

# **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**

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**by**

**Fauna & Flora International**



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## **Summary of activities and results**

The project purpose is 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.

In the field, six Tiger Protection & Conservation Units operating from the east and west of the protected area conducted a total of 127 SMART forest patrols in and adjoining the national park across a total walking distance of 2276Km (1414 miles ) by GPS Waypoint.

Although threat to tigers from organised tiger poaching syndicates remained far above the norm, active poaching threat to tigers detected dropped to the lowest level since 2012 with 51 active tiger snares – three set by a poacher already in police custody – recorded on TPCU patrols compared with 72 in the preceding 12 months - a fall of more than 30%.

Reduced threat was most apparent in the south-west of the national park in the Mukomuko area where no active snares were recorded on either TPCU patrols or on monitoring transects in 2016 compared with 27 in 2015 and a direct consequence of law enforcement in January 2016 resulting in the arrest of the leader or 'kingpin' of a tiger poaching syndicate which was the primary source of threat to tigers in this area.

A total of 109 tiger presence records were made with 61% of all TPCU forest patrols reporting one or more tigers present on the patrol route and so higher than in 2015.

In addition to managing forest-edge community informant networks to secure information on suspected threat to tigers for a patrol response, more than 150 'for information' or active wildlife crime and illegal wildlife trade investigation reports were logged during the project period.

Investigations were conducted in the four provinces which overlay the national park and supported two law enforcement actions resulting in the arrest of two tiger poachers and a trader and taxidermist sourcing tigers from national park forests in two or more provinces.

A third law enforcement action in January resulted in the arrest of a pangolin trader and a second man sourcing and brokering the sale of pangolin and tigers from park-edge hunters in the Merangin area of Jambi.

However planning to strengthen and extend investigations through recruitment of an additional two TPCU rangers so allowing a more consistent wildlife crime investigation focus while maintaining patrol capacity was impacted by very delayed disbursal of funds pledged for this purpose by another programme donor.

For the third year running lower than usual levels of human-tiger conflict were recorded with only six human-tiger conflicts reported, one serious, during the project period and no wildlife emergencies requiring evacuations or veterinary interventions recorded.

Tiger conservation effort deep within the national park was strengthened by the FFI/KSNP/Panthera Tiger Monitoring Team (MHS) who conducted camera trapping and



subsequently law enforcement monitoring transects in an 828 sq km Core area. Camera trapping encountered technical difficulties, including a mass migration of Sumatran bearded pig which resulted in a reduced tiger density of 0.9 per 100 Km<sup>2</sup> compared with 1.21 100 Km<sup>2</sup> in 2015.

In early August 2016, long-serving TPCU ranger Suhardi, died very suddenly. A community ranger member since 2003, (*See photograph, second from left*) we thank

him for his unwavering commitment to protecting and conserving Sumatran tiger and for the sacrifices he made in the cause of tiger conservation. He is sadly missed..

Meanwhile the team's long-serving Field Manager, Dian Risdianto, was promoted in December to a national level position in the Ministry of Environment and Forestry after leading the TPCU team for eight years. He is replaced, as field manager, by Bengkulu TPCU coordinator Nurhamidi who joined the PHS team in 2004.

### **SMART patrols by Tiger Protection & Conservation Units (TPCU)**

Tiger Protection & Conservation Units conducted a total of 127 SMART patrols in and adjoining the national park covering a total walking distance of 2276Km (1414 miles) by GPS Waypoint with 671 Unit days spent in the field on patrols.

The primary patrol focus continued to be to the central area of the national park and adjoining key tiger habitat centering on an 828km<sup>2</sup> 'Core' area which also forms the focus for tiger monitoring activities.

However TPCUs also conducted patrols more widely around the national park where information was secured on possible active threat to tigers or tiger prey.

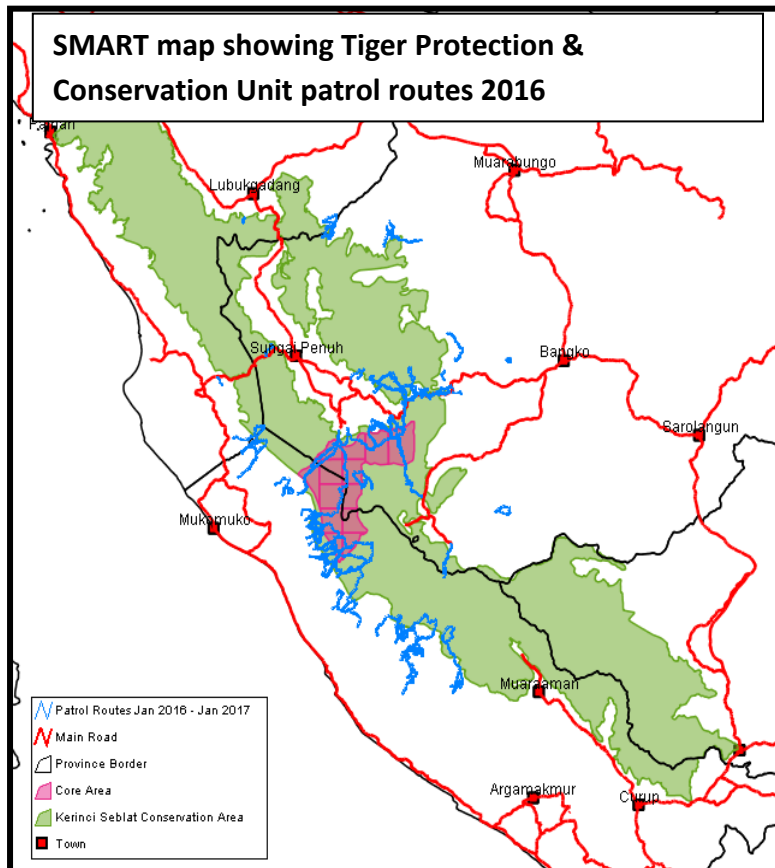
Patrols made a total of 109 tiger presence records (*See SMART map, Appendix 1*) during the project period with 61% of patrols reporting one or more tiger present on the patrol route, the highest in five years.

However effort - TPCU patrol days to record tiger presence increased to 1 tiger per 6.1 patrol days and to 12.92 miles during the project period from the 1-5.5 patrol days and

11.47 miles recorded in 2015 and so the lowest since 2012 although above the 10-year patrol average for frequency of encounter in spite of the historic levels of threat to tiger recorded on patrols between 2013-2015.

Patrols recorded significant differences in tiger presence between areas of the national park where a strong TPCU presence has been maintained and other areas where, for capacity reasons, few patrols have been conducted since 2013

Very low tiger presence was recorded in the north-east of the national park in Bungo district



of Jambi province and in one area in and adjoining the national park in North Bengkulu district where an investigation into a suspected poaching syndicate believed operating in both Kerinci Seblat and Bukit Barisan Selatan national parks is ongoing.

However patrol effort to record tiger presence in and adjoining the 'Core' area of the park and other high frequency patrol sites was stable or better at 1 tiger per 4.6 patrol days (4.9 days in 2015) while effort to record tiger presence on monitoring transects in the Core area by the Tiger Monitoring team (MHS) reduced to 1 tiger per 3.15 forest days.

From the third quarter of 2012 through to 2015, TPCU patrols recorded very severe levels of threat to Sumatran tiger from organised illegal wildlife trade-driven poaching syndicates with a total of 217 active tiger snares destroyed on TPCU patrols between 2012- 2015 compared with 34 in the preceding four years (2008-2011).

Threat to tigers from organised poaching gangs remained high during the project period with a total of 51 active tiger snares detected and destroyed on TPCU patrols in 2016 and an additional four active snares on law enforcement monitoring transects.

However the project period saw a very significant reduction in threat to tigers compared with 2015 when a total of 72 active snares were recorded on TPCU patrols and a further 11 on monitoring transects while more than 90% of all active snares recorded by TPCU (and 100% in the first six months of 2016) were recorded on intelligence-led patrols. Three of these active snares had been set by a tiger poacher already arrested in a project-led law enforcement action in early January 2016.

Parkwide, just over 13% of the 127 TPCU patrols conducted recorded active threat to tiger compared with more than 20% of TPCU patrols in 2014 and 2015.

The most significant fall in active threat to tiger was recorded in the west and south west of the national park and adjoining forests in Mukomuko district of Bengkulu province where no active threat to tiger was detected in 2016 in a previously high risk area following successful law enforcement against the leader of a tiger poaching syndicate and one of his cohorts.

However direct threat to tiger remained high in forests to the north of the Core area in and adjoining the national park in the Merangin river valley area on the Kerinci-Merangin district borders of Jambi province where three inter-linked poaching gangs were active. Here TPCUs made use of local information networks to guide patrols and also played gangs off against each other so that hunters informed on other hunters.

Two gang members, one the Kingpin or key man in these syndicates and a long-standing TPCU law enforcement target, were arrested shortly after the project period closed. It is likely, on the basis of experience in Bengkulu in 2016, that threat to tiger will reduce significantly in this area in 2017 although three individuals known to pose threat to tiger in this area remain at large.

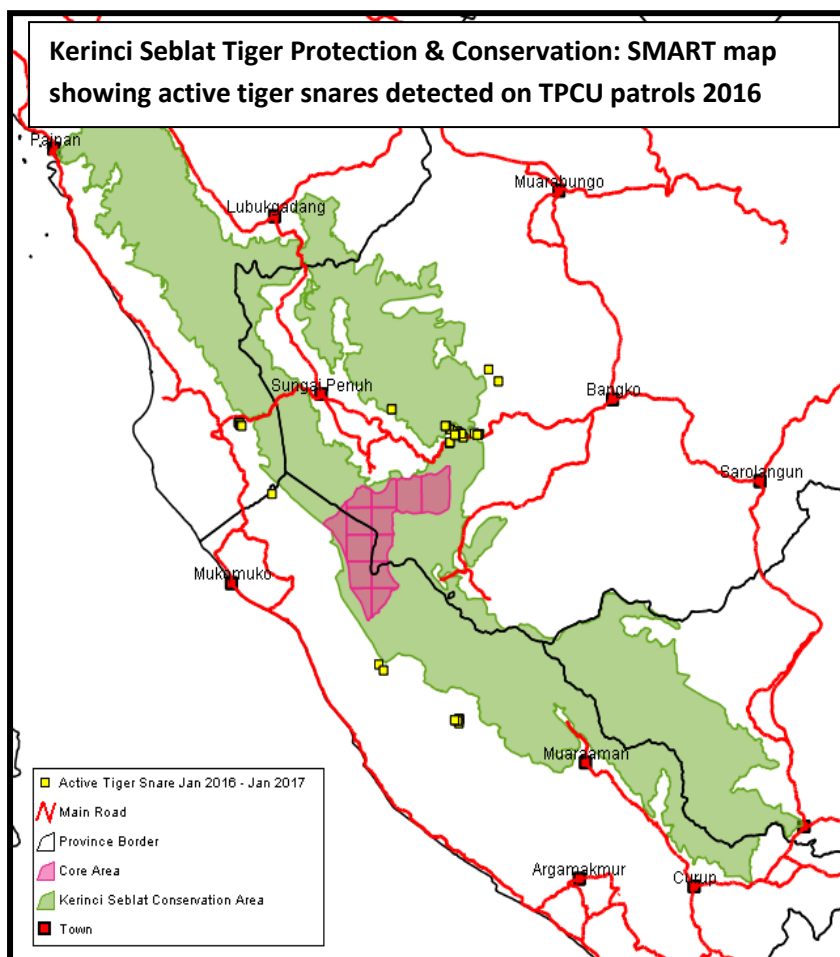
TPCUs have maintained a very intensive presence in this area since 2013 due to the high level of threat to tiger and if threat reduces due to the deterrent impact of law enforcement, it will allow TPCUs to (cautiously) commence to expand patrol focus in the north-east of the park

Park-wide, TPCUs recorded one active tiger snare per 13 patrol days (including drop/pick up from patrols) compared with one snare per 8.23 days in 2015 while effort to record active threat in the south-west and west of the national

park increased from 1 tiger snare per 6.6 Unit patrol days in 2015 to 1 per 15.3 Unit patrol days.

Intensity of threat (number of snares in a 'snare line') also reduced with only three of the 17 TPCU patrols detecting active poaching threat reporting more than three snares active compared with eight patrols in 2015.

Poaching threat to tiger prey species, primarily rusa sambar and muntjak deer, was recorded on only eight (6%) of the 127 patrols conducted with a total of 191 deer snares





detected and destroyed by TPCUs and so continuing a long-standing slow year-on-year decline in threat to deer in regular patrol areas. Almost 90% of these snares were recorded on three patrols, two information-driven, conducted during the fasting month of Ramadan when threat to tiger prey species may rise in some areas around the park due to market demand for meat.

Threat to tiger habitat from both encroachment by smallholders – frequently involving the sale of protected or buffer zone forests by rogue local elites - and localised illegal logging within and adjoining the protected area was recorded on more than 10% of patrols and responded to as possible. However both patrol units and the national park were seriously constrained in responding to encroachment and illegal forest conversion through full law enforcement due to lack of political support at a national level for any strong action.



**Above:** Not all forest camps can be made close to a river or other water source – here a TPCU having ‘made camp’ prepares to go off to collect water for cooking and other needs for the night ahead

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

More than 150 reports were logged during the project period in the course of investigations and information collection conducted mainly in park-edge districts of the four provinces which overlay the protected area.

Reports logged ranged from notes on the activities of previously identified suspected poachers or traders, details of individuals newly identified as suspected poachers or traders, prices allegedly touted by traders for tiger and other protected wildlife and suspected poaching or trade incidents.

Investigators also worked to identify and map illegal wildlife trade routes from the national park and towns or cities identified as a sub-national source of trade demand for tigers and to identify changes in illegal wildlife trade demand.

Additionally, all personnel were expected to maintain and build information networks with the purpose of securing information on suspected active poaching threat for a patrol response.

Investigations confirmed major tiger traders have become more selective since early 2015 setting higher minimum 'standards' or length grades for tiger skins so suggesting that international blackmarket demand may be slowing. However continuing high demand for tiger bone and a further escalation in blackmarket prices for tiger canines was recorded.

Investigations also identified a booming illegal trade driven by international blackmarket demand, for the gallstones of Malay porcupine, a CITES II species which is protected under Indonesian law.

Evidence of tiger crime was obtained in the course of five investigations during the project period but in two cases could not be advanced to law enforcement for technical reasons and in a third case because it would have compromised a major ongoing investigation and possibly have placed the investigator at serious threat

Wide ranging illegal wildlife trade investigations were conducted in the province of West Sumatra which has previously not received a strong investigation focus and which overlays the northern section of Kerinci Seblat National Park.

TPCU investigators identified four inter-linked trade networks operating out of districts to the north of the national park in this province with one trade syndicate identified as posing threat to tigers and other protected species not only in Kerinci Seblat but in two other national parks and more widely in five or more provinces of central and northern Sumatra

Two of the traders identified claimed to have direct links with international blackmarket buyers and to be using the Indonesian freeport island of Batam in the Riau archipelago off the coast of Singapore as an exit port from Indonesia for smuggled wildlife.

In Merangin district of Jambi, investigations revealed a group of salesmen selling fish and vegetables and other household products to park-edge villages and also using their business to source tigers and Malay pangolin for onward sale to traders in two park-edge districts.

Meanwhile an investigation in the park-edge municipality of Lubuklinggau in South Sumatra into a suspected wildlife trader and illegal taxidermist advised he was familiar with two known tiger poachers in park-edge districts of Jambi 250Km to the north of Lubuklinggau. Both these latter investigations concluded with law enforcement action while law enforcement against one of the illegal wildlife traders identified in West Sumatra province was conducted in February by government agency partners using data from TPCU investigations collected in 2016.

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

Two successful tiger law enforcement actions were successfully conducted during the project period in partnership with park-edge police divisions with a third law enforcement action in January 2017 resulting in the arrest, on pangolin trade charges, of two men also known to pose threat to Sumatran tiger.

The first law enforcement action was conducted in early January 2016 following a long-running investigation by TPCU personnel and resulted in the arrest and successful prosecution of two men, one the kingpin of a tiger poaching syndicate responsible for the high levels of threat to tigers recorded in the west and south-west of the Core area on TPCU patrols since 2014 .

These men were subsequently sentenced to national and project record custodial sentences with poacher-trader Sudirman, the syndicate organiser receiving a three years custodial sentence and Rp30 million fine (\$2300) and his accomplice, the habitual tiger poacher Anzuar Anas, sentenced to four years in prison and a Rp60 million fine (US\$4,620).

Warrants for the arrest of a third man involved in this poaching and trade syndicate were issued but the suspect evaded arrest and remains on the national police 'Wanted' List

In December, tiger law enforcement was again launched, this time in Sarolangun area of Jambi and resulting in the arrest of a taxidermist and illegal wildlife trader operating out of the municipality of Lubuklinggau, an illegal wildlife trade entrepot on the south-eastern edge of the national park in South Sumatra province.

Evidence seized composed a high quality taxidermised tiger and suspected fraudulent permits of ownership, unfortunately due police jurisdictional issues it was not possible to leverage an immediate search of the suspect's premises in Lubuklinggau where other protected wildlife, including the pelt of a freshly killed clouded leopard had been seen.

This case is likely to move to a court hearing in March 2017.

Two planned tiger law enforcement actions were aborted, in one case when it became clear that law enforcement planning had been compromised - almost certainly unintentionally – by a government agency partner.

In a second case, planned law enforcement did not take place after the suspect's partner, the leader of the syndicate, intercepted the suspect and evidence before law enforcement could be conducted in a neighbouring province. The leader of this syndicate was finally arrested in February 2017 by a KSDA Jambi team using information collected by TPCU investigators.



Offences recorded on TPCU patrols were responded to as appropriate with all offenders documented and formally warned that they could face prosecution if a repeat offence was detected however no full law enforcement action proceeding to formal arrest and prosecution was conducted on patrols in 2016.

Serious threat to national park forests from organised clearances of forest for coffee plantations by incomers from other areas of Sumatra was recorded on a number of patrols in the north-east of the national park with social conflicts emerging between traditional forest edge communities and in-migrants.

However both TPCUs and the national park were seriously constrained in responding to this threat to tiger habitat through law enforcement due to lack of national government political will.



Above: TPCU rangers search the baggage of two suspected deer poachers encountered on a patrol in national park forests in a remote area of Merangin district, Jambi

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

Only five human-tiger conflicts were recorded and responded to by TPCUs during this project period, the third year in which the number of conflicts reported has been well below the long term project average.

The most serious of these cases involved a farmer bitten on the thigh by a tiger cub while clearing undergrowth in a cinammon plantation at the edge of the park in the south of Kerinci district.

Examination of the site and interviews with the victim strongly suggest that the cub – probably aged six-seven months old - had been exploring while its mother was resting and had been startled by the farmer and responding by biting him. The farmer was able to walk back from his farm to the nearest village and was treated at a local first aid post where the bite wound was stitched but did not require in-patient hospital treatment.

A TPCU team and colleagues from the national park remained on site in this area for more than a week following this incident, providing counselling to local farmers on safety and demonstrating a presence with the purpose of deterring any attempt by poachers to exploit this incident.

A second potentially serious incident occurred in early December when villagers from a supportive forest-edge community reported a tiger moving through forest-edge farmland apparently trailing a snare wire.

TPCUs attended the scene and confirmed a tiger was present but were unable to secure first-hand confirmation that the animal had escaped from a snare. The animal subsequently moved north where it was seen by another TPCU informant who advised that the animal was moving normally and that no snare wire was visible.

All other human-tiger conflicts reported and responded to related to tigers moving through forest-edge farmland – in one case almost certainly as a consequence of encroachment by smallholder farmers – but with no predation of livestock or direct threat to people recorded.

## **Capacity Building:**

No formal village meetings or workshops were held by the project team during the project but TPCUs and other programme personnel routinely provided information to forest edge farmers and local community leaders regarding the protected status of tiger and tiger prey species and the role of tigers in controlling populations of wild boar.

Two members of the project team, the Jambi TPCU coordinator and a long-serving TPCU ranger who also now manages the TPCU SMART patrol database also attended a wildlife crime analysis training workshop with support from another programme donor in Bangkok, Thailand .

Meanwhile discussions with key park-edge police divisions identified a need for training for key TPCU personnel in managing wildlife ‘Scene of Crime’ sites with the purpose of

securing potentially useful forensic evidence to strengthen subsequent investigations into poaching incidents detected on TPCU patrols

It is hoped that a small training workshop to introduce key TPCU rangers and some national park partners to the principals of crime scene management for evidence collection purposes may be held in early-mid 2017 following revision and extension of an MoU between the national park and provincial police agencies.

Informal briefings on wildlife crime detected in the course of TPCU patrols were also provided to key park-edge police divisions but planning for strengthened coordination with park edge and provincial police agencies to build a coordinated strategy to address wildlife crime was hampered by ongoing delays in activation of a long-planned GEF/UNDP biodiversity conservation project.

### **Community/Government/Stakeholder Engagement:**

The program team maintained informal contact with colleagues in other tiger conservation programs in Sumatra, in particular sharing information on changes in detected threat to tigers and other protected wildlife where investigations identified links to other tiger conservation landscapes.

The programme also provided extensive data to the Sumatran tiger conservation forum Harimaukita for use in a national Sumatran tiger Population Viability Analysis workshop.

This workshop concluded that Kerinci Seblat National Park offers the best hope for the long-term survival of wild Sumatran tiger but with the important proviso that the protected area is not fragmented by infrastructure development.

In April 2016, the Governor of Jambi province made a formal proposal to the Minister of Environment and Forestry for construction of an 'disaster evacuation' route through the north east of the national park from Kerinci to Bungo district using the active Mt Kerinci volcano as a rationale.

To address this very serious threat to the park's integrity, the FFI team leader worked closely with a member of the AKAR Network of local NGOs to provide background briefings to the owner of a park-edge plantation company who has access to the very highest levels of the Indonesian government and who has established a conservation forest area in the national park buffer zone.

Extensive briefing materials were prepared regarding the likely impacts on tiger and biodiversity more widely both in the national park and the plantation company's conservation forest if the road was approved and this data provided via our local NGO partner to the plantation company owner. Two Indonesian government ministries subsequently rejected the road building proposal.

Meanwhile the FFI team leader leveraged strategy meetings by park-edge NGOs in three provinces to support development of coordinated but locally relevant park-wide strategies to counter pressure from other local and provincial politicians for similar trans park infrastructure development elsewhere in the Kerinci landscape.

The team also liaised with the Aspinall Foundation Indonesia team who are proposing to develop a wildlife rehabilitation centre with the TKA palm oil plantation company in the

north-east of the national park and which is also planned to include a temporary holding facility for rescued tigers and other large felids.

The FFI team leader also liaised closely with senior national park officers to prepare for extension of an MoU between the national park and four provincial police authorities to address the illegal wildlife trade around the Kerinci landscape.

### **Monitoring tiger populations in selected sites within a Core area of the national park in partnership with Panthera Tigers Forever**

Camera trapping by the FFI/KSNP/Panthera Tiger Monitoring team was conducted over a five months period in 2016 in an 828Km<sup>2</sup> Core area of the national park using 3.5x3.5Km<sup>2</sup> grid cells with the intention of maximising captures of tiger.

Camera trapping encountered a number of technical issues in 2016 including flash flooding which meant that key camera trap placements could not be made in two sites and vandalism of 16 camera traps by suspected helmeted hornbill poachers and by Malay sunbear.

Most significantly, camera trapping was conducted amidst a mass migration of Sumatran bearded pig *Sus barbatus oie* with more than 30,000 images of wild boar secured so that more than half the camera traps placed – including in the Sipurak area - had suffered flat batteries and in some cases memory cards full of wild boar images, by the time they were retrieved.

Consequently from 2,819 effective trap nights the monitoring team secured images (34) of only 10 individual tigers and not the 11 individuals recorded in 2015 and using spatially explicit capture–recapture modelling under maximum likelihood (secr) framework implemented in R 3.3.1 for estimating tiger density produced a density estimate of 0.90 within 95% CIs 0.47 to 1.70 individuals per 100 km<sup>2</sup> and lower than the 1.21 per 100 km<sup>2</sup> recorded in 2014 and 2015. No active or recently active threat to tiger or tiger prey was reported during camera trapping in the Core Area in 2016 unlike in 2014 and 2015.

DJM  
Sungaipenuh, Kerinci  
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