

Pelestarian Harimau Sumatera Kerinci-Seblat

Kerinci Seblat Sumatran Tiger Protection & Conservation

**Report on Activities 2008-2009
conducted with the support of**

21st Century Tiger

by

Fauna & Flora International



Summary

Program Objective

To secure the long-term conservation of wild Sumatran tiger in and around a World Heritage Site National Park which forms part of a globally important Tiger Conservation Landscape primarily through controlling the poaching of Sumatran tiger and prey species and habitat loss and effective mitigation of human-tiger conflict. Additionally through 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 habitat.

Summary of Activities

Five Tiger Protection & Conservation Units (TPCU) were active during the reporting period and not six as planned as delayed disbursement of funds by other donors and concerns about sustainability of effort in the current economic climate led to a decision to dissolve TPCU VI and to incorporate existing, contracted TPCU VI members into the remaining five units.

Tiger Protection & Conservation Units conducted a total of 72 routine and non-routine field patrols in and bordering KSNP forests covering a total walking distance of just over 1600Kms and made a total of 68 separate tiger records.

A total of five active tiger snares and 211 deer snares were found and destroyed by patrol teams and the tragic loss of a Sumatran tiger in a Sumatran serow *Capricornis sumatrensis* snare in early June 2009 once again indicates the incidental dangers posed to tiger by snare poaching for deer.

Law enforcement actions resulted in the arrest of a total of 46 individuals for offences including poaching or trafficking of Sumatran tiger, deer poaching, illegal logging and encroachment into the national park.

A total of 24 incidents of human-tiger and other human-wildlife conflict were recorded requiring TPCUs to attend for three or more days in addition to other incidents requiring only field assessment followed by advice on containing the situation to villagers.

In-depth, practical, on-the-job training was provided to four national park rangers in 2008, one of whom has now been seconded to this team while TPCU ranger leaders and key staff received GIS and database training from our colleagues on the FFI/DICE Sumatran tiger and deer monitoring program.

Two workshops planned for 2008-2009 – a wildlife investigation and law enforcement training workshop and wildlife veterinary emergency responses were not held due to funding constraints.

The program hosted visits from WWF Riau to discuss issues of law enforcement and in particular how to leverage support for law enforcement against tiger crime in

Riau province and from KSDA South Sumatra who also wanted to discuss ways in which they could improve tiger protection and conservation in South Sumatra province.

Three long-serving TPCU ranger members resigned for personal reasons in the first four months of 2009 including Agustria who was a founder member of the 2ICT-funded TPCU III. At date of this report, seven would-be TPCU rangers are undergoing on-the-job training and in competition for these three posts. The trainees understand that not all can be successful and that those not winning through the selection process (finalised in December) will become 'Mitra Tiger' and provide support for tiger conservation in their home communities.

The program provided technical advice to an international palm oil company which is planning to establish a forest and species conservation concession totalling 20,000 ha in KSNP buffer zone forests in Bengkulu province and received a request for training in species protection and conflict mitigation from a second oil palm plantation in West Sumatra. Through ZSL Jambi Tiger Project we also have established communications with a Wilmar-owned plantation in West Sumatra province which is working with ZSL and is interested in establishing a consortium of plantations in West Sumatra who can work with KSNP and others to conserve tiger habitat and wildlife movement corridors

Not all large plantation companies are as responsible and supportive and at date of this report, a local operating subsidiary of the giant Sinar Mas conglomerate continues to advance plans for conversion of more than 80,000ha of forests lands bordering KSNP in Merangin and Sarolangun districts, Jambi, to pulp timber while an Indian-owned palm oil plantation company is also lobbying villagers to convert 20,000ha of highly biodiverse state forests to oil palm in Merangin district..

Key program staff worked closely with fellow members of the Harimaukita Sumatran tiger conservation forum to discuss how to secure practical, island-wide implementation of the 2007 Sumatran Tiger Conservation Strategy and Action Plan and helped facilitate a visit to West Sumatra province by members of the World Bank's planned Global Tiger Initiative.

Unfortunately the national park's plans to develop a field patrol system integrated with that of the PHS TPCU teams (see our Report 2007-2008) has still not been implemented so that the TPCU teams and a local NGO collaborative patrol system facilitated through FFI Kerinci continues to provide the only routine ranger presence in national park forests.

Forest Patrols

A total of 72 forest patrols ranging from two-seven days in length were conducted by TPCUs, primarily in national park forests in seven districts of Jambi and Bengkulu provinces but also in three districts of West Sumatra and South Sumatra provinces.

Two of these patrols were conducted to take law enforcement action against encroachers and no tiger presence was recorded.

Patrol teams made a total of 68 separate tiger records on these patrols, mainly from footmarks and scrapes and other secondary sign but including two close-quarters visual records (one documented, albeit rather shakily, by a TPCU ranger).

Frequency of Encounter with tiger sign was slightly higher than in the previous period of 2007-2008 with a park-wide frequency of encounter rate of 1 tiger per 23.75 patrol Km walked compared 1-24.59Km in 2007-2008.

The percentage of routine patrols, park-wide, recording tiger presence also increased slightly to 63.38 per cent of all patrols compared with 60.4 per cent of patrols during the same period 2007-2008.

Only five active tiger snares were found and destroyed by TPCUs, four of which were found due to tip-offs by community informants reporting suspicious individuals entering the forest.

A total of 211 active (in place and posing active threat) deer snares were destroyed and the threat such snares pose to tigers and other endangered species was graphically and tragically illustrated in early June 2009 when a re-located tiger was snared and died in a serow trap on a mountain peak in Kerinci district.

More than 170 of these snares were found in four sites either not previously or only occasionally (< 1 per year) patrolled and very few snares were found in areas routinely (>2 patrols per year) visited and then not in large numbers.

Towards the end of the program period TPCUs began to pioneer new patrol routes to expand the deterrent effect of forest patrols however the team is anxious not to lose ground gained and is concerned that threat may resurface in some areas if the frequency of patrol is reduced.

Use of illegal firearms to hunt deer, primarily in forest-edge farmland at night but also in old logging forests appears to have continued to escalate, in particular in areas bordering two local government districts. The problem of lawlessness in local government and provincial government border areas has also been observed in relation to illegal logging and encroachment and may be due in part to government jurisdictional issues.

Although the program has previously advised police divisions of this problem only police in West Sumatra province responded effectively to the problem of ownership and use of illegal firearms during 2008-2009. West Sumatra provincial police offered first an amnesty to owners or users of illegal firearms and subsequently conducted numerous "sweeps" of forest-edge villages to confiscate illegal firearms not previously surrendered. Investigations indicate that this appears to have been generally very successful.

Patrol district and province	Frequency of Encounter (Kms)	Percentage patrols recording tiger present	%age patrols recording (any) snare poaching
Kerinci Seblat National Park park-wide	23.75 Km	63.38%	25.35%
Kerinci,Jambi	22.67 Km	65%	38.40%
Merangin,Jambi	30.14 Km*	41.6%*	8.30%
Bungo,Jambi	22.12 Km	66.70%	33.30%
Sipurak (Merangin-Kerinci districts)	19.68 Km	100%	33.30%
Rejang Lebong, Bengkulu and Musi Rawas, South Sumatra)	42.83 Km	55.50%	44.40%
Lebong, Bengkulu	50 Km	50%	50.00%
Muko Muko, Bengkulu	14.09 Km	85.70%	14.20%
Bengkulu Utara, Bengkulu	N/A	N/A	N/A
Solok Selatan, West Sumatra	15 Km	50%	50%
Pesisir Selatan, West Sumatra	40km	N/A	N/A

* 2+ patrols cut short by law enforcement actions
N/A because only one patrol conducted in this area

New or recent encroachment into the national park or protected buffer zone forests was encountered on one in four of all patrols and poses an increasingly serious threat

Much of the encroachment and illegal forest conversion reported was by local farmers or in-migrants making (illegal) land claims and some of the individuals conducting or organising clearance were civil servants and local businessmen. Poverty was not the primary driving force in forest encroachment and few of the encroachers recorded were 'poor' subsistence farmers. However we also observed encroachment or sponsored encroachment by plantation companies (palm oil) and other commercial interests.

TPCU ranger units will always respond to encroachment where possible as evidenced by arrests, prosecutions and formal warning notices issued however a more co-ordinated and vigorous in-field approach to this issue is required. This would be best secured through a Presidential Instruction to all government agencies as was made regarding illegal logging in 2005.

Law enforcement

A total of 46 individuals were arrested either immediately by TPCU rangers or in joint actions with other agencies during the program period for a range of offences including trafficking or poaching wildlife, illegal logging and encroachment into the national park.

The more minor of these offences were dealt with through formal legal warnings issued by patrol team leaders however 19 cases advanced to court judgments or are currently proceeding through the legal system.

No arrests directly relating to poaching or trading of tiger were made during the project period however an army officer arrested in a law enforcement operation led by PHS rangers in June 2008 received a five months prison sentence and Rp5 million (US\$500) fine at a Military Tribunal in Palembang, South Sumatra in November 2008.

Another significant arrest – although made on illegal logging charges – occurred in February 2009 when a notorious loan shark and illegal logging ‘boss’ who is known to have traded tigers was arrested by a TPCU team after they raided his illegal timber store.

Wesley Haloho was identified as a buyer of Sumatran tiger skins in 2001 and is believed to have been buying tigers, to order, for a government officer now based in Jakarta. In spite of monitoring, team members had never been able to secure valid evidence against this individual who enjoyed high-level ‘protection’ from various agencies possibly related to ensuring that his loan-sharking and illegal logging business could proceed unhindered.

Following his arrest, neither Kerinci police or the district forestry service were willing to process the case through to trial and finally NPA officers conducted the legal investigation prior to submitting documentation to the courts even though the arrest occurred outside of the protected area and so should have been handled by police and/or district forestry service officials. A number of unsuccessful attempts to influence NPA officers and PHS rangers, including cash inducements, were made by individuals claiming to be acting on behalf of the suspect.

In early July just after this report period closed, Wesley Haloho was sentenced to two years in prison. His lawyer is appealing the judgement

In October 2008, an unarmed TPCU patrol unit arrested an armed deer poacher, believed to have also previously hunted tigers, in park-edge forests on the borders of Muko Muko and North Bengkulu districts. The man is related to an influential local government legislator and so the team escorted the arrested man to Bengkulu police headquarters to ensure that local police were not subjected to inappropriate lobbying. This man was subsequently sentenced to a one year prison term under firearms legislation.

Also in October, a TPCU ranger unit in Kerinci district arrested three men on suspicion of poaching deer: the suspects were arrested and taken out of the forest to National Park headquarters where, after legal advice was taken, they were released under formal warnings as, although they were carrying snare ropes, the TPCU could not

prove their connection with a number of active deer snares found in the area where the men were arrested.

In early November 2008 TPCU ranger leader Eko Supriyatno (see picture below) secured information on a taxidermised tiger concealed in the office of a courier company in Jambi city. The TPCU leader investigated and succeeded in gaining access to the company store room and confirmed the report. SPORC Jambi then raided the courier company offices and the evidence was seized. The 'owner' was found to be a senior army officer from neighbouring South Sumatra province who had been promoted and was awaiting a posting to Java



No formal prosecution was launched in this case and KSDA Jambi came under heavy pressure for the stuffed tiger to be returned to the army officer but stood firm. KSDA also advised provincial military commanders that any subsequent, similar cases will be prosecuted.

In early June 2009, a young male Sumatran tiger was released in forests bordering the TKA oil palm plantation and KSNP forests to the north east of the Mt Tujuh massif after frequenting a forest-edge village in Solok Selatan district, West Sumatra.

Just under a week after its release, the tiger moved uphill to the peak of Mt Tujuh and into an area that is not patrolled as it is not normal tiger habitat (very difficult and extreme topography). The GPS radio-collar, provided by ZSL, then began to indicate that Sasa was not moving with only minor (50m variations) in position.

TPCU rangers and a former member of the ZSL Jambi Tiger Project who has experience in tracking radio-collared animals prepared to attend the site with great foreboding, not least because information had been secured advising a group of men, including one man long suspected to be a semi-professional hunter of Sumatran serow, had entered the Mt Tujuh forests from Kerinci some days earlier.

The GPS radio collar signals indicated that Sasa was on a high, narrow ridge just below the peak of Mt Tujuh and bordered, on either side, by precipices and it took the TPCU team two days to find a route up to the site.

Once at the location, the rangers were able to confirm that Sasa was dead and had been 'neck-caught' in a serow snare – one of more than 50 set by two Kerincinese hunters on the narrow ridge trails at the peak of Mt Tujuh.



Mt Tujuh and Lake Tujuh at dusk showing the site where Sasa died in a serow snare less than a week after his release

He had been able to break loose from the snare due to his strength but then bolted downhill and the trailing snare rope caught in a tree and he almost certainly broke his neck. The tiger had been skinned by the poachers (both of whom have been identified) but the rest of the carcass on a ledge below the mountain ridge.

A TPCU ranger, under-cover, secured access, using family and other connections, to the home of the suspect *S* and was able to confirm that the tiger skin was being hidden in the suspect's house while he sought a buyer.

S was extremely anxious and worried that he might have already been detected and advised that if he was unable to sell the skin quickly he would throw it into a nearby swamp. He also advised that the ZSL radio collar mechanism had been smashed with a stone and the collar then hidden under the mossy forest floor near the peak of Mt Tujuh.

An immediate law enforcement operation could not be launched because the suspect's young brother knew the undercover ranger (but not his current job) and where he and his family live. A diversionary action was therefore taken so that the younger brother would be in an area of Kerinci outside of cell phone coverage for some hours while law enforcement was conducted.

Because the planned arrest would be conducted in a village (ie outside KSNP's area of legal jurisdiction) and entry would be required to the suspect's house, support was requested from Kerinci district police while TPCU rangers maintained 'distance surveillance' of the suspect's house

Unfortunately, when the law enforcement team arrived in the suspect's village, a police officer began openly asking the whereabouts of the suspect's house so alerting villagers and the suspect. While police requested permission (which was refused) from the village headman (a member of the suspect's family) to enter and search the poacher's house, *S* fled and remains in hiding to this date. Using unorthodox tactics, the original TPCU investigator subsequently secured the skin of Sasa for evidence in a

subsequent court case and *S* has now been placed on the Kerinci police Wanted list. Investigations by TPCU members continue into his current whereabouts and it is hoped that this poacher will shortly be arrested and brought to justice.

As snare poaching of tigers and deer reduced in regularly patrolled forest areas, so TPCU rangers on patrol or working with KSNP ranger colleagues stepped up actions against encroachment in the national park.

Eleven men were issued with formal legal warnings and expelled from national park forests and their shelters or 'farmhouses' burned down by TPCU patrols in Kerinci and Merangin districts while 19 other encroachers were formally arrested in actions in Kerinci and Rejang Lebong districts and their cases are now going through the legal system.

Tiger and deer snares and the body parts of Sumatran serow and sambar deer were found in the farmhouse of one of these men who had previously been placed on the TPCU data base of suspected tiger poachers. Five men were also arrested by a TPCU patrol unit and received one year gaol sentences on illegal logging charges in Curup, Bengkulu and a sixth man was arrested on encroachment charges by the TPCU team as they made their way out of the forest after confirming Sasa had been killed.

TPCUs found it increasingly difficult to act successfully on 'information received' with professional hunters and dealers adopting new tactics to avoid arrest including use of decoy vehicles or individuals (one man is now known to use his wife to transport tiger skins while he follows in a second vehicle), widespread use of rental vehicles and armed 'body guards' for 'transactions' with unknown/new "buyers."

One major law enforcement operation in Lubuk Linggau, district capital of Musi Rawas, South Sumatra was cancelled at the last minute when it became known that a senior police officer was involved and it was concluded that law enforcement involving local police would compromise not only the action itself but the subsequent safety of rangers and investigators.

The team's field manager and program manager have now made contact with police officers at Indonesian national police headquarters who are members of the ASEAN Wildlife Law Enforcement Network (WLEN) and are working to develop new strategies to deal with this and similar situations where local judiciary or law enforcement personnel may be compromised.

Investigations

Collection of valid data on the identities and activities of individuals believed to threaten Sumatran tiger and their *modus operandi* is a core activity and essential both to direct patrols to areas where tiger are believed at threat or as a precursor to law enforcement.

As in previous years, team investigators found that tigers reportedly offered for sale were being marketed by a trans-provincial network of 'brokers.' These men very often are offering an item for sale that they have not actually seen but which they have heard about from others and which cannot subsequently be proven to exist.

Investigations were further complicated in 2008-9 by individuals in "barang antik" or "curiosity item" networks offering tiger products for sale:

'Barang Antik' brokers are frequently confidence tricksters or at very least, prone to serious terminological inaccuracies and previously were best known for trying to sell non-existent elephant ivory at improbably high prices. Their increasing involvement at the periphery of the tiger trade is very frustrating for TPCU investigators since all reports of tiger crime must be treated seriously, at least until an initial investigation has been made and a decision is reached on whether the report is valid.

Tiger bone prices appear to have increased, slightly, over the course of 2008-9 with a park-wide (district level) average of approximately Rp450,000 (US\$45) per kg. In June one poacher claimed to have secured Rp1.6m per kg for tiger bone in early 2009 from a previously unknown dealer in Jambi; although a Traffic SE Asia investigator colleague has advised that tiger prices in Palembang, provincial capital of South Sumatra and a national and international illegal wildlife trade hub, are considerably higher than those paid at district level, we concluded this claim was unlikely.

No observable movement in prices reportedly paid for tiger skins was observed. Although we continued to receive reports of tiger skins being sold as 5cmx5cm charms for prices ranging from USD6-16 per piece all charm "off cuts" observed in markets were false and had been produced using the skins of (usually) goats but on occasion banded langurs or muntjak. Similarly, we observed no genuine tiger canines for sale in markets.

Human-Wildlife Conflict

▪ Human- wildlife conflict resolution and wildlife emergencies

Program rangers intervened in an average of two or more cases of human-wildlife conflict each month during the program period, the majority relating to low-grade human-tiger conflict but also to incidents involving tapirs, crocodiles, Malay sun bear, clouded leopard and Asiatic golden cat.

The majority of the Human-Tiger conflict incidents reported referred to tigers moving through forest-edge farmland and so alarming farmers and preventing them from working.

Seven cases involved livestock predation – water buffalo (5), cattle (3) and dogs (not enumerated) which are mainly kept by farmers to guard their farmland against crop predation by wild pigs.

Numerous other reports of tigers moving through farmland at forest edge did not require a full intervention by TPCU rangers but monitored at a distance for any indication of escalation or reports of hunters entering the area.

More than 20 noise-maker 'cannons' have now been distributed to key forest-edge villages where there is a history of tiger moving in or through farmland and selected villagers have been trained in use of the cannons and when and how they may be used and when they should request TPCU support.

It is hoped this will reduce pressures on the TPCU teams who frequently have to interrupt patrol plans to drive long distances to provide support and guidance to forest-edge communities on conflict issues.

Reports of 'human-tiger conflict' whether involving livestock predation or just an animal moving through farmland correlated strongly to forest conversion or disturbance in the surrounding area and in February-March 2009 the program provided technical advice and some operational support to colleagues from KSDA Jambi in a very serious case human-tiger conflict which resulted in the death of at least eight people, mainly illegal loggers in eastern Jambi.

This case was almost certainly triggered by large-scale forest clearance – some very legally questionable - by two large companies – the Jambi-based pulp timber paper company WKS (a subsidiary of Riau-based APP which is a part of the Sinar Mas conglomerate) and palm oil company PT Makin Group who appear, on the basis of maps, to have cleared at least 2000 ha of protected state forests for oil palm.

The team did not attend the conflict site because effective conflict mitigation and response requires an in-depth knowledge of both local people and the landscape in which the conflict is occurring and the site was approximately 370Km east of this program's operating area. Additionally colleagues from ZSL's Jambi Tiger Protect have a strong and close relationship with KSDA Jambi and worked with KSDA on this case.

We were however able to advise colleagues from KSDA that a group of 12 men, reportedly from South Sumatra, had been hired by an unidentified commercial interest with instructions to shoot the tiger which was interfering with illegal logging and forest clearance activities. It is highly likely that this tiger was subsequently killed by these hunters given a sudden cessation of the conflict.

In December 2008 villagers from a forest edge community in central Bengkulu approximately 60Km south of KSNP's southern borders reported a 'baby tiger' roaming forest-edge farmland. The main TPCU team continued with an emergency patrol to check reports of tiger snares active while two TPCU rangers joined colleagues from the FFI/KSDA Conservation Response to check the report.



The field team assumed the community report related to a clouded leopard or Asiatic golden cat as villagers in rural Sumatra are prone to describe all *felids* as *macan* or *harimau* (tiger) regardless of the species. Unfortunately in this case the report was correct and the field team found a Sumatran tiger cub in very poor condition. The

animal was taken to Bengkulu for emergency veterinary treatment for acute dehydration and starvation but died early the following morning.

TPCU rangers found prints of a second cub in this area but attempts to track and catch the cub failed and it also strongly suspected to have subsequently died. The team believes the cubs' mother had earlier been poached by deer hunters operating in this area, part of which is in the process of being cleared by a subsidiary of a British-owned company and ROSPO member, Anglo-Eastern Plantations PLC, for an oil palm plantation.

In late May 2009 the team was contacted for support by KSDA West Sumatra to check a report of a tiger entering an isolated forest settlement in Solok Selatan district to the north-east of KSNP.

A TPCU attended, joined by a former ZSL staffer now working on an FFI/DICE program in the adjacent Batang Hari Protected Forest (*Hutan Lindung Batang Hari*). Once on site the team quickly confirmed that a young adult male Sumatran tiger had essentially taken up residence in the settlement which is surrounded by old logging forests and rubber gardens.

The villagers were understandably frightened and the tiger had already killed a number of chickens and dogs and was sleeping behind the village generator and moving in front of the village school in the early evening.

Attempts to frighten the tiger away using noise-makers failed, probably due to the very noisy generators in use in this area for gold mining purposes and, faced with a high likelihood that this incident would end in either the death of the tiger or an attack on a villager, a decision was taken to catch the animal and relocate it.

Before this was conducted, the conflict response team held a meeting with village elders to secure their agreement for this course of action since Arbey is an “adat” village where tigers are highly respected and a problem such as this must be resolved with the full agreement of the community.

The deputy chairman of the Harimaukita Sumatran tiger conservation forum, Dr Wisno, who is a highly respected vet, attended the site and TPCU rangers placed a tiger capture box which succeeded in catching the tiger, a young male, on the second night (see picture, right).

The tiger, who was given the name Sasa, was transported to Bukittinggi Zoo for temporary holding in isolation while ZSL staff and forestry officials worked to secure the the release of a GPS radio collar, donated by



Australia Zoo, from Indonesian customs.

Meanwhile, PHS team members discussed possible release sites with colleagues from the MHS tiger survey teams to cross-reference threat and tiger presence data so that a release site with low threat and ideally no adult resident male (on basis of surveys and camera trapping) could be identified.

This was not an easy issue as relatively few areas in the park could be identified which offered the combination of 4-wheel drive vehicle access, no or very low threat and no resident adult. Additionally, the team was anxious to release this tiger in West Sumatra province as provincial governments are not usually happy to have 'their' tigers – even problem tigers – relocated to other provinces.

After some discussion, TPCU rangers conducted field checks of forests bordering KSNP and the TKA oil palm plantation to the immediate north-east of Mt Tujuh. The plantation's staff have become very supportive and helpful to the PHS team which frequently patrols this area and the plantation agreed to allow its access roads to be used for the release after being assured that this tiger had not attacked people.

Meanwhile colleagues from ZSL and the forestry department worked tirelessly for more than a week to secure the release, from Customs in Jakarta, of a GPS radio collar so that Sasa's movements could be monitored post release.

Once the GPS radio collar was placed, Sasa was released in lowland hill forests bordering KSNP and the TKA palm oil plantation in an area that is rich in prey species and which has been free of poaching threat for almost two years due to frequent TPCU presence.

It had been anticipated that Sasa would move west, south-east or north-west from the release site - all good tiger habitat and believed free of threat.

Unfortunately, for unknown reasons, after moving for some days as



Final preparations for the release of 'Sasa' in forest bordering KSNP and the TKA oil palm plantation

anticipated, the tiger suddenly veered to the south-west, climbing up a very narrow ridge trail from the lowlands to the peak of Mt Tujuh where he was caught and subsequently died in a serow snare placed by a Kerincinese hunter.

A young male Malay tapir was rescued from farmland where it had been caught by villagers and passed to the PHS team and, after treatment for a neck injury, was relocated and released into national park forest across the Merangin river to the south of the Kerinci valley

A young female Malay sunbear, confiscated in late 2007, was released under supervision in September 2008 at the same site with a second, young adult male which immediately moved off and was not seen again and was joined in February 2009 by a second young and very wild male confiscated by Merangin based rangers of KSDA (Unit for Conservation of Natural Resources).

The female was radio-collared and appeared to be doing well but was subsequently found dead. The young Indonesian scientist who was monitoring the young bear had encountered technical problems with the receiver which stated that the bear was moving almost constantly when in fact she had died of unknown causes. The young male moved to the site in February appears to have survived, almost certainly because it was only held in captivity for a few days before confiscation.

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 responding to forest crime.

Tiger records made relate to presence only and while rangers estimated the number of individual present along a patrol route from footmark shape (to ascertain gender) and size, they did not estimate individual numbers of tiger present in an area. However correlation of TPCU results and population estimates with the scientifically rigorous field work of the FFI/ DICE tiger monitoring team shows that TPCU consistently under-estimate the number of individuals in an area.

In mid 2008 a research student under the supervision of Dr Matt Linkie, commenced analyzing eight years of TPCU field and intelligence data to correlate it with data collected since 2004 by the MHS team.

Early results indicate that snare-poaching threat to tigers and deer in patrol areas has indeed reduced with frequency of patrol rather than patrol distance being one key to threat reduction. Interestingly, the level of threat recorded by TPCU patrols is much higher than surveys conducted by the MHS team and clearly indicates how local knowledge and investigations are important to direct patrol units to areas at threat.

In September 2008, taxonomists of the Deer Specialist Group confirmed that a pregnant muntjac hind found and released from a snare by PHS rangers and the FFI team leader in 2002 were of an endemic deer not recorded since the late 1920s.

IUCN taxonomists also concluded that the deer, (see *right*) previously considered a rare sub-species of the red muntjak *Muntiacus muntjak*, should be assigned species status as *Muntiacus montanus* or the Sumatran muntjak.

The animal is smaller than the red muntjak – probably weighing not more than 15-17Kg – and (see *right*) has very distinctive facial markings and very small antlers. At present it is recorded from two mountain peaks in Kerinci and Solok Selatan district and tentatively from two more massifs in Merangin district to the south. Focused surveys will undoubtedly extend its range however this deer is probably restricted to upper hill and montane forests above 1200m in western Sumatra.



Community awareness

The PHS team is committed to maintaining good relations with forest-edge communities and working with forest-edge farmers to involve them in our activities and secure their support for project goals

A total of 17 community rangers and five other staff drawn from 16 villages in nine of the 13 districts around this national park were contracted to the program and able to campaign for tiger and tiger habitat conservation in their villages and communities.

At date of this report, seven young men from forest-edge villages in five districts around the park are competing to win three places available in TPCUs and have agreed that even if not finally selected to join the TPCUs that they will continue to work with the team for tiger conservation in their home communities.

More focused community and institutional awareness activities around KSNP were conducted by local NGO partners, all of whom are also members of the AKAR network which this program helped to establish in 2006 to campaign against threats to the national park.

The team worked most closely with Lembaga Tiga Beradik, a local NGO based in Merangin district which has formed a collaborative forest patrol team (TMP2H) formed from local villagers, district and national park rangers and traditional law (*Adat*) leaders which has a primary focus to combating encroachment and forest conversion.

At date of this report this NGO is spearheading campaigning to prevent more than 80,000 ha of forests in Merangin and Sarolangun districts, including important tiger habitat bordering KSNP from being converted to a pulp timber plantation by a Jambi province subsidiary of Riau-based APP which has a particularly poor environmental record.

More than 40 villages and six sub-district leaders in Merangin district and the head of neighbouring Sarolangun district have now formally rejected the proposed pulp timber plantation proposal.

More than 30 of these villages have proposed that production forests proposed for conversion to pulp timber (acacia) should instead be rezoned as either 'village forest' (*Hutan desa*) or as traditional (*hutan adat*) forests and so prevent future proposals for conversion to plantations.

In Solok Selatan and Dharmasraya districts of West Sumatra, the FFI team leader is drafting proposals for actions to conserve a seriously threatened forest corridor between KSNP and the Hutan Lindung Batang Hari and we hope to work closely with ZSL and Wilmar on this particular issue in 2009-2010.

Capacity raising

No formal training workshops were conducted during the project period however the program provided on-the-job training to four young national park rangers in 2008 one of whom has now been placed on full-time secondment to the team in 2009-2010.

Additionally the team hosted two visits by WWF Riau tiger program and from KSDA South Sumatra, both with the purpose of discussing how to heighten law enforcement against tiger poachers and traffickers.

Five TPCU leaders and both the program administrators received in depth training in GIS input and analysis from our colleagues in the MHS team so allowing them to develop mapping capacity for reporting purposes and we also secured GIS training for a member of a local NGO partner.

Five KSNP rangers acting as TPCU Leaders and three young national park managers were on full or part-time secondment to the program and their experience has significantly strengthened the national park's district and provincial management offices' abilities to respond to threat.

Seven candidates for three places in TPCUs in Jambi and Bengkulu were selected for on-the-job training with the programme with a final decision on candidate selection in December 2009. The unsuccessful candidates will return to their home communities with a strong practical experience of tiger conservation and protection issues, including conflict mitigation.

Stakeholder Co-ordination and Involvement

The PHS team operates as an embedded unit within KSNP and all activities are conducted in co-ordination with the park director or his deputies who have legal responsibility for program activities and, through team leaders and young operations managers, the full involvement of the park.

The program continued to enjoy friendly links with other species conservation programs in Sumatra and overseas and in late 2009 we will be working with ZSL's Jambi Tiger Project to provide field training for founding members of a species protection unit ZSL plans to establish in and around Berbak National Park in Eastern Jambi.

The program took an active role in the Harimaukita Sumatran tiger conservation forum and, with colleagues from Harimaukita, coordinated with the World Bank which is planning a wild tiger conservation initiative (Global Tiger Initiative).

The palm oil plantation sector is now becoming more environmentally responsible and we provided technical advice to the SIPEF foundation which plans to establish a protected forest area bordering KSNP in two areas of Bengkulu province and are discussing species and habitat conservation training for the staff of another plantation company in West Sumatra province. With the help of ZSL staff from the Jambi Tiger project, a relationship has been established with a third plantation company owned by the Wilmar group.

We hope this program can work with ZSL and Wilmar to secure local government and agro-industry consensus regarding conservation of wildlife movement corridors between the national park and neighbouring protected areas and protection of national park borders in two districts of West Sumatra province.

Funding was secured from IUCN Holland for one of our local NGO partners and, with the support of another donor, a member of FFI staff has been seconded for six months to Sumatra to build capacity and technical expertise among the NGO members of the AKAR network around KSNP who are crucial partners both to this program and the national park.

Wildlife rescue and response to wildlife emergencies

Although the program's primary focus is to in situ conservation and protection, a program such as this must always be able to respond to wildlife emergencies or the trade in live endangered carnivores.

The program provided care for and organized the release of three young Malay sunbears and the release, veterinary treatment and release of a young male Malay tapir caught by villagers roaming in farmland.

A more coordinated and focused approach to the practical issues involved in the live wildlife trade is however urgently required in Sumatra.

In our experience, villagers in possession of young felids or bears, are *not* poachers or wildlife criminals but have indeed 'found' the animal while working in the forest or forest-edge farmland.

The team responds where possible by confiscation and counseling – in particular asking villagers to leave young animals where they are as the mother is almost certainly foraging and will soon return.

This response not only prevents the animal from being sold on into the illegal wildlife trade but, perhaps more importantly, in villages where confiscations have been conducted, members of that community do not re-offend.

DJM
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