

# Protecting tigers in Kerinci Seblat National Park: Three successful years of Rufford investment



A critically endangered Sumatran tiger on a forest ridge trail in Kerinci Seblat National Park (2008)

## A short report to Rufford Small Grant (for Nature Conservation)

Organization Name:	Durrell Institute of Conservation and Ecology
Project Period:	March 2004 to May 2008
Project Manager:	Dr Matthew Linkie
Field Manager:	Mr Yoan Dinata



Wild Sumatran tiger from KSNP

## Three successful years of Rufford investment in Kerinci Seblat National Park

In March 2004, Rufford awarded its first grant to the Durrell Institute of Conservation and Ecology (DICE) to implement, in partnership with Fauna & Flora International (FFI) and the Indonesian Department Forestry, the first scientific monitoring programme to assess the conservation status of tigers in Kerinci Seblat National Park (KSNP), Sumatra. This 13,300km<sup>2</sup> UNESCO World Heritage Site was believed to be the major stronghold of Sumatran tigers, but lacked reliable data on tiger and their prey. Through three consecutive Rufford grants totalling £19,992, our projects have recorded a number of noteworthy achievements, which include,

- ◆ Becoming the only Indonesian tiger project to produce annual Sumatran tiger density estimates from camera trap data
- ◆ The Department of Forestry officially upgrading the Rufford-funded camera trap sites as 'core protection zones' for tigers
- ◆ Using camera trap data and the core protection zone status to successfully lobby against a government planned road construction through critical tiger areas in KSNP
- ◆ Co-hosting a camera trapping workshop at the Society for Conservation Biology Annual Meeting in Port Elizabeth, South Africa
- ◆ Developing a new indirect sign survey method for tigers and their prey that overcame the problems with surveying difficult-to-detect tropical mammals. This method has gained wide attention and has been adopted by numerous tiger projects across Asia, such as the surveys that will produce the first reliable Sumatran-wide tiger population estimate
- ◆ Publishing five articles in peer-reviewed scientific journals, as well as completing two further manuscripts that are in review
- ◆ Training 12 full-time Indonesian staff, 27 students and 17 volunteers in enhanced field survey and data analysis techniques
- ◆ Project Field Manager (Yoan Dinata) winning a BP Conservation Leadership Scholarship to study for an MSc in Conservation Biology at DICE
- ◆ Field Coordinator (Iding Haidir) winning the best foreign trainee prize at a 3-month wildlife conservation course hosted by the Wildlife Institute of India

- ◆ Photographing the critically endangered, endemic Sumatran ground cuckoo, which had previously been recorded only once since 1916. This record gained the project and its donors wide exposure through being covered by over 26 media organizations, including Channel 4 News, Fox News and The Sunday Times.



Possibly the greatest arising from the initial Rufford seed grant has been to build the capacity of 56 young Indonesian conservationists and the collaborations among eight universities, who have then helped DICE and FFI to expand their wildlife conservation work across the KS region. Thus, staff trained previously under Rufford-funded projects have helped to implement and manage four new donor-funded projects that are: i) mitigating human-elephant conflict in southern KSNP; ii) protecting tigers and their prey in the 3000km<sup>2</sup> Batang Hari Protection Forest, northeast of KSNP; iii) working to establish a new protected area, eastern KSNP; and, iv) working with highly influential religious leaders and forest-edge farming communities through an innovative faith-based outreach pilot project (Figure 1).

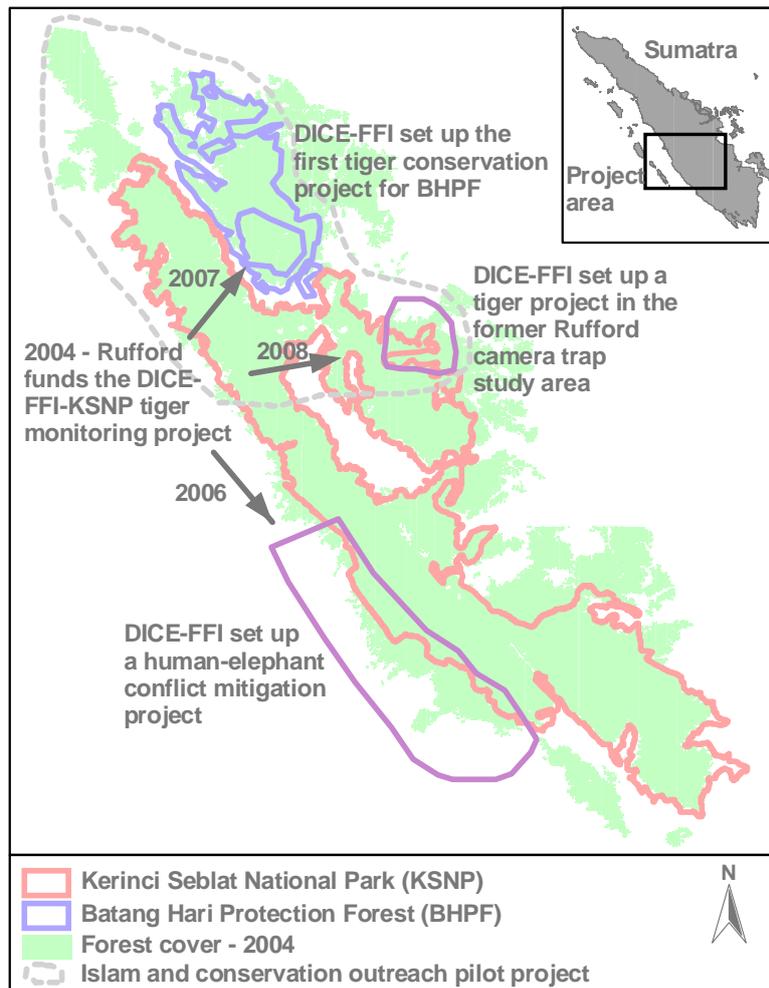


Figure 1. The Rufford-funded Kerinci Seblat wildlife conservation model

## Exposure of the project and its donors

---

### Scientific peer-reviewed papers funded by Rufford [Project staff names in bold]

---

**Linkie, M.**, Chapron, G., Martyr, D.J., Holden, J. & **Leader-Williams, N.** 2006. Assessing the viability of tiger subpopulations in a fragmented landscape. *Journal of Applied Ecology*, 43:576-586.

**Linkie, M.** & **Dinata, Y.** 2007. Sumatran ground cuckoo recorded near Kerinci Seblat National Park, Sumatra. *Oryx*, 41:13.

**Linkie, M.** & Christie, S. 2007. The value of wild tiger conservation. *Oryx*, 41:415-416.

**Linkie, M., Dinata, Y., Nugroho, A. & Achmad Haidir, I.** 2007. Estimating occupancy of a Data Deficient mammalian species living in tropical rainforests: sun bears in the Kerinci Seblat region, Sumatra. *Biological Conservation*, 137:20-27.

**Dinata, Y., Nugroho, A., Achmad Haidir, I. & Linkie, M.** 2008. Conserving rare and endangered avifauna in west-central Sumatra. *Bird Conservation International*, 18:30-37.

**Linkie, M., Achmad Haidir, I., Nugroho, A. & Dinata, Y.** in review. Conserving tigers *Panthera tigris* in selectively logged Sumatran forests. *Biological Conservation*.

**Linkie, M., Borysiewicz, R.S., Dinata, Y., Nugroho, A., Achmad Haidir, I., Ridout, M.S., Leader-Williams, N. & Morgan, B.J.T.** in review. Predicting the spatio-temporal patterns of tiger and their prey across a primary-disturbed forest landscape in Sumatra. *Journal of Applied Ecology*.

---

### Scientific presentations

---

2008: National University of Singapore. Invited paper 'Evaluating forest conservation in the tropics'.

2007: University of Oxford International Felid Conference. Invited paper 'Managing tigers in a primary-disturbed forest landscape'.

2007: Zoological Society of London Scientific Meeting, 'Scientific solutions and challenges to tiger conservation'. Invited paper 'Conserving rainforest tigers in Sumatra'.

2007: Society for Conservation Biology Annual Meeting in Port Elizabeth, South Africa. Invited paper 'Evaluating biodiversity conservation projects in the tropics'.

---

### Media publications

---

[http://www.hero.ac.uk/uk/research/archives/2008/our\\_place\\_in\\_the\\_jungle\\_Mar.cfm](http://www.hero.ac.uk/uk/research/archives/2008/our_place_in_the_jungle_Mar.cfm)

---



Wild Sumatran tiger from KSNP

## Looking forward to another three years of conservation success: The next steps

It is essential that the momentum gathered during the first three years of Rufford funding continues. Indeed, the next three years of the project will be the most challenging yet as we aim to meet our new and ambitious set of conservation targets that include,

- ◆ Training the next cohort of young Indonesian conservationists
- ◆ Establishing a new protected area around the former Rufford camera trap study area at the KSNP border
- ◆ Working with the Department of Forestry to develop the first tiger conservation management plans for KSNP, Batang Hari Protection Forest and Bungo
- ◆ Producing the first Sumatran tiger population estimate for the entire KS region using the newly developed indirect sign survey
- ◆ Supporting locally-based community conservation initiatives, such as forest patrols
- ◆ Transforming the faith-based community outreach pilot project into a fully functioning project that unites all of the Rufford-funded projects by working with forest-edge farming communities and urban communities in sustainably using natural resources across the KS region.

### **Conclusion**

DICE wishes to take this opportunity to thank the Rufford Foundation in enabling us to create the platform for a longer-term conservation project that has already increased the long-term survival prospects of one of the world's most endangered species, the Sumatran tiger. We hope that Rufford will wish to continue sharing in the success of this model project that is generating considerable gains for the Sumatran tiger and other threatened wildlife both within the project area, and also across the island, by generating urgently needed scientific data, building local capacity and stimulating local collaborations.