

# **Status Report for Philippine Eagle “Kalabugao”: October 29 to March 4, 2010**

By

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## **SYNOPSIS**

Rehabilitated Philippine Eagle “Kalabugao” was released into the wild together with captive-bred eagle “Hineleban” last October 29, 2009. She was at the hack site in Lupiagan Sumilao, Bukidnon for 34 days before she was released to the lush forest of Mount Kitanglad. Kalabugao stayed within the head waters of Kulaman River north east of the hack site and within the vicinity of the peak for two months. On February 2010, she began to move downstream along Kulaman River. She was never dependent on supplemental food and is now actively hunting. This report highlights field monitoring results since October 2009 until the first week of March 2010. It also describes the first documentation of two successful hunts by Kalabugao in February 2010.

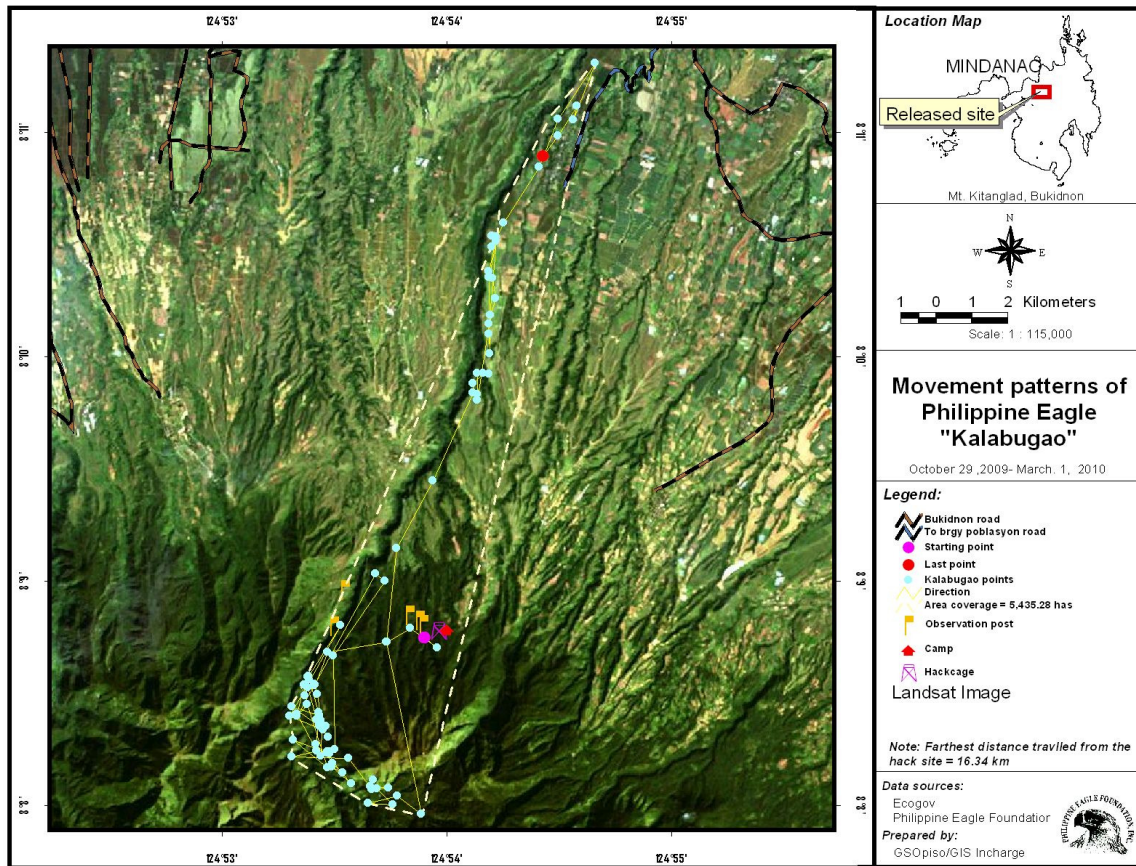
## **RESULTS**

### **Movement patterns**

Kalabugao spent her entire first two months outside the hack cage within the forest interiors of Mt. Kitanglad (see Figure 1). She gradually moved north east of the hack site towards the head waters of Kulaman River, and then moved back and forth between this region and the peak in the succeeding weeks. It was too difficult to home in on Kalabugao in these parts of Mt Kitanglad because of the highly rugged terrain, very thick vegetation and the completely closed forest canopy. In our desperate attempt to get a visual contact and make sure she’s provided with supplemental food (in case she’s not hunting successfully), two teams tried triangulating from two different posts and then homing in on her. But we were never successful. The team had no choice but to infer her status from the nature of her movements. She was actively moving each day which made us conclude that she’s doing well and has been hunting and feeding during this period.

At the beginning of her third month, she briefly revisited the hack site, and then started moving downstream along Kulaman. This prompted us to follow her closely and observe her vigilantly as she has ventured outside the natural park and within the vicinity of peopled areas. She continued her journey further downstream. From our viewpoint, it seems she was using the riparian forests of Kulaman as a dispersal pathway. Owing to Kulaman’s deep gorges, the river has retained a substantial amount of natural forests. This corridor of dipterocarp trees extends to the lowlands. At a certain junction, it meets with another river that has its origins from the watersheds of Impasug-ong , Bukidnon which is where Kalabugao was retrieved in 2008. We thought that if she continues her current track and moves upstream from that junction, she might end up returning to her natal site. However, she only went as far as that section of Kulaman which is very near the poblacion of Sumilao (~9 km – aerial distance - from the hack cage). This point was the last reading we got from the satellite. Unfortunately, no GPS data was ever received since March 2. This means two things: either the battery is dead or the antenna has been damaged. The transmitter should last for at least a year. We believe the eagle could have damaged the antenna. One radio-tagged female eagle severed the antenna of its VHF (radio) unit in 2002. We have yet to verify though if this was also the case for Kalabugao.





**Figure1.** Movement patterns of Philippine Eagle “Kalabugao” from October 29, 2009 to March 1, 2010.

## Successful Hunting



**Figure2.** A Philippine cobra *Naja samarensis* was the first ever documented prey item of Kalabugao

On February 3, 2010, satellite telemetry readings showed that Kalabugao started trailing downstream of Kulaman between Barangays Licoan and Colasi. A monitoring team was dispatched to the site to locate and observe the bird. On February 12, with the help of a radio-tracking equipment, the team started to follow Kalabugao’s track starting from Licoan. Radio signals indicated that he was moving further downstream. Tracking signals continued for the next two days but because of the thick vegetation and the deep gorges that characterize the river, the team had difficulty finding the bird.

For the first time after more than 3 months of scaling the slopes of Kitanglad, the team finally had a visual contact with Kalabugao. On a remarkably clear sunny day in February 15, she was spotted atop a tree on a ridge above Kulaman. Now that she was found, the next crucial step was to get close enough to assess her general physical health. The team went down the deep gully and crossed Kulaman to get to where Kalabugao is. They were guided by the directions of the signals from the bird's radio transmitter and a few prominent landmarks. Before the team reached her spot, she flew and disappeared below the ridge. The team proceeded to the area beneath his perch tree and discovered a snake with a dark dorsal side (back) and a yellow underside. The upper half of the snake has been apparently consumed by Kalabugao. Based on the snake's color pattern, it was a Philippine cobra *Naja samarensis* (see Figure 2), which is a known Philippine Eagle prey item (Ibanez et al, 2003). The team left the snake remains on the spot where they found it hoping that the eagle will go back to consume the rest of the carcass. Eagles are known to return to their hunted prey and such behavior is suspected to be the reason why some eagles end up getting trapped by hunters. However, in this case, Kalabugao never went back to feed on the prey remains.

The team went back the following day and the snake carcass was untouched and still intact. The radio signals were pointing a bit further downstream. Carefully following the signals lead, the team homed in on Kalabugao. We climbed a steep hill guided by the strongest signals then gradually climbed down at the opposite slope. The tree line was



**Figure 2.** Kalabugao with a fresh prey clutched between her talons.

scanned and in a matter of minutes, she was finally spotted on a thick horizontal branch feeding on what looked like a carcass of a young Long-tailed macaque *Macaca fascicularis*. It was apparently a fresh catch as the meat was deep red with blood (Figure 2). She held the prey with her talons while tearing pieces of meat to consume. Using digiscoping techniques, we were able to get the first set of photos of Kalabugao since her release. She flew further down the hill and we followed her. We recorded her behavior and saw that her crop was very full. Her feathers were neatly arranged and she looked very active, alert and healthy.

After an hour, she flew downstream. She was tracked again and spotted perching on a nearby tree. We were very delighted to finally confirm that she was ok and fully independent. The rehabilitation and release of Kalabugao was very successful.

### **Inter-species interactions**

In subsequent monitoring trips, we decided to observe her from afar to avoid disturbing her. The team occupied an observation point atop a ridge which gave a perfect view of her activity area. Kalabugao was mobbed by two bird species. On February 17,

two Brahminy kites *Haliastur Indus* unrelentingly stooped at Kalabugao. There were no direct contacts though as the eagle docked whenever the Brahminy kites swooped on her, although we suspect the kites never really intended to make contact. The mobbing ended when Kalabugao finally flew away and hid amongst the tree crown. Tarictic hornbills *Penelopides affinis* also made attempts to intimidate the eagle.

Kalabugao got the most mobbing on February 22, when Brahminy kites, Serpent eagles and two big macaques harassed her *en masse*. The macaques made the first move. One of the macaques climbed up Kalabugao's perch, issuing loud shrieks towards her. Kalabugao in defiance spread her wings and looked ferociously at the macaque. Apparently threatened by the eagle's threat posture, the poor macaque ran to the comfort of his troop and hid amongst the vegetation. These gestures of intimidation continued until two Brahminy kites and two Serpent eagles *Spilornis holospilus* joined the fray. These birds-of-prey stooped at Kalabugao fiercely. The eagle retaliated and flew towards one of the Brahminy kites but it was quick to avoid the eagle's attack. The two Brahminy kites launched a few more attacks but again none resulted to contacts.

On February 24, fresh from evading a Brahminy kite's attack on her, Kalabugao was again raided this time by four Large-billed crows *Corvus macrorhynchus*. The quartet collectively mobbed and followed the bird from one perch to the other, forcing Kalabugao to fly further downstream. Unintentionally, Kalabugao ended up being very close to the populated center of Sumilao near Kulaman. She spent the next three days in a remnant forest close to Sumilao. Because she was relatively very near homes and people, we kept an eye on her, leaving her only when it was dark and returning before first light the following day to watch over her. To the team's delight, she started moving away from the community on February 27.

### **Recapturing Kalabugao**

In fear that she might have the same fate as Hineleban who was cold-bloodedly killed by two suspected drunkards last December 2009, we decided to attempt trapping to bring her back to the forest interiors of Mt. Kitanglad. We know at the onset that trapping her would be very challenging primarily because she was very shy; she never took any of the supplemental food we gave and she seemed very wary of people. Nevertheless, we tried trapping her from February 26 to March 4. A modified Bal-Cha-Tri trap (Miranda and Ibanez 2006) was set at dawn just before light at a spot close to where Kalabugao was the previous day. We used a Long-tailed macaque from the eagle center as bait. But we were not successful. She totally ignored the bait. We were sure that she was attracted to monkeys because in one occasion, she attempted to attack a troop of wild macaques just below the trapping site. She definitely saw our bait but for some reasons, the caged animal was not enticing enough for her. On February 28, she gradually moved up the Kulaman River further away from the communities. When we felt that she was safely away from possible harm, we decided to end our trapping. However, the team continued tracking her on her way upstream. As of this writing, she is now at the lush forests of the boundaries of the protected area, safe and actively hunting long-tailed macaques and other wild prey.



## Education campaign



**Figure 3.** A resident along Kulaman river whom we visited during tracking. Background shows the deep gully leading to Kulaman.

While tracking Kalabugao, we took the opportunity to visit each household ahead of and along her track and chat with whoever is home about Philippine Eagle conservation in general and the release project in particular. We made the campaigns in a very casual and friendly way, much like a guest narrating an interesting story to his/her host. We informally talked about the biology and ecology of the eagles and the laws that protect the bird. We also asked help with narrating the same story to peers and relatives, especially to hunters and people with guns. We also personally requested assistance with monitoring Kalabugao, including texting the team whenever an eagle is spotted close to

their homes. This method of reporting (i.e. via text messages) has been very effective so far. In several instances, the actual locations of eagles Tinuy-an, Hineleban and Kalabugao were discovered through text messages of concerned community members.

## Discussions

Kalabugao preferred the forest interiors of the park during her first two months in the wild. She was also very difficult to detect not only during this period but even when she was already within Kulaman. She was very wary of people. She flies off whenever she detects people close to her location. Out of four birds released at Mt Kitanglad so far, she is the only bird that's very sensitive to human presence. She never took domestic animals either and during her ventures along Kulaman River where she has crossed several open areas and homes, she never showed any sign of interest over domestic prey.

This nature is either an individual idiosyncrasy or is typical of wild-reared birds. We cannot tell for sure which among these two applies to Kalabugao. Kagsabua, an eagle freed in 2008, was also a wild-reared bird, but she was not as sensitive to people as Kalabugao. Eagle Tinuy-an was also from the wild, but she was unbelievably tame. But surely, the fact that Tinuy-an was taken from the wild as a very young eaglet, hand-fed and reared by its captor, and was in captivity for more than a year led to its domestication. In contrast, Kalabugao and Tinuy-an were birds capable of flight when they were rescued. We are entertaining the possibility though that Kalabugao is much older than Kagsabua; perhaps at least a year older so that Kalabugao is "more wild" than Kagsabua. This is merely a conjecture though because the actual age of Kalabugao was never actually verified through systematic means.

Why Kalabugao started moving away from the protected area and down along the riparian forest Kulaman remains an open question. Was it a natural desire at dispersal or was it more an accidental result of getting chased and mobbed by wildlife? Prey-wise, it seems the forests of Kulaman have its own diversity as evidenced by the successful hunt on a Philippine cobra and a Long-tailed macaque. Kulaman also harbors a remnant dipterocarp forest which is very rare in the mid- and high- elevation forests of the protected area. Dipterocarp forests also harbor other Philippine Eagle prey items such as rodents, Flying lemurs and Palm civets. Kagsabua got his first Palm civet prey from a riparian forest as well. Thus, it is highly probable that she's using Kulaman as a hunting ground as well. Based on these limited but very insightful observations, it seems riparian forests like those along Kulaman can be both a dispersal pathway and a foraging habitat for non-territorial juvenile and sub-adults. For a juvenile eagle whose flying skills are limited, gradual dispersal over linear forests (forest corridors) is intuitively safer and manageable than flying over open landscapes. This phenomenon therefore hints the importance of conserving riparian forests as a dispersal route and supplemental habitat not only for Philippine Eagles but also for wildlife in general. More observations will certainly provide clearer answers to these questions.

## **Conclusion**

The story of Kalabugao represents the first documented case of a successful rehabilitation and release project for a critically endangered birds-of-prey in the Philippines - if not in the Asia Pacific. A concerned-citizen group (a biking society in Cagayan de Oro City) found the extremely ill and emaciated eagle in a remote village in Bukidnon in 2008. DENR and PEF rescued the bird which had a broken collar bone as later showed by X-ray results. At the eagle center, she was patiently medicated and brought back to health. Prior to release, she was trained to avoid power poles. She was also provided with her own aviary and was actively trained for her to build her stamina and flight and hunting skills. She was released in 2009 and was monitored faithfully thereafter through the concerted efforts of the local government units, government agencies, NGOs, local communities and civil society groups. Now free and surviving independently in the wild, Kalabugao and her story is another testament to the human spirit of team work and unity that emerged in response to a crisis.

## **Future Plans**

We will continue to monitor the movement and behavior of Kalabugao in close collaboration with local co-researchers and the communities surrounding the hack site and the riparian forests of Kulaman. Although the satellite transmitter is already dead, the radio tag is working fine. Through the triangulation method, we'll still be able to get location estimates and map out the movements of the bird. Regular logs of her hunting behavior and success and the nature of her interaction with people, wildlife and the forests will be continued as well. Personalized education campaigns in each community that Kalabugao can possibly fly to or have contact with will also be sustained.

We will attempt trapping her too to retrieve the GPS unit and replace it with a new one. Although this may seem to be difficult given the extreme shyness of the bird, we will take on the challenge because having a satellite unit on Kalabugao will contribute tremendous amount of very accurate movement data which a radio unit cannot provide.

### **Acknowledgement**

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