot of questions about and follow that curiosity.

What’s next?

B: Well, when we originally started, we were trying to produce three stories that encapsulate what TEAM was doing. We have one story from each region in the tropics: Badru in Africa, Patricia in South America and Christine in Malaysia. In January 2014, we’re releasing the third chapter in the series, which will probably be called *Christine’s Story*. *Patricia’s Story* focuses on vegetation. And in Malaysia with Christine it’s climate. You can see all three films on our website at bdsjs.com.