

# **Pelestarian Harimau Sumatera Kerinci-Seblat**

## **Kerinci Seblat Sumatran Tiger Protection & Conservation**

**Report on Activities conducted in 2013 with  
the support of 21<sup>st</sup> Century Tiger and  
Dreamworld Conservation Funding  
by**

**Fauna & Flora International**



**FAUNA & FLORA**  
INTERNATIONAL

## Executive Summary

Six Tiger Protection & Conservation Units (TPCU) were active and fully-operational during the 2013 project period operating out of basecamps to the west and east of Kerinci Seblat National Park under formal letters of assignment by the director of the national park authority.

Units conducted a total of 113 routine and non-routine field patrols covering a walking distance of more than 1720Km and made no fewer than 108 tiger presence records using the SMART patrol reporting method. Over the year, 60% of field patrols recorded tigers present, the highest level since 2008.

However, while tiger records on forest patrols were stable in priority patrol focus areas, TPCU patrols recorded an unprecedented increase in direct and highly focused poaching threat to wild tigers from organised poaching and trade syndicates.

Patrol units detected and destroyed a record 63 active tiger snares – 87% of which were found on intelligence-driven patrols and a further 53 recently (one month or less) de-activated tiger snare placements, the majority also found on the basis of information secured.

Examination of these latter sites confirmed that no fewer than 10 tigers were killed in or adjoining the national park in 2013 by organised poaching syndicates using multiple snare placements and operating under the 'Poach to Order' method favoured by the illegal wildlife trade syndicates who now dominate serious wildlife crime in this area of central Sumatra.

However active threat to tigers recorded on patrols in and adjoining national park forests in the south-west of the national park reduced very sharply in the final five months of the year with only one patrol recording active snares for tiger and no 'recently active' snares found.

It is highly likely this fall in threat directly relates to a law enforcement action conducted in late July 2013 which resulted in the arrest and successful prosecution of five men operating across two or more districts of the national park in Bengkulu province.

Patrol and investigation records clearly showed that threat to tigers in 2013 was from a small number of organised poaching gangs working in conjunction with wildlife trade syndicates and that 'opportunistic' poaching of tiger by local hunters was very uncommon.

More than 90 specific investigations were conducted during the project period to identify threat and source of threat to tigers and biodiversity in general, in and adjoining the national park and, where crime was suspected to have occurred, to secure evidence for subsequent law enforcement.

Additionally TPCU and other programme personnel maintained a strong focus to strengthen community information networks and to secure information on suspected active (poaching) threats to tigers and tiger prey species for a field patrol response.

Program personnel also continued working to 'map' the individual components of organised illegal wildlife trade syndicates operating at a trans-border (sub-national) level and identify routes and methods used by these syndicates so that an effective, coordinated, inter-institutional response may be developed to the now highly 'organised' nature of serious wildlife crime.

Three tiger-related law enforcement actions were successfully conducted by program personnel in coordination with other government agencies during the project period. This resulted in seven men being prosecuted and sentenced to custodial terms with one case still proceeding through the legal process at this date.

A fourth, very significant tiger law enforcement operation resulting in the arrest of a local level dealer and broker of tiger and other species long known to this programme was

successfully conducted in January 2014 as a result of investigations conducted by a TPCU ranger, working undercover, in 2013.

A further 11 suspects were arrested in two species-related law enforcement actions by TPCU patrol units but these cases did not proceed through the legal process to a court judgment.

TPCU personnel worked to manage and mitigate a total of 16 separate human-tiger conflict incidents over the project period and due to the exceptional levels of threat recorded in 2013, even very minor 'victimless' conflicts were treated as potentially serious in some areas requiring the rolling attendance of TPCUs and patrols in surrounding forest to ensure the situation was not exploited by poachers.

One incident, which resulted in the death of a young male tiger which was shot by a Kubu or Suku Anak Dalam tribal hunter in farmland east of the national park claimed the animal had posed a direct threat to him, was formally logged as human-tiger conflict, however it is more likely to have been an opportunist poaching incident.

Team personnel also responded to three tiger emergencies, two relating to tigers accidentally trapped in wild pig snares in farmland (both of which released themselves unharmed) and a third incident involving a five month-old cub poisoned with paraquat. This was carried out by an unknown individual in farmland adjacent to a road built in 2009, through what is now known to be a key tiger corridor in the south of the Kerinci valley. The cub subsequently died in the Taman Safari Indonesia animal hospital to where she had been evacuated. A fourth tiger died after being caught in a snare set by a farmer to protect his crops from wild pig predation.

Actions to pilot practical implementation of the Forestry Ministry's P48 multi-stakeholder Human-Tiger Conflict Mitigation Protocol commenced in September 2013 with support from another programme donor in three districts to the south-west of the national park.

Meanwhile the program is working actively with the National Park Authority to develop planning for a technical MoU with five central Sumatra provincial police authorities to establish an effective operational framework to address trans-border illegal wildlife trade. The long and close working relationship between FFI Kerinci and Kerinci Seblat National Park Authority was further cemented by agreement of a Memorandum of Understanding between the park and the FFI Kerinci team.

Nine members of the PHS KS team have taken the Indonesia Civil Service Test in November 2013 and are now awaiting the results. Successful candidates will be formally inducted into the National Park service in early-mid 2014 so further institutionalising expertise in tiger protection and conservation in Kerinci Seblat National Park.

### **Activities conducted in 2013 and results**

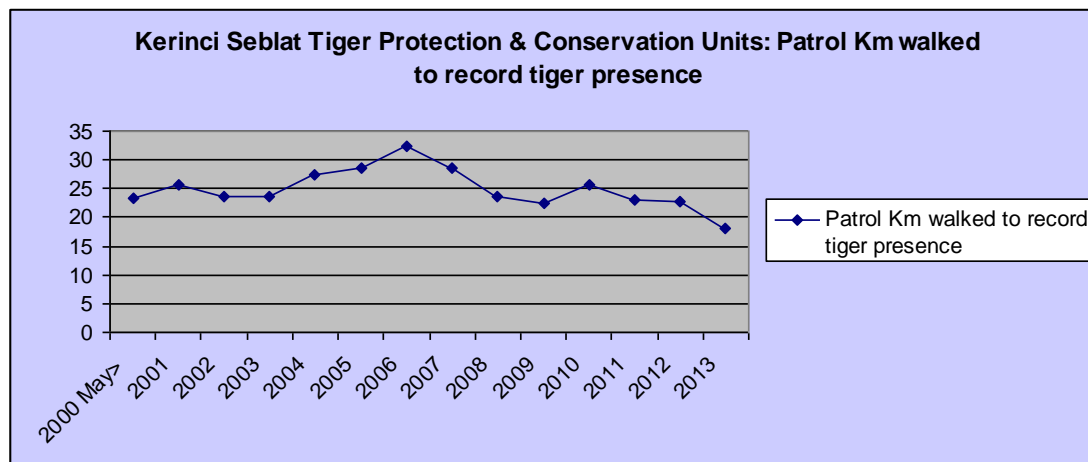
**Forest patrols** : The six Tiger Protection & Conservation Units now active conducted a total of 113 field patrols in the 2013 project period covering a walking distance of more than 1722Km (by GPS waypoint) in the national park and buffer zone forests in seven districts and three of the four provinces which overlay the protected area.

Patrols were more highly focused than is the historical norm for this program due to the high levels of direct threat to tigers detected in certain areas and so 'survey' patrols or patrols to lower priority tiger habitat were less frequently conducted.

Patrols recorded the presence of not fewer than 108 Sumatran tigers and 60% of field patrols reported tigers present on the patrol route.

Meanwhile frequency of encounter with tiger rose, for the first time, to about 1 tiger per 20 patrol-kilometers-walked so maintaining the upward trend first recorded in 2007.

**Chart 1: Frequency of encounter with tigers by TPCU patrols**



The increase in numbers of tigers recorded on patrols in 2013 is primarily a consequence of establishing a sixth TPCU, which became active from January 2013 with support from another programme donor. This allowed the Bengkulu-based teams to extend and strengthen patrol regimes in key tiger habitat in national park and adjacent forest in northern Mukomuko district which had previously received a lower patrol focus due to capacity issues.

Increased frequency of encounter based on patrol reports is also influenced by a heavy focus to important tiger habitat on the Kerinci-Merangin district borders in Jambi province where a poaching syndicate caused serious problems.

In early 2011, this programme began to secure reports of sudden and huge increases in prices allegedly paid or offered, for tiger body parts by dealers from, or with links to, a provincial capital and its satellite cities in eastern Sumatra which had previously been very rarely recorded as a source of threat to wild tigers in this landscape.

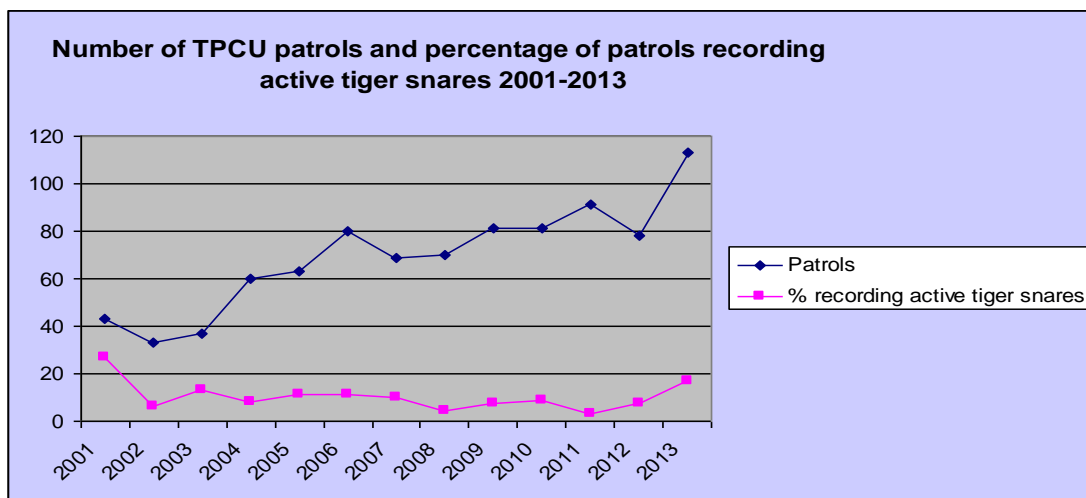
Discussion with other programmes in Sumatra and in certain countries on the Asian mainland subsequently advised that similar aberrant price movements and changes in methodology were occurring in some areas and disturbing similarities in the timing of these changes were observed.

We warned that the reported increases in prices had the potential to significantly change the Risk (of arrest)-Reward Ratio as calculated by poachers and local traders and so result in increased poaching threat to tigers.

However over the course of 2011, 'only' 11 active tiger snares (eight found on one information-driven patrol) were found and destroyed by TPCU patrols and only three (4%) of forest patrols over the course of the year recorded active poaching threat.

Although 2011 showed no increase in threat detected on patrols and an unusually low level of information regarding tiger crime was secured by team investigators, the programme began to put in place measures to anticipate increased demand-driven threat to tigers due to higher prices allegedly offered and changes in structure of wildlife trade syndicates in this area of Sumatra and to further strengthen information collection by TPCU personnel on suspected active threat for a patrol response.

**Chart 2: TPCU patrols conducted and percentage of patrols recording active threat to tigers 2001-13**



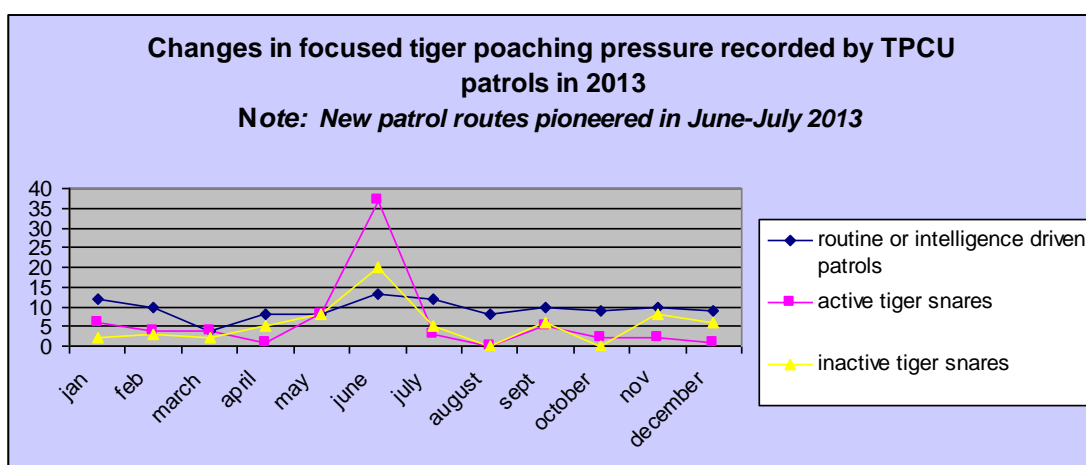
The predicted increase in threat to tigers began to clearly emerge in mid-2012, a year in which TPCUs detected and destroyed a total of 21 active tiger snares – the highest number found since 2006 and with 7% of TPCU patrols reporting active threat, the great majority in the final five months of that year. Of these snares, 15 were found on just two (intelligence-driven) patrols and demonstrated a previously highly unusual intensity of effort by tiger poachers, who, historically, were likely to place a maximum of two-three snares in an area.

Unfortunately, the rise in threat due to trader-driven demand for tiger body parts escalated still further in 2013 (see Chart 3 below) with 19 (16.8%) of 113 patrols reporting active threat to tiger and an unprecedented 63 active tiger snares destroyed.

Tiger poaching also demonstrated a continued rise in intensity with almost half (46%) of all active snares destroyed found on just four (intelligence driven) patrols.

Increased intensity of poaching pressure is believed due to traders funding or facilitating key poaching gangs' activities as well as supplying costly snare cables. The materials required for one snare placement are estimated to cost approximately US\$30 so that a multiple snare placement represents a considerable financial output unlikely to be borne by poachers alone when setting numerous snares.

**Chart 3: Patrols and threat to tiger recorded 2013**



Patrol teams also found evidence of an additional 55 recently (< 6 weeks) deactivated tiger snare placements – many on patrol routes where active snares were also destroyed – and from site examination, concluded that no fewer than 10 tigers were killed in these snares over the course of 2013.

Chart 2 (see above) also demonstrates marked, albeit much smaller, peaks in tiger poaching pressure recorded on patrols in 2001 when the team was first becoming established and 2005-2006, when new TPCUs were established and commenced working in areas of the national park where no focused field patrol regime had previously been conducted.

Therefore, the increased field patrol capacity available in 2013, was also a contributing factor to the high level of direct threat recorded and demonstrates the imperative for a focused and practical field protection regime for so long as demand/trade-driven poaching is an active threat to tiger and other species conservation.

Analysis of field patrol records for 2013 also demonstrates (see Chart 3) peaks and troughs in active threat to tiger with threat peaking in June 2013 when no fewer than 37 (58%) of the 63 active snares detected and destroyed over the year 2013 were found.

Smaller peaks in recorded tiger poaching pressure were observed in January and February and July 2013 and, in one area in the east of the national park in September and October 2013.

It is highly probable that these surges in snare placement records relate, in part, to hunters and their local 'brokers' seeking to fulfil an 'Order' placed by the organised wildlife trade syndicates now driving tiger crime in and adjoining this national park.

Direct poaching threat to tigers in and adjoining the national park reduced very sharply in the south-west of the national park following a law enforcement action in late July 2013 which resulted in the arrest of five men. Subsequent patrol records show that in the final five months of 2013 only one TPCU patrol reported tiger snares (3) active in this area of the national park and no 'recently active' snares were recorded.

While frequency of encounter with tiger was generally stable in routine or intensive patrol focus areas in 2013 and initial camera trapping results in the Sipurak area show tiger populations appear stable, camera trapping by the national park authority in the far north-west of the national park in West Sumatra province between August-September 2013 secured no images of tigers.

This may in part be a consequence of a decision to camera trap in an area notable for much very steep terrain - a habitat type not greatly favoured by tigers – and choice of camera trap placement since tiger pug marks were recorded on one transect. However, given the very serious level of trader-driven poaching threat recorded in 2013, it is highly



likely that tiger numbers in Kerinci Seblat and the wider tiger landscape have reduced since 2011 in areas where there is no focused field protection presence.

A total of 694 active deer snares were found and destroyed by patrol units over the course of 2013, the highest figure since 2006. Of these, 87% (603) were disarmed on information-driven patrols in the six weeks leading up

to the festival of Hari Raya Idul Fitri which marks the end of the fasting month of Ramadan, a period when deer poaching traditionally spikes in some areas as hunters seek to exploit seasonal consumer demand for meat.

One intelligence driven patrol during the fasting month of Ramadan resulted in the detection of a total of 290 active snares placed by two hunters from the Siulak area in the north of the Kerinci valley while expansion of patrols into previously rarely-patrolled areas of the national park in the north of Mukomuko district resulted in destruction of a further 106 deer snares during the Ramadan period.

Over the year as a whole, *excluding* the Ramadan period, TPCU patrol records show deer poaching was primarily opportunistic and small-scale (2-5 snares) in nature. No long snare lines were recorded as was common in the early days of the programme and with only 91 active deer snares recorded and destroyed, the majority of which were on new patrol routes or in areas receiving a low (<2 patrols per year) patrol focus.

Evidence of poaching of wild birds for the lucrative domestic song bird market was recorded on more than 25% of patrols and this activity poses a serious threat to biodiversity in and adjoining the national park while there is strong narrative evidence that bird poachers in some areas are acting as the 'eyes and ears' of hunters and advising them where tigers are present. Where bird hunters were encountered in the forest, they received counselling and formal warning letters and were requested to immediately leave the area and any birds already caught released if the location was within the national park where patrol units have legal jurisdiction.

Clear evidence (body parts) of poaching of helmeted hornbills (*Buceros vigil/Rhinoplax vigil*) for export for ivory carving via a large city in eastern Sumatra was found on only two patrols but this reflects the methodology (shooting with high-powered airguns) and not the actual level of pressure on this iconic (CITES I/IUCN Near Threatened) bird species in Sumatra that has emerged since late 2012.

Patrol results were recorded using the SMART reporting method however software previously secured proved unusable and the latest SMART software to formally activate the team's SMART data base was only secured at the end of 2013. A training workshop was finally held in early 2014 led by the SSL Jambi team leader – a KSNP officer on secondment to that programme - to train key PHS personnel in SMART data input and management.

**Picture (below):** Forests bordering the national park on the Kerinci-Merangin district borders in Jambi: Snare poaching is indiscriminate and inhumane. Animals frequently die horribly or are left maimed if they do survive or escape as witness this photograph below, the foot of a Malay sunbear which the animal *pulled off* in its frantic efforts to escape a snare set for a tiger found on an intelligence-driven patrol in late 2013.

## **Investigations and information collection**

Investigations and information collection on suspected threat to tiger and other protected species form a core operating platform for a range of programme activities, supporting field protection patrol and local conflict mitigation strategies and forming the key precursor to law enforcement where appropriate.

More than 90 separate investigations into suspected tiger and related wildlife crime were conducted in nine districts of the four provinces bordering the national park excluding semi-routine 'monitoring' of individuals believed to pose an active threat to tiger in and adjoining this national park.

Some of these active investigations and suspect monitoring activities were continued from previous years and have not yet been closed to date of this report.

Team investigators were also expected to secure information on trends in the illegal wildlife black market, including prices allegedly secured or offered; changes in demand for species and the individual source of threat whether at poacher or trader level.

Collection of information on suspected tiger crime, trade routes and to identify individuals implicated at both trader and poacher level was generally conducted covertly by key programme personnel who did not disclose their identities or purpose.

Additionally all programme personnel were expected to collect information, openly or covertly, on suspected active (poaching) threat for a patrol response as required and this activity resulted in the subsequent detection of more than 50 active tiger snares by TPCU patrols.

While some informants were 'open' supporters of this team from forest-edge communities, much valuable information for a patrol response was collected covertly or semi-covertly from poachers or their associates.

Whether to secure information on trade incidents or poaching, experience advises that the most valuable information is frequently secured from wildlife criminals and their associates and not from law-abiding members of the community.

Investigations confirmed that the primary source of trade threat to wild tigers and a range of other protected species, most notably Malay pangolin and helmeted hornbills, in the central and northern area of KSNP and the surrounding Kerinci Tiger Landscape was primarily from traders operating from certain cities and seaports in eastern Sumatra in a province that does not adjoin Kerinci Seblat National Park.

These syndicate leaders were found to be using a network of local wildlife traders and hunters based in park-edge district and sub-district capitals who acted as a poacher-dealer interface and to distribute equipment, including snare cables and in at least one case, firearms.

These organised 'sub-contractor' networks were most active in areas where there is a history of involvement in the gaharu trade – a non-timber forest product in high demand for perfume and incense manufacture - whether at collector or trader level while hunters travelled very widely to fulfil 'orders' placed.

Investigations advised that dealers based out of Palembang city, capital of South Sumatra province, a city long known as a domestic and export wildlife trade hub and its supplier hubs, continued to form the main source of trade-driven threat to tigers and other protected species in the southern area of the national park.

Certain individuals operating out of Jambi City and nearby towns were also identified as suspected to pose a substantial threat to tigers in both the Kerinci landscape and in national parks in the east of the province. The program is now working closely with colleagues from the ZSL Jambi Tiger Project to investigate and secure evidence against these individuals.



In early 2013 PHS team investigators began to record reports of a surge in trade-driven threat against the iconic Helmeted hornbill (*Buceros/Rhinoplax vigil*) driven by trader demand from Pekanbaru in Riau province. Investigations found a close correlation between trade in hornbill casques and tiger body parts and the gaharu trade at district level, in particular in one notorious poaching and trade hotspot to the west of the national park in West Sumatra province.

This close connection between the illegal trade in tigers and gaharu is a relatively new trend (since 2011-12), however was previously recorded as a key common denominator in the poaching and trade in Sumatran rhinoceros in the 1990s.

Investigations advised that poaching and trade in helmeted hornbills was highly co-ordinated and trader-managed with prices paid per 100g, almost identical to those in West Kalimantan (Indonesian Borneo). An individual from a district on the West Sumatra-Riau border, identified as controlling and directing one or more groups of hornbill hunters who travelled across two or more provinces of Sumatra (see *Law Enforcement*) and who may now be also decimating hornbill populations in North Sumatra province.

Undercover investigations secured evidence of tiger crime on five occasions over 2013 with law enforcement subsequently conducted in three of these cases during the project period. In January 2014 (after this project period closed), PHS personnel conducted a law enforcement action with Mukomuko police division resulting in the successful arrest of a trader involved in one of these cases which (February 2013) could not be proceeded with for technical reasons.

Extensive discussions were held among senior members of this team on how to strengthen responses to the change from poacher to trader-driven threat which has led to considerable difficulties in securing evidence for law enforcement due to the 'closed' nature of networks and, in particular, how to secure action against trans-provincial crime syndicates led by individuals based in one or more cities in Riau province in eastern Sumatra.

This is a province which does not border Kerinci Seblat National Park and so PHS personnel, who operate under a decree and letters of authority issued by the director of the National Park, have no formal authority to operate in that province and advancing any investigation conducted would require liaison through third parties which is not generally advisable where law enforcement is proposed.

Subsequent discussion with the NPA resulted in a 'technical working agreement' between KSNP and five provincial police authorities – including Riau province – that should be developed and activated so that the park and this team can facilitate an inter-institutional 'network' to address trans-provincial wildlife crime outside institutions' individual areas of legal jurisdiction. This should be done so that investigations can be more easily advanced to law enforcement as appropriate.

## Law enforcement and support legal process

Five species-related law enforcement actions were conducted during the project period either directly by PHS TPCU personnel or in partnership with other government agencies - resulting in the arrest of a total of 20 men.

A sixth species law enforcement action was successfully conducted in January 2014 following an investigation into tiger poaching and trade in two districts in the west and south-west of the national park in 2013.

The arrested man in this case had been the target of a planned tiger law enforcement action in February 2013 which was aborted for technical reasons but where the subject continued to be monitored by a TPCU investigator.

The first of these actions was conducted in late July 2013 in Mukomuko district of Bengkulu province in the south-west of the park following a long-running investigation into tiger poaching in Lebong district in the south of the park.

While Bengkulu teams' Coordinator liaised with Mukomuko district police to prepare for a joint law enforcement action, the TPCU investigator confirmed that a syndicate of gaharu (*Aquilaria* sp) collectors and tiger poachers operating in two or more districts of Bengkulu province were in possession of, and proposing to sell, the bones and skin of a poached Sumatran tiger.

Law enforcement was launched later that night at a pre-agreed site. Unfortunately, while the pelt and bones of a Sumatran clouded leopard were successfully seized as evidence for prosecution, the primary evidence sought (the skin and bones of a tiger seen earlier in the day by the TPCU ranger-investigator) was not secured.

This was due to a young local police detective, working undercover with the TPCU investigator during the law enforcement action, giving the 'go' signal to the waiting PHS-Police team without approval of his TPCU partner and before the second article of evidence (the tiger skin and skeleton) was delivered to the syndicate leader by a gang member courier.

It subsequently transpired that the police officer had never seen a Sumatran clouded leopard and had assumed the evidence, seen fleetingly, at night, upon delivery by a courier, was the tiger which was the target of this joint law enforcement action and which had been confirmed visually earlier that night.

All five men arrested, three from Mukomuko district and two from Lebong district (areas separated by more than 100 miles and at least seven hours travelling time), were previously known to PHS as suspected tiger poachers and gaharu collectors. However it was not until law enforcement was conducted that it was appreciated all these individuals were known to each other and were working together as part of an organised, if informal, tiger poaching and gaharu collection syndicate.

These men were subsequently all sentenced to five months custodial terms for possession of or trade in a protected species (Sumatran clouded leopard). This would have been a very light sentence if it had been made for tiger poaching or trade but it is, so far as we are aware, the first such custodial sentence awarded in central Sumatra for offences relating to Sumatran clouded leopard and so provides an important benchmark or precedent for judiciary and police for the future.

Two months later (September 2013), tiger law enforcement was launched in partnership with Rejang Lebong district police in the extreme south of the national park and resulted in the arrest of two men (*see below*) in possession of the pelt of an adult Sumatran tiger.

This male tiger had been poached some days earlier from watershed protection forests in the north-east of the Bukit Barisan Tiger Conservation Landscape. The arrests followed an investigation launched in early 2013 which identified a group of hunters habitually poaching tigers and other protected species in both KSNP and other protected forests to the south of the national park. Rejang Lebong magistrates subsequently sentenced the suspects to a very light custodial sentence of only six months with a fine of \$500 or an additional three-months prison term, the reason for this very light sentence is unknown but may relate to lobbying by local political elites.



Finally, in early December, Jambi-based TPCUs launched a law enforcement action in the south of the Kerinci valley resulting in the arrest of two men and seizure of the pelt of an adult Sumatran tiger poached in the Lubuk Pinang area of Pesisir Selatan district of West Sumatra and transported to Lempur, Kerinci for onward sale.

The two men arrested were traders/brokers with one of the two men already known to the program, suspected to play a key role in transporting tigers for sale to provincial level dealers in West Sumatra and Riau provinces. The suspects and evidence were taken to Jambi City where the post-arrest legal process was managed by legal officers of the SPORC Jambi Brigade since the older brother of one of the two men arrested is a wealthy and politically 'connected' individual who was considered likely to seek to inappropriately influence the legal process if this was managed in Kerinci district.

Two further species law enforcement actions launched by TPCUs did not proceed through to court hearings and formal judgments

In July 2013 Jambi-based TPCUs conducted surveillance and then arrested nine men from a district on the West Sumatra-Riau provincial borders under suspicion of poaching helmeted hornbill (*Buceros/Rhinoplax vigil*) for their casques in national park forest on the Kerinci-Merangin districts borders in Jambi province.

These individuals were subsequently released under a formal legal warning, and their high-powered airguns were confiscated after it was found the casques had been smuggled out of the forest the previous night before law enforcement was launched. The reason for this operation's failure to secure the evidence (casques) sought is now known and steps taken to ensure it will not reoccur.

Additionally two deer poachers from the Siulak ethnic group from the north of the Kerinci valley were arrested by an intelligence-driven TPCU patrol in late July in connection with the placement of 290 active deer snares.



These men (see *below*) were escorted, under arrest, out of the national park by the arresting TPCU and surrendered into the custody of the national park's Kerinci Section.

Park officers in discussion with the team's field manager subsequently decided not to launch the full prosecution process against these men, primarily due to the volatile political climate at the time (the arrests occurred just over a month before hotly-contested elections for the Kerinci district Leader or Bupati), and so the potential to result in threat against community members of the team based in Kerinci involved in this action.

Seven chainsaws were confiscated by TPCU patrols and formal warnings issued to the individuals apprehended while two men arrested in early 2013 in national park forests in Bengkulu on illegal logging charges were subsequently sentenced to eight months custodial terms with an additional sentence if fines levied were not paid.

Additionally, either directly by TPCUs or through information supplied to park personnel manning a park guard post on the Kerinci-Merangin district highway, shipments of wild birds were intercepted on three occasions with more than 150 wild songbirds subsequently released. Traders were sending birds to provincial capitals using 'travel' or share taxi and the programme subsequently learned these interceptions caused some disruption to other wildlife trade.

Other breaches of forest and species law were dealt with by TPCUs through counselling on permissible activities within the national park or through formal legal warnings and instructions to perpetrators to immediately withdraw. These formal warnings were most frequently issued to song bird hunters and non-timber forest products collectors.

## Human wildlife conflict mitigation and wildlife emergencies

PHS personnel responded directly to a total of 16 separate human-tiger conflict incidents during the 2013 project period with the key principal being to protect both tiger and forest edge communities.

Nine of these incidents related to tigers moving in the farmland-forest interface or in forest-edge farmland and saw no livestock predation or active, direct threat to villagers.

Livestock predation (farm or semi feral dogs, non-shepherded goats and cattle) was recorded in five cases, one of which also saw a motor cyclist receive minor leg injuries when his motor cycle was opportunistically attacked by a tiger as he returned to his village at night, through production forests heavily degraded by smallholder conversion to farmland.

The escalation in direct threat to tigers from poaching since 2012 (see Patrols, Investigations) meant that in certain areas around the national park even very minor 'conflicts' required the rolling attendance of one or more TPCUs for periods of up to three weeks to deter poachers from entering the area to exploiting the incident.

This had a direct impact on routine TPCU patrol activities in the first three months of the year which accounted for more than half of all the human-tiger conflict incidents reported and attended in 2013.

'Low grade' conflicts were particularly time consuming to manage in the Merangin river valley area on the borders of Kerinci and Merangin districts of Jambi where tigers frequently move through the narrow farmland strip that follows the Merangin river which separates the eastern and western areas of the national park.

In this area villagers are generally supportive of the PHS team and tiger conservation but hunters from neighbouring sub-districts and further afield have easy access to the area via the Kerinci-Bangko district highway which runs down the Merangin river valley and so even minor conflict incidents were judged to require an intensive patrol presence to deter certain individuals who have become a serious threat to tigers since 2012.

Actions to mitigate and monitor low grade conflicts and to patrols to deter opportunist hunters were most intensively conducted in the first three months of 2013 with no routine forest patrols conducted in March by the three Jambi-based TPCUs due to no fewer than four 'stray tiger' conflicts occurring in three sub-districts of Kerinci and Merangin districts.

Intermittent low-grade ('tiger seen') conflict incidents also continued to be recorded along the length of a new section of the Kerinci-Merangin district highway in the far south of the Kerinci valley which was built in 2009 after a series of landslides on one section of this road.

Construction of this new road section – which is outside national park borders – offered easier access to farmlands cleared in the early nineties but subsequently abandoned when cinnamon prices crashed in the late 1990s and this area has subsequently been the site of numerous human tiger conflicts, not least due to clearances of secondary and tertiary forest as a result of easier access.

Not fewer than five tigers have been killed or have had to be rescued due to snare or other injuries since 2009 in this area of Kerinci *excluding* a five months old cub poisoned in December 2013 which subsequently died after evacuation to the Taman Safari Indonesia Wildlife Hospital in Bogor, Java.

One cause of the ongoing conflicts in this area and others where roads have been upgraded or constructed through human-tiger habitat overlap areas is that, through growing affluence in rural Indonesia, many villagers now own or have access to a motorbike and so are mobile at all hours while clearly there is a greater feeling of vulnerability when seeing a tiger while on a motorbike than if in a vehicle.

We strongly recommend that this area be appraised for a trial 'Green Infrastructure' program with wildlife crossings established at key points along the New Road and in the Merangin river valley area bordering Kerinci and Merangin districts and that agreements developed with the generally very supportive local communities regarding land use in certain areas to minimise future conflicts for the safety and well-being of all concerned.

Patrols and conflict mitigation actions including counselling and awareness raising will not fully resolve the human-tiger conflict issue in this area, which is now known to form a major tiger movement corridor between the eastern and western sections of Kerinci Seblat National Park. Due to presence of buffer zone forests and extensive palm oil plantations along much of the western edges of the national park in Bengkulu province, human-tiger conflict poses a lesser problem in the team's core focus areas of the park in Mukomuko and North Bengkulu districts. Even here however ongoing (illegal) clearance and conversion of state forests for small holder agriculture (primarily oil palm) is resulting in a growing frequency of human-wildlife conflicts.

Bengkulu-based TPCUs spent almost two weeks on a rolling rotation in one site where not fewer than five goats were killed and a motorcyclist suffered minor leg injuries after a tiger opportunistically attacked as the man returned to his village, at night, through degraded former 'production' forests.

TPCUs, working with colleagues from Bengkulu KSDA's Conservation Response Unit concluded that two tigers were present in these forests which have been subject to heavy illegal small-holder land conversion. TPCU forest patrols in this area also found clear evidence that a juvenile tiger had been snared and died in a wild pig snare at farmland edge some days before the conflict was reported.

This conflict required almost two weeks to be resolved before the two tigers in question finally moved, north-east to disturbed but still intact production forest bordering the national park. No further problems were reported while post-conflict monitoring advised that there was no subsequent attempt was made by poachers to find and hunt these two animals.

Five tiger emergencies were reported, three of which related to tigers caught, accidentally, in wild pig snares in forest-edge farmland. Two of these cases – in farmland to the southwest of the park in Bengkulu - were resolved naturally with the animals releasing themselves, apparently unhurt, and retreating into the national park, in one case observed by a TPCU rescue team.

However in a third case, in late July 2013, a young male tiger was caught by the belly in a nylon rope snare in park-edge farmland in the north of the Kerinci valley and died from compression injuries, before it could be anaesthetised and then safely released from the pig snare. Response to this case was facilitated by the program but managed by colleagues from the national park, including a former TPCU leader, as all Jambi TPCUs were in the field at the time.

Easy and uncontrolled access to lethal pesticides and herbicides in rural Indonesia means that use of poison by farmers to resolve low-grade conflicts (poachers rarely employ poisons as it is believed to impact on the value of the pelt) is a constant potential threat where tigers are moving in farmland.

The body of a tiger cub was retrieved from a forest edge village to the east of the national park after a report by the village headman to the program in June 2013; in this case the headman admitted that the cub and an adult tiger, presumed to be its mother, had been intermittently moving through forest-edge farmland in this area for several days. The village had chosen not to report to the PHS team for fear of subsequent conflicts with neighbouring communities due to illegal logging in adjacent production forests.

A post mortem advised that the cub may have been sick for some time but that ingestion of a commonly available farm pesticide was likely to be the final cause of death. Pugmarks of an adult tiger, possibly the mother of this cub, were subsequently seen by in the area by TPCU

personnel. The individual responsible for this tragic incident was identified by the village council who advised village traditional law sanctions would be imposed.

Finally, in early December 2013, TPCU personnel were advised of a tiger cub sitting at the side of a road in a village close to a new road built in the south of the Kerinci valley in 2009

and which has been the site of very numerous human-tiger conflicts ever since.



A TPCU team which was returning from a patrol in national park forests in a neighbouring sub district was diverted to the site and recovered a five months old tiger cub which was evacuated to the FFI office in Sungaipenuh.

Emergency veterinary treatment was provided by a highly experienced wildlife vet but the cub's condition deteriorated and began to show signs of serious nervous system damage and the team therefore organised for her evacuation to the Taman Safari Indonesia wildlife hospital in Bogor, Java where she died three days later.

The poison used was subsequently identified as a widely available herbicide widely sold under the brand name Paraquat and it is strongly suspected the cub died after eating from the carcass of a wild pig killed by pig hunters some days earlier and which had been laced with poison by a still unidentified local farmer. An adult tiger, believed to be the cub's mother, was present in this area for almost 10 days following this incident, possibly seeking her dead cub and her movements monitored by a TPCU patrol unit

### **Co-ordination and stakeholder liaison**

The program maintained a strong working relationship with other tiger conservation teams in Sumatra, not least through the Harimaukita Sumatran Tiger Conservation Forum and with the ZSL Jambi tiger team which is presently led by a KSNP park officer on secondment and with key local NGO partners working around the national park.

The program manager spent some time in the second quarter of 2013 liaising with other tiger conservation programmes in Sumatra and on the Asian mainland regarding the possibility of sharing patrol and field threat data to assess if there were any temporal or other similarities between the increases in threat recorded in this tiger landscape with other areas.

Unfortunately, this exercise did not proceed as hoped as it proved very difficult to identify projects with similar field data sets regarding law enforcement monitoring patrol results and

tiger and other specie snare records and we concluded that investigation data is too 'gray' to be of full value in assessing changes in poaching pressure and trade in tigers.

We did however learn there were disturbing temporal similarities between the increases in threat recorded in this national park and with tiger poaching (snare placement) records in the Gunung Leuser ecosystem in northern Sumatra.

Discussions with the this long-established team also advised that it was likely that an organised helmeted hornbill poaching and trade syndicate operating from a district on the West Sumatra-Riau provincial borders (see Investigations, Law Enforcement) may also now be active and commissioning hornbill poaching for the birds' ivory casques in North Sumatra province and the Gunung Leuser ecosystem area.

PHS personnel routinely worked to maintain good relations with district police authorities and with key 'link' contacts at provincial police agencies in two provincial capitals.

The team leader also worked with colleagues at the National Park Authority to develop a draft technical working agreement or MoU between the national park authority and five central Sumatra police authorities. This plan is specifically intended to support more effective networking between the national park and provincial police agencies regarding actions against the illegal wildlife trade at a trans-border (sub national) and inter-jurisdictional level.

We hope to commence to seek funding for this activity in 2014 and, if it proceeds as we believe it will, that it may form a precursor or pilot initiative that may be replicated elsewhere in Sumatra where trans-border wildlife crime and institutional jurisdictions hamper actions to address the ultimate (in country) source of threat, traders operating across provincial and jurisdictional borders.

### **Identify mechanisms to fully implement Forestry Minister's Law 48/2008 regarding human-wildlife conflict mitigation**

With funding from another programme donor, actions commenced in Bengkulu province to secure full implementation of the Forestry Ministry's Instruction No.48 regarding a multi-stakeholder approach to human-wildlife conflict mitigation.

These activities were managed by a TPCU ranger member of the PHS team who is also an active member of a local (Bengkulu) conservation NGO.

Five local government districts, three of which adjoin Kerinci Seblat National Park, are now actively taking a part in planning for full implementation of the P48 instruction and preparing to submit funding proposals to central government for multi-stakeholder actions to mitigate human wildlife conflicts in these districts from 2015.

A formal sign-off on this planning is expected by the Governor of Bengkulu province in early 2014 and mechanisms have been identified which we anticipate will allow for not only compensation payments for individuals killed or injured in human-wildlife conflicts but also a methodology to compensate farmers for livestock predation.

Providing central government is supportive of this initiative – and the province is optimistic that this will be agreed – we may hope that these five districts are the first in Indonesia to formally implement Law No 48 while the planned provision of compensation, in kind, for livestock predation will be the first of its kind in Sumatra

### **Capacity raising**

No formal training workshops were held by the programme in 2013, not least due to lack of clarity as to when nine long serving PHS personnel would sit the Civil Service Test and, if successful, become formal as opposed to honorary members of the national park.

However detectives from four Kerinci Seblat park-edge police authorities attended a training workshop for police officers from five provinces of Sumatra which was facilitated through



FFI Indonesia and Interpol Indonesia in early 2013 to provide an in-depth briefing on organised wildlife trade with particular focus to tigers, pangolin and elephant.

The programme continued to provide technical advice and support to our AKAR Network colleagues in the TFCA project regarding patrols and in particular on minor human-tiger conflicts.

AKAR Network members are currently heavily focused to seeking to neutralise political pressure by certain local politicians to reactivate proposals for trans-park roads even those these were finally formally refused by the Forestry department in early 2013. This is an issue of very serious concern given national, district and local elections set to be held in early-mid 2014 and which might prompt an inappropriate response by politicians.

**DJM**  
**Kerinci, January 2014**