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Swallowed by a cayman : integrating cultural values in Philippine crocodile conservation

Ploeg, J. van der

Citation

Ploeg, J. van der. (2013, June 11). *Swallowed by a cayman : integrating cultural values in Philippine crocodile conservation*. Retrieved from <https://hdl.handle.net/1887/20940>

Version: Corrected Publisher's Version

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Author: Ploeg, Johan van der (Jan)

Title: Swallowed by a cayman : integrating cultural values in Philippine crocodile conservation

Issue Date: 2013-06-11

5. DO CROCODILES HAVE RABIES? INITIATING A DIALOGUE ON IN-SITU PHILIPPINE CROCODILE CONSERVATION¹

INTRODUCTION

In 2008 the Mabuwaya Foundation organized community dialogues in 15 villages in the northern Sierra Madre. These meetings took two days and included: lectures on the Philippine crocodile, wetland conservation and environmental legislation (figure 5.1); film showing and a puppet show; and a planning workshop on community-based wetland conservation action. More than 750 people attended these meetings and asked questions, raised issues and proposed solutions. Here I will present 4 short dialogues (translated from Ilocano) that are illustrative of local peoples' perceptions of protecting crocodiles in the wild. The questions of people and the answers of our team show the importance (and also the difficulties) of engaging rural communities in crocodile conservation.

Figure 5.1: Barangay captain Jose Wanol lectures on Philippine crocodile conservation during the community consultation in barangay Del Pilar. Photo by M. Balbas (2008)



‘WHY DO WE HAVE TO PROTECT CROCODILES?’

On May 24 the Mabuwaya Foundation organized a community consultation in Cadsalan, a remote village in the municipality of San Mariano and one of the key Philippine crocodile conservation sites. In 2008 three Philippine crocodile nests were recorded in Dinang Creek.

Boy Robles (farmer): “Why do we have to protect crocodiles? It seems that crocodiles are more important than people. The government made a law to protect crocodiles, but they don’t help the people.”

Jessie Guerrero (Mabuwaya Foundation): “Of course crocodiles are not more important than people. We conserve the Philippine crocodiles for the benefit of people. The Philippine crocodile occurs only in the Philippines and is almost extinct, that’s why we have to protect it. It is part of our cultural heritage. In other countries people earn money with crocodiles, for example through tourism.”

Elymar Appaccag (barangay councilor): “If you want to protect your crocodile you should place a fence around the creek, or transfer the crocodiles to a safe place.”

Jessie: “Our goal is to protect the Philippine crocodile in the wild. We don’t want to create a zoo. And if we place a fence the crocodiles cannot move out and people can no longer fish in the creek.”

Sofia Manuel (barangay health worker): “Does a crocodile bite contain rabies?”

Jessie: “Only mammals can have rabies. Crocodiles are reptiles. I have been bitten many times by the crocodile hatchlings and never got sick.”

Cherielyn Lopez (teacher): “How many eggs can a crocodile lay?”

Jessie: “There can be up to 23 eggs in a Philippine crocodile nest. The incubation period is 60 to 90 days. The crocodiles lay their eggs in April and the nest will hatch in July. You can easily recognize a crocodile nest: it is a large mound made of leaves. Our project has a breeding reward: for every surviving hatchling the project will award 500 pesos to the barangay fund. The finder of the nest will also get a reward.”

Alvin Labuguen (sanctuary guard): “Last year someone stole 20 eggs from the crocodile nest in Dinang Creek and ate them”

Jessie: “Wow, pity for the community. For 20 hatchlings the project would have paid 20 times 500 pesos, is 10,000 pesos! Also pity for the thief: I’m sure he had stomach pains after eating 20 eggs!”

Everywhere people asked why crocodiles should be protected (figure 5.2). Most people in the project area now know that the Philippine crocodile is protected by law. But people question the motivation of preserving crocodiles. The Mabuwaya Foundation formulated six reasons: (1) the national law (obviously begging the question but people often accept this as an excellent reason); (2) ecological values (crocodiles as flagship species for wetlands conservation - see below); (3) cultural values (crocodiles are an important part of Philippine culture and history); (4) economic benefits (the possibility of ecotourism); (5) intrinsic or religious values (crocodiles have the right to live); and (6) immaterial benefits (it’s interesting, exciting and fun to conserve crocodiles). Particularly

the fact that this endemic species has been exterminated throughout the country but survives in their village appeals to people.

Figure 5.2: People ask questions during a community consultation in barangay Tappa. Photo by D. Rodriguez (2009)



‘ARE CROCODILES DANGEROUS?’

On February 8 the Mabuwaya Foundation held a meeting in Disulap to discuss the management of the municipal Philippine crocodile sanctuary in Disulap River (figure 5.3). The foundation has worked 10 years with this community, but people still have many questions.

Marites Balbas (Mabuwaya Foundation): “There are several zones in the crocodile sanctuary. In the nesting season from April to July all activities are prohibited in the strict protection zone, because crocodiles can be aggressive when they guard their nest. In other areas fishing, bathing and washing clothes are allowed.”

Johnny de Gollo (farmer): “There is no problem with the sanctuary. But a crocodile

attacked my pig far from the sanctuary. And the crocodile did not even finish everything: it just ate the intestines of the pig. That's not good. The crocodile is greedy. I'm afraid that one day it will attack a child"

Marites: "But did you ever hear of a Philippine crocodile attack on people?"

Aizah Nojadera (teacher): "No, but what will happen if the crocodile population will grow? We will experience ecological imbalance. The crocodile will have to eat more."

Mari-Tes: "fifty years ago there were many crocodiles in San Mariano. Now there are only very few. If the population will grow they will find a place. There is enough food in the river for the crocodile: fish, rats, insects, snails..."

Aizah: "I'm not against the crocodile, but I thought that large crocodiles ate people."

Marites: "You have seen too many movies! The Philippine crocodile grows up to 3 meter. We never heard a story of a Philippine crocodile attacking people. But be careful: when the crocodile has a nest, she can be aggressive. That's why there is a strict protection zone in the sanctuary."

Johnny: "But what about my pig?"

Paul de Gollo (barangay captain): "Your pig should not wander around: it should be tied near the house"

Fear for crocodiles is another recurrent theme during the consultations. People are concerned about the safety of their children and livestock. The communication, education and public awareness campaigns of the Mabuwaya Foundation stress that the Philippine crocodile is extremely weary of people, and that there are no recorded

Figure 5.3: Community consultation in barangay Disulap. Photo by M. van Weerd (2007)



fatal attacks on humans. In fact most people know from their own experience that Philippine crocodiles do not pose an imminent threat to humans. But the teacher in the dialogue above phrased out a common concern: what will happen if the Philippine crocodile population will recover? Crocodiles might not be dangerous today, but how about tomorrow? Actually, the Mabuwaya Foundation had never thought about this issue. There is an urgent need to integrate these concerns and questions in the design of communication materials.

‘HOW CAN WE BENEFIT FROM CROCODILE CONSERVATION?’

The Mabuwaya Foundation held a community consultation in Buyasan on May 26. Buyasan lies on the bank of the Ilaguen River and fishing is an important livelihood strategy for the community. Philippine crocodiles are occasionally caught in nets or fish traps.

Elvis Sales (fisherman): “The fishermen complain that crocodiles destroy their fishnets. The fishermen are afraid to fish because of the crocodiles. Sometimes they see crocodiles underwater. What can you do about that?”

Visitacion Aglugub (housewife): “Why are you afraid? We wash our clothes in the creek. Often the crocodile is very near, but it never attacked us. Sometimes the crocodile wants to play with us. When I was washing clothes the crocodile once took the shirt. As long as you don’t harm the crocodile, the crocodile will not harm you.”

Juan Telan (farmer): “How can we benefit from the conservation of crocodiles?”

Jerome Miranda (municipal councilor): “It is simple: if we protect the Philippine crocodile, we protect the fish that we eat. We have to stop the use of electricity fishing, because it depletes the fish stocks on which we depend. Let us join hands to protect our environment!”

Bonbon Aglugub (fisherman): “Yes, there used to be many fish in Buyasan. The problem is that people from other villages come here and fish with electricity. There is no *ludong* [Bluespot mullet] anymore in the river.”

Marites: “It is the responsibility of the barangay officials to protect the environment. The officials can declare a fish sanctuary or enact a barangay ordinance prohibiting destructive fishing methods. It protects the Philippine crocodile and benefits people.”

Melchor Marrallag (fisherman): “But in most cases the army and the police are the ones doing illegal fishing!”

Elmer Tales (barangay tanod): “Can we apprehend offenders?”

Jerome: “Yes, based on the Local Government Code, the barangay officials can arrest people who violate the barangay ordinances. The barangay officials should make a decision on this. You are the ones who can decide what is best for the people and for the crocodiles”

Rogelio Macapia (barangay captain): “We would like to declare Bulawan Cave and Dilatngan Creek as our fish sanctuary. If we see people fishing with electricity we will confiscate the battery.”

In the remote rural areas of the Philippines, such as Buyasan, most people earn less than 1 US\$ a day. There is a clear need to link crocodile conservation with people's well-being. But a sustainable harvesting or ranching program is clearly not a possibility with this critically endangered species. And the economic returns of a community-based crocodile-tourism enterprise in San Mariano are highly uncertain. The Mabuwaya Foundation has therefore adopted a broader ecosystem approach to conserve wetlands. Rural communities in the Philippines rely heavily on freshwater ecosystems. Fishing is an important livelihood activity, especially for the poor. People are directly confronted with the effects of overfishing and erosion as a result of logging and unsustainable land use practices. There is broad public support to conserve critical wetlands and ban destructive fishing methods. In this view the Philippine crocodile becomes the flagship species of community-based wetland conservation.

'HOW MANY EGGS DO CROCODILES LAY?'

On June 18 staff of the Mabuwaya Foundation met with the community of Dibuluan (figure 5.4). Dibuluan is a small Kalinga settlement on the forest frontier. The Kalinga are the indigenous people of the northern Sierra Madre. A Philippine crocodile population survives in this area.

Rudy Revilla (member of the farmer's cooperative): "What if my carabao is eaten by a crocodile? Do I have the right to kill the crocodile in return?"

Dominic Rodriguez (Mabuwaya Foundation): "No. According to the Wildlife Act you can only kill a crocodile if there is an imminent danger to humans. Anyway, did you ever see a Philippine crocodile attacking a buffalo?"

Rudy: "No."

Dominic: "The Wildlife Act specifies a penalty of 100,000 pesos or 6 years in jail for killing a Philippine crocodile."

Onofre Daniel (village councilor): "It's good that we know the laws and the penalties now. It is up to us if we want to violate the law. For me, I will not try. It's hard to be in prison"

Bernalie Coca (daycare worker): "I attended this meeting because I wanted to know the importance of the Philippine crocodile. First, I found the crocodile useless. But during the lectures I learned many new things and now I am interested in crocodile conservation."

Myla Tagaoan (village councilor): "Yes, the lectures were as clear as the blue sky. It was not boring."

What should we do if a crocodile attacks livestock? What is the penalty if someone kills a crocodile? What to do if you accidentally catch a crocodile? During the village meetings people often pose practical questions. It provides an opportunity for the team of the Mabuwaya Foundation to disseminate information on Philippine crocodile

conservation, and better understand and respond to peoples' concerns. In fact people raise relatively few problems with crocodiles during the community consultations: in general people tolerate the species. Surprisingly, most questions deal with Philippine crocodile ecology and behavior: How big is an adult crocodile? How long can a crocodile stay underwater? How does a nest look like? People are often fascinated by crocodiles and have a genuine interest in the species. This is an important motivation for people to preserve crocodiles.

Figure 5.4: The Philippine crocodile mascot 'Krokey' dances with a village councilor after the community consultation in barangay Dibuluan. Photo by M. Balbas (2008)



INITIATING A DIALOGUE ON CROCODILE CONSERVATION

During the village meetings in the northern Sierra Madre the Mabuwaya Foundation engaged rural communities in a dialogue on Philippine crocodile conservation. It enabled the foundation to contextualize the fears and concerns of local people, and to directly address these issues. It provided an opportunity to share information, find common ground to solve specific problems, and integrate crocodile conservation in broader

discussions on rural development and environmental management. As a result rural communities feel that their voice is heard and their concerns taken into account. Such a participatory approach is instrumental to mobilize local support for the conservation of endangered crocodilians in the developing world (Brechin *et al.* 2003).

ENDNOTE

1. Based on: van der Ploeg, J., M.G. Balbas & M. van Weerd. 2009. Do Philippine crocodiles have rabies? Initiating a dialogue on in-situ crocodile conservation. *Crocodile Specialist Group Newsletter* 28 (3): 8-10. Jan van der Ploeg wrote the paper. Mari-Tess Balbas organized and led the community consultations, and transcribed and translated the dialogues. Merlijn van Weerd provided comments on earlier versions of the text.