



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

***Report on Activities conducted in 2008-2009 with
the support of 21st Century Tiger and
Dreamworld Conservation Fund***



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

Activities

Investigations —

More than 80 active investigations into reported wildlife crime – primarily reported poaching or trafficking of Sumatran tiger but also suspected deer and elephant poaching and trafficking (frequently by organized syndicates) were conducted during the project period.

In addition an average of five or more ‘status’ reports were logged each month by TPCU rangers or community supporters – mainly regarding the activities or identities of individuals suspected to be poachers or traders of tiger or other protected wildlife and trends in demand for wildlife, including prices reportedly secured.

In addition to active threats to species, TPCU community members also worked to obtain information on threats to national park and protected buffer zone forests, on occasion going to the forest, undercover, to confirm information received from villagers.

Investigations and information collection were conducted in all four provinces and 11 of the 13 districts bordering Kerinci Seblat and results also used to direct TPCU patrols to areas where tiger were believed at risk. Six of the nine active tiger snares and more than half of the 425 active deer snares destroyed by TPCUs were found on patrols launched on the basis of ‘information received.’

Investigations resulted in the seizure of one Sumatran tiger pelt and a taxidermised tiger belonging to a senior army officer and the arrest of seven deer poachers and 13 illegal loggers or encroachers.

However the team found it difficult to advance tiger-related investigations through to visual confirmation (A.I) of crime which is the final stage before law enforcement.

In a number of cases this was almost certainly because the alleged evidence (tiger skin or other body parts) did not actually exist and investigations in 2009-2010 were complicated by involvement of men from ‘*barang antik*’ or ‘curiosity item’ networks.

Individuals involved in these networks were previously best known to this program for offering non-existent elephant ivory at improbably high prices while cross-checking with supportive local police detectives advises these individuals are often known to the police as confidence tricksters and fraudsters. Their involvement at the periphery of the tiger trade over the period 2008-2009 was both frustrating and time-consuming since all reports of tiger crime must be treated seriously, at least until an initial assessment has been made, even where it is strongly suspected the report is untrue.

During 2009, the program became increasingly concerned over reported increases in prices demanded and allegedly secured, by poachers, for tiger products – in particular tiger bone – and

in July 2009, for the first time since 2004, Jambi team members received a credible report of a dealer facilitating poachers through supplying snare wires.

It is unlikely to be coincidental that six of the nine active tiger snares detected and destroyed during the period September 2008-August 2009 were found during the final three months of the project period. It is too early to state that 2009 saw a significant rise in prices for both tiger skins and tiger bone and increased threat in this area of Sumatra however we are concerned that reports of increased prices may have started to reignite poaching pressure.

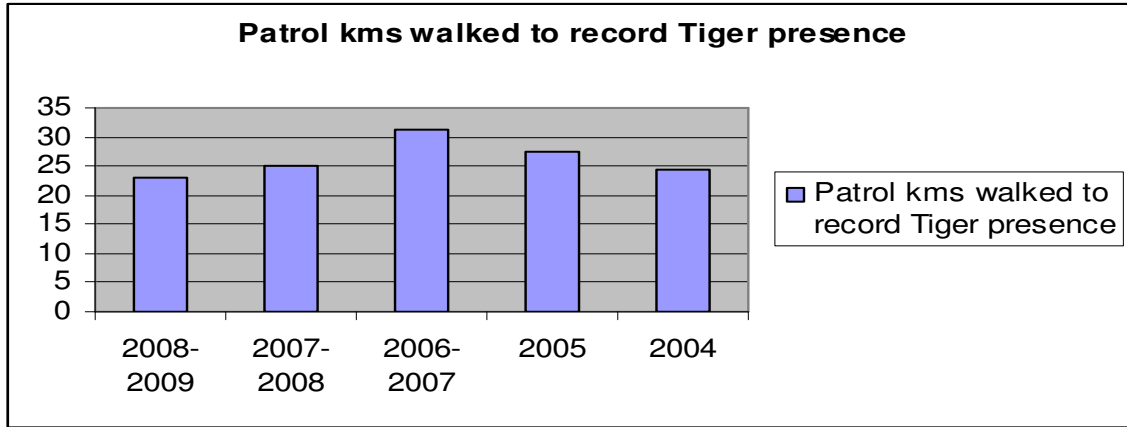
Law enforcement action led by national police headquarters in mid-2008 against a major international pangolin trade network in Palembang, capital of South Sumatra, resulted in a crash in prices and demand through 2008 in this area of central Sumatra. Unfortunately, demand and prices have revived in 2009 with information and seizures made overseas indicating that the majority of traded pangolin are being exported to Vietnam. There is an intimate connection between the trade in tiger bone and pangolins and the resurgence in the black market export trade in pangolins may have some connection to apparent increases in prices for tiger bone recorded in the second two quarters of 2009.

In 2010 the ZSL Jambi Tiger Project proposes to launch a species protection unit loosely modelled on this program; the presence of trained and highly-focused species protection rangers in eastern Jambi with easy access to Jambi city is likely to be of real value in tackling the trade in tigers and other protected species in an area that has become increasingly significant as a illegal wildlife trade hub.

Forest Patrol *in key areas to prevent threats to tiger, prey species and habitat emerging or to remove threat and establish and maintain, where possible a presence in the forest so deterring poachers and others so that tiger populations may stabilize and begin to recover:*

A total of 91 patrols were conducted in nine of the 13 districts and all four provinces around KSNP and covered a total walking distance (by waypoint) of 1,835Kms.

The TPCU teams made a total of 80 separate tiger encounter records during these patrols and recorded a Frequency of Encounter with Sumatran tiger of 1 individual per 23.91 patrol Kms walked, a slight improvement on the encounter rate for the same period 2008-2009 when patrol units, park-wide, recorded a 1 tiger per 25 patrol Kms walked.



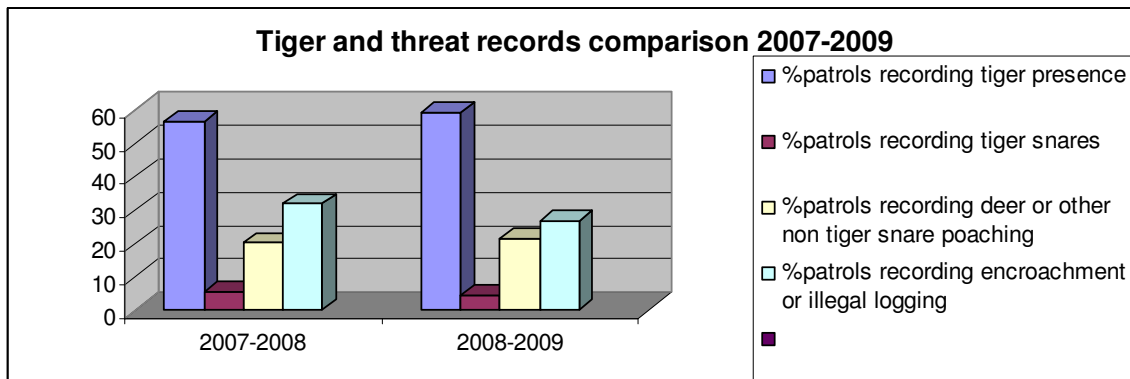
Overall, just under 60 per cent (59.3%) of TPCU patrols recorded current or recent past tiger presence compared with 57 per cent of patrols in the same period 2007-2008. This is the second year in which patrol percentage rates of encounter with tiger have improved, park-wide, and suggests that tiger populations are, indeed, now stabilising.

Over the project period, TPCUs destroyed a total of 9 tiger snares, compared with 20 in the same period of 2007-2008. Six of these tiger snares were found in a period of two months in mid-2009 on new patrol routes or in areas where patrol frequency had been reduced because of lack of threat in recent years.

In the case of the snares – one of which killed a young tiger - found in the Sipurak area of the national park on the Kerinci-Merangin district borders in Jambi province it is now known that the reduced patrol frequency had been observed by a poaching syndicate which moved to exploit the situation. The poachers who placed these snares have been identified and are believed to have included a professional hunter from the Tapan area of West Sumatra province who escaped a PHS tiger law enforcement operation in September 2001.

Patrol frequency in this area had been reduced with the intention of pioneering and developing new patrol routes so that program impact could be extended. The team is now re-evaluating attempts to expand patrol coverage as we must ensure that this does not permit a resurgence of threat in areas made safe through patrol presence and other actions.

A total of 425 deer snares were found and destroyed by TPCUs (595 in the same period 2007-2008) and the death of a young male Sumatran tiger in a deer snare in June 2009 in Kerinci district illustrates the incidental dangers posed to tigers from snare poaching for deer.



Just over 40 per cent of these deer snares were found in the six weeks leading up to the festival of Eid ul Fitri which marks the end of the fasting month of Ramadan. Of the remaining snares,

the overwhelming majority were found on routes not previously patrolled or which had not been patrolled for six months or longer and while the percentage of patrols recording active ungulate snares rose, fractionally, this was primarily due to pioneering a number of new patrol routes or patrols in areas not routinely covered.

Almost half (46 per cent) of the patrols conducted recorded illegal activities occurring in or bordering the national park ranging from illegal fishing (using poison or electricity), song bird trapping and tiger or deer poaching through to illegal goldmining, illegal logging and encroachment with the latter being conducted both by smallholder farmers and plantations.

Use of illegal firearms to hunt deer, primarily in forest-edge farmland at night continued to be reported by informants, in particular in areas bordering two local government or districts or provinces where poachers exploit areas of jurisdiction issues and one armed deer poacher was arrested by a TPCU patrol team (unarmed) and was subsequently sentenced to a custodial term under firearms legislation.

Just over 37 per cent of patrols conducted reported no active or developing threat to species or habitat along the patrol route. 'No observed threat' was most likely to be reported in areas where TPCUs have maintained a routine patrol presence at two or more patrols a year and, in particular, where forest law enforcement has previously been conducted. However the teams noted that even routinely (> a year) patrolled areas may be at risk from opportunist seasonal deer poaching in the weeks leading up to Eid ul Fitri.

A new director of the National Park Authority was appointed in July 2009 and in late August acted on serious issues within the treasury department of the NPA which had resulted in almost no routine operational and routine patrol funds being disbursed to national park rangers in the first eight months of 2009.

We very much hope that, following the park director's swift and decisive action and the subsequent arrest of the NPA financial director on theft and fraudulent accounting charges that 2010 will see National Park provincial and district managers and their rangers supported in implementing a routine field patrol schedule which compliments the more focused and specialist activities conducted by PHS TPCU teams.



*TPCU Leader Johann Simorangkir with deer snares and smoked body parts of a rare serow (*Capricornis sumatrensis*) recovered from a poacher's camp in a previously unpatrolled area of Kerinci district in Jambi while investigating the loss GPS signals from a radio collared tiger who, it subsequently transpired, died in one of the poacher's deer snares*

Law enforcement

A total of 50 individuals were arrested either directly by TPCU rangers on patrols or in joint operations with the national park or police during the project period and seizures included one tiger pelt, one stuffed tiger, numerous snares and six chainsaws.

Minor or relatively minor cases encountered during patrols were dealt with through formal legal warnings issued by TPCU leaders however 19 cases advanced to court judgments or are currently proceeding through the legal system.

No arrests on direct tiger poaching or trafficking charges were made during this period however a Kerinci deer poacher who caught a young male tiger in a deer snare escaped arrest and was placed on the Police Wanted Register and the tiger's pelt secured as evidence and in February 2009, a notorious Kerinci-based loan shark and illegal logging 'boss' known to have traded tigers was arrested by a TPCU team after they raided his illegal timber store and was subsequently sentenced to a two years prison term.

An army officer arrested in possession of a tiger skin and bones in a law enforcement operation led by PHS rangers in June 2008 in Jambi city received a five months prison sentence and Rp5 million (US\$500) fine at a Military Tribunal in Palembang, South Sumatra in November 2008.



A high quality taxidermised tiger (see left), subsequently found to belong to a senior army officer, was seized in a law enforcement operation in Jambi led by the Jambi Unit for Conservation of Natural Resources (KSDA) following an investigation by a TPCU leader who took

part in the operation. No charges were subsequently pressed but KSDA advised local army commanders that any future case of possession of tiger products by army officers would be prosecuted.

Five deer poachers, one armed, were arrested by TPCU patrol teams in the course of three different patrols; the armed man was subsequently prosecuted and received a nine months prison sentence on firearms charges while the other hunters were escorted out of the forest and subsequently released after receiving formal legal cautions.

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 in key tiger habitats.

Eleven men were issued with formal legal warnings and expelled from national park forests by TPCU patrols in Kerinci and Merangin districts while 19 other encroachers were formally arrested in actions in Kerinci and Merangin districts of Jambi and Rejang Lebong district of Bengkulu provinces and their cases are proceeding through the legal system or resulted in custodial sentences of up to one year

Tiger and deer snares and remains of Sumatran serow (*Capricornis sumatrensis*) and sambar deer were found in the farmhouse of one of the encroachers who had previously been placed on the TPCU data base of suspected poachers and he was prosecuted on encroachment charges and received a one year custodial sentence.

Five men were also arrested by a TPCU patrol unit and received sentences ranging between nine months and two years on illegal logging charges in Curup, Bengkulu while a sixth man was arrested by the TPCU team as they made their way out of the forest after confirming the death of a tiger in a serow snare on Mt Tujuh, Kerinci in June 2009. This man's case is now proceeding through the judicial system and it is hoped that a rogue village headman and a second villager who 'sold' national park forest lands to this man will subsequently be prosecuted.

Suspected tiger poachers and traffickers have become ever more cautious in areas where the PHS team has been active and TPCU ranger investigators found it very difficult to validate and advance information through to law enforcement.

Professional hunters and dealers adopted new tactics to avoid arrest including the use of decoy vehicles or motorbikes while transporting suspected wildlife shipments (one man is now known to use his wife to transport tiger skins while he follows in a second vehicle), made widespread use of rental vehicles and, in one case, used armed 'body guards' to monitor a proposed 'transaction' with a new buyer (a TPCU investigator). A planned 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 district police officer was involved and providing 'protection' to the syndicate.

The team's field manager and program manager are in contact with police officers at Indonesian national police headquarters who are members of the ASEAN Wildlife Law Enforcement Network (WLEN) and hope to work jointly to develop new strategies to deal with such situations.

The team's field manager, Dian Risdianto – who finally rejoined the program in February 2009 - and TPCU leaders also provided advice on tactics to local NGO partners campaigning for conservation and protection of the national park and surrounding tiger habitat

Human-tiger (and other wildlife) conflict resolution to protect both the community and Sumatran tiger.

Within two years of establishment the program had learned that the extent of human-wildlife conflict was not only dramatically under-reported in and around Kerinci Seblat National Park (and, indeed, elsewhere in Sumatra) but that unresolved conflict was highly likely to result in the death of a tiger.

To reduce the risk of revenge killings by villagers seeking to protect livelihoods or livestock and to prevent poachers exploiting conflict, the program always seeks to respond while the conflict is at an early stage and *before* livestock predation has occurred and the conflict has escalated.

TPCU rangers intervened in a total of 24 reported cases of human-wildlife conflict during the project period, 19 relating to Sumatran tiger and the remaining cases involving Malay tapir (1), Malay sunbear (2), clouded leopard (1) and Asian wild dog (1) .

As in previous years the team found that villagers were not always accurate in their description of the animal(s) causing concern and a pack of six or more fierce tigers who killed a pig close to a village in the Kerinci valley were found, upon investigation, to be Asian wild dog *Cuon alpinus*.

A second human-tiger conflict incident, also in Kerinci, was complicated by village politics and wild claims which reached local, and subsequently national, press that a villager had dueled, bare-handed, with a tiger for hours in a bid to protect his cattle.

TPCU investigators found evidence that a tiger had indeed passed through the alleged victim's farmland but could find no evidence that it had killed a cow let alone that a villager had engaged in combat with a wild tiger and had suffered no injuries other than a small tear in his nylon jacket. Meanwhile tiger pugmarks in a nearby rice field subsequently shown to the press as evidence to support the veracity of this event were clearly hand-made by an individual not very familiar with tiger foot marks. The local press did not allow facts get in the way of a 'good story' and published sensational and wildly inaccurate stories about this case which caused additional time-consuming problems.

Nine of the reported cases of human-tiger conflict attended by TPCUs involved no livestock predation but were cases of tigers moving in or close to farmland or, in two cases, hunting wild pig in forest-edge farmland. In one of these cases a TPCU stood by for almost a week when it became clear that local poachers were also taking an interest in the case

The team is entirely dependent on receiving timely information on conflict for a swift response and very often villagers still only advise of a problem once predation of livestock has occurred.

Five conflict incidents involving livestock predation were recorded, mainly involving dogs (frequently used to guard farmland from wild pig crop predation) but also a pack pony (tethered at forest edge overnight) and one serious problem which saw a series of five attacks on water buffalo and one attack on a cow over a two-months period in an isolated forest block to the north-east of KSNP in Bungo district of Jambi.

As in previous years, villagers were encouraged to work with TPCUs to resolve human-tiger conflicts, including collaborating to identify the probable cause of the problem and learning how to drive a tiger away from an area by using noise maker cannons.

In December 2008, villagers bordering a forest block to the south of KSNP in Bengkulu province contacted KSDA Bengkulu to advise of a 'small tiger' moving in farmland at forest edge and

causing anxiety to farmers. The report was passed to the FFI/KSDA Conservation Response Unit (CRU) in Seblat who liaised with the TPCUs in Bengkulu.

Reports relating to a 'small tiger' almost invariably are found to be mis-descriptions of clouded leopard or Asiatic golden cat in this incident, however, villagers' reports were correct and the team found a very young and severely emaciated and dehydrated tiger cub.

The cub was secured and taken to Bengkulu the same night for emergency veterinary treatment. Tragically it died in the early hours of the morning. TPCU rangers remained on site, not least because it was believed a second cub was still in the area, but also in an attempt to find out what had happened to the mother.

Footprints of a second cub were found but subsequently lost and no trace of the adult female could be found. The team strongly suspects that the adult female was snared and died in a trap set by deer hunters using access by roads cleared by a British-registered palm oil plantation company and her cubs were too young to survive independently.

In 2007 Jambi provincial government made a proposal – subsequently withdrawn – to drive a road through the Sipurak ecosystem area as a replacement for a road in the extreme south of the Kerinci valley which was and is prone to landslides. An alternative route was subsequently proposed which did not impact on KSNP forests and passed through an area of mainly abandoned farmland and tertiary forest/scrub and construction commenced in early 2008.

This new road, which is now complete but not yet surfaced, has become a regular source of low-grade conflict with not fewer than two adult tigers and one sub-adult frequently moving on and around and along the road causing some alarm to road users and to the road construction crews and necessitating TPCU teams to conduct frequent night patrols to guard against opportunist poachers (of whom not fewer than five are known in this particular sub-district) and provide advice to road crews and farmers not reactivating farmland previously abandoned due to distance.

Additionally, the team provided technical advice and made a one-off grant for operational support to our colleagues from KSDA Jambi as they sought to respond to a series of human-tiger conflict incidents in one area of eastern Jambi which resulted in the death of eight people (all involved in illegal logging). The conflict was almost certainly a consequence of massive habitat loss, as a result of forest clearance for a pulp timber plantation by WKS, a subsidiary of the Sinar Mas-owned company Asia Pulp and Paper and nearby, legally questionable clearance of 2000ha of lowland forest lands for oil palm by PT Makin Group. We believe the tiger responsible was finally killed by a syndicate of professional poachers from the Lampung-South Sumatra borders who were facilitated by individual(s) involved in the illegal logging active in this area.

Sasa: conflict, rescue, relocation, tragedy

Until 2009, swift interventions to resolve and mitigate conflict have meant that this program has never had to seriously attempt to catch and relocate a 'problem' tiger although other species – primarily Malay sun bear - have been caught and relocated after mitigation measures failed.

In late May 2009 the program was contacted for help by KSDA West Sumatra after a Sumatran tiger was reported to be moving in a forest enclave village bordering the Batang Hari Protected Forest in Solok Selatan district, West Sumatra province approximately 70km north-east of KSNP.

A TPCU team immediately attended the site and confirmed that a tiger was indeed essentially living in the village, sleeping under villagers' houses, moving quite openly around the village and so causing understandable anxiety to the village.

No attacks on people had occurred but one or more village dogs had already been predated and when noisemakers failed to persuade the animal to move back into the forest, the TPCU recommended that this tiger be urgently caught and relocated for its own safety and that of villagers.

Colleagues from KSDA West Sumatra, a wildlife vet from Bukitinggi Zoo who is also the deputy chairman of the Harimaukita Sumatran Tiger Conservation Forum and members of the FFI/DICE Batang Hari Protected Forest Sumatran tiger survey team joined TPCU rangers for a village meeting where the community gave its consent for the tiger to be caught and relocated and a capture box was placed and baited with live prey.

A capture box malfunction on the first night meant the tiger was not caught but the following night, once this technical issue had been resolved, a young male Sumatran tiger in good physical condition was caught.

The tiger, named 'Sasa' by the joint mitigation and rescue team, was sedated, making use of one of the blowpipes previously donated by another donor, and then carried across the Batang Hari river by dug-out canoe (See *photograph below*) to a waiting vehicle for transport to temporary holding at Bukitinggi Zoo.



While 'Sasa' was held, in isolation, at Bukitinggi zoo, two TPCU teams launched field surveys to confirm suitable sites for his relocation while our colleagues from the ZSL Jambi Tiger project worked with PHKA officers in Jakarta to secure the release from Customs of a GPS radio collar donated to ZSL by Australia Zoo.

The survey teams worked under the slight constraint that the tiger needed to be released in West Sumatra province and, if possible, within Solok Selatan district since a tiger relocated from West Sumatra to Jambi province in 2004 led to complaints by West Sumatra province politicians.

The team also had serious difficulties in identifying a safe, accessible area of forest for the release that was not already occupied by a resident adult, not entirely surprising given that results of park-wide surveys by the FFI/DICE tiger monitoring team show that more than 75 per cent of

the 17kmx17km cells surveyed in and around KSNP are occupied by tigers, the highest known tiger occupancy level of any national park in Sumatra

Just under two weeks later the GPS radio collar was finally released by Customs and Sasa was transported to a release site bordering KSNP forests on the Jambi-West Sumatra provincial borders which had had no recorded poaching threat for two years and which offered four-wheel vehicle access. The site (see *photograph below*) also offered the benefit of being bordered by a large and now supportive palm oil plantation (PT TKA) which, because tigers will rarely if ever willingly move in/through oil palm, meant that there was minimal risk of Sasa moving into village farmlands again.

The PHS team requested a press black-out on the relocation and no public announcement of the relocation as experience advised this would have led to potential problems, including poachers seeking to exploit information on the whereabouts of a tiger.

Sasa was released without problems and for the first three days moved, as hoped, in KSNP forests in areas of known low threat although we were not happy that he was moving in a north-westerly direction towards an area where encroachment has occurred and where was already a known good tiger density.



Possibly because he met a/the resident male, Sasa then suddenly changed direction and moved southwards, climbing a high ridge connecting the lowland forests of the Ulu Jujan and the Batang Ganah rivers area to Mt Tujuh. This took him directly into potentially great danger as the summit ridges of Mt Tujuh (2700m asl) are not patrolled by the TPCU teams as they are not prime tiger habitat but do fall within an area where deer poachers were suspected to often be active .

The program's worst fears were soon to be realised as the GPS radio collar advised that Sasa was stationary on a high, narrow ridge trail above Lake Gunung Tujuh at about 2400m asl and checks with local informants advised that five men, including one known deer poacher, had recently entered the area, allegedly to go fishing on the lake.

A radio collar detector was borrowed from ZSL so that an investigation patrol could safely seek to establish what had happened. At this point it was still hoped that Sasa had made a kill and was staying close by. However on the day the investigation team left, the GPS radio collar ceased to send its position and, upon arrival at Lake Tujuh (1905m), the team found there was also no supplementary radio signal from the collar.



Picture: Lake Tujuh at dusk, the location where Sasa died is behind the peak on the left of this photograph and proved extremely difficult to reach.

It took almost two days to find a route up the precipices and vertiginous slopes from Lake Tujuh to the ridge trail where the last location signals had been transmitted, once there, it was confirmed that Sasa had been neck-caught in one of almost 50 snares set for serow, a forest antelope that favours very steep areas.



Right:- Searching for a radio signal from Sasa's collar on the cliffs above Lake Tujuh

Once caught, Sasa had panicked and fled, breaking the snare anchor. However the tiger then ran or slipped down a nearby precipice dragging the snare rope behind him which snagged on a tree and examination of the carcass subsequently suggests he died of a broken neck.

The two hunters who had placed the snares then found the dead tiger and skinned him, leaving the carcass on site to be found by the TPCU investigation team.

TPCU investigators working under cover rapidly confirmed the identity of the two deer poachers who had placed the snares (the remaining three had been fishing on the lake) and then confirmed where Sasa's skin was being hidden and by whom.

To protect the identity of the prime investigator who gained access to the suspect through a family connection, the poacher's brother was persuaded to join two under-cover TPCU rangers in an area to the south of Kerinci where no cell phone signal is active and police were then requested to join the PHS team in arresting the poacher while his brother was out of contact and the two could not communicate.

Unfortunately, upon arrival in the poacher's village, a police officer on the joint police-PHS team identified himself and openly demanded to know where the suspect's house was (the PHS team clearly already knew both the suspect's house and where the tiger skin was being concealed). This unfortunate action tipped off the suspect and his family (who included the village headman) and access to the suspect's house was denied by the village headman and, during subsequent negotiations to secure entry, the suspect escaped.

PHS team members subsequently secured the tiger skin for evidence in a subsequent prosecution through unorthodox means and retrieved Sasa's bones from Mt Tujuh and *C* has been placed on the district police Wanted List.

This hideous event further strengthens our conviction that, wherever possible, conflict must be mitigated before it escalates and that capture and relocation of a wild tiger must always be a last-choice option. In this particular incident, the PHS team subsequently learned that Sasa had been moving in farmland close to the village for at least two weeks before he started to actually

move in the village itself. Unfortunately no report was made by the village and so actions that would have allowed for him to be driven him back into the safety of Batang Hari Protect Forest were not taken.

Training – to increase the capacity of forest rangers and others to detect and respond effectively to wildlife crime, human-tiger conflict and wildlife emergencies:

No formal training events such as workshops were conducted during the project period however five KSNP rangers joined the TPCU teams for periods of between one and three months for in-depth practical training in species protection and conservation field actions. One of these rangers, Boy Ronnald was subsequently (May 2009) posted to the PHS team on a full-time basis at the request of the program.

Three community ranger posts became vacant during the project period with long-serving rangers resigning for health or personal, family-related reasons and seven would-be TPCU community rangers were offered short-term on-the-job positions as trainees to compete for these positions. All the candidates were made aware that not all could be successful and all accepted that they would be expected, successful or not, to support PHS and the national park in tiger conservation activities in their home communities.

TPCU leaders and the program's Jambi and Bengkulu administrators received GIS and data base training which has allowed them to directly input patrol results into the National Park's GIS system and to develop GIS maps of tiger presence and threat. The program also secured GIS and data base training for a key local NGO partner from Conservation International Indonesia program

As in the past, the program regularly invited enthusiastic and fit young national park rangers to join TPCU patrols to cement links between the tiger team and national park rangers and to build national park ranger patrol and conflict management capacity

The program also received two visits from WWF Riau's tiger program, primarily to discuss approaches to securing effective wildlife law enforcement whether as a result of investigations or on patrols and a visit from KSDA South Sumatra who requested technical advice on combating wildlife trade and developing more effective species protection in the field.

The program also drafted plans, with ZSL, for actions to reduce wildlife crime, mitigate conflict and respond to threats to tiger habitat in eastern Jambi, primarily around Berbak National Park through establishing a species protection unit loosely modelled on the PHS Kerinci Seblat team.

ZSL has now secured funding for a core team (founded initially on rangers from Berbak NP and KSDA Jambi) and the PHS team will provide practical training to the core unit members as well as conducting undercover threat assessments in Jambi city and Berbak at the end of 2009 and in early 2010.

If this unit proceeds as planned, it will develop capacity for actions against not only tiger poaching in and around Berbak NP but as, if not more important, actions in Jambi city itself where at least four major traders in Sumatran tiger have been identified to date by PHS investigators but where distance from KSNP means it is difficult for this team to respond effectively because investigations to secure subsequent law enforcement action are time-consuming and require the ranger investigator to be able to respond, very swiftly to information secured and distance to Jambi city from the program's core operating area is +475Km.

Networking –

The program enjoys close and friendly relations with other tiger conservation projects in Sumatra and overseas and the team leader and field manager are both members of the Harimaukita Sumatran tiger conservation forum which also provides expert field practitioner advice to the Department of Forestry.

PHS staffers provided advice and guidance to a World Bank Global Tiger Initiative consultant visiting Jambi and West Sumatra to develop planning for implementation of the 2007-2017 Sumatran Tiger Conservation Strategy & Action plan at local and provincial government level.

In addition, we worked closely with three key local NGOs around KSNP on tiger habitat protection and conservation issues, in particular, providing field data to support campaigning against proposals by a subsidiary of pulp timber conglomerate APP to convert more than 100,000ha of key tiger habitat in the national park buffer zone in Merangin district, Jambi to pulp timber. At date of this report, a total of 82 villages have rejected the proposal by Sinar Mas as a result of campaigning and advocacy by our local NGO partner (who have the full support of local government) and 32 of these villages have now requested support for development of Community Protected Forests to prevent further assaults on some of the last fine forests in Jambi outside of the protected areas network.

The FFI team leader also provided technical support and input to plans by the Belgian plantation company SIPEF to establish a privately-managed conservation area to protect threatened national park buffer zone forests in northern Bengkulu province.

The program manager also provided local input and advice to oil palm conglomerate Wilmar regarding a concession granted to a Wilmar subsidiary close to KSNP in Jambi province with Wilmar keen to work with FFI to establish community protected areas in HCVF forest around the proposed concession. The program manager also met with ZSL and Wilmar staff at another Wilmar-owned plantation bordering KSNP, this time in Solok Selatan district of West Sumatra province, where Wilmar advise they would like to work with FFI and ZSL to develop and conserve tiger movement corridors in and bordering their estate.

Batang Hari Protected Forest (Hutan Lindung Batang Hari)

Approximately 30 Sumatran tiger have now been recorded by the FFI/DICE tiger survey team as resident in and bordering the Batang Hari Protected Forest which lies to the immediate north-east of KSNP and covers parts of four districts of West Sumatra province.

This protected watershed forest is directly linked to Kerinci Seblat National park by a 17x28kms, protected lowland hill forest corridor in Solok Selatan district and, to the north and north-west, to other forest blocks.

However, numerous serious threats to the BHPF have been identified by the FFI/DICE survey teams and local NGOs, not least illegal mining and an otherwise well-run logging company operating far outside its concession area and deep within the protected forest. As, if not more dangerous, the forest corridor connecting Kerinci Seblat National Park to the BHPF is under serious threat due to illegal forest conversion, including by a large palm oil plantation company.

During 2009, PHS members made three visits to this area to assess forest condition and threats and to identify, on the basis of past knowledge (the FFI team leader worked in the

area between 1995-6) the extent of illegal encroachment into the national park by PT Sumatera Jaya Agro Lestari (PT SJAL), a subsidiary of Padang city-based PT Incasi Raya Group and smallholder farmers.

The program manager and a TPCU also conducted a survey patrol to assess tiger presence and threats in the corridor and recorded not fewer than 3 adult tigers and one cub in the course of a four-day survey, two moving in very degraded forest lands which would not normally be considered tiger habitat if assessed purely on habitat. The program is now working with local NGO partners to encourage and support the national park in taking action against PT SJAL and has drafted plans for collaborative actions, with sympathetic local villages and other stakeholders to secure a comprehensive solution to threats to tiger and tiger habitat in this area with the immediate priority being to secure the corridor between HLBH and KSNP.