

Field Report: Conservation of Small Felids in Bukit Barisan Selatan National Park, Sumatra

Volume 1, Issue 1

December 20, 2008

Inside this issue:

Into the Forest	1
Way Canguk Research Station	1-2
On to Liwa	2
A First for Indonesia	3
Additional Capture	3
What Next?	4



Park Entrance from the village of Way Heni

Into the Forest

After over a year of planning and organization, this October marked the beginning of the pilot project for our small felid research in Sumatra, Indonesia. We arrived safely in Jakarta with all equipment intact and, thanks to the extensive help of several colleagues (I am forever indebted to you, Beebach and Ira!), were able to proceed relatively quickly through the permitting process.

On October 14 we somehow managed to fit all of our equipment into one small car and were incredibly excited to be travelling to Sumatra at last! After a long drive/ferry ride we arrived in Kotaagung, the small town that hosts the headquarters for the national park. We had a brief meeting with the staff of the park and then headed into the forest!

The goal of the project is to place VHF or GPS collars on

individuals in order to examine the habitat use and population ecology of three little-studied felid species: the clouded leopard (*Neofelis diardi*), marbled cat (*Pardofelis marmorata*) and Asiatic golden cat (*Catopuma Temmincki*). Our study site, Bukit Barisan Selatan National Park (BBSNP), is located in southern Sumatra and has been the site of extensive camera trapping efforts since 1998. We were lucky enough to be able to use this data in order to select sites within the park in which to focus our live capture efforts.

We planned to begin our research in two separate areas. The first was Way Canguk, a beautiful research station run by the Wildlife Conservation Society-Indonesia Program (WCS-IP) and the second area was in the remote Liwa region of the park. Liwa had the highest photo rate of small felids in BBSNP, and while the photo

rate at Way Canguk was comparatively low, there had been several recent sightings of both clouded leopards and marbled cats.



Porters carrying equipment into the Way Canguk Research Station

Way Canguk Research Station

Live trapping began in Way Canguk on October 18th. Nineteen soft-catch foothold traps were set over a period of one week in two 5km-long lines.

Traps were set on major animal trails and were baited with chicken meat, live chickens and commercial lures. Whenever sign of cat activity were found

(tracks, feces, tree scratches, etc.), a trap was set in the location. In addition, traps were set in all locations in which there had been previous sightings of our focal species. Traps were relocated after two weeks if there was no animal activity. They were also moved for various other reasons, including: flooding, excessive pig activity

and human activity.

There was a relatively high level of illegal human activity in Way Canguk, with poaching of both forest and animal products. Owing to this increased human presence in the forest, traps were checked twice daily.

Continued on Page 2

Way Canguk Continued...

Continued from Page 1

In Way Canguk we trapped at 22 different locations for a total of 25 days and 409 trap nights. No carnivores were captured.

On 14 occasions traps were tripped, or closed, with no animals captured. Six of those times, clear tracks confirmed that the traps had been triggered by an ungulate which had subsequently pulled free of the jaws. On eight of the occasions we were unable to definitively determine what had triggered the traps.

In total, three animals were captured; two water monitors (*Varanus salvator*) and one rat

(*Rattus spp.*). All animals were assessed for injuries and then released.

Although initially we were encouraged by several eye witness accounts of clouded leopards and marbled cats during the months prior to our arrival, we saw very little sign of our target felids during our time at Way Canguk. We were only able to locate two feces that could be attributed to felids, two trees with slightly aged scratches and one set of small cat tracks.

Despite the lack of small cat sign, there was commonly sign of Sumatran tiger (*Panthera tigris sumatrae*), with fresh tracks located on four separate

occasions. In addition, there was copious sign of wild pig, sambar deer, muntjak, argus pheasant, and numerous groups of siamiang and macaque.

Because of the low photo rate at Way Canguk, we had initially planned to trap there for only one month and move to our second field site if no animals were trapped. Unexpected events forced us to unset all traps on November 11, slightly before we had completed a full month of trapping, and all traps were subsequently picked up in preparation for our move to Liwa.



A water monitor in Way Canguk

“... we have had some very exciting results...!”

On to Liwa

After examining camera-trap data from a previous WCS-IP project in BBSNP, we identified the Liwa region of BBSNP as having the highest photo rate of our focal species. We planned to use these data in order to set our traps at the exact locations that the photos had previously been taken, though we soon learned that



Equipment being transported into our field site at Talang Lima

looking at a map, pointing and saying, “I want to go there” is much easier said than done! However, once again thanks to the logistical juggling of our wonderful field team and the support of WCS-IP and the park staff, we arrived at the small settlement of Talang Lima, in the Liwa region of BBSNP on November 27th.

Talang Lima consists of five houses and is situated among coffee fields that border the park. Getting to the area we targeted for trapping required an arduous hike from Talang Lima to the top of a massive ridgeline, but we were suitably rewarded when we topped out into a pristine forest that remained intact despite the slowly encroaching coffee fields far below.

During several days of reconnaissance hikes, we saw signifi-

cant felid sign and began to set traps on November 30. Once again, traps were set along major trails and in areas in which felid sign had been located. Twenty-two soft-catch foot-hold traps and one cage trap were set out over a period of two weeks.

The terrain in the area not only slightly constrained the areas that we could reach to set and check traps, but also extended the time required to get all of the traps out. In the end, we set traps along two ridgelines, covering roughly 4km, with plans to scout additional ridgelines and slowly extend our trapping efforts as possible.

As I write this newsletter we plan to keep the traps out through the end of February. To date they have been out for 30 days and we have had some very exciting results.....!



A concrete marker of the park boundary, located several hundred meters from the forest and well within an established coffee field

A First for Indonesia

On the morning of December 13 after only thirteen days of trapping in Liwa (186 trap nights), a small female Asiatic golden cat ("Kapemie") was captured. After a successful immobilization and removal from the trap, we began the process of placing the collar and recording measurements. The cat was in excellent condition, though slightly small. Judging from her overall appearance and the slight yellowing and wear of the teeth, she was classified as a young adult.

We had hoped to fit any captured golden cats or clouded leopards with a GPS collar, but she did not meet our weight requirements for that collar, so was instead fitted with a Sir-

Track VHF collar.

Kapemie recovered from the immobilization smoothly and we monitored her VHF signal through the rest of the afternoon as she moved South along the ridge behind our base camp. Since her capture, we have been triangulating her position daily and have also been conducting intensive activity monitoring at random intervals.

The data we are collecting from Kapemie is extremely valuable as she is the first Asiatic golden cat to be collared in Indonesia and only the third to be collared in the world. Kapemie will give us a glimpse into the life of a golden cat in

Sumatra, allowing the examination of her habitat use, movement and activity patterns, all data which is sorely lacking for this species and will be used to guide conservation initiatives in the future.



An anesthetized GCI being fitted with a Sirtrack VHF collar.



Agus and Budi, two Indonesian assistants, taking measurements and collecting samples.



Using radio telemetry to track the movements of GCI.

Additional Capture

In addition to Kapemie, we have been tracking the movements of a masked palm civet (*Paguma larvata*) that was captured in Liwa on December 9th.

This adult male (CII) was immobilized for removal from the trap and was subsequently fitted with a refurbished Ad-

vanced Telemetry Systems VHF collar.

Through simultaneous tracking of our collared animals, we hope to gain insight into the resource partitioning and habitat use between sympatric carnivores within our study area.



CII recovering from anesthesia after being fitted with a small VHF collar.

**JENNIFER
MCCARTHY, PHD
STUDENT
UNIVERSITY OF
MASSACHUSETTS
AMHERST**

Department of Natural
Resources Conservation
Holdsworth Hall
160 Holdsworth Way
Amherst, Massachusetts 01003
USA

Phone: +1 413 695 9600
Fax: +1 413 545 4358
E-mail:
jennifermccart@gmail.com

What Next?

Funding is currently in place to continue trapping efforts in Liwa through the end of February and we are hoping that we may be able to secure additional funds which would allow us to extend the project even further.

We have continued to see a great deal of cat sign and are hopeful that we will be successful in capturing and collaring additional individuals.

We have one Sirtrack GPS collar that we are very eager to deploy on a clouded leopard or large golden cat and we are also hopeful that we may be able to capture an elusive marbled cat! Previous camera trap photographs indicate a high photo rate of the species in the area, even recording a melanistic individual.

Tracking of collared individuals will be continued daily with

randomly assigned intensive activity monitoring as well.

In addition to trapping efforts, we are working with two students from the University of Lampung, Indonesia who are conducting surveys on human conflict with small/medium sized cats in the settlements surrounding the park. This information will contribute to the assessment of conservation initiatives within the park.

This project would not possible without the financial and logistical support of the following organizations and individuals. My team and I thank you!

*The Small Cat Conservation Alliance
The Panthera Foundation
John and Cathie Martyn
The Cat Action Treasury
The Smithsonian National Zoo
The Wildlife Conservation Society-Indonesia Program
The Staff at Taman Nasional Bukit Barisan Selatan
Indonesian Department of Forestry (PHKA)
The Conservation Science Initiative
Hariyo "Beebach" Wibisono*

*Mary Benson
Kevin Stonner
Joy Cole
Lisa McCarthy
Dr. Kim Berger
Dr. Todd Fuller
Dr. Steve DeStefano
Arnold Sitompul
Dr. Tom McCarthy and Norma Cole
The Bird and Exotic Clinic of Seattle*



In memory of Dr. Ahmad Masadi whose enthusiasm for the forest and love of his work will always be remembered



Pictured from Left to Right: Pk. Manuntun (TNBBS Ranger), Pk. Teunk (Project Manager, Agus (Assistant), Budi (Assistant), Kyle McCarthy (Assistant), Jennifer McCarthy (Project Leader). Not pictured: Nedy (Assistant), Herman (Cook), Dr. Jogy (Project Veterinarian).