## Cat Project of the Month – December 2009

The IUCN/SSC Cat Specialist Group's website (www.catsg.org) presents each month a different cat conservation project. Members of the Cat Specialist Group are encouraged to submit a short description of interesting projects

## Fishing Cat Conservation and Research Project



Detail from a poster inviting the public to get to know more about the kodkod cat (Photo F. Vidal).

The Fishing Cat Research and Conservation Project identifies viable populations of fishing cats in Southeast Asia supports direct action to conserve those populations. The project does this by conducting field research, supporting effective habitat management, and by initiating and supporting education and outreach activities.

Namfon Cutter is the director of this project and is currently conducting field research as part of a MSc. Degree program in the University of Minnesota's Conservation Biology Graduate Program. Namfon has been a member of the Cat SG since fall 2009.



Passanan Cutter, project PI (Photo P. Cutter)

# Background

The Fishing Cat Research and Conservation Project has four components, each contributing to fishing cat conservation in Thailand and throughout Southeast Asia.

 The first of these is a regional review of fishing cat distribution and conservation status involving the compilation of all current and historical data on fishing cat occurrence throughout Southeast Asia.

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- The project's second component is a detailed ecological study of fishing cats in their natural habitat. This component of the project will provide biologists with a solid foundation upon which to plan subsequent ecological research and conservation efforts.
- A third component of the project seeks to take advantage of the project's live capture component to screen animals for
  the presence of several emerging zoonotic diseases. Avian influenza, SARS, and other diseases are now significant
  health concerns for both wildlife and human populations. We work collaboratively with regional partners to ensure that
  our work contributes to current disease research and monitoring efforts.
- The fourth project component is education and outreach. Using the activities and results of the project as primary content, we use presentations, posters, and other tools to raise awareness of fishing cats and other wetland dependent species and encourage more sustainable use of the wetland landscapes upon which they depend.



Sites where intensive surveys have been carried out as part of this project. Green points indicate sites where fishing cats have been documented.

We conducted surveys for fishing cats in four locations in peninsular Thailand between 2003 and 2009. We documented fishing cats at Thale Noi Nonhunting Area and Khao Sam Roi Yot National Park and found no evidence of the species at Klong Saeng and Maenam Pachi Wildlife Sanctuaries (Cutter2004, 2005). Currently, our survey focuses around the Khao Sam Roi Yot National Park and the surrounding areas.

#### **Methods**

We identify and prioritize potential fishing cat conservation sites through networking, reviewing historical data, and by using predictive models based on fishing cat habitat associations.

On the ground, we carry out preliminary surveys of likely sign and attempt to confirm fishing cat presence, area of occurrence, and breeding through the use of automated still and video cameras.

We have initiated a live-trapping and radio telemetry program at one site where breeding has been documented (Cutter & Cutter 2009) and plan to carry out parallel investigations at one or more additional sites.



Project team setting up camera trap (Photo P. Cutter).

Biological samples from captured individuals and from fresh feces are screened for zoonotic diseases and undergo genetic analysis to supplement field studies and provide insight into site and regional diversity and connectivity.

We employ local residents and collaborate with protected area staff whenever possible so that knowledge, skills, and enthusiasm from project activities might form the basis for ongoing conservation action at all project sites.



Fishing cat documented at Khao Sam Roi Yod (Photo P. Cutter).

### **Preliminary results**

In December of this year reports of two captive fishing cats at Khao Sam Roi Yot (Cutter&Cutter 2009) prompted us to carry out sign and camera trapping surveys initiated in the area adjacent to the southern boundary of the park. Once sign and camera trapping surveys had confirmed at least 10 different individuals, we began trapping, sampling, and collaring cats. To date we have captured fourteen individual fishing cats—7 males, and 7 females. We affixed radio collars on all but one, a three-month old male that we did not have a small enough expandable collar for. However, as per our field protocol, biological samples were collected from this individual for further genetic study and disease screening.

The current telemetry and habitat evaluation work at Khao Sam Roi Yot National Park indicates that, with the conservation of food resources and daytime resting sites, and the reduction of direct poaching, fishing cats can thrive in heavily human-modified agricultural landscapes (Cutter & Cutter 2009). This work is helping us to formulate straightforward, achievable, and verifiable management targets that we can now demonstrate are directly linked to individual fishing cat and population fitness



Characteristic fishing cat habitat in southern Thailand (Photo P. Cutter).



## Next steps

Important next steps for this project include on going monitoring and conservation of the population of fishing cats and protection of their refuges, organizing the data into a comprehensive database, conducting the data analysis, writing up the results periodically, recommending a plan for conservation and management of fishing cats and their habitats focusing around the Khao Sam Roi Yot.

Fishing cat documented at Khao Sam Roi Yod National Park, Thailand, December, 2009 (Photo P. Cutter)

We also see the importance of continuation of the conservation campaign that involves local community. At this state we have initiated local involvement and collaborate with local environment group and promote our project though national television, posters, brochures and through friends and will continue to maintain collaboration with people this way.

Our other plan is to establish Education activity where an education team will be sent out to participate in school, and field activities.

### References

Cutter P. 2004. Surveys for Fishing Cat (Prionailurus viverrinus), in Klongsaeng Widlife Sanctuary, Surat Thani Province, Thailand, December 2003-May 2004: Report to The Department of National Park, Wildlife and Plant Conservation. http://www.fishingcatproject.info/th/documents/cat\_view/40-project-reports Cutter P. 2005. Surveys for Fishing Cat (Prionailurus viverrinus), in Maenam Pachi Widlife Sanctuary, Ratchaburi Province, Thailand, May-September 2005: Report to The Department of National Park, Wildlife and Plant Conservation. http://www.fishingcatproject.info/th/documents/cat\_view/40-project-reports

Cutter P. 2007. Surveys for Fishing Cat (Prionailurus viverrinus), in Thale Noi Non- Hunting Area, Pattalung Province, Thailand, May 2006-February 2007: Report to The Department of National Park, Wildlife and Plant Conservation. http://www.fishingcatproject.info/th/documents/cat\_view/40-project-reports

Cutter P. 2009. Camera Trapping and Conservation Status Assessment of Fishing Cats at Khao Sam Roi Yot National Park, and Surrounding Areas, 5 February 2009: Report to The Department of National Park, Wildlife and Plant Conservation. http://www.fishingcatproject.info/th/documents/cat\_view/40-project-reports

Cutter P. & Cutter P. 2009. Recent sightings of fishing cats in Thailand. Cat News 51, 12-13.

### **Project Information**

Duration: 2003 - ?

Location (see map): Khao Sam Roi Yot National Park, Thailand

Sponsor(s): Rufford Foundation, WCS, Cincinnati Zoo, Minnesota Zoo, Smithsonian National Zoological Park,

Panthera, University of Minnesota

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