

SAVE THE FROGS! Ghana Powering Africa's Environmental Revolution

By Gilbert B. Adum

Amphibians have been rapidly disappearing in Ghana, the rest of Africa and worldwide. For the last two decades these declines have littered the scientific literature and dominated round-table discussions at scientific conferences. But there remains a missing link that could be a powerful revolutionary tool in reversing the trend of declining amphibians – building community-driven grassroots organizations dedicated exclusively to amphibian conservation. SAVE THE FROGS! Ghana (www.savethefrogs.com/ghana) is such an initiative that has been launched in the West Africa country of Ghana to protect amphibian life threatened by extinction. SAVE THE FROGS! Ghana is an offshoot of USA-based non-profit organization SAVE THE FROGS!.

SAVE THE FROGS! Founder Dr. Kerry Kriger travelled to Ghana in September 2011 to implement amphibian conservation programs in the country. Upon my initial meeting with Dr. Kriger, it quickly became clear that there was a huge need for a SAVE THE FROGS! branch in Ghana and that the timing was perfect for forming the new organization. Within a week, SAVE THE FROGS! Ghana was officially announced, a Board formed, a plan of action devised and a new era of amphibian conservation in Africa had arisen.

SAVE THE FROGS! Ghana's first line of action is creating the Atewa Hills National Park, which would be Ghana's 6th national park. Atewa Hills is the final remaining home of the critically endangered Togo Slippery Frog (*Conraua derooi*), which lives on two streams in the Atewa Hills and nowhere else. *Conraua derooi* is the closest relative of the world's largest frog, the Goliath Giant Frog (*Conraua goliath*). The Atewa Hills also supports exceptional numbers of endemic and rare flora and fauna

including black star plant species and 700+ butterfly species. Unfortunately, the reserve is under constant threat from mining interests and illegal logging, and is not managed as a wildlife reserve. Locals also exploit the Togo Slippery Frog for food consumption. Therefore, preserving the reserve as a National Park would afford it the fullest protection deserved, and would prevent its becoming another mountaintop removal site that once harboured abundant wildlife, as has unfortunately been the case elsewhere in West Africa.

As the Atewa Hills harbour the highest biodiversity in Ghana, one would assume its conversion to a national park would be fairly simple. However, many influential companies and individuals profit off of the continued exploitation of the Atewa Hills and are working diligently to thwart any efforts of turning it into a national park. Our goal therefore is to educate the surrounding villages about the importance of the Atewa Hills to their livelihoods; to build nationwide and international movements to protect the Atewa Hills, and to educate our country's politicians and other decision-makers about the value in permanently protecting the reserve as the Atewa Hills National Park. We are also developing paper petitions that will be distributed at schools and universities throughout Ghana, and electronic petitions that will gather signatures from citizens around the world. You can learn more about the Atewa Hills and our campaign, and sign the petition, at: www.savethefrogs.com/atewa.



“Africa does not need strong men, it needs strong institutions.” This was President Barack Obama's advice to Africans when he was last in Ghana in 2009. As far as amphibian conservation is concerned there are few African institutions that are equipped with the necessary resources including the capacity to train their people to conserve amphibians. In Ghana for instance there are only two professional amphibian biologists, myself and Caleb Ofori Boateng, both trained by Mark-Oliver Rödel of Humboldt University, Germany. This lack of amphibian biologists presents a clear problem, so SAVE THE FROGS! Ghana is working to increase the number of amphibian biologists 5-fold within a decade. We have already initiated a SAVE THE FROGS! Ghana chapter at the country's leading science university (see www.savethefrogs.com/knust), and these undergraduates will be spreading amphibian education and awareness to primary schools in their catchment areas. Already there about 300 volunteers, including students from the Kwame Nkrumah University of Science and Technology and scientists from the Forest Research Institute of Ghana. These members are extremely enthusiastic and we are confident the new initiative will make a positive impact.

In turn, we are stimulating and sustaining their interests in frog research and conservation by enhancing their capacities in the taxonomy, ecology and importance of frogs. With the assistance of SAVE THE FROGS! in the USA, we are making small



The critically endangered Togo Slippery Frog (*Conraua deroo*) Photo: Caleb Ofori

grants available to undergraduate students so that they can pursue amphibian research projects, supervised by and of interest to myself and Caleb, Ghana's other amphibian biologists. For the general public we have embarked on awareness campaigns in churches and schools, and through radio broadcasts. We are planning to implement alternative livelihood activities such as beekeeping and mushroom farming in communities that currently eat frogs or destroy their habitats.

We have also been drumming for the Ghanaian frogs and for that reason we have on our board a music celebrity, who is a Big Brother Africa Star, Mimi. We are planning a large benefit concert on the 4th Annual Save The Frogs Day, April 28th 2012 (www.savethefrogs.com/day). Soccer is huge in Ghana, so we are also funding SAVE THE FROGS! Ghana soccer teams in communities surrounding critical frog habitats.

Ghana has been the hope of the African continent since the dawn of colonization, as emblemized by the black star on the nation's flag. We hope SAVE THE FROGS! Ghana will serve as a model and as inspiration for amphibian conservationists throughout the African continent and the world at large. SAVE THE FROGS! Ghana is a nonprofit organization in a developing country though, and as Dr. Kriger states: "the difference between success and failure in saving Ghana's frogs will come down to how much support the outside world provides." SAVE THE FROGS! Ghana appreciates your advice, and your financial support! Please go to www.savethefrogs.com/ghana for more information.

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The beginning of a career and the value of mentoring young scientists

By Scott Boisvert

My adventures began in 2007 when I was selected as the Jr. High Grand Award winner at the Arizona Science and Engineering Fair, and so attended the Intel International Science & Engineering Fair (ISEF) as an observer. Being at ISEF really inspired me to do a great research project so I could go back the following year, this time to compete. So I began to network with a plan of finding someone willing to open their lab to a high school freshman. I had the tremendous opportunity to meet Dr. Elizabeth Davidson of Arizona State University who became my mentor for the next three years. At

our first meeting she described the work being done for amphibians because of global population decline, and reviewed the history with *Batrachochytrium dendrobatidis*. This brought to mind growing up in Michigan, spending many afternoons sitting along a creek near my house watching and trying to catch frogs. When I thought about amphibians facing a real threat of mass extinction, I couldn't accept the idea that one day my children or grandchildren may not be able to enjoy the same experiences. I was inspired to find something that could help, and that moment confirmed my interest in this research.



Scott Boisvert with mentor Dr. Elizabeth Davidson, Research Professor in Life Sciences at Arizona State University.