

**Protection and Conservation of
Sumatran Tiger in and around
Kerinci Seblat National Park,
Sumatra, Indonesia**

***Report on Activities conducted with the
support of Dreamworld Conservation
September-August 2008***

Fauna & Flora International Indonesia Program

Program Objective

- to secure the long-term conservation of wild Sumatran tiger, in particular through controlling the poaching of Sumatran tiger and prey species and habitat loss and through effective mitigation of human-tiger conflict, by raising the ability of the forestry department and others to tackle tiger and other serious wildlife crime and winning the support of forest-edge communities and local governments for conservation of Sumatran tiger and tiger habitat

Activities conducted in 2007-2008 with support of Dreamworld Foundation

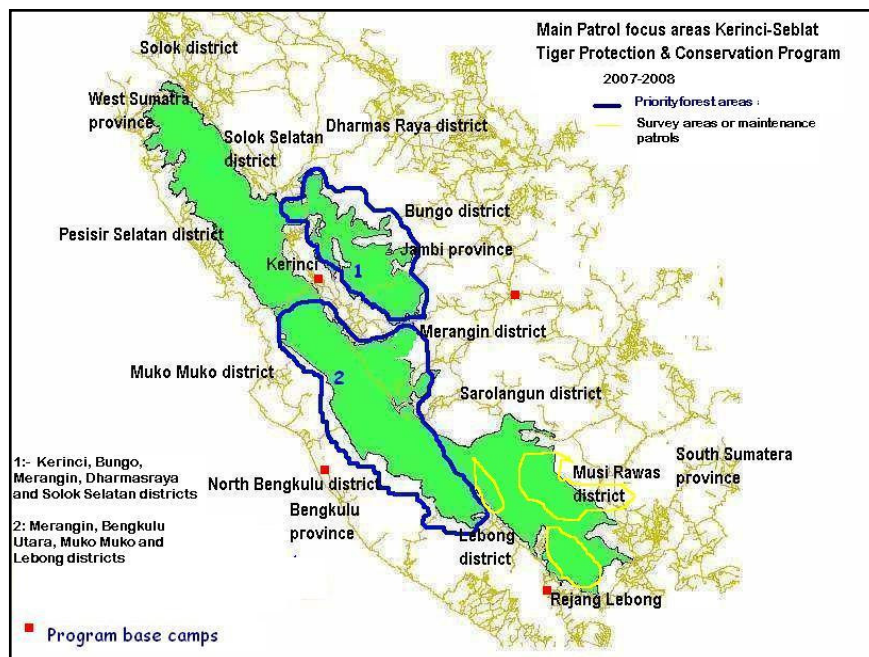
Forest Patrol

Tiger Protection & Conservation Units (TPCU) conducted a total of 74 forest patrols in nine districts of the four provinces of Kerinci Seblat National Park covering a total of 1675Km

Three patrols were aborted or cut short due to TPCU rangers making arrests after meeting illegal activities (illegal logging or encroachment into the park) while a fourth patrol in forests on the slopes of Mt Kerinci was abandoned and rangers retreated due to a sudden eruption of Indonesia's highest (3805m) active volcano which was

accompanied by heavy ash falls and many minor earth tremors

The number of patrols launched and total kilometres walked in the forest was lower than planned: this was due a variety of issues including a series of 7.9 Richter Scale or stronger earthquakes in Bengkulu in September 2007



and health and safety incidents. However the main cause of reduced patrol activities was the secondment of two TPCU ranger leaders to SPORC (mobile forestry protection unit) for three months training (November-January 2008) so forcing TPCUs

to amalgamate for patrol purposes and reducing, for field operational purposes the number of units since it is program policy that wherever possible, TPCUs should be led by an NPA ranger so that immediate decisions can be taken where law enforcement is required or other problems are encountered.

One National Park TPCU team leader Rahmat Arifin, subsequently (March 2008) resigned after eight years service to the cause of tiger conservation in KSNP and has not yet been replaced due to slow disbursement of funds by another donor.

A total of 67 separate tiger records were made during patrols in and bordering the national park – this figure relates only to encounters with Sumatran tiger (usually footmarks and scrapes although occasional visual observations were made) and is not an estimate of the number of individuals present.

The Frequency of Encounter – kilometres walked by TPCUs to record tigers - stood at 1 tiger record per 25 patrol Kms walked - an improvement on the more than 32.5Kms per tiger record for the same period 2006-2007 : this may be due to a greater distance (1950Km) being walked in 2006-07..

Tiger records were most frequently made on patrols in some areas of Bungo district in Jambi and Muko Muko district of Bengkulu province and it is possible that the multiple records made on some patrols is related to illicit conversion of state forests bordering KSNP to palm oil so forcing tigers into unusually high densities in the patrol areas

Although frequency of encounter improved, the percentage of patrols recording tiger presence reduced slightly (57 per cent) this is probably primarily due to abandonment of some patrols in tiger rich habitats to allow law enforcement.

TPCU rangers found and destroyed a total of 20 active Tiger snares or confiscated tiger snares from men found in or near the forest edge and a total of 595 active ungulate snares (sambar, muntjak and serow) were found and destroyed: 300 of these snares were found in the course of a new patrol route in Muko Muko district of Bengkulu.

Rangers units recorded only active snares posing a danger to tigers or to tiger prey species and tiger and deer snares found and confiscated in searches of suspect farm houses or forest camps are not included in the above total.

The percentage of TPCU patrols finding active tiger snares reduced and, with the exception of the 300-window snare line destroyed in Muko Muko, no very long snare lines were found however the percentage of patrols finding small numbers of deer snares increased slightly.

Seizures of firearms (ownership and use of which is strictly controlled under Indonesian law) also increased with a total of seven (all home-made) muzzle loader type shotguns found and confiscated after searches of suspect farmhouse or forest camps. The increase in seizures links directly to the growing number of reports of hunters shifting from snare poaching to use of guns to shoot deer by night probably due to financial losses caused to hunters by destruction of snares by TPCUs

Between 2000-2005 the forest crimes most commonly reported by TPCU patrols were illegal logging – active or recent – and bird trapping ('liming' for song birds, neck snares for ground birds such as pheasant).

The wild bird trade has reduced sharply since 2006 primarily due to consumer anxieties due to avian influenza while the Presidential decree on illegal logging issued in late 2004 has led to a steep drop in illegal logging..

Unfortunately the main threat now to Sumatran tiger habitat around KSNP is due to large-scale conversion of forest – in lowland areas for oil palm plantations – and plans by the Forestry department to issue licences to convert almost all surviving forest adjacent to the national park in Jambi province to pulp timber.

TPCU ranger patrols recorded evidence of illegal conversion of forest in the national park or its protected buffer zone on just under 30 per cent of patrols in 2007-2008 with forest conversion for palm oil a particular problem in North Bengkulu and Muko Muko districts of Bengkulu province and Bungo district of Jambi.

Investigations by TPCU rangers and local NGOs facilitated by FFI found that

very often individuals clearing these protected forests were business people and civil servants and not impoverished subsistence farmers.

In Bengkulu area there was wide spread evidence of palm oil plantations ‘sponsoring’ community leaders to conduct large-scale forest clearances for ‘community’ palm oil plantations to supply nearby oil palm companies’ mills. It is possible that the sharp drop in palm oil prices which commenced in June 2008 may deter some of the speculators – some of whom clearly have powerful local political backing.

In July a new Bupati (district leader) of Merangin district in Jambi was elected and in August pledged, publicly, to act against and stop illegal forest clearance in his district during his first year in office. In late August Bupati Nalim, a former senior police officer in West Sumatra, personally oversaw a law enforcement action against an illegal logging operation previously protected due to connections with the son of the previous district leader and we believe there may be grounds for cautious optimism in this key district for Sumatran tiger habitat conservation.



Illicit conversion for palm oil of a ‘protected’ logging forest forming the national park’s buffer zone in Muko Muko, Bengkulu

Investigations

Investigations into suspected tiger poaching and trafficking were conducted, for the first time, in all four provinces around the national park even though the main focus continued to be in eight park-edge districts in Jambi and Bengkulu provinces.

Investigations led directly to three successful law enforcement operations led by TPCU staff against four tiger poachers or traffickers from three different provinces and the seizure of the skins and skeletons of two recently-killed Sumatran tigers and two taxidermised tigers.

All the men arrested had a history of poaching or trafficking of protected species; one man arrested boasted to undercover PHS rangers that he had trapped and sold 10 tigers in a two-year period from forests north-east of KSNP in West Sumatra province while the trader arrested in Curup, Bengkulu in January 2008 had been under intermittent surveillance by PHS members since 2004 and had trafficked at least five stuffed tigers before his arrest.

The Merangin district army officer arrested a joint operation in Jambi city in July 2008 after a two-months long investigation told undercover PHS rangers he had already traded five Sumatran tigers from National Park forests in the sub-district military command to which he was posted and advised that he was in a position to supply more though his links to local hunters.

None of these men met the usual definitions of "poor" and as in previous investigations and law enforcement actions, the team notes that rural poverty had little connection with tiger and elephant poaching or trafficking; this is not always the case with some deer poachers or with men collecting song birds for the cage bird trade.

More than 60 investigations were launched during the period 2007-2008 however in some investigations, even while first-hand evidence of poaching or trafficking protected species was secured, law enforcement could not be launched for technical reasons. The reasons for technical failures have been identified and are being rectified.

Activities conducted or facilitated by FFI in and around KSNP now cover a very large area and our colleagues in the FFI/Durrell Institute of Conservation Ecology Sumatran tiger monitoring team spent much time in 2007-2008 conducting surveys of the Batang Hari Protected Forest to the immediate north-east of KSNP in West Sumatra.

To support our colleagues, PHS investigations were extended to Dharmasraya district of West Sumatra province which covers parts of both KSNP and the Batang Hari Protected Forest and investigations stepped up in the area bordering Bungo district of Jambi and Dharmasraya, primarily to assess threat and identify the individuals threatening tigers in this area.

These Investigations strongly indicated poaching threat to tigers was higher than in KSNP while information much easier to secure than in areas where the PHS team has been active for a long time.

None of the suspected poachers identified in the new investigation areas – one of whom claimed, convincingly, to have poached 19 tigers - were previously known to the PHS team however the men poachers identified as their primary dealers were, with one exception, all already known as suspected buyers of tiger products from other areas bordering KSNP. Interestingly, all the tiger hunters identified were active locally and not traveling to poach tigers as is frequently the case in KSNP.

The team launched one *ad hoc* investigation in a district far from KSNP in the Limapuluh Kota district on the West Sumatra-Riau provincial borders: this was intended to secure information on a dealer and exporter (to Korea) of black (chewing) tobacco suspected to be involved in sponsoring illegal clearances of KSNP forests in Kerinci district and cited on two occasions between 2004-6 as having purchased tiger skins.

No valid evidence was secured against this man – primarily due to the very short time available – however the TPCU investigator was offered a large quantity of elephant ivory from Riau province as well as two tiger pelts suspected to have come from the north (Pasaman district) of West Sumatra province by other individuals.

The PHS team was unable to launch law enforcement action in this case because our West Sumatra KSDA colleagues, although enthusiastic and committed, appear not to enjoy the same close relationship with local police divisions as PHS or to have experience in providing the type of backup required and so the planned law enforcement operation had to be abandoned.

The program hoped to be able to rectify this issue through running a wildlife crime investigation and law enforcement training program for KSDA and police however in the current financial climate we conclude that pending this plan, initial training should be though inviting carefully selected young KSDA rangers to join PHS team for short periods to learn the basic principles of investigations and subsequent law enforcement actions against major wildlife criminals

In addition to investigations into suspected tiger poaching or trafficking, PHS rangers also conducted investigations into less direct threats to Sumatran tiger including attempts to construct roads through the national park, organized illegal forest conversion, the activities of deer poaching syndicates and the black market in Malay pangolin which is closely linked to the trade in Sumatran tiger bone.

Prices known or alleged to have been paid for tiger skins remained stable and approximately similar to 2002-2003 levels and so, given the continuing increases in cost of living in Indonesia, have, in real terms, fallen substantially in value.

Prices paid or alleged to have been paid for tiger bone fell sharply in 2007-2008 from the very high prices (+AUD121 per kg) paid in early 2007 when the Peoples Republic of China was proposing to legalise domestic trade in tiger bone to approximately AUD58 per kg in early-mid 2008.

Dian Risdianto comprehensively updated the program data base on suspected wildlife criminals and this now includes data on more than 1000 known or suspected poachers, their known associates, *modus operandi* and, where possible, their dealers.

He also conducted a detailed analysis of tiger and deer poaching in and around KSNP for his Conservation Biology Masters degree thesis awarded by University of Indonesia. His research mainly used investigation and law enforcement results from the program. He returned to duties at KSNP in August 2008 and, after assisting the park in running a series of important workshops will resume leadership of the program.

Nandang Gumilar, who has led the tiger program since mid 2006 will take over a co-ordinating role including developing linkages to other forestry institutions in central Sumatra so that lessons learned in Kerinci can be put into action elsewhere to conserve and protect Sumatran tiger

Law enforcement:

Four men from three provinces around Kerinci Seblat National Park were arrested in the course of three law enforcement operations against tiger poachers and traders. The arrests resulted in the seizure of the fresh pelts and skeletons of two adult Sumatran tigers and two taxidermised tigers.

All these operations were a direct result of painstaking investigations by TPCU rangers, in one case over a period of almost four years. The subsequent legal judgement regarding the two hunters from Solok Selatan district of West Sumatra - arrested in Sungai Penuh, Kerinci with the pelt and bones of a tigress was deeply disappointing. The men received custodial sentences of only three months and there were strong indications that the prosecutor may have been inappropriately influenced.

The case against the 'antiques' dealer and retired army officer arrested in late January 2008 in Curup, Bengkulu while trying to sell two stuffed tigers has proceeded to the point of being passed to the courts but has still not reached the point of a hearing or a legal judgement. However the man's age – he is now more than 70 years old - suggests that a non-custodial sentence will be imposed.

In July, after a two months long investigation in Merangin district, Jambi by TPCU rangers,



an army officer (see *photograph, left*) posted to a remote park-edge sub-district was arrested in Jambi city while waiting to sell the skin and skeleton of an adult Sumatran tiger from Jangkat sub-district..

This case is being proceeded with through the Military Courts system since the suspect is a serving army officer.

Although the custodial sentences awarded in the case of the Solok Selatan poachers was disappointing, the team is always aware that the



strongest impact is through detection of crime and action against the wildlife criminal and not the length of sentence subsequently made.

Other law enforcement actions by TPCU rangers saw the arrest of two men in Merangin district, Jambi – arrested by TPCU rangers when they were found illegally logging inside the national park in October 2007: these men were subsequently sentenced to a two year prison term at the district court at Bangko.

It is likely that this sentence may not be unconnected with the suspects' recourse to the services of a rather unpopular local lawyer, subsequently arrested on drugs charges, rather than any meaningful commitment by the local judiciary to conservation law..

TPCU patrols also responded to large-scale encroachment in the national park in the course of two patrols in May 2008.

In early May, three Kerinci farmers and their chainsaw were arrested by a TPCU unit on a routine patrol in Bungo district on the eastern edges of KSNP; the men were in the process of clearing national park forests to plant oil palms. The men were subsequently sentenced to a one year custodial term at Bungo district court

Just two weeks later, another routine TPCU patrol arrested three men from the far south of Bengkulu province who had already cleared 40ha of national park forests in Merangin district, Jambi. Five chainsaws, three guns and a tiger snare, large quantities of snare wire and evidence of recent past deer poaching was among the evidence secured in this case

Two local men had "sold" national park forests to these in-migrants for approximately AUD71 per ha but managed to escape while a back-up team from Bangko was en-route to the area (six hours drive, five hours walk) Both these men were placed on the national police Wanted register but their arrest not yet secured by local police. The Bengkulu farmers were subsequently sentenced to one year custodial terms by Merangin district court.

Less serious cases of wildlife or forest crime encountered by TPCUs were handled through counselling and advice on acceptable activities and forest and species status and the issue formal legal warnings



Some of the evidence seized in the encroachment operation in May 2008 in Merangin district

Human-tiger and other human-wildlife conflict resolution

Interventions to mitigate and resolve human-tiger and other human-wildlife conflict problems were conducted every month during the reporting period with the exception of November 2007.

The team always sought to intervene before a problem became serious and ideally, before livestock predation had occurred although this was not always possible in remote areas where information can be slow to reach the team.

The majority of human-tiger conflict problems reported related to Sumatran tiger moving in farmland and causing alarm to farmers and very often disrupting village livelihoods since farmers are often understandably reluctant to conduct routine activities when a tiger is in the vicinity: such cases were generally dealt with by monitoring the tiger's movements and providing advice to villagers on safety and livestock husbandry.

Where the tiger showed no immediate sign of moving out of farmland, rangers normally used home-made 'cannons' or noisemakers to deter the animal from remaining in the area and this method is generally successful: the team frequently provides training to villagers in use of noisemakers. Unfortunately this method is less successful with Malay sunbear which is a species that frequently comes into conflict with villagers..

TPCU rangers reported some problems in one area of Jambi where villagers guarding a swiftlet nest cave in the forest repeatedly asked for a TPCU presence to mitigate a 'human-tiger conflict' problem on the grounds that poachers were likely to strike. In fact the problem was due to an inter-village dispute regarding access both to the swiftlet cave and other NTFP resources and one village was seeking to strengthen its position over the other by seeking to place TPCU rangers in the area.

Five cases - two on-going - related to multiple or one-off predation of livestock in forest-edge villages or enclaves. The most complex and difficult to resolve related to a tigress and her cub which repeatedly preyed on goats in a number of villages in a long, narrow valley bordered on three sides by National Park forests in Lebong district, Bengkulu. At date of this report predation continues intermittently however the traditional communities in this valley were and remain supportive.

The most serious case in which TPCU rangers were involved occurred in late February 2008 in an area approximately 30km north of Kerinci Seblat National Park's northern point in West Sumatra when two farmers were killed by a tiger in the space of three days.

Both attacks happened at forest-edge during the day (mid or late morning) in villages approximately 10Kms apart and neither victim was eaten although both were badly bitten and clawed and one of the victims was dragged some feet from the site of the attack by the tiger. PHS rangers, who attended the incident site to lend support to KSDA West Sumatra, concluded the same tiger was responsible for both attacks (initially KSDA feared that two tigers were attacking people) and the animal responsible was a sub-adult male, probably at an age when it should still have been generally moving with its mother.

As well as carefully surveying the sites where the attacks occurred, a community member of the TPCU conducted 'undercover' interviews with farmers and others in the area where the first attack occurred. As a result it is strongly suspected that these attacks occurred approximately a month after a tigress was shot in a revenge killing triggered by an attack on a free-roaming cow which had been left to forage in scrubland at forest edge.

Capture boxes were put out at both attack sites by KSDA West Sumatra and our friends from the PKHS Riau team although the field checks by the TPCU team strongly indicated the animal was no longer present. The team also concluded that this was a potentially very dangerous tiger

not because it was a 'man eater' but because it appeared to be a young tiger acting outside of the normal restraints imposed by its parent. Just over two weeks later a third fatal attack occurred in rice fields at forest edge approximately 75Km north-east of the second attack site (approximately 120Km north of KSNP): ground checking of the site indicated that, in spite of the distance between the first two and the third attack sites, the same young male tiger was involved.

This program and other tiger conservation teams stood by and provided advice to KSDA West Sumatra but no further incidents occurred and, as with the previous attacks, the tiger involved did not remain in the area. No further attacks have been reported.

Although the majority of human-wildlife conflict cases responded to related to Sumatran tiger moving in farmland TPCU teams also responded to other incidents, in particular human-bear conflict which included one long running problem in which numerous goats were predated by a bear roaming from village to village in Muara Siau sub-district of Merangin district .

As in previous years, conflict incidents reportedly involving Sumatran tiger were often found, upon investigation, to relate to other species – most usually Asiatic golden cat but in two cases, Malay tapir.

Although it is human-tiger conflict that is most likely to attract media and public attention, the most frequent form of HWC is in the form of crop predation by wild pigs and to protect their crops, farmers are very prone to placing snares to protect their crops.

Unfortunately snares are recognised as dangerously indiscriminate and endangered species frequently fall victim to these snares. Usually Sumatran tiger caught in pig snares are able to release themselves from such snares although they may suffer serious injuries however in March 2008, a young female Sumatran tiger was caught by the neck in one of these snares in farmland in the south of the Kerinci valley and strangled to death.

This incident occurred in an area where since early 2008 one or more tigers have intermittently killed dogs, kept by farmers to drive off wild pigs and in May 2008 former TPCU I Leader Rahmat Arifin (PHS 2000-2008) and TPCU II leader, Eko Supriatno led a TNKS ranger and police team which arrested a armed rogue army officer and his poacher side-kick as they tried to track and shoot this tiger. From the footmarks and eyewitness reports, it is probable this tiger is the survivor of a sibling pair, one of which died in the pig snare in March



Training

In previous years the program has conducted a range of practical focused training workshops focused on building practical field skills of rangers and police however no workshops were conducted during the period 2007-2008 for a number of reasons.

However three young KSNP rangers joined the program on temporary secondment between April – July 2008 for a practical on-the-job training program intended to introduce them to all aspects of PHS activities and give them practical training in all aspects of being a good forest ranger. One of these young rangers may subsequently be invited to join the program as a TPCU leader once funds for that post have been disbursed by the relevant donor and if the NPA approves his secondment..

Additionally the team continued to regularly invite national park rangers to join patrols and other activities, including conflict mitigation, to build self-confidence and practical experience in a range of species conservation issues. The FFI team leader and acting Jambi team co-ordinator were also among the lecturers at a workshop by KSDA West Sumatra intended to develop human-wildlife conflict management capacity among KSDA officers in West Sumatra province.

Additional Activities

- **Field research in the 300,000 ha Batang Hari Protected Forest** to the immediate north-west of KSNP in West Sumatra province, a forest block still linked by a fragile forest corridor to KSNP in Solok Selatan district was launched by our colleagues on the FFI/DICE Sumatran tiger monitoring team.

Field results were encouraging with camera trapping and other data indicating a probable population of at least 30 Sumatran tigers and evidence of breeding (two cubs). PHS team members provided technical support to the BHPF team, primarily through investigations into tiger crime in Solok Selatan, Solok and Dharmasraya districts (all of which districts also include areas of KSNP forests).

We are now working with FFI Asia Pacific and FFI International to secure longer-term support for action to conserve not only the BHPF and its tigers but **lay the framework to secure and conserve a forest corridor running from KSNP through BHPF for more than 100Km north-east to the Riau borders** so producing a protected area of more than 500,000 ha. Sumatran tigers are known or believed present along much of the length of this forest block and more integrated and effective management of the corridor is essential if its integrity is to be maintained.

- Past and present members of the program took an active role in the pre-planning and provision of expert advice for the **Sumatran Tiger Conservation Strategy** Workshop which was held in September 2007 in Padang, West Sumatra. Two of the expert committees (Human-Tiger Conflict and Poaching and Trafficking) were chaired by past or present PHS members and we secured inclusion of key points for conflict mitigation and law enforcement policy in the Sumatran Tiger Conservation Strategy and Action Plan which became official government policy in late 2007.

- In August 2002, the FFI team leader and TPCU ranger M Rozali spent three days in montane forests on Mt Kerinci checking reports of active snares in the forest.

No tiger snares were found but numerous ungulates snares were destroyed and a muntjak hind was released from one snare.

Extensive photographic documentation was made before the final release because some features of the animal appeared a little unusual.

In early September 2007, the FFI team leader learned that in the early years of the last century a muntjak had been found on Mt Kerinci by the Robinson & Kloss Expedition and proposed as sub-species of the Red barking deer *Muntiacus muntjak* and named, in 1917 as *Muntiacus muntjak montanus* but not reported since and the type specimen was believed to have been lost.



Over the following months, discussions were held by email with a number of deer taxonomists and photographs and other material supplied. The FFI team leader was rapidly advised that the photographs offered the first evidence for the continued survival of the montane muntjak since the late 1920s (when a specimen was secured high in the mountains of what is now Gunung Leuser National Park in North Sumatra province).

This deer has now been re-evaluated by taxonomists and the Deer Specialist Group of IUCN and re-named as ***Muntiacus montanus*** although its status as a taxa independent of *Muntiacus muntjac* is provisional pending DNA and examination of skulls etc. The formal announcement of this 'new' species was made jointly by PHKA and FFI in Jakarta in late September 2008

- The program continued to **work with local NGOs**, primarily with Lembaga Tiga Beradik in Merangin district, Jambi who run a collaborative community-forestry patrol program focused on tiger habitat conservation. FFI International secured continuation funding for the AKAR network of local NGOs to investigate and campaign against encroachment into the national park and its buffer zone. Unfortunately the network's results in its second year of activities were disappointing; the reasons for this have been identified and are being rectified.

- The program continued to **network with other committed and pro-active species conservation and protection programs in Sumatra** and elsewhere, exchanging information and ideas on responses to common problems.

In March 2008, three team members – the FFI team leader, the Jambi co-ordinator and a member of the community team joined other Sumatran tiger conservationists at a meeting in 50 Kota, West Sumatra where the Harimaukita Tiger conservation forum was established.

The forum provides not only an opportunity for tiger conservationists in Sumatra to develop closer working relationships but also to provide an interface for the Department of Forestry to work with tiger conservation programs throughout Sumatra.

- The FFI team leader has proposed a number of potential areas around KSNP to colleagues at FFI Asia-Pacific program as possible **carbon sequestration** sites under REDD – forest blocks proposed are all important tiger habitat and form the national park buffer zone or connect directly to the National Park.

- The FFI team leader also provided advice to an Australian based **eco-tourism operator** seeking a location for a Lodge for the purpose of developing tiger based eco tourism activities in or bordering KSNP.

One site has now been selected in North Bengkulu district and the FFI team leader hopes that a second lodge may be developed in Merangin district, ideally in the Birun or Durian Rambun village area where the community is supportive and where presence of an international tourism operator may increase the enthusiasm of local government and forest edge communities for conservation of forest and Sumatran tiger outside of the national park itself.