

Pelestarian Harimau Sumatera Kerinci-Seblat

Kerinci Seblat Sumatran Tiger Protection & Conservation

PROGRAM REPORT 2007-2008

to

21st Century Tiger

by

Fauna & Flora International



Summary

The purpose of the program is to support effective protection and conservation of Sumatran tiger, tiger prey species and habitat in and around a World Heritage Site National Park that forms a large part of a globally important Tiger Conservation Landscape.

Six Tiger Protection & Conservation Units (TPCU) - which form the main platform for project activities - were active during the program period but staffing problems, accidents and ill-health meant units were on occasion short of personnel so forcing Units to amalgamate for patrol purposes thereby reducing total patrol kilometres walked

This was particularly the case for three months of the program period 2007-2008 when two senior TPCU leaders were sent to Java for training with the elite mobile SPORC or rapid response forest crime unit.

A series of massive (7.9+ Richter Scale) earthquakes which struck just off the coast of central western Sumatra in mid- September 2007 destroyed the project's base camp in Seblat, Bengkulu (see *photograph, right*), caused serious damage to project equipment including vehicles and disrupting program activities in September and October due to hundreds of large aftershocks.



TPCU teams conducted a total of 71 routine tiger protection and conservation patrols in forests in and around Kerinci-Seblat National Park (Taman Nasional Kerinci Seblat or TNKS) and made 67 Sumatran tiger presence records including one very close, first-hand observation although this was not documented by camera and frequency of encounter rose, park-wide, to 1 tiger record per 24.59 patrol kilometres walked from the 1 tiger record per 32.47 patrol kilometres walked for the same period 2006-2007.

Three men were arrested and charged with tiger poaching or trafficking offences in the course of two law enforcement operations and 2 taxidermised tigers and the skin and skeleton of a third tiger were seized as evidence for the prosecution.

An average of two or more interventions per month (with the exception of November 2007) were made by TPCUs to mitigate human-tiger and other human-wildlife conflict and the arrest of an armed, rogue army officer and his companion, a known poacher, in an area where a tiger had been intermittently predated dogs in forest-edge farmland shows, once again, how even 'low grade' conflict of a type that in the past would not have even been recorded by forestry agencies, may be exploited by hunters

For a long time, the program has looked for the opportunity to work with and support the park in development of a more integrated field patrol strategy to improve in- field protection activities and to make better use of resources.

The framework for this new approach is now being laid and it is hoped that in 2009, dependent upon Central Government funds being provided, that a more synchronised and effective park patrol strategy can be established and so maximise use and effectiveness of limited resources. The new Park director, meanwhile, has stated that he plans to use conservation and protection of Sumatran tiger as the framework for future development of park strategies.

The program liaised closely with the FFI/DICE Tiger and Prey Species Monitoring team, comparing results and issues in the field and provided technical advice – primarily regarding unseen threat (reported poaching and trafficking of Sumatran tiger) to the FFI/DICE team that has now started survey and assessment work in the 300,000 ha Batang Hari Protected Forest (Hutan Lindung Batang Hari or HLBH) which forms one of the primary watersheds of the Batanghari river..

This is a block of generally hilly or very hilly forest which lies to the immediate north-east of Kerinci Seblat National Park and which was, until work commenced in late 2007 led by a former ZSL Jambi Tiger project team member, entirely data-deficient.

If this very substantial forest block (only slightly smaller than Bukit Barisan Selatan NP can be effectively conserved and pressure on forest by oil palm and other interests and poaching of tiger and prey species controlled, there is a strong potential to develop a large mammal corridor between TNKS and the BHPF forest block and from HLBH to the Ulu Kampar forests on the Riau-West Sumatra provincial borders to the north-east.

The program facilitated the activities of a network of local park-edge NGOs in three provinces around KSNP to campaign and support the national park authority and others in seeking reducing threat to tiger habitat, Additionally the program secured continuation support for collaborative community forest protection patrols led by a local NGO which is primarily focused to securing effective management and conservation of of state and national park forests in a key area for tiger conservation.

Program members, past and present, took active roles in supporting the forestry department (PHKA) in development of the Sumatran Tiger Conservation Strategy and Action Plan 2007-2017 although not all recommendations were accepted.

At the end of the program period, the team's Jambi co-ordinator, Dian Risdianto, was advised that he had been awarded a Masters degree in Conservation Biology, funding of which was through a BP Conservation Award facilitated through FFI and he will return to the program in August 2008.

Debbie Martyr
Program Manager
June 2008

Project Activities

Patrols

Tiger Protection & Conservation Units (TPCU) conducted a total of 71 field patrols in seven districts (*kabupaten*) and three of the four provinces around Kerinci Seblat National Park with patrol length varying, on average, between three and seven days.

Under program planning, six TPCUs, each composing three rangers drawn from local communities and under contract to FFI Kerinci and led by a Kerinci-Seblat National Park Ranger on secondment were expected to be conduct two routine field patrols per month (with the exception of the month immediately after Ramadan) unless operational priorities (serious HTC conflict, law enforcement) ruled otherwise

However, the September 2007 Bengkulu earthquakes (three earthquakes of 7.9 on Richter Scale or greater), ranger health problems (primarily episodes of typhoid and malaria), a series of motor cycle accidents and, in particular, the secondment of two senior TPCU ranger leaders to SPORC (mobile forestry crimes unit) for training for three months caused serious disruption to field activities and frequently forced TPCUs to combine for patrol purposes . Four patrols were cut short or aborted at an early stage due to law enforcement actions.

As a result, the total Unit patrol distance walked in 2007-2008 was substantially lower than planned at only Kml,648.

TPCU patrols made a total of 67 separate tiger records during the course of patrols with records counted as separate encounters where the distance between records made, and the size, shape and age/condition of the tiger sign indicated different individuals were being recorded. This total undoubtedly includes repeat encounters with the same individual on different patrols over the course of 2007-2008 and does not refer to a total number of individuals encountered.

Frequency of encounter – Kilometres walked to meet Tiger sign - during the 12 months project period was 1 tiger record per 24.59 patrol kilometres and substantially higher than the 32.7Kms frequency of encounter recorded over the same period 2006-2007.

This very high rate of encounter is almost certainly a consequence of multiple encounters with tiger sign on some patrols in Bungo district of Jambi and Muko Muko district of Bengkulu province. The very high frequency of encounter record by TPCU patrols in these districts may be a product of tigers being forced into higher than normal densities in national park forest due to ongoing illicit or illegal forest conversion in national park buffer zone forests..

However the percentage of TPCU patrols recorded tiger presence reduced to just over 60 per cent from the 78 per cent for the same period in 2006-2007: this is probably mainly due to patrols being aborted to conduct law enforcement against illegal loggers,

encroachers and poachers in four patrol areas which are important tiger habitat and would have yielded tiger sign if the patrol had been conducted.

A total of nine active Tiger snares were destroyed or seized from poachers in the forest during patrols compared with 14 tiger snares destroyed/seized during the same period in 2006-7.

TPCU rangers found and destroyed a total of 665 active ungulate snares (685 found and destroyed in 2006-2007) – of which 300 were found in the course of a new patrol route in Muko Muko district of Bengkulu.

Snare seizures recorded were only those ‘active’ and posing a danger to tiger or prey species and do not include tiger and deer snares found and confiscated in searches of forest camps or suspect farmhouses in or bordering KSNP. Very few long snare lines were found during the reporting period but the percentage of patrols finding small numbers of deer snares rose.

Encounters with active snares in the six weeks leading up the feast of Hari Raya in October 2007 which marked the end of the fasting month of Ramadan reduced in comparison with previous years.

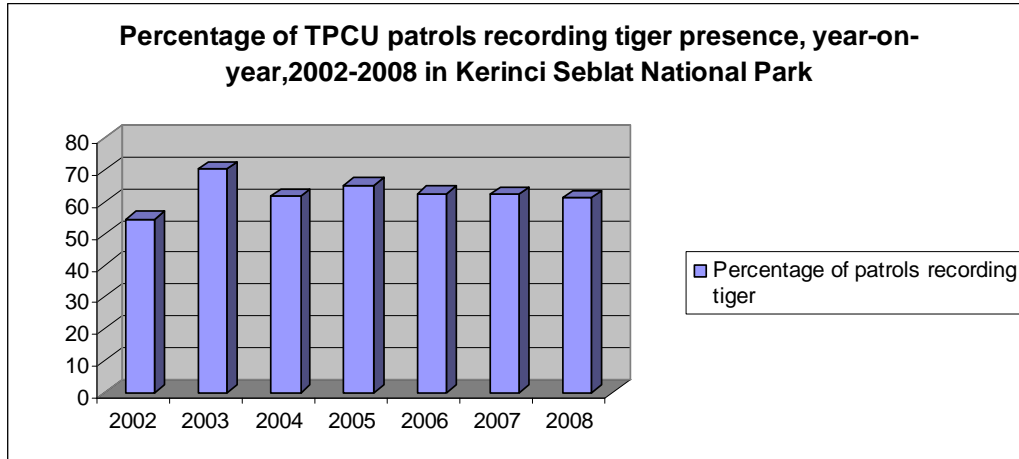
Use of smaller snare lines and apparently reduced deer poaching pressure during the pre Hari Raya period is likely to be indicative of poacher caution (destruction of a snare line by rangers represents a considerable loss of poacher investment both in funds and time) rather than a reduced threat although some local NGO partners did lobby local religious leaders to issue fatwa on deer poaching activities during the holy month of Ramadan

A total of five guns were confiscated from poachers by the still-unarmed TPCU ranger teams or were found in searches of forest camps.

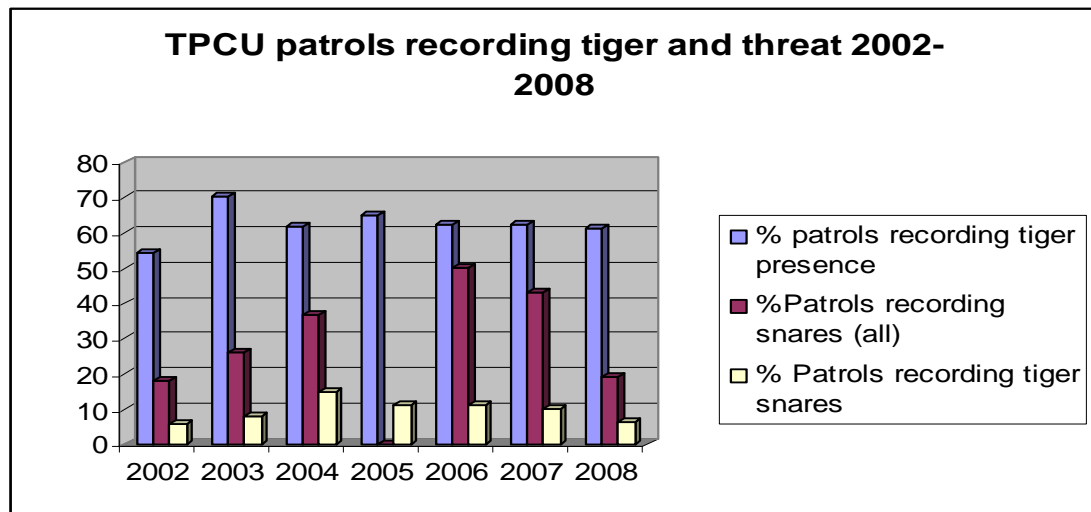
Comparison of Patrol Results June 2007-May 2008 and the same period 2006-2007

Period	Tiger records	Frequency of encounter (Kms)	%patrols recording tiger	Active tiger snares	% patrols reporting tiger snares	Active ungulate snares	% patrols reporting active deer snares
2006-2007	58	32.7	60.00%	21	10.25%	685	24.30%
2007-2008	67	24.59	62%	9	9.85%	665	28.16%

Comparison of patrol results, park-wide during the project period June 2007 -May 2008 indicates that the percentage of patrols recording Sumatran tiger presence is now fractionally higher than in 2002 and has remained generally relatively stable (see below) park wide albeit with wide variations year on year in specific patrol areas



Patrol results and correlation with reports of attempted and successful tiger poaching incidents over the past five years shows that poaching of Sumatran tiger and deer species remains an issue of concern. However active snares were most likely to be found in rarely patrolled areas or on new patrol routes and rarely on routes where two or more patrols a year are conducted. As in previous years, local information from forest-edge farmers and village level supporters of the program was critically important to establishing where tiger snares might be active and launching "snare sweeps" to make the area safe before a tiger was killed.



Patrol records show that snare poaching was most likely to be found in areas which had not been patrolled for a year or more or on new patrol routes/areas.

No snares were found on any route which had been patrolled more than twice a year or where poachers had previously been arrested or received formal legal warnings and patrol routines subsequently maintained.

Four routine forest patrols were aborted during the program period after TPCU rangers arrested deer poachers (3), illegal loggers (2) and encroachers (7). All these arrests proceeded to the judicial process

Illegal logging in and around this national park has reduced very sharply since 2005 when President Susilo Bambang Yudhoyono made control of illegal logging a national priority. Unfortunately no such focus has yet been given to the issue of forest conversion – illegal or illicit - and encroachment into KSNP forests and, in particular, illicit/illegal encroachment of the national park's buffer zone which primarily composes State Forests zoned for limited/selective logging has now reached a critical level in many areas.

When the program launched in 2000, encroachment into the national park or buffer zone forests was generally conducted by local villagers extending their small-holdings. However since 2005 escalating encroachment has been recorded in many districts around KSNP where the encroachment is highly organized and appears to be backed by powerful business or political interests.

In some districts of Bengkulu conversion of national park buffer-zone and protected forests is, in some areas, apparently being orchestrated by plantation using local village leaders and their communities to convert protected forests to palm oil as a means of extending their land holdings into protected forests.

TPCU units routinely sought to build friendly and constructive relationships with forest-edge farmers and village headmen and used patrols not only for species and forest protection activities but also as a means to develop and maintain links with forest-edge farmers, many of whom are now valued informants

Patrol records, routes, key species encountered and threat actual, imminent or potential were provided to the National Park Authority on a monthly basis and a three monthly report made to the department of forestry.

Investigations

The collection of sound data on the identities and activities of individuals suspected to pose a threat to Sumatran tiger, trafficking routes, *modus operandi* and market trend is a core activity of the program, is used to direct patrols to areas where poaching is suspected active and is essential to law enforcement where crime has occurred and evidence of crime secured.

With assistance from Dian Risdianto, now concluding a Masters degree in Conservation Biology at Universitas Indonesia which focuses on poaching patterns around TNKS, the project data base was revised and updated and now holds information on the identities and hunting methods of more than 1,000 men known to have poached tiger and or deer.

More than 400 regular or opportunist dealers, traders or brokers in Sumatran tiger and other protected species, including Sumatran elephant have also been identified – although some are now believed to be inactive.

As in past years investigations in 2007-8 were mainly conducted by community members of the PHS team however two national park ranger members of the team provided valuable support to their community member colleagues, particularly in the final stages of investigations.

In line with program planning, investigations were extended to or effort increased in two districts to the north east of KSNP – Solok Selatan in West Sumatra and Bungo in Jambi province and resulted in the arrest of a poacher and his associate in September 2007 who had boasted to PHS investigators of having caught and killed 10 tigers (this is likely to relate to a range of felids and not just tiger) in the past 2 years primarily in forests between KSNP and the Batang Hari Protected Forest to the north east of KSNP.

Initial information on the Solok Selatan case was acquired when the program manager overheard a conversation in a Padang city hotel between two men from Pekanbaru, Riau province who were discussing the difficulties they were having in buying tigers “because people are now afraid, so many people have been arrested.”

In the course of this conversation, one of the traders (subsequently identified from the hotel registry and his name and address passed to WWF Riau tiger program) mentioned a tiger skin for sale in the Lubuk Melako area of Solok Selatan and the investigation was launched which led, just over a month later, to the arrest of two poachers (the identify of one of whom was already known to one TPCU investigator).

A second poacher, now elderly but still active, on the Bungo-Dharmasraya-Solok Selatan district borders who claimed to have killed 19 tigers to date, provided a portion of smoked tigers meat to substantiate his claim and cited two previously unknown dealers in the district capital of Dharmasraya district as regular buyers of tiger skin and bones and a third dealer in Muara Bungo already known to the the PHS team.

PHS investigators therefore extended investigations to this district on the Jambi-West Sumatra provincial border which includes a small area of TNKS forests and a substantial part of the Batang Hari Protected Forest (HLBH)

Highly credible information on reported tiger crime and identities of dealers and others was disturbingly easy to acquire in this area and mirrors the situation found in Bengkulu province when the program first established there in late 2003.

Poachers identified appeared to be working in protected and ex-logging forest in their home sub-districts and the high degree of mobility identified with some tiger poachers in districts to the west of the park was not observed.

As with other areas around the national park, tiger poachers in these new operating areas were found to be selling pelts and bone to dealers based in district capitals who were then primarily selling tiger skins and bone on to major dealers in Palembang, capital of South Sumatra and to Jambi city (which may itself be a conduit to Palembang).

One investigation was opportunistically launched (taking advantage of the Lembah Harau meeting which launched the Harimaukita SumatranTiger forum) in Limapuluhkota district of West Sumatra.

It was hoped this preliminary investigation would secure evidence to support strong suspicions that a tobacco wholesaler (exporting chewing tobacco to Korea) who is suspected to be supporting large-scale encroachment in two areas of the national park has also been buying tigers poached from Kerinci Seblat NP.

In the event, the PHS investigator was unable, in the time available to him, to make effective contact with the suspect but was offered three tiger skins and more than 200kg of

elephant ivory (the latter allegedly owned by a rogue government officer in neighbouring Riau province) by another individual in the same town.

Unfortunately, West Sumatra forestry officers were unable to organize the back-up needed for a law enforcement operation planned to secure the arrest of the individual(s) offering these items and the team therefore was forced to withdraw.

There appear to be some relationship issues between KSDA West Sumatra and provincial police and it is hoped that a planned wildlife crime investigation and law enforcement workshop to be held in Padang in 2008-9 will help to build a closer working relationship and inter-institutional trust.

Black market prices believed to have been paid for tiger skins showed no noticeable change in 2007-2008 and so continue to fall, in real terms, in relation to the cost of living index which rose sharply in 2007-2008 even before a 28 per cent rise in fuel prices in late May 2008.

In 2005 the PHS program warned that tiger bone prices had escalated dramatically and, by late 2006, the bones of a tiger had the potential to be more valuable than the pelt on the black market (where sold to a dealer rather than an end-user) with prices in excess of Rp900,000 per kg (US\$97.3) at hunter level where poachers were selling directly to dealers with direct links to the wildlife trade centre of Palembang, capital of South Sumatra.

However since the third quarter of 2007 reported prices of tiger bone prices appear to have fallen sharply in all areas of KSNP – and in May 2008 a tiger poacher in the Tebo area of Jambi (east of KSNP) advised that he hoped - but had not yet succeeded - to sell 5 Kg of tiger bone for Rp450,000 per Kg (US\$48.65). Significantly in this case, the bone remained in the poacher's hands but the skin had already been sold.

It is unlikely to be entirely coincidental that the reduction in price reported over 2007-2008 and, apparently, demand for tiger bone on the black market appears to come shortly after a decision by the Chinese government not to legalise a domestic trade in tiger bone products.

Overall, intelligence collection was less effective than in recent years in terms of securing evidence of crime and setting subsequent a subsequent law enforcement response; this was primarily due to the ever-increasing caution of hunters and dealers in areas where the team is recognized to be active however there were also problems in 2007-2008 in following through initial information to law enforcement: this particular problem is now being resolved.

As planned, the program maintained links with the WWF Riau tiger program and with the FZS/SOCP team in Bukit Tigapuluh NP and with WCS IP Tiger program. The program also maintained a close working relationship with Traffic Indonesia, in particular in sharing and discussing information relating to the trade in Malay pangolins which, as previously noted, is closely interlinked at dealer level with the trade in Sumatran tiger.

Law enforcement

Two law enforcement operations were successfully conducted against tiger poachers and traders in 2007-2008 and these resulted in the arrests of three men and the seizure of the fresh pelt and skeleton of an adult female tiger and two stuffed tigers

As in the past, law enforcement was a product of investigation and the dealer arrested while trying to sell two taxidermised tigers was first placed on the team's database as a suspected tiger dealer in early 2004.

The subsequent legal judgement regarding the two hunters from Solok Selatan district who were arrested in Sungai Penuh, Kerinci with the pelt and bones of a tigress was most disappointing: the men received custodial sentences of only three months and there are indications that inappropriate lobbying of the state prosecutor by the family of one of the suspects occurred.

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 is proceeding, but slowly

Two more law enforcement operations, one against an habitual tiger poacher in Bengkulu province and a second against a trader in eastern West Sumatran province were aborted through

circumstances outside the program's control.

In July, acting on information from an MHS survey team that many snares were



TPCU rangers write out formal legal arrest warrants to 3 deer poachers caught in late July 2007

active in forests to the north west of Mt Kerinci, a TPCU team entered the area on a day when it was suspected the poachers would be planning to leave the forest to sell deer meat at a nearby weekly market.

The suspicion was correct and three hunters from a notorious deer poaching community in northern Kerinci were arrested) carrying the butchered but still identifiable carcasses of three muntjak out of their camp deep inside the national park.

Ironically, it is very likely the animals were the newly rediscovered (2008) *Muntiacus montanus*, a species endemic to the mountains of Sumatra and not recorded since the early 1920s.

The three men were passed into police custody for the judicial process to begin and subsequently each received six months custodial sentences; this is only the second time that deer poachers have been prosecuted in Kerinci district and on the previous occasion, again



Inventorising and weighing the bones of a tiger seized in a law enforcement operation in September 2007.

following an arrest by TPCU rangers, the prosecution was proceeded with on firearms charges and not under species protection law.

Other law enforcement actions by TPCU rangers saw the arrest of two men in Merangin district, Jambi who were found illegally logging inside the national park in October 2007. The pair were subsequently sentenced to a two year custodial term by at the district court at Bangko..

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

In early May, three Kerincinese farmers and their chainsaw were arrested by a TPCU unit on a routine patrol after they were found clearing national park forests in Bungo district of Jambi.

Mysteriously, not only was news of the arrests leaked by an unknown source to a local newspaper reporter but the local daily newspaper also secured and ran, as front page news, a photograph remarkably similar to one taken (see right) by TPCU rangers of a *Rafflesia hasselti* which was found close to the encroachment site and which had a pattern on one petal strongly resembling the Arabic script for Allah so leading the 'Bungo Pos' to speculate that this was a message from God regarding the need for protection of KSNP forest in that area.



Strong lobbying of police and KSNP rangers for the release of these men was conducted immediately after the operation but was unsuccessful and the three men remain, at date of this report, in police custody pending a court hearing.

In late May another routine TPCU patrol arrested three men from southern Bengkulu province clearing national park forests bordering the Sipurak ecosystem in Merangin district. The team requested back-up from Bangko to escort the suspects out and to assist in the arrest of two other men (both already known to the TPCUs, one as a suspected tiger poacher) who were named by the encroachers as having 'sold' the land (for Rp500,000 or GBP27 per ha).



Unfortunately, while the team was awaiting back-up, the two men who had 'sold' these forests made good their escape and have now been placed on the Merangin district police Wanted list.

Five chainsaws, three guns and a tiger snare, large quantities of snare wire and evidence of recent past deer poaching (see photograph, above) was among the evidence secured in this case.

The coffee farmers are being held in police custody and will face charges for illegal clearance of national park forests and have agreed to be witnesses for the prosecution against 'M' and 'I' once their arrest is secured in order to secure a lighter sentence.

The FFI team leader briefed the national newsagency Antara in Bengkulu regarding this case and it received local press coverage in south Bengkulu and may serve to warn farmers in south Bengkulu against moving to Merangin district to clear forests for coffee plantations. The arrests also made front page news in local Merangin district press, firstly relating to the operation itself and evidence of national park forests being bought and sold and on the second day with local parliamentarians demanding a crackdown on illegal forest clearances.

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 of *surat pernyataan* or formal legal warnings which allow for a second-offender to be immediately arrested and legal proceedings launched against the individual with the previous case taken into account as evidence of previous illegal activities.

Human-Wildlife Conflict

TPCU ranger units conducted interventions to mitigate human-tiger and other human-wildlife every month during the program period with the exception of November 2007. The purpose was always to respond to a report of developing conflict and when possible *before* conflict had escalated to the point of livestock being predated.

Although the majority of cases responded to related to Sumatran tiger moving in farmland at forest edge, TPCU teams also responded to cases of human-bear conflict (Malay sunbear have a propensity for breaking into empty farmhouses to take rice and cooking oil) including one long-running conflict which saw a bear repeatedly predating goats over a large area of farmland in Merangin district.

As in previous years, some cases initially reported by villagers as tigers predating goats were found, upon investigation, to relate to Asiatic golden cat and not Sumatran tiger and a long-running case involving a Malay sun bear predating goats was also first reported as involving Sumatran tiger.

Many of these cases, although in principle 'low grade' conflict where no predation of livestock had (yet) occurred were time consuming to resolve and required repeat visits to the site to provide advice to farmers or provide a ranger presence to deter poachers known to frequent that area.

In areas where good relationships have been established with forest edge communities, TPCUs are frequently asked to provide a presence, not because forest-edge farmers are frightened of the tiger but because they are worried that poachers from other communities might enter the area, kill the tiger and so damage the village's 'good name'

Situations such as this can be time consuming and TPCUs made almost daily visits to one area in the south of the Kerinci valley during January and February 2008 where a tigress and her cub were moving in and out of farmland, possibly because of the presence of many wild pigs.

At time of this report, TPCUs working with KSDA and TNKS are continuing to seek ways to mitigate an ongoing conflict in the Lebong area of Bengkulu which has seen an adult



TPCU ranger Leader Jhonisman with a bamboo 'cannon' – these noisemakers are a useful tool in conflict management and are often successful in deterring tigers from an area.

from neighbouring villages in three days.

TPCU rangers interviewed witnesses who had seen this tiger and advised it was 'small' and also tracked the animal and concluded that the tiger was a sub-adult male. Neither of the farmers killed was eaten by this tiger – although one was dragged a few feet and then abandoned and FFI consulted with experts elsewhere in Sumatra, India and Russia who supported the conclusion that this was a young animal.

Although capture boxes were put out for this tiger, the tiger apparently left the area immediately after the second killing and no tiger was caught. Just under two weeks later, a third person, an elderly woman, was killed in rice-fields bordering forests just over 60Kms to the north of the initial conflict site(s). Again the victim was not eaten. Footprints at this site were similar in size and shape to the Bungus tiger and there is a high probability the same tiger was responsible.

During this incident a member of the TPCU team seconded to assist conducted informal interviews with villagers and learned that a month earlier a cow had been predated by a tiger close to where the first man was killed, the community ranger also received information suggesting an adult tiger had subsequently been shot dead:

female and a cub predating at least 10 goats across a wide area since January 2008.

In February 2008, 3 PHS team members were seconded to the Bungus area of Pesisir Selatan in West Sumatra province – approximately 30Km north of KSNP's northern edge – to support KSDA West Sumatra in responding to the killing of two people

Although human-tiger conflict is the most likely form of HWC to attract attention, for subsistence farmers in this area of Sumatra, a much more pressing problem is that of crop predation by wild pigs.



Picture – a young female tiger killed, accidentally in the south of the Kerinci valley in March 2008 in a wild pig snare in farmland approximately 500m from forest edge: Indiscriminate placement of such snares is a major problem in many areas around Kerinci-Seblat National Park.

In addition to wild pig hunting clubs – in many areas implicated in opportunist hunting of deer and other protected species – farmers are also very prone to putting out snares, often many hundreds, in an attempt to protect their crops, unfortunately, such snares very often catch other species than pig and this occurred in March 2008 when a young adult female tiger died in a wild pig snare in farmland in the south of the Kerinci valley.

In this same area of farmland, a second tiger, continues at date of this report, to intermittently kill dogs in forest-edge farmland and at the very end of the program period a former TPCU (Rahmat Arifin, TPCU I 2000-2008) leader, now returned to full-time duties with the National Park and a current TPCU leader, Eko Supriyatno led a TNKS ranger team which arrested an armed rogue army officer and his poacher side-kick as they tried to track this tiger and shoot it. Footprints of this tiger and eyewitness reports suggest it is a young adult and it is possible that it is the survivor of a sibling pair of dispersing young tigers.

Base line biological and habitat threat data

TPCU rangers collected simple baseline data on forest condition and the presence/absence of flagship and indicator species in the course of patrols and on potential or developing threat as well as active or recent forest crime.

Tiger records made relate to presence only and while rangers will estimate the number of individual present along a patrol route from footmark shape (to ascertain gender) and size, they are exceptionally cautious in estimating numbers of tiger present in an area.

The team liaises closely with the DICE/FFI tiger monitoring team sharing basic information regarding tiger presence and threat to tigers and prey species and in 2008, a research student will be analyzing eight years of TPCU field and intelligence data both to correlate trend from a sound statistical perspective and also to support development of methods to identify and quantify hidden (poaching, trafficking) threat to tigers.

The program manager worked with deer taxonomists in Indonesia and overseas after it emerged that the program had, unknowingly secured images of a muntjak not recorded since the 1920s and she provided data on known distribution, habitat and threats for the specialist who is preparing for this deer to be included in the 2008 IUCN Red List as a provisional new species and categorized, for now, as Data Deficient.

Community awareness

The PHS team has always sought to develop and maintain good relations with forest-edge communities, discuss activities and explain project goals and how these also benefit forest edge farmers.

A total of 18 community rangers from villages in eight of the 13 districts around this national park were contracted members of the TPCU teams during the reporting period and so uniquely placed to campaign for and raise awareness of tiger conservation issues in their home communities.

Since 2004, this informal awareness raising activity has been added to by facilitation of activities by local NGOs who formed the core of the AKAR team which FFI Kerinci helped establish to campaign against the threat of roads being constructed through the national park.

A number of the AKAR member NGOs provided much assistance to the PHS team and the national park in particular Perak in Kerinci who regularly provide support to the team by checking initial conflict reports and LTB in Merangin district who are focused to habitat protection in the national park buffer zone but have secured prohibitions by a number of park edge villages on the hunting of deer or other protected species.

Capacity raising

Six KSNP rangers, who act as TPCU Leaders and three young national park managers are normally on secondment to the programme.

Rahmat Arifin who served as TPCU I leader from May 2000-February 2008 has now returned to full-time duties with the national park in Kerinci section after 3 months SPORC training and is using his experience with the PHS team to try to implement new and more effective working methods among his ranger colleagues.

His fellow TNKS ranger and TPCU leader, Eko Supriyatno, who joined the program in August 2000 and was also recruited to the SPORC teams is also expected to return to f/t duties with the park shortly but has also stressed that he too will remain committed to tiger conservation and to building capacity among his colleagues.

Three young TNKS rangers are currently on three months secondment to the program for full-time training and it is hoped that two of these young rangers will prove suitable to take over roles as Unit leaders.

National Park rangers regularly joined field patrols and other activities to gain practical experience of species and habitat conservation issues in the forest and to build expertise in forest navigation. Officers from Kerinci police division also joined patrols in the period 2007-8 and this was very helpful in building awareness and understanding among local police of the challenges the park and this program face in conserving species and habitat

The program also facilitated former program manager Rudijanta Tjaha Nugraha to act as one of the lecturers at a training workshop on human-tiger conflict management in NAD Aceh run by FFI Aceh program and, with Dr Matt Linkie, is working to organize for Rudi to be appointed as a technical advisor to the FFI Aceh program to secure a more effective approach to human tiger conflict management

At the very end of the program period, Dian Risdianto, Jambi teams co-ordinator learned that he had passed a Masters degree in Conservation Biology at Universitas Indonesia conducted with the support of BP Conservation Awards. His thesis focused on analyzing poaching patterns around KSNP so that a more effective approach can be made by authorities.

It is hoped that Dian will be permitted to return to the program as Field manager in August 2008 but the program will continue to work very closely with our interim field manager Nandang Gumilar who is now promoted in charge of program activities at National Park headquarters.

Funding and management capacity in 2007-2008 meant that no training workshops were conducted however the program manager and acting Jambi teams co-ordinator Johann Simorangkir were invited to make presentations at a training workshop for KSDA West Sumatra on methods recommended for effective practical management of human wildlife conflict.

Stakeholder Co-ordination and Involvement

The PHS team operates as an embedded unit within KSNP and so all activities are conducted in co-ordination with the park director or his deputies and the National Park director has ultimate legal responsibility for program operations.

The program continued to enjoy informal and friendly links with other species conservation programs operating elsewhere in Sumatra and maintained close contact in particular with the WWF Riau tiger program, PKHS teams in Riau and Bukit Tigapuluh national parks, with WCS tiger program – in particular with the WCS team leader Harry Wibisono (better known as Beebach).

Program staff took part in the 2-day meeting that launched the Harimaukita Sumatran tiger conservation forum and the FFI team leader was co-opted onto the forum's trade working group.

The program manager also provided input to the FFI Aceh team regarding a number of tigers caught and then held in very poor and unsuitable conditions at KSDA Aceh headquarters and on development of a strategy to reduce tiger crime in Aceh.

Past and current program members took leading roles in supporting PHKA in the drafting of the Sumatran Tiger Conservation Strategy and Action Plan 2007-2017 with the PHS team leader heading the trade working group of which Dian Risdianto was an invaluable and leading member while Rudijanta, former PHS field manager, led the conflict mitigation strategy working group.

Although some key recommendations were not adopted by the department of forestry (a system of compensation payments, albeit strictly controlled, for forest edge villagers who have suffered livestock predation by tigers, the need for a Tiger program officer co-opted from the department of forestry to co-ordinate some Sumatran tiger conservation activities in particular law enforcement and a proposal that plantation companies clearing or converting forest should take some legal responsibility for consequent human-wildlife conflict problems), the majority of our working groups' recommendations were accepted and are now formal government policy although PHKA will undoubtedly need support and encouragement to ensure recommendations are translated into action on the ground.

At an inter-institutional level the PHS program team continued to work to develop an effective and close working relationship with park edge police forces and enjoyed a friendly and constructive relationship with KSDA in Bengkulu, West Sumatra and Jambi provinces,

Wildlife rescue and response to wildlife emergencies

Although the program has a strong focus to in situ conservation and protection and in particular to combating tiger and other wildlife crime, the program also always seeks to respond, where possible, to wildlife emergencies

In August 2007, team members provided technical support to KSDA West Sumatra in Sawahlunto-Sijunjung district where an adult male tiger had been caught in a gin trap set by farmers after livestock had been repeatedly preyed over a two-year period.

Although KSDA had already secured the support of a young vet from Bukitinggi Zoo, they had no access to up-to-date anesthetics or blowpipes, antibiotics or the experience to deal with such an emergency in the field.

As a result of training by ZSL in Jambi in 2003 and subsequent training workshops in veterinary emergencies by Australia Zoo (who have also donated tools and drugs to the program,) the PHS team was able to support a response to this emergency and the tiger, an adult male, was darted, treated on site (fluid therapy and antibiotics) and then evacuated to Bukitinggi Zoo where the snare damaged limb was subsequently amputated.

This was the fourth occasion in just a few months that TPCU rangers found past training put into action, previously in 2007 TPCU teams had also supported the rescue and treatment of two (pig) snare injured clouded leopards who were successfully treated and released and a snared Sumatran tigress who subsequently died of gangrene in spite of heroic efforts, led by PLG Seblat vet DrH Yanti, to save her.

Two leopard cats, one adult, one juvenile, were rescued, one from a storeroom in the Sungaipenuh Telephone office (it appears to have entered the office at night and then found itself trapped) and a second from a fish trap on the shores of Lake Kerinci: both animals were held temporarily for a veterinary check up and then released in suitable habitat.

Two leopard cat kittens, one caught by villagers monitoring a conflict situation and a second being held as a pet, were cared for until they were seen to be able to catch and kill prey (rats, chicks) and to be scared of and avoid human contact and then released. Three leopard cat kittens handed over to the team were reunited with their mother who was still in the area they were found.

An adult slow loris and her baby were secured by a TPCU ranger from a fellow villager who had found the animals in his farmland. The lorises were released after a 24 hour health check as was a Malay pangolin that strayed into a chicken coop and was reported to TPCU teams by a panicked farmer as an "unknown animal, possibly fierce."

The program is currently caring for a confiscated Sumatran Clouded leopard cub, found after an investigation into reports of a man seeking to sell a baby "tiger " in Bungo district and two bear cubs and is liaising with a number of organisations to seek urgent support for a short-term (6-8 months) project to facilitate these animals' rehabilitation and subsequent release

Associated Activities

'Sipurak' collaborative forest protection patrols

The forests around the Sipurak river system in Merangin district, Jambi are among the most important tiger habitats in Kerinci Seblat National Park and in October 2004 FFI was able to facilitate the repatriation of almost 14,000 ha of former state logging forest bordering the Sipurak ecosystem to KSNP.

FFI then facilitated a local NGO to campaign for conservation of both the state forests not repatriated to KSNP and the national park itself with the primary focus on the issue of organised illegal forest clearance for coffee plantations.

In January 2006 after eight months of campaigning and awareness activities in forest edge villages, program partner Lembaga Tiga Beradik facilitated formation of the Team for Monitoring, Protection and Patrolling the Forest (TMP2H) drawn from members of 11 traditional villages in three sub-districts who conduct patrols with national park and forestry service rangers aimed at stopping or controlling forest clearance.

In mid 2007 FFI was able to secure continuation funding for Lembaga Tiga Beradik from IUCN Holland and during 2007-2008, the TMP2H team and LTB provided valuable support to the PHS team and KSNP, not least through investigations leading to the arrest of a village leader and his deputy who were selling state forest lands to a Chinese businessman implicated in large-scale illegal forest clearance elsewhere in the LTB team's 3 sub-district working area in Merangin district.

FFI worked closely with LTB to keep the EU-funded FLEGT team in Jambi advised of the situation in and around Merangin district regarding illegal or unauthorised clearances and in early 2008, the Governor of Jambi province authorised formation of a multi-stakeholder team to assess and investigate unauthorised or illegal forest clearance in this district although no action has been taken to date.

In addition to continuing the system of forest patrols, the LTB team successfully lobbied communities in two sub-districts during 2007-2008 to reject plans for an oil palm plantation which had already been approved by the head of the district and encouraged two park-edge villages to declare substantial blocks of ex logging forest bordering the park in their administrative area as *Hutan Adat* or protected traditional village forest.

Hutan Adat enjoy protection under law and the LTB strategy is to secure a large number of such community-owned and protected forest blocks in the park buffer zone so making these forests less attractive to oil or pulp timber companies and to secure a community managed, protected buffer zone.

TMP2H village representatives have now started to occasionally join TPCU rangers on patrols in their traditional forests to learn improved navigation and reporting procedures and the basic procedures in human-wildlife conflict mitigation

Tiger Awareness and associated activities

No specific focused tiger awareness campaign was conducted by local NGO partners during the project period primarily due to a resurgence of road building as a threat to the national park's integrity in the middle and latter part of 2007.

However FFI secured a continuation from UNESCO Rapid Response Fund for the AKAR network of local NGOs to campaign for action to reduce encroachment into the national park and buffer zone forest and to build support for the park at community and local government level.

Some members of AKAR lobbied local religious leaders to issue prohibitions to their congregations against deer poaching in the weeks leading up to the festival of Har Raya which marks the end of the fasting month of Ramadan.

Tiger Operational Centre

Following the signing of a formal MoU in October 2006 between Merangin district government and PHKA regarding support for conservation of KSNP, construction work started on the program's long awaited base camp operating centre.

Unfortunately it very rapidly transpired that there were serious issues relating to this site with Merangin district government and two other individuals laying claim to the ownership of the 2 ha of land granted to the program and with all three parties holding apparently valid land title certificates

The program is now negotiating with the district government for partial compensation, at least, of the funds expended on building on land provided by the local government but which, it appears, was not the local government's to give. An alternative site close by has been offered but without at minimum partial compensation for funds already expended, it was impossible to relaunch building on the neighbouring site and so no progress was made.