

# **Pelestarian Harimau Sumatera Kerinci-Seblat**

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

**Report on activities conducted with the  
support of 21<sup>st</sup> Century Tiger and Dreamworld  
Conservation Fund**

**February 2017 - January 2018**

**by**

**Fauna & Flora International**



## **Summary of activities and results**

The project purpose was to secure the effective protection and conservation of Sumatran tigers through actions to address and reduce direct and indirect threat to tigers in and adjoining a national park that forms the protected core (1.38 million hectares) of a globally important (Level 1) Tiger Conservation Landscape

Six Tiger Protection & Conservation Units (TPCU), operating from base camps to the east and west of the national park conducted a total of 116 SMART patrols in and adjoining the protected area across a total walking distance of 1851 km (1150 miles).

A total of 85 tiger presence records were made on these patrols with patrol Effort to record tiger presence increasing, fractionally, park-wide but reducing, in the core area of the park to 1 tiger per 3.9 patrol days compared with 1-4.79 days in the same months of 2016-2017.

A very substantial fall in poaching threat to Sumatran tiger was recorded with a total of only nine active tiger snares recorded on five TPCU patrols compared with 48 snares on 15 patrols in the preceding 12 months and poaching threat detected falling to levels last recorded in 2008 with active threat recorded on only 4% of all patrols (13% in 2016-2017, 2015-16 - 10% 2014-15- 16%).

The number of SMART patrols conducted and distance walked was the lowest for three years primarily due to the number of high priority investigations and subsequent wildlife law enforcement actions conducted.

Investigations were conducted mainly in park-edge districts and municipalities of the four provinces which overlay the national park but extended to provincial capitals and the Indonesia capital, Jakarta.

These investigations supported five tiger law enforcement actions resulting in the arrest and prosecution of 12 tiger poachers and illegal wildlife traders and with a clear correlation between reduced threat recorded on TPCU patrols and wildlife law enforcement actions conducted since early 2016.

Subsequent court hearings demonstrated a trend to stiffer sentencing for tiger crime with five of the individuals arrested sentenced to custodial terms of three years or greater accompanied by substantial fines and demonstrating increasing awareness among the judiciary of the links between tiger poaching and trade and organised crime.

The programme team continued to record lower than the historic norm levels of human-tiger conflict during the project period with only six conflicts recorded and with no wildlife emergencies requiring evacuations or veterinary interventions.

With support from other donors the team facilitated ratification of a new three years MoU between Kerinci Seblat national park authority and provincial police authorities with the purpose of strengthening inter agency collaborations to address and reduce forest and wildlife crime. Subsequently, meetings between local national park officers and district police agencies were held to develop a three years workplan under the MoU and to collaboratively identify training needs.

The team also provided technical back up and SMART training to a local NGO partner working in the far south-west of the national park which established a collaborative SMART

patrol group in an area where TPCUs do not have capacity to maintain a routine field presence under a MoU with the national park.

Additionally the programme team supported SMART patrol and resort based management training for national park rangers under the UNDP/GEF 'Transforming Biodiversity Conservation Effectiveness' project which finally activated in mid-2017 and, in December, a briefing meeting for park-edge police detectives regarding the illegal wildlife trade around the Kerinci landscape.

Tiger conservation effort was strengthened by the FFI/KSNP/Panthera Tiger Monitoring Team (MHS) who conducted camera trapping and subsequently law enforcement monitoring transects in the 828 sq km Core area.

Camera trapping in the Core area recorded an increase in tiger densities with 13 individual tigers identified compared with nine in 2016 and with frequency of encounter with tiger recorded on monitoring transects stable in the core area stable or better.

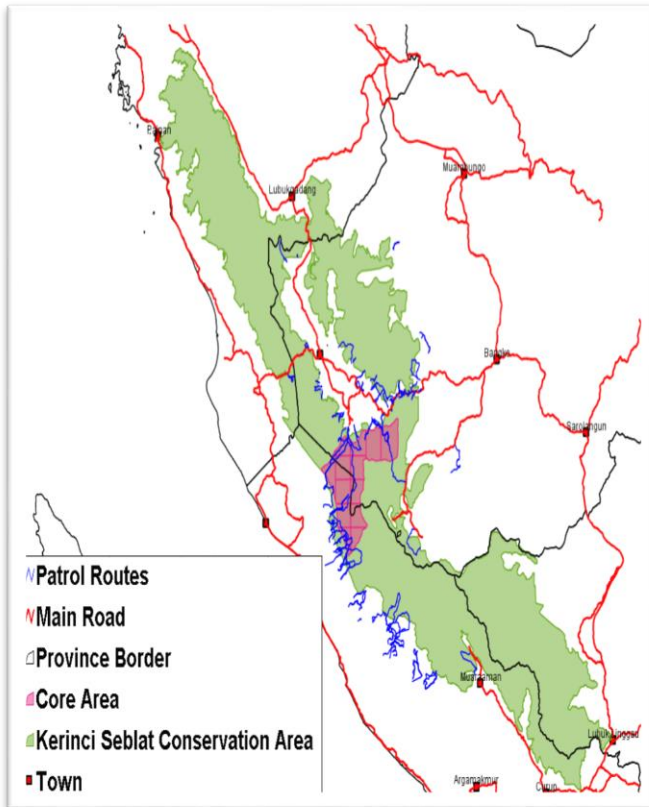
Camera trapping was also conducted in an area in the north-eastern block of the national park for the first time since 2013 with support from IUCN ITCHP. Camera trapping in this area, which receives a very low patrol focus, recorded tiger densities have fallen confirming previous warnings by the programme team that tiger populations in areas not receiving a routine patrol focus are likely to have reduced due to the high level of threat from illegal wildlife trade-driven poaching recorded between 2013 and 2016.

Finally, in October 2017, Nurhamidi, Bengkulu TPCU coordinator since 2004 and, since January 2017, TPCU field manager, was honoured for his achievements and dedication to tiger conservation and protection by the Ministry of Environment and Forestry Director General of biodiversity and conservation Ir Wiratno (see below)



## 1: SMART patrols by Tiger Protection & Conservation Units (TPCU) -

*Routine and intelligence-driven SMART patrols in national park and park-edge forests by Tiger Protection & Conservation Units detect, address and reduce direct and indirect threat to Sumatran tiger and prey and deter opportunist wildlife and forest crime*



A total of 116 SMART patrols were conducted by TPCUs during the project period covering a total walking distance of 1851Km (1150 miles) with 572 Unit days spent in the field on patrol (See SMART patrol map left).

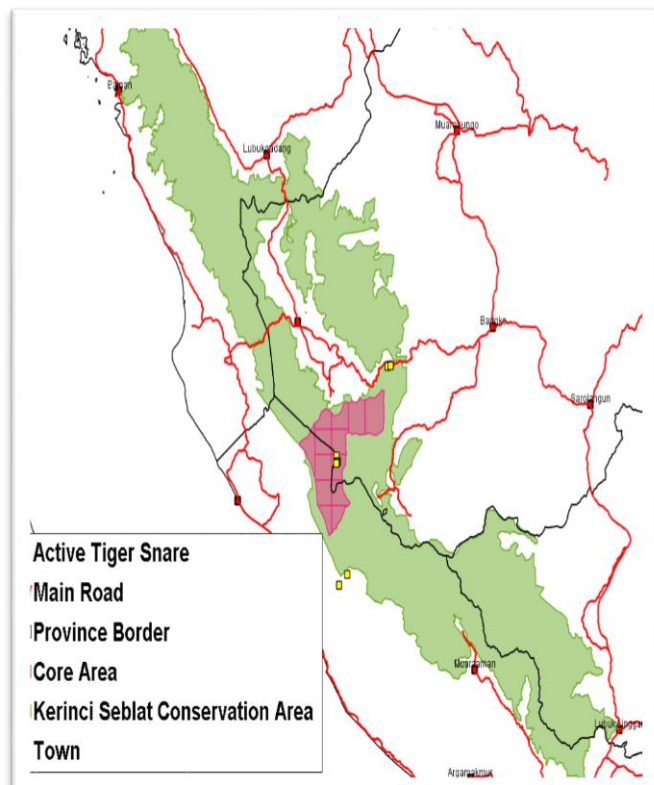
The number of patrols conducted and distance walked was lower than planned due to the number of pre-planned intelligence-led wildlife law enforcement actions conducted and lower than in 2016 when TPCUs conducted a total of 122 patrols covering a total distance of 2140Km.

Active poaching threat to tigers recorded on TPCU patrols reduced to the lowest level recorded since 2008 with only nine active tiger snares detected and destroyed (See map, below) in the course of five patrols. Six of these snares were recorded on patrols launched on the basis of tip-offs from forest-edge community informants and a seventh following discussions with the tiger monitoring team.

TPCU patrol effort to record active threat increased to one snare per 63 patrol days park-wide compared with 1-13 days in the preceding 12 months and 1-8.75 days in the same months of 2015-2016.

Reduced poaching threat to tiger was most apparent in forests in the central eastern section of the national park in the Merangin river valley area on the Kerinci-Merangin district borders following law enforcement facilitated by the team in February 2017 which resulted in the arrest of two tiger poachers active in this area.

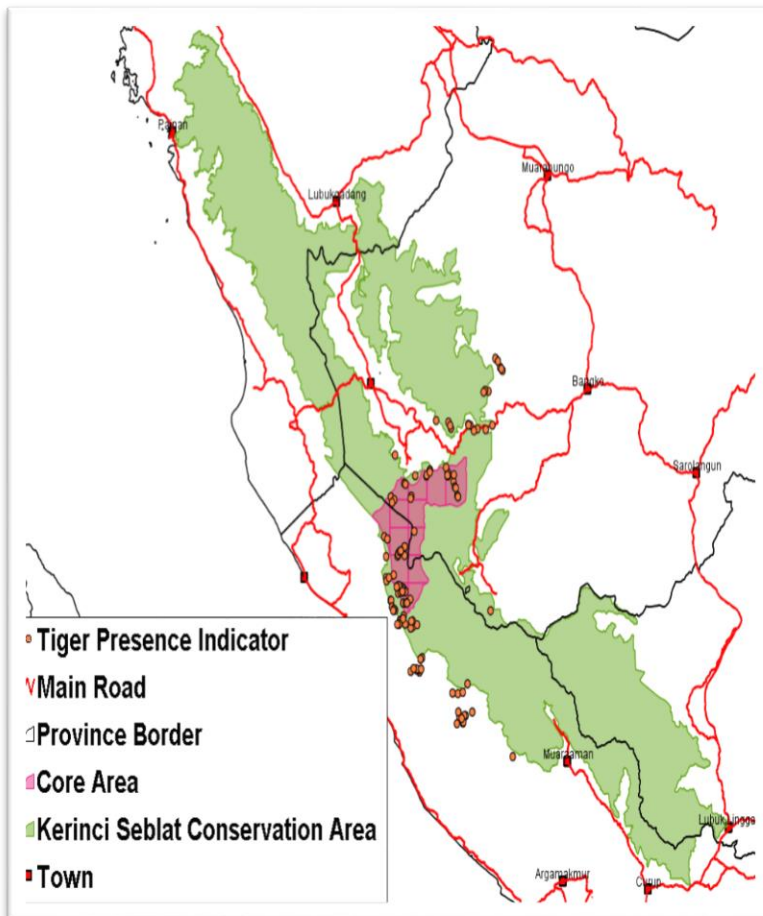
A total of 23 recently (< one month) deactivated or sprung snare placements (in one case destroyed by an elephant) clearly set for tiger were recorded by TPCUs and on monitoring transects by the MHS team during the project period compared with 48 'recently active'



placements in the preceding 12 months.

Nine of these recently active snare placements were recorded deep within the Core area on the Bengkulu-Jambi provincial borders in the final two months of 2017 in an area where no active or recently active threat was recorded in 2016. The individuals responsible for at least seven of these snare placements, one of which is suspected to have killed a tiger and a second, which caused serious lower limb injuries to another tiger, have now been identified as former associates of a poaching syndicate kingpin arrested in January 2016.

A total of 89 Sumatran tiger presence records were made on TPCU patrols in and adjoining the national park during the project period (see *SMART patrol map below*) with effort to record tiger presence increasingly fractionally from 1 tiger per 6.2 unit patrol days in 2016-2017 to 1-6.7 days park-wide.



TPCUs conducted a total of 33 patrols in the Core area covering a distance of just under 760Km (472 miles); these patrols made a total of 51 tiger presence records with 57% of all tiger records made on 28% of patrols and with patrol Effort to record tiger in the core reducing to 1-3.92 days compared with 1-4.79 days in the same months of 2016-17 suggesting that a fragile recovery in tiger numbers may be commencing following three years of historic levels of illegal wildlife trade-driven poaching threat.

Active poaching threat to key tiger prey species (sambar deer and muntjak) was recorded on only eight (7%) of all patrols with a total of 89 deer snares - of which 41 were recorded on one patrol in a rarely patrolled area in the far north of the

Kerinci valley - documented and destroyed. A further 20 active deer snares were recorded and made safe on a camera trap monitoring transect in the north-eastern block of the national park also in an area rarely patrolled by TPCUs.

Seasonal patrols to address threat to tiger prey species from poachers seeking to profit from market demand for meat during the holy month of Ramadan were conducted, as planned, but, for the first time, detected no significant spike in poaching threat to deer. Consequently no prizes were awarded under the annual Great Kerinci Snare Sweep competition as no TPCU attained the minimum qualifying number of points (for snares detected and destroyed).

Although direct threat to tiger and tiger prey reduced during the project period, serious threat to tiger habitat continued to be recorded, primarily from encroachment for coffee plantations in the east of the national park, in particular in Merangin district of Jambi and for palm oil in lowland forests in the south west and west of the park.



Forest clearances very frequently involved the sale of protected or buffer zone forests by rogue local elites to 'smallholders' – very often neither poor nor landless - with clearances facilitated in one park-edge district, by a rogue farmers' rights organisation supporting forest clearances by immigrants from provinces in southern Sumatra.

Warning letters and instructions to 'quit' were issued where possible but both the national park and TPCUs were constrained in taking full law enforcement action due to advisories issued at the highest levels of the ministry of environment and forestry and, in Merangin district, by the scale of the problem and militant, organised nature of the organisation backing the clearances.

This latter situation may now be about to change following law enforcement conducted directly by Jambi provincial police authority in late January 2018 resulting in the arrest of four men including one charged with coordinating and directing the illegal clearance of national park and customary forests in western Merangin district and, allegedly, charging encroachers from other provinces of Sumatra a monthly fee for 'protection.'

## **2: Poaching and Illegal Wildlife Trade Investigations:**

*Investigations identify individuals posing threat to tigers, their methods, networks and trade routes and secure evidence for law enforcement as appropriate, monitor the illegal wildlife black-market for change and maintain forest-edge community information networks*

More than 150 investigation reports were logged by TPCU personnel and a retained, daily-paid informants and graded for credibility using recognised policing protocols during the project period.

Investigations were mainly conducted in park-edge districts and municipalities of four park-edge provinces and three provincial capitals but extended to Batam Island, a Freeport off the coast of Singapore and to Jakarta as the team worked to map syndicates from poacher through to sub-national and national level source of threat to tigers.

Covert interviews with two individuals identified as national-level traders, one operating from Jakarta, one from a town in a park-edge province but trading wildlife in Jakarta, advised they were supplying Sumatran tiger and helmeted hornbill (*Rhinoplax vigil*) casques sourced from the Kerinci landscape and more widely in Sumatra to two foreign nationals. These latter individuals have not yet been satisfactorily identified.

Investigations into a trader suspected to be trafficking both tigers and Malay pangolin from forests in the east of the national park traced a trade route from a park-edge district capital park to a provincial capital and from there to a location in Jakarta using a courier company. This investigation, which is ongoing, subsequently advised that the owner of the courier company was a, if not the, major player in this trade syndicate.

Investigations strongly advised that the main national source of illegal wildlife trade demand for tiger from the Kerinci landscape has shifted to the Indonesian capital, Jakarta but identified dealers based in the province of West Sumatra, which overlays the northern section of KSNP, as playing pivotal roles in the illegal wildlife trade in tigers from Kerinci Seblat and more widely.

However investigations also yielded credible information regarding trade in tigers from two or more provinces of the landscape through dealers based in West Sumatra province via Pekanbaru city to Batam Island for onward transport, by sea, to Singapore and Malaysia.

In the case of trade to Jakarta and to Pekanbaru and Batam, there were clear linkages to national and international trade in gaharu or agarwood (*Aquilaria sp*) although links between trade in reptiles (snakes, freshwater terrapins, water monitors) and pangolin were also reported.

Monitoring of the illegal wildlife trade during the project period recorded reduced trade demand for both tiger skins and bone at a park-edge level on the basis of prices allegedly secured by hunters however investigators recorded continuing high demand for tiger canines, possibly due to the perception that this trade is safer and less easily detected.

Investigations supported five successful tiger law enforcement actions in three park-edge provinces during this 12 months period with first-hand (A1) evidence of tiger crime observed by TPCU investigators in the course of two further investigations. These did not proceed to law enforcement for operational reasons or because evidence observed was not sufficient to ensure a satisfactory outcome but which remain active at date of this report.

Forest-edge community information networks played an important role in the early stages of some of these investigations through 'tip-offs' on the identities of suspected poachers or traders or public service or courier company vehicles used to illegally transport wildlife.

Community informants also continued to provide information to TPCUs on suspected active poaching threat to tiger and tiger prey for a patrol response with six of the nine active tiger snares recorded detected on information-led patrols.

### **3 Species and forest law enforcement actions to uphold Indonesia conservation law:**

*Conduct law enforcement appropriate to the offence and support and advance the subsequent legal process with the purpose of securing an appropriate legal judgment*

A total of five intelligence-led tiger law enforcement actions were conducted or facilitated during the project period resulting in the arrest and prosecution of 12 men and seizure of body parts of seven Sumatran tigers - not all from Kerinci Seblat National Park.

Four of these cases (10 suspects) proceeded smoothly from law enforcement through the legal process to custodial sentences with one case (two suspects) awaiting a verdict at date of this report.

Intelligence-led law enforcement actions with final stage investigations managed by either the PHS field manager or provincial TPCU coordinator and designed or 'set' or support safe and successful law enforcement are time-consuming and the number of actions conducted impacted on patrol capacity during the project period.

In February 2017, a TPCU investigation launched in early 2016 supported law enforcement against a tiger and helmeted hornbill trader operating out of West Sumatra province and two tiger poachers, one a syndicate kingpin, operating in national park and park-edge forests on the Kerinci-Merangin districts borders area of Jambi province. Law enforcement was conducted in Solok district of West Sumatra province by a specialist team from KSDA Jambi and all three men subsequently sentenced to two-year custodial sentences by Padang city court with additional fines of \$2300 each or an additional two months gaol term.

In April, intelligence-led law enforcement was conducted in partnership with Bungo district police and resulted in the arrest of two illegal wildlife traders, one from Solok district, West Sumatra and a second man from the Duri area of Riau province and seizure of the skin of tiger, poached from the Bukit Tigapuluh landscape on the Riau-Jambi provincial borders. The suspects were subsequently sentenced to eighteen months in prison in the case of the Solok trader with his cohort receiving a 12 months prison term.

A month later, in May, tiger law enforcement was again conducted, this time in North Bengkulu district in the south-west of the national park, resulting in the arrest of two tiger poachers and seizure of the skin and skeleton of a large adult male tiger poached from a former park-edge logging concession. The two hunters subsequently received custodial sentences of three years and three years and six months, respectively, and fines of \$3760 each or additional prison time.

In June Bengkulu-based TPCUs again stood by for intelligence-led tiger law enforcement but were forced to withdraw for operational security reasons. Law enforcement in this case was finally conducted in July in partnership with Mukomuko division police and resulted in the arrest of two poachers from a village in Mukomuko district and their 'boss', a village headman from the neighbouring district of Pesisir Selatan, West Sumatra province with the complete body parts of two sub-adult tigers as evidence

The syndicate leader had been identified in early 2017, initially in connection with suspected trafficking in helmeted hornbill from Kerinci and Merangin districts of the national park and found to have links to an exporter-level tiger and helmeted hornbill trader frequently visiting West Sumatra from Jakarta. Investigations subsequently advised this man was also working with tiger poachers operating in national park forests of at least three districts of two park-edge provinces.

The two tigers seized as evidence had been poached in early 2017 in a park-edge forest restoration concession on the Bengkulu-West Sumatra provincial borders but not yet traded on because the trader leading this syndicate had links to one of the two tiger poachers arrested in Solok in February and feared his identity had become known in the course of post-Case development.

One of the two poachers arrested in this action was the son of a tiger poacher and trader arrested in a joint law enforcement operation with Mukomuko police in 2014 who subsequently received a very light five months sentence. This case proceeded smoothly through post law enforcement Case development with the programme providing Expert Witness support and proceeded to court with the three suspects receiving three year prison terms with additional fines of \$3780 each or a further six months in prison.

Finally in October, intelligence-led tiger law enforcement was conducted with Merangin district police in the east of the national park resulting in the arrest of two men, a poacher and his intermediary, and seizure of the skin and complete skeleton of a young adult tiger believed poached in June in the north east of the national park. This case has now moved to the court process and a verdict is expected shortly.

Two further cases, relating to wildlife crime law enforcement in late 2016 and early 2017 before the project period advanced through the legal process to sentencing during the project period.

A taxidermist from park-edge Lubuklinggau municipality in South Sumatra province arrested in a joint law enforcement action with police in neighbouring Sarolangun district of Jambi in December 2016 while transporting a taxidermised tiger received a seven months custodial term. The light nature of this sentence was due to the fact that the taxidermised tiger which formed evidence for prosecution belonged to a third party.

Two pangolin traders, one also known, through investigations, to be acting as a broker for tiger poachers in western Merangin district of Jambi arrested in a joint law enforcement action with Merangin district police in January 2017 were subsequently sentenced to eight months custodial terms.

One planned trans-park TPCU patrol was aborted on Day II when evidence of active illegal logging was encountered by the patrol team. One man – the leader of the gang - was arrested and escorted out of the national park and passed into police custody – three younger men succeeded in escaping – and this case is now proceeding through the judicial process.

Additionally TPCUs issued twelve formal warning letters and 'orders to quit' to 24 individuals encountered in the course of patrols and seven informal warnings to small holder farmers conducting or preparing to conduct forest clearances in and adjoining the national park. Three chainsaws were seized from loggers or encroachers' camps.



#### 4 Human-Tiger Conflict Mitigation and wildlife emergencies

*Respond swiftly to human-tiger conflicts using a nationally approved conflict mitigation Protocol, where possible before livestock predation has occurred to protect both tigers and forest-edge community livelihoods*

Only nine human-wildlife conflicts – six relating to Sumatran tiger, one to an Asiatic golden cat misidentified by villagers as a tiger and two to Malay sun bear were responded to directly by TPCUs or by partners facilitated by the team where TPCUs were not immediately available.

Only one of the human-tiger conflicts reported involved livestock predation – a water buffalo calf tethered at forest-edge – and all other conflicts reported related to tigers moving through forest-edge farmland

A low grade (victimless) conflict involving a tiger and cubs frequently seen moving through farmland and fragment forests in the far south of the Kerinci valley was the most time-consuming of these incidents as it occurred far from park-edge and within the animals' home range where mature cinnamon plantations and mixed forest fragments are in the process of conversion to smallholder coffee plantations.

The project team trialled use of ammoniac in the form of household bleach and toilet cleaner in one of the two human-Malay sun bear conflicts reported in which a bear and her cubs repeatedly raided villagers' henhouses. Results were promising but this methodology must be further trialled before it becomes a standard procedure.

No major wildlife emergencies – such as a snared tiger - were recorded.

#### 5 Stakeholder liaison and capacity building, other activities

*Build support for and capacity to achieve the goals of Indonesia's 2010-2022 National Tiger Recovery plan through formal and informal coordination with government agencies, local and national civil society, training to national park personnel and others as required*

- Wildlife and forest crime law enforcement strategy development: - With support from other donors, the project team facilitated ratification of a new three year law enforcement support MoU between Kerinci Seblat National Park and four park-edge provincial police authorities. Following ratification, three planning meetings were held for senior officers of park-edge police divisions and national park officers to develop a three year work plan and to identify training needs.  
At a follow-up meeting in Padang city in December held to brief park-edge police detectives on the methods used by illegal wildlife trade syndicates around the landscape, the main guest speaker was the new head of Indonesia national police detectives environmental crimes division, a former chief of detectives in West Sumatra province who demonstrated great support for the programme's goals. Following law enforcement conducted directly by Jambi provincial police authority in January 2018 which secured the arrest of four men coordinating organised clearance of national park forests in western Merangin district for coffee plantations, the project team provided background briefings for police case development officers.
- TPCU personnel gave input to SMART patrol and 'resort based management' training for national park personnel in workshops funded through the GEF/UNDP 'Transforming Biodiversity Effectiveness' project which finally launched in mid-2017 and SMART patrol training to a collaborative anti-poaching patrol team established by a local NGO partner in Bengkulu with the purpose of building a tiger protection presence in forests in the far south-west of the national park.
- All TPCU activities and outputs were reported, monthly, to the director of the national park authority so providing real time data on biodiversity and forest and

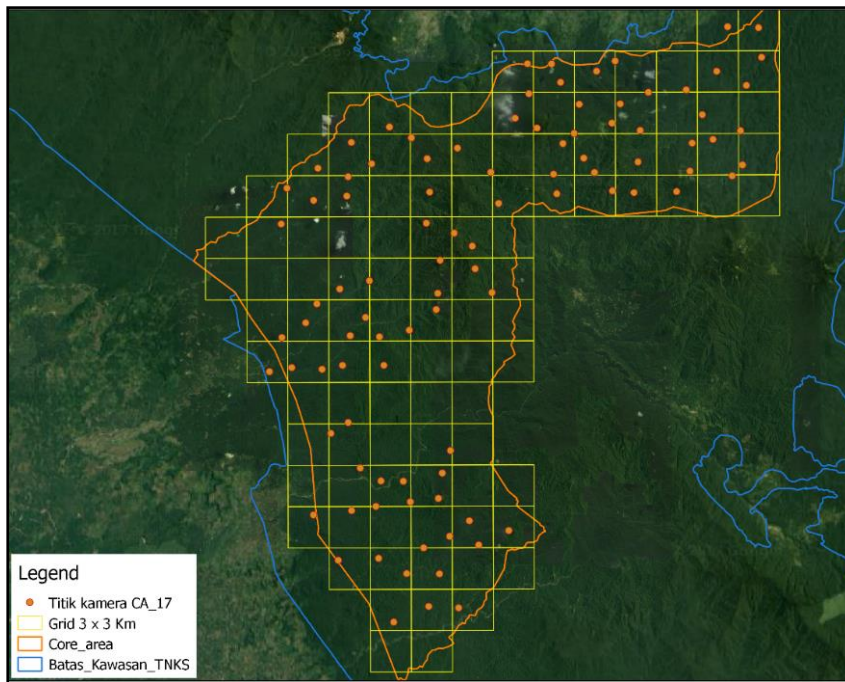
wildlife crime recorded on patrols and results of other routine and non-routine activities and subsequently reported by the national park director to the Ministry of Environment and Forestry in Jakarta.

- The team also gave input to planning, managed by the Sumatran tiger conservation forum Harimaukita, for proposed revisions to the Ministerial Instruction No 48/08 regarding human-tiger conflict mitigation. Subsequently the programme worked with KSDA West Sumatra, local forestry agencies and NGO partners to support preparations for establishment of a multi-stakeholder human-tiger conflict mitigation taskforce in West Sumatra in 2018 under a proposed Decree of the Governor of this province.
- In April 2017 a Strategic Environmental Assessment, funded by UNESCO Indonesia, to examine the environmental impact of proposed trans-park roads was finally published. This study rejected all but two routes on the grounds that environmental impacts would outweigh economic benefits. However two trans-park emergency evacuation routes were identified as *potentially* necessary. The program worked closely with IUCN specialists and local NGO partners to secure rejection of this clause at a public praesidium in Jakarta in May and at the UNESCO World Heritage Commission meeting in June in Poland, the Indonesia delegation pledged that no trans-park infrastructure would be approved. However local political pressure for infrastructure development remains high and TPCU and MHS patrols recorded that part of a footpath through the core area of the national park between Lempur in the south of the Kerinci valley and the Renah Kemumu enclave in neighbouring Merangin district has been illegally widened using funds of unknown origin and sparking encroachment directed by a rogue traditional community group leader.
- The program team maintained close informal contact with local NGO partners and tiger conservation teams in adjoining tiger conservation landscapes sharing information on threats detected, in particular where there appeared to be links to other tiger conservation landscapes and, in one ongoing investigation, sharing information on an individual trading both tigers and elephant ivory.

## Monitoring tiger populations

Camera trap monitoring of tiger densities and changes in density was conducted in the Core area and a second site in the north-eastern block of the national park where no monitoring has been conducted since 2013 and which is also very rarely patrolled by TPCUs.

1/ Camera trapping by the MHS team in the core area with support from Panthera Tigers Forever was conducted between August and November 2017 using 3 x 3 Km<sup>2</sup> grid cells rather than the 3.5 x 3.5 Km<sup>2</sup> used in 2016 and with 80 grid cells chosen from the 107 cells which cover the core area.



*Figure 1. Map of camera trap location in KSNP Core area 2017*

Of the 98 camera stations deployed, 14 were destroyed or stolen by a poacher (subsequently identified by TPCU investigators).

Monitoring was conducted for a total 4,382 trap nights with average active period for each camera 52,2 days securing a total of 1,740 independent photographs of animals of which 80 photographs were of Sumatran tiger with 13 individual tigers (6 male, 7

female) identified. A further six tiger images could not be identified as individuals due to unclear body pattern or only partial images.

Seven of the tigers photographed were tigers recorded on previous surveys, including an adult female identified with cubs in 2015. One photograph advised of ongoing tiger breeding in the core area with one of the adult females recorded in a suckling period



The number of tigers recorded during camera trapping in the core area was the highest in four years (10 tigers 2016: 11 tigers on 2015 and 12 tigers in 2014).

This increase in tigers recorded is thought to be due to a combination of factors including reduced poaching threat to tigers, increasing number of camera stations installed and fewer lost or vandalised camera traps.

The monitoring team then used spatially explicit capture-recapture modelling under Bayesian framework implemented R 3.3.1 with the SPACECAP package to estimate tiger density and population size. The density estimates was 0.98 with 95% HPD 0.62 - 1.36 per 100 km<sup>2</sup> producing an estimated tiger population around the core area was ranging from 16 – 35 individuals.

Although the number of tigers identified was higher than in the previous year, the results showed that the tiger density per 100 km<sup>2</sup> did not increase greatly compared with the 2016 camera trapping results. With help from Panthera staff, the monitoring team then re-ran analysis 2016 and 2017 data sets with SPACECAP, standardising the datasets with a sub set of 60 days using a period with the maximum camera trapping activity and hence the best capture rates. The result showed that N tiger detections and No of individual tigers (Mt+1) was 21 captures of 7 individuals in 2016 compared with 62 captures of 13 individuals in 2017. This was likely a consequence of an improved study design for 2017 camera trapping in addition to reduced poaching threat.

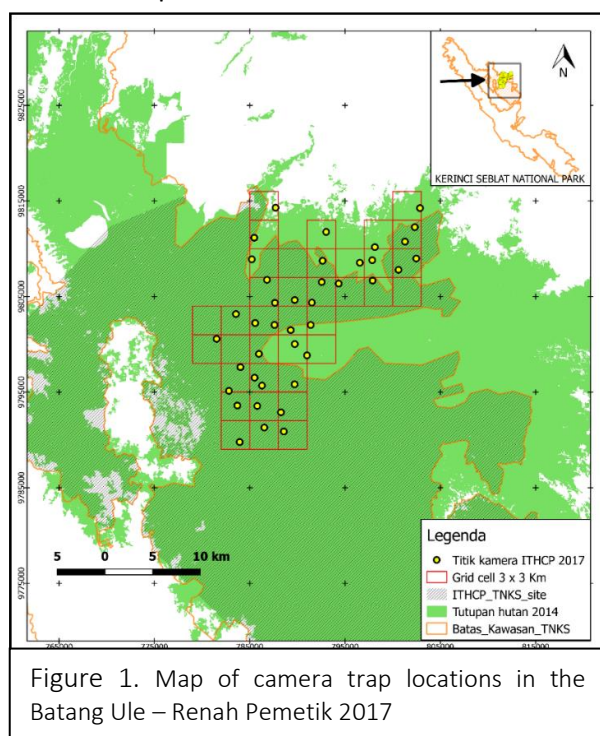
#### Summary of Core area camera trapping and data analysis

Period survey	11 Aug 2017 - 10 Nov 2017
N Station cameras	98
N Camera lost/destroyed	14 (14%)
N occasions	92
N tiger identified	13
N tigers from previous survey	7
ML-secr Density/100Km Mean (lower and upper confidence limit) $\pm$ SE	0.92 (0.53 - 1.60) $\pm$ 0.26
Population size $\pm$ SE	21.31 (12.40 - 36.63) $\pm$ 6.00
Mask area from secr	231804 ha
SPACECAP Density/100Km Mean (lower and upper 95% HPD) $\pm$ SD	0.98 (0.62 - 1.36) $\pm$ 0.19
Population size $\pm$ SD	25.22 (16-35) $\pm$ 4.99

#### 2/ Monitoring Sumatran tiger and prey in the Batang Ule – Renah Pemetik area of KSNP (Kerinci-Bungo districts) in the north-eastern block of the national park under IUCN ITHCP

Previous survey results identified this area as having a high tiger population (Linkie, 2008) however data from the last camera trapping survey (conducted in 2013 with support by Panthera) advised tigers numbers had reduced when compared with camera trapping conducted in 2006 and 2010.

This location is an area that is rarely patrolled by TPCU so the data from camera trapping which was conducted over three months provided valuable information on the tiger populations in this area of the national park.



Camera trapping was conducted from 15 April to 19 July 2017 using 41 camera stations set in grid cells of 3 x 3 Km<sup>2</sup>, two of which stolen by people conducting illegal activities inside KSNP (deer poaching).

Of the 2100 trap-nights, only four individual tigers were identified on 12 camera stations with one camera trap station securing a partial image of a tiger's head which is not included in the analysis as the animal could not be fully identified.

The four individual tigers identified consisted of two adult males (one of which was recorded on camera in the 2013 survey) and two adult females.

One of the females was photographed with her cubs (Figure 2) see below. These cubs were not

included in the subsequent density and population analysis.

Analysis of camera trapping results proposed tiger density in this area as 0.48 tiger per 100 km<sup>2</sup> with 95% lower and upper HPD value (0.24 - 0.88) with an estimated population ranging from 4-15 individuals and relatively low compared to the core area of KSNP.

Figure 2. Adult female recorded with two cubs



Camera trapping confirmed tiger numbers in this area have declined since the last survey was conducted in particular in the Batang Ule area where three tigers were present in 2013 but none were recorded in 2017.

The results of this survey demonstrate the impacts of poaching and habitat loss in this area in recent years.

DJM

Sungaipenuh, Kerinci  
February 2018

Appendix 1:

Chart 1:

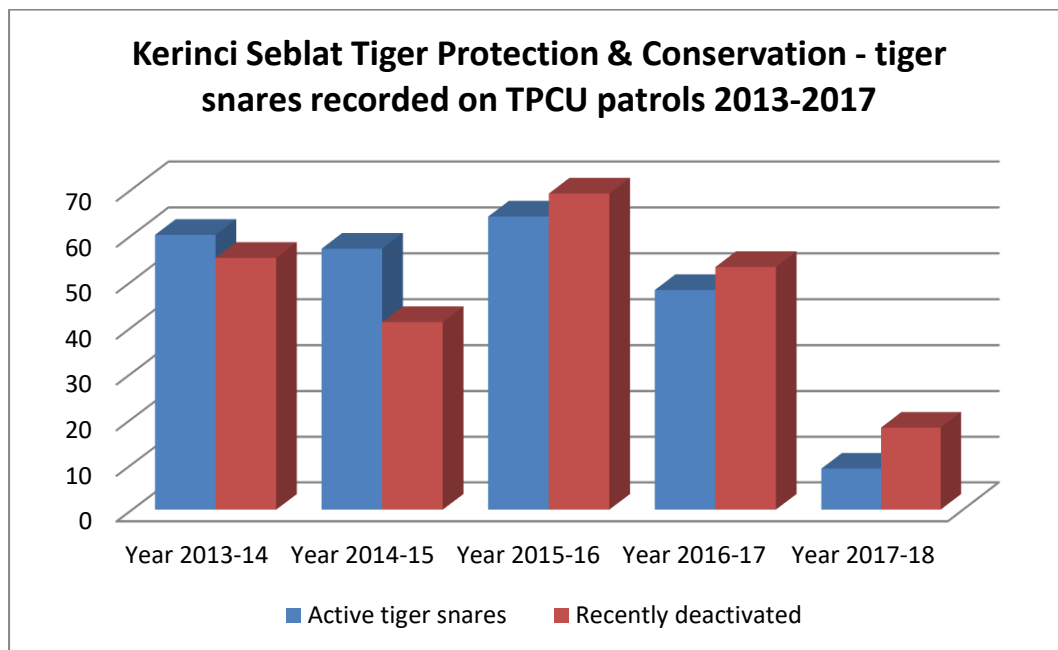


Chart II:

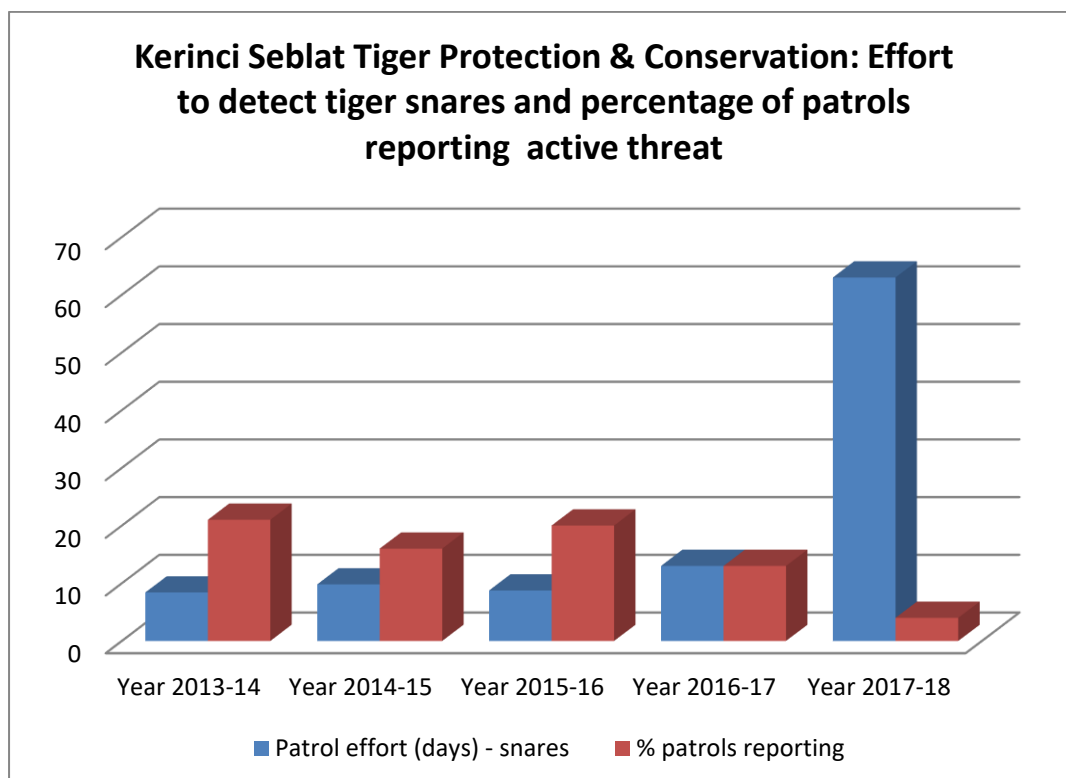
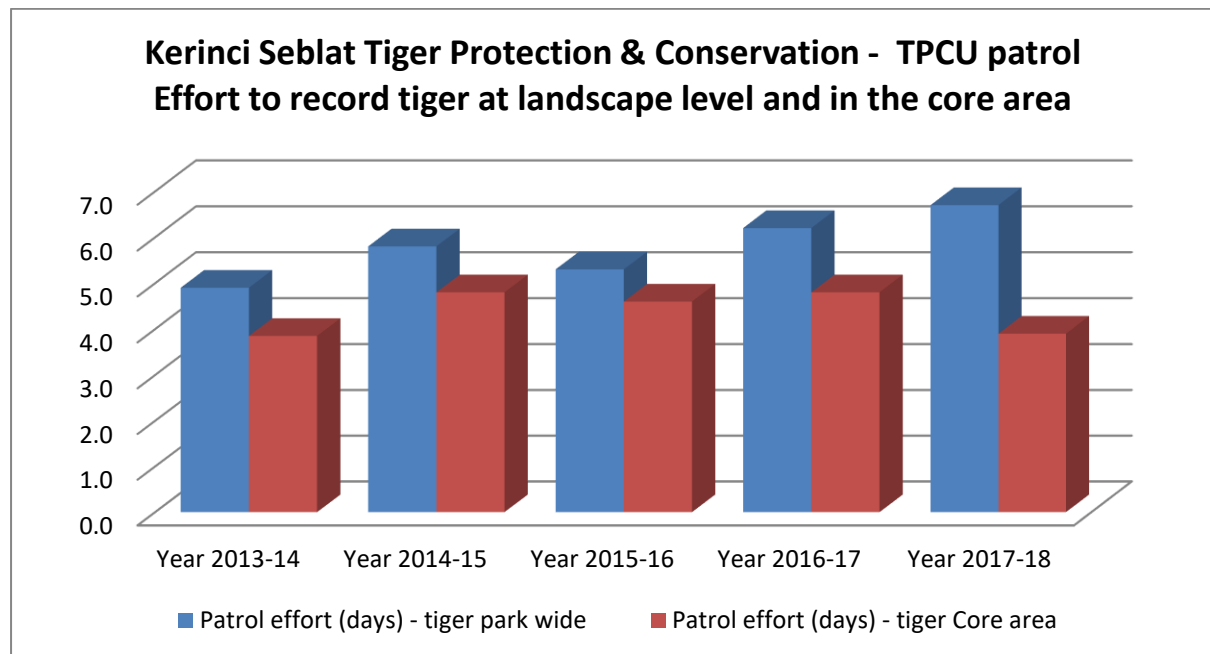




Chart III



Note – Chart III (*above*) clearly demonstrates the impact on tigers in and around the national park of the historic levels of illegal wildlife trade-driven threat recorded between 2013-2015 and, reduced but still significant, in 2016. Increased Effort to record tiger presence in 2016 and 2017 is influenced by TPCUs conducting threat assessment patrols in areas rarely patrolled between 2013 and 2015 and where low or very low tiger rates of encounter were made.