

This report will be made public. If it contains confidential or sensitive information, please also provide a revised report for sharing with the public.

Section I. Project Information

Project Title: Kerinci Seblat Sumatran Tiger Protection and Conservation

Grantee Organisation: Fauna & Flora International (FFI)

Location of project: Kerinci Seblat National Park. Sumatra, Indonesia

Size of project area (if appropriate):

15,000Km² - Kerinci Seblat Landscape (Kerinci Seblat National Park and forest bordering or adjacent to the protected area in four provinces (excluding the Batanghari forest complex)

13,800Km² - Kerinci Seblat National Park: patrols primarily in approximately 450,000ha of the central area of the national park and buffer zone forests but with other actions conducted more widely across the landscape.

No of tigers and / or Amur leopards in project area, giving evidence & source: Drawing on park-wide Occupancy surveys by the FFI Kerinci Seblat Tiger Monitoring team (2019-2020) and local partners, camera trapping in the Core Area (2020) and analysis of available habitat (forest cover); the current tiger population in the Kerinci Seblat landscape is 128 individuals with the national park protecting 119 tigers of which 29 have territories wholly or mainly within the Core Area. If habitat across the landscape is conserved and other threats, direct and indirect, contained, there is potential for up to 144 Sumatran tigers in and around KSNP.

Partners: (Please give details of partners, including communities, academic institutions etc. for this project.

Kerinci Seblat National Park authority; park-edge Units for Conservation of Natural Resources (KSDA) in Bengkulu, Jambi, West Sumatra; Indonesia National Police (park-edge divisions and provincial agencies), Ministry of Forestry Law Enforcement directorate, Kerinci Seblat (formerly Merangin) Village Forest programme, Lingkar Inisiatif, ICS, Sumatran Tiger Conservation Forum (Harimaukita), Andalas University Biology faculty, WCS IP, EIA, Traffic SEA.

Project Contact Name: (main contact via email)

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Reporting period: February 2021-January 2022

Please ensure that your report relates to the objectives and activities detailed in your proposal and logframe. Please include <u>results data</u> in Section II and Section III.

Section II. Project Results

Long Term Impact: (How has this work contributed to the vision and long-term impact that your project aims to achieve?)

The project's long-term goal is to underwrite a sustained, natural increase in Sumatran tiger populations in Kerinci Seblat National Park (KSNP) through detecting and reducing threat to tiger, their prey and habitat with activities strengthened by collaborations between national and local government, local civil society and forest-edge communities.

Threat to Sumatran tiger recorded by Tiger Protection & Conservation Units during the project period remained below the long-term programme average for the fifth consecutive year while patrol frequency of encounter with tiger stabilised after four successive years of rising tiger encounter rates.

Poaching threat to key tiger prey species remained low, so maintaining the gradual, downward trend in pressure on deer that has been recorded over the past decade while a Relative Abundance Index analysis for deer in the Tiger Core Area indicates deer populations are now increasing.

However Sumatran tigers in Kerinci Seblat continue to face a range of threats, not least ongoing pressure on tiger habitat both within and adjoining the protected area while the advent of African Swine Fever is now believed to be impacting on wild boar populations which form a core tiger prey species given naturally low rusa sambar populations.

The project is also aware that low rates of threat to tiger recorded both on patrols and during TPCU investigations around the landscape may have been influenced by the impact of the Covid-19 pandemic on national and international trade routes.

However, the results of activities during the project period build on multi-year actions by a highly-committed and professional team of rangers and results advise they have advanced the project's long-term vision and goals for conservation of wild Sumatran tigers in Kerinci Seblat National Park.

Conservation Outcome: (What are the actual changes that this project has achieved?)

For the fifth consecutive year, SMART patrols by Tiger Protection & Conservation Units in national park and park-edge forests of three provinces reported direct threat to Sumatran tiger at levels substantially below the long-term project average with only one active and six recently-active tiger snares recorded.

Threat to key tiger prey species, primarily rusa sambar and muntjak, maintained a now long-running, gradual decline as hunters have widely come to accept they face risk of detection with only one 'long' snare line for deer recorded and destroyed on an information-led patrol during the fasting month of Ramadan.

Frequency of encounter with tiger was stable at 1 per 18.3Km across the project landscape following three consecutive years in which tiger encounter rates on patrols increased while 68% of TPCU patrols reported tiger presence compared with 62% in the preceding project period. A record 95% of TPCU patrols in the Core Area reported tiger present.

A minimum of 61 individual Sumatran tiger presence records were made on TPCU patrols during the project period with two patrols, both in forests in the south-west of the national park, reporting tiger breeding records in the form of two adult tigers and three cubs.

Investigations found no evidence of any revival of organised Illegal Wildlife Trade demand for tiger body parts with those poachers still active now appearing to resort to using networks of 'brokers' or proxies to seek potential buyers in the absence of any solid commercial demand for tigers.

Only one intelligence-led tiger law enforcement action was conducted and resulted in the arrest and prosecution of a tiger poacher operating in a national park to the south of Kerinci Seblat but using a suspected tiger poacher and illegal wildlife products broker based in a Kerinci Seblat park-edge village to seek a buyer.

No camera trap monitoring of tiger populations in the Core Area was conducted during the project period but is planned to be conducted in 2022 and, on the basis of patrol records, we anticipate this exercise may record a further increase in tiger densities in the Core Area.

Summary of activities and achievements: (*Please provide a summary for use in our communication materials* Max 300 words)

The project conducted a range of activities in national park forests and park-edge districts of the four provinces which overlay a national park which protects the single-largest population of tigers on the island of Sumatra.

Tiger Protection & Conservation Units conducted SMART forest foot patrols across a distance of 1,118Km (695 miles) in national park forests of three provinces and recorded the presence of a minimum of 61 Sumatran tiger. Two tiger breeding records were reported.

Patrol Frequency of Encounter with tiger was stable at 1 tiger per 18.3Km following three years of increasing encounter rates however the percentage of patrols reporting tiger present rose from 62% in 2020-2021 to 68% during the project period.

No camera trapping was conducted, but patrol records suggest tiger numbers, particularly in the west of the protected area, may be recovering from the severe levels of threat recorded between 2013 and 2017.

Direct threat to tigers recorded on TPCU patrols remained far below the long-term average for the fourth consecutive year with only one active tiger snare and a further six 'recently-active' placements while poaching threat to key tiger prey species continued a long-running, gradual decline.

Investigations were conducted in park-edge districts of four provinces and one of these supported the arrest of a tiger poacher and seizure of the skin and bones of a young male Sumatran tiger. The poacher subsequently received an eight month prison term and fine, lower than the recent norm. A second individual, acting as the poacher's intermediary or broker escaped arrest but was apprehended some months later.

Details of activities and results: (*Please give detailed narrative of the results of each objective & output. Please include measures for example patrol numbers and distances covered*)

1: SMART forest patrols by Tiger Protection & Conservation Units (TPCU) consolidate gains made and contain any significant resurgence in poaching threat to tiger while focused patrols during the fasting month of Ramadan contain potential spikes in local market-driven threat to tiger prey species.

A total of 66 SMART foot patrols were conducted by TPCUs in national park and park-edge forests of three provinces covering a total distance of 1,228Km (763 miles) by GPS Waypoint or 1558Km/968 miles using Tracklog with a total of 398 days spent on forest patrols.

The number of patrols conducted, forest patrol days and distance walked was substantially lower than planned due to severe financial constraints on all TPCU field activities in the second half of the project period as a result of shortfalls and delays in disbursement of anticipated counterpart funding.

Patrols recorded a minimum of 61 individual Sumatran tiger with Frequency of Encounter with tiger stable at 1 tiger per 18.3 kilometres walked (using GPS Waypoint) parkwide or 1 tiger per 6.4 patrol days. Tiger breeding records were made on two patrols, both in the south-west of the national park with the presence of two adults and three tiger cubs recorded.

Park-wide, the percentage of TPCU patrols reporting one or more tiger present on a patrol route climbed to a project record of 68% from 62% of all patrols in the same months of 2020-2021, itself marking one of the project's highest rates of encounter with tiger.

A total of 22 SMART patrols were conducted wholly or mainly in the Tiger Core Area. These reported the presence of not fewer than 31 Sumatran tigers with a record 95% of all Core Area patrols reporting tiger presence. However, Effort to report tiger presence in the Core increased, fractionally, from 1-4.2 days to 1 tiger per 4.6 days.

Across the landscape, tiger presence was highest in national park and park-edge forests in Bengkulu in the south-west of the national park, which accounted for just over 60% of all tiger records made during the project period.

Active or recently active threat to Sumatran tiger was recorded on five TPCU patrols however only one active tiger snare was recorded in spite of a continuing strong focus to securing information on active threat for a rapid patrol response. A total of six 'recently-active', tiger snare placements were reported on three more TPCU patrols, two in the west of the national park and one in the east of the protected area. The carcass of a Malay tapir (EN), which had died approximately two weeks earlier, was found in one of these inactive snare placements.

Only four (6%) of TPCU patrols reported active poaching threat to deer with just 46 active deer snares destroyed, 40 on a single intelligence-led patrol early in the fasting month of Ramadan, a period when pressure on deer frequently rises in some areas of the national park. Very low rates of poaching threat to tiger prey may be a consequence of the ongoing Covid-19 pandemic which saw many forest-edge communities ban outsiders from entering their area for fear of transmitting the virus.

Illegal logging, generally local and small-scale in nature was recorded on nine patrols in or immediately adjoining the national park with TPCUs responding where possible. Smallholder encroachment into national park or buffer-zone forests continued to pose the most widely encountered threat to tiger

habitat, with 25 of the 66 TPCU patrols conducted reporting recent or new clearance of tiger habitat, for palm oil in lowland forests to the west of the park and for coffee in the central and eastern area of the park.

Disturbingly high rates of encroachment were recorded in one area to the south of the Kerinci valley in an area where there is pressure for a road to be constructed to serve a proposed geothermal power development plant.

2: Investigations - identify and monitor individuals posing threat to tigers, their networks and trade routes, secure evidence for law enforcement as appropriate and identify and counter any resurgence in illegal wildlife trade- driven threat to tigers.

Investigations into poaching and the illegal wildlife trade have formed a core project activity since the programme was established.

Investigation capacity was severely impacted by financial constraints in the second-half of the project period with the team choosing to prioritise maintaining a patrol presence in forests in key sites over investigations where conservation impact may be more difficult to quantify.

Consequently, while personnel continued to collect information opportunistically and maintained communications with information sources, from August, no active on-the-ground investigations were conducted.

Over the project period as a whole, of more than 30 investigations were conducted; two of which secured first-hand evidence of crime (A1) with one of these investigations proceeding to tiger law enforcement in an operation led by the Ministry of Environment and Forestry Law Enforcement directorate (Gakkhum).

The second investigation could not proceed to law enforcement as evidence seen was unlikely to support an appropriate result in any court of law however the individual concerned remains 'a person of interest' and appears to have links to hunters and traders in park-edge districts of two provinces in the east of the national park.

'Distance' monitoring of the illegal wildlife trade and activities of suspected poachers or their proxies in the second-half of the project period reported that active Demand for tiger body parts remains 'muted', likely as a consequence of the pandemic's impacts on national and international illegal wildlife trade routes.

International travel restrictions imposed as a result of the pandemic are now being widely eased and tourism is now slowly resuming, including to the island of Bali, and the team will be watching closely for any significant changes in IWT demand, particularly for tiger canines.

Although no active IWT demand was noted in the course of distance monitoring of suspected traders or poachers, investigations found that a small number of known or suspected illegal wildlife traders are still allegedly willing to purchase tiger body parts, albeit at prices far below those allegedly paid before the pandemic

3: Law enforcement: Conduct offence-appropriate law enforcement within the national park and with other government agencies, where outside the national park's jurisdiction. Support post-law enforcement case development to secure an appropriate judgment that offers a substantial deterrent.

The project team took part in only one intelligence-led tiger law enforcement operation during the project period. This resulted in the arrest of a tiger poacher operating in Bukit Barisan Selatan National Park to the south of Kerinci Seblat National Park and seizure of the complete body parts of a young adult Sumatran tiger. A second man, from a Kerinci Seblat park-edge district, who had been under surveillance as a suspected tiger poacher but who was acting as the poacher's 'broker' in this case, escaped arrest but was placed on the national police 'Wanted' list and subsequently apprehended late in 2021.

Law enforcement was led by the Ministry of Environment and Forestry's Law Enforcement directorate and Bengkulu provincial police, but with TPCU personnel taking an active role in planning and implementation. This case proceeded from law enforcement, conducted in a small town to the south of Bengkulu City, through case development by Bengkulu province police with support by MoEF Law Enforcement directorate officers to a court hearing in Bengkulu City with the poacher awarded an eight months custodial sentence and a Rp10 million (£532) fine or an additional prison term if not paid.

A second tiger law enforcement action, conducted in late December 2020 following a TPCU investigation into a tiger poaching syndicate operating in Bukit Barisan Selatan National Park and the far south-west of Kerinci Seblat NP moved to a court hearing in 2021, during the project period. Bengkulu City magistrates sentenced the three men arrested - two poachers and their 'broker' - to seven months prison sentences with fines of Rp5million (£266) each with a further six months in prison if the fines were not paid.

In both cases, the custodial sentences awarded and accompanying fines, were lower than recommended by Bengkulu City court prosecutors and substantially below the recent norm for tiger crime recorded around the project landscape.

A third intelligence-led law enforcement operation, dating from December 2020, in which a pangolin trader, from a park-edge district in West Sumatra province - also suspected to trade, opportunistically, in Sumatran tiger - proceeded to a court hearing in Kerinci district court during the project period. The suspect was sentenced to a one-year prison term with a fine of Rp50m (£2662) and an additional three-months prison term if the fine was not paid.

Formal, written warnings or verbal cautions and instructions to leave the national park were issued to 18 men in the course of 12 TPCU patrols for a range of offences including illegal logging and hunting wild songbirds to supply the lucrative cagebird trade. Two chainsaws and a high-powered rifle, found in a forest-edge farmhouse, were confiscated while bird hunting equipment was confiscated from offenders encountered within the national park.

Full law enforcement was not conducted in these cases, either because the offenders were cooperative and promised not to repeat their behaviour or, in the case of illegal loggers, because they were daily-paid local labour and formal arrest and prosecution would not have served the cause of tiger conservation.

4: Human-Tiger Conflict Mitigation - 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

TPCUs responded directly to only two human-tiger conflict reports during the project period – one of which was found to relate to Sumatran leopard cat. All other human-tiger conflicts were attended by members of human-wildlife conflict mitigation taskforce groups or *satgas mitigasi konflik* led by local units of KSDA. This was, in part, a consequence of severe shortfalls in counterpart funding to the project.

In the east of KSNP, a sharp increase in human-tiger conflict appears to have occurred with the most serious incident involving the death of two people — one an illegal gold miner — in an area approximately 30Km east of the national park. In a second case, repeated livestock predation was reported in a park-edge village and is believed to have culminated in the death of the tiger involved. It is very likely that this surge in reported conflicts is a result of plunging wild boar populations due to the African Swine Fever epidemic.

5: Other Activities -

- **5.1 Training**: The project didn't conduct any capacity development activities during the project period however national park members of the team gave input to a training workshop managed by the national park authority on human-wildlife conflict mitigation and wildlife rescue procedures. This training was attended by 38 participants, consisting of two officers of Jambi Unit for Conservation of Natural Resources (KSDA), 10 members of park-edge Forest Management Units in Jambi province, two officers from Kerinci district government, 20 national park officers and two FFI staff. Drawing on funds from a Kerinci Seblat Village Forest donor, training was also delivered by FFI to national park personnel on database management and analysis of wildlife monitoring and forest patrol records using R method.
- **5.2 Coordination and stakeholder liaison:** Informal contact was maintained with colleagues in other tiger conservation programs in Sumatra and with local and national NGOs, most notably Lingkar Institute in the far south-west of the national park while the programme advisor was a member of a panel of tiger conservation specialists formed to draft outline priorities for tiger conservation over the period 2022-2034. Both TPCUs and the tiger monitoring team (MHS) shared data routinely with the Merangin village forest team and all field activities were reported, monthly, to the director of the national park for onward reporting to the Ministry of Environment and Forestry in Jakarta.

Key achievements of this project: (*Please give a bullet point list of key measurable outputs*)

- Six TPCUs conducted 66 SMART forest patrols across 1,118Km (694 miles) by GPS Waypoint in national park and park-edge forests of three provinces.
- Patrols recorded a minimum of 61 Sumatran tigers with Frequency of Encounter stable at 1-18.3Km following three consecutive years of improving tiger encounter rates.
- 68% of TPCU patrols, park-wide, reported tiger present compared with 62% (2020-2021) while a record 95% of patrols in the Core Area reported one or more tiger present.
- Two tiger breeding records two adults and three cubs made on two patrols in the southwest of the national park

- Poaching threat to Sumatran tiger recorded on TPCU patrols remained below the long-term programme average for the fifth consecutive year while threat to key tiger prey species, in particular, sambar deer, continued a long-running decline.
- Investigation and 'for information' reports found poaching threat to tiger remains primarily opportunist and not driven by organised illegal wildlife trade demand.
- A TPCU investigation launched in a park-edge district in 2020 resulted in successful tiger law
 enforcement with a tiger poacher from a national park to the south of Kerinci Seblat arrested
 and sentenced to a custodial term.
- At a meeting with the Director General of the Ministry of Environment and Forestry's
 Directorate of Nature and Ecosystem Conservation (KSDAE) the project Technical Advisor was
 honoured to be presented with a Certificate of Achievement for her work in Kerinci Seblat.
 This means seven members of the Tiger Protection & Conservation project team have now
 been formally recognised for their work to conserve tigers in Kerinci Seblat.

Obstacles to success: Give details of any obstacles/challenges to success that the project has encountered. (*Any changes to the project that have affected the budget and timetable of project activities should have been discussed prior to the end of the project*)

Following the end of the UNDP project in late 2020 and as a consequence of financial impacts of Covid-19 on donors, the programme experienced severe financial difficulties in conducting the planned range and number of field activities and, from June 2021 was unable to operate optimally as in previous years; this meant that the number of SMART forest patrols and investigations by TPCUs was far below planned. These severe financial constraints also meant that the project team passed information on reported emerging human-tiger conflict to colleagues from human-wildlife conflict mitigation taskforce groups for mitigation interventions.

Monitoring and Evaluation: (Describe the methods used to monitor and evaluate the progress of the project)

TPCU forest patrols: Evaluated, collaboratively, twice-monthly by patrol teams and by senior members of the team and, routinely, using the programme's SMART database to analyse and compare patrol results over a multi-year period. Tiger presence and change are evaluated using both Effort to detect tiger sign @ patrol days per tiger, and through frequency of encounter (Km walked to record), and % of patrols reporting tiger presence using secondary indicators. Active or recently-active poaching threat to tiger is recorded quantitatively (number of snares, number/% of patrols recording) and Effort (days) to detect, and compared with the number of deer snares recorded to secure a ratio of tiger to deer snares. Patrol 'coverage' of an area is not a key evaluation and monitoring tool due to the adaptive patrol model used and the greater impact of a consistent but unpredictable presence in the forest but may be drawn-upon in quarterly and six- monthly activity reviews using SMART patrol maps.

Investigations: Number of investigation reports logged, and graded (credibility). Investigations securing credible data on blackmarket prices, changes in demand for tiger or other species, new trade routes or identifying previously-unknown individuals (poachers, traders, couriers). Investigations or information collection supporting patrols which record active threat. Number of investigations progressing to A1 (observed first-hand) or A2 (credible but unproven). Number of investigations

supporting subsequent wildlife law enforcement in the landscape or by associates in another area of Sumatra. Willingness of forest-edge informants to provide information on suspected threat to tiger or tiger prey or an emerging conflict for a TPCU response.

Law enforcement: Number of pre-planned tiger law enforcement actions conducted and outcomes; number of suspects, evidence and, if Sumatran tiger, condition of evidence (complete or partial body parts, missing body parts). Willingness of other government agencies to partner for law enforcement actions. Law enforcement proceeding from arrest through Case Development to a court hearing and to sentencing. Judgments made (sentences, fines etc). Availability of suitable Expert Witnesses. Number of habitat and other law enforcement actions on patrols where offenders are present, type of offence, number of offenders, actions taken. Post-law enforcement patrol records and investigations in areas where law enforcement has been conducted suggest law enforcement impact.

Human-tiger conflict mitigation: Number of human-tiger conflict incidents reported, grade (severity) of conflict. Conflicts reported before livestock (excluding farmland guard dogs) predation has occurred, and conflicts involving livestock predation or posing direct threat to people. Conflicts mitigated in partnership with other government agencies under multi-stakeholder conflict mitigation taskforce groups (satgas) or directly by TPCU personnel. Post-conflict mitigation outcomes, including use of community informants to monitor any recurrence of conflict or reports of poachers entering the area. **Note:** during the project period, while emerging human-tiger and other human-carnivore conflicts continued to be reported to project personnel by forest-edge community information networks, conflict mitigation interventions were primarily conducted by the relevant provincial human-wildlife conflict mitigation taskforce team due to severe financial constraints on the project team.

Shared learning: (How will you share the outputs and learning from your project, in what format and with whom?)

The programme operates in full partnership with KSNP authority and all TPCU activities and outputs were reported, monthly, to the national park director and subsequently, to forestry headquarters in Jakarta. This reporting system delivered real-time information to the national park leadership and national decision-makers in evaluating progress towards Sumatran tiger and other conservation goals, challenges recorded in the field and actions required.

Nationally, outputs from surveys and patrols were shared informally with colleagues on the Sumatran Tiger Conservation Forum (Forum Harimaukita) where likely to be of value or directly with other tiger conservation programmes in Sumatra mainly by email or in conversations with local NGO partners.

Challenges and solutions identified by the project team over many years were also input into discussions with a panel of tiger specialists from international NGOs developing a 12 years strategy for input to a 2022-2034 Global Tiger Recovery Program II

Media: (Please provide a list of publications and media both local and national which mentions the work funded by this project and/or mentions WildCats Conservation Alliance)

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Have you provided at least 2 blogs? Y/N? 1

Have you provided at least 10 high quality images with details of the relevant credit? Y/N?



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Total area surveyed: N/A
Have you included data on other species recorded? N/A
Total area patrolled: Approximately 485,000ha – note, this excludes conflict
mitigation and investigations which substantially extends programme impact
How do you collect data? Handheld devices/paper/other? Please give
details? TPCU SMART data/observations collected using individual paper
'Tally Sheets' and data from these is subsequently cross-checked and reduces



base.
he course of forest community and works supporting conservation and conflicts. How many people did you reach? How many people did you reach? >150 – including long-standing forest-edge informants with whom TPCU rangers maintain informal routine contact,
s, NTFP collectors, swiftly pass on advice to TPCU regarding possible conflict for intervention before livestock predation has occurred; active ivestock predation has occurred.
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If yes: N/A					
Who?	What did you do? N/A	How many people reached? N/A			
Have you seen behaviour change from these activities? (Please give details of how this is measured)					
Did you carry out training activities for any staff/community member on the project? No - Not during this project period					
If yes: (please be as specific as possible)					
Who?	What did you do?	How many staff trained? How many others trained?			
How do you measure the effectiveness of this training?					
Did you carry out conflict mitigation activities with community members?					
If yes:					
Who?	What?	How main people did this include?			
Have you seen behaviour change from these activities? (Please give details of how this is measured)					
Were any scientific papers/articles published because of your project? N					



If so, please give details or provide copies.	