Supplementary materials

**Safeguarding Asian tapir habitat in Sumatra, Indonesia**

Irene M.R. Pinondang\*Ɨ, Nicolas J. Deere, Maria Voigt, Ardiantiono, Agus Subagyo, Alexander Moßbrucker, Antika Fardilla, Desy S. Chandradewi, Fahrudin Surahmat, Febri A. Widodo, Gabriella Frediksson, Hariyo T. Wibisono, Jatna Supriatna, M. Irfansyah Lubis, Nuri Asmita, Sunarto, Tengku Lidra, Tomi Ariyanto, Wido R. Albert, Wilson Novarino, Wulan Pusparini, Yoan Dinata, Matthew J. Struebig

**Table S1**. Details of camera trap campaigns and total survey effort in each of nine landscapes surveyed in Sumatra.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Landscape** | **Government partner** | **Survey periods** | **Target species** | **Grid size (km)** | **Total stations** | **Camera trap/station** | **Camera station description** | **Total trapdays** | **Trap spacing (km)** | **Description of human activities in the area** |
| Bukit Barisan Selatan | Wildlife Conservation Society  | May- Nov 2015 | Tiger and prey | 3x3 | 63 | Pair | High probability to capture tiger | 8799 | 2,14(1.51 – 46.47) | Illegal hunting, encroachment  |
| Berbak Sembilang |  |  Mar 2015 - May 2016 | Tiger and prey | 3x3 | 105 | Pair | High probability to capture tiger | 14178 | 2.15(0.5 - 67.78) | Illegal hunting (low), encroachment (medium), fire forest (medium) |
| Dangku |  | Jan-Apr 2015 | Tiger and prey | 2x2 | 10 | Pair | Forest cover | 801 | 3.54(1.82 - 18.42) | Illegal hunting (low), encroachment (medium), fire forest (medium) |
| Bukit Rimbang Bukit Baling |  | Aug-Dec 2015 | Tiger and prey | 2x2 | 72 | Pair | NA | 6913 | 2.24(1.34 - 82.81) | Illegal hunting, encroachment  |
| Tesso Nilo |  | Jul 2013-Oct 2015 | Tiger and prey, elephant | 2x2 | 25 | Pair | NA | 2364 | 2.52(1.87 - 20.57) | Illegal hunting (low), encroachment (medium), fire forest (medium) |
| Kerinci Seblat | Fauna & Flora International, Andalas University | Mar 2016 -Feb 2017 | Tiger and prey | 3.5x3.5 | 75 | Pair, single | High probability to capture tiger | 9993 | 2.20(0.9 - 123) | Illegal hunting, encroachment  |
| Batang Toru | Sumatran Orangutan Conservation Program | Feb-Jun 2015 | Not specified | Not specified | 58 | Single | Primary and secondary forest | 1966 | 1.19(1.03 - 11.78) | Not specified |
| Way Kambas | Sumatran Tiger Trust | Jun-Dec 2015 | Tiger and prey | 2x2 | 69 | Single | High probability to capture tiger | 7833 | 1.89(1.04 - 30.21) | Illegal hunting, encroachment  |
| Bukit Tigapuluh | Sumatran Tiger Trust, Frankfurt Zoological Society | Jun-Dec 2015 | Tiger and prey | 2x2 | 107 | Single | High probability to capture tiger | 7471 | 1.71(1.01 - 63.41) | Illegal hunting, encroachment  |

**Table S2.** The amount of critical and suitable tapir habitat predicted in protected and non-protected areas.

|  |  |  |  |
| --- | --- | --- | --- |
| **Status/Name** | **Area size(km2)** | **Landscape-specific prediction (km2)** | **Sumatra-wide prediction (km2)** |
| **Critical****(20th percentile)** | **Suitable (60-20th percentile)** | **Critical** **(20th percentile)** | **Suitable (60-20th percentile)** |
| Prediction |  |  |  |  |  |
| Suitable area |  |  |  | 15,363 | 28,525 |
| Protected areas |  | 5,997 | 12,466 | 5,431 | 11,998 |
| Arau Hilir & Air Terusan1 | 914 |  | - | 612 | 204 |
| Air Putih4 | 64 |  | - | 27 | 37 |
| Barisan1 | 41 |  | - | 23 | 23 |
| Barumun1 | 403 |  | - | 80 | 210 |
| Batang Gadis3 | 731 |  | - | 8 | 307 |
| Batang Pangean I, II2 | 483 |  | - | 129 | 266 |
| Berbak Sembilang3 | 4,118 | 2 | 208 | 37 | 434 |
| Bukit Barisan Selatan3 | 3,177 | 1,009 | 1,512 | 715 | 1,182 |
| Bukit Batu1 | 217 |  | - | 71 | 182 |
| Bukit Bungkuk2 | 140 |  | - | 102 | 124 |
| Bukit Duabelas3 | 551 |  | - | - | 1 |
| Bukit Kaba4 | 147 |  | - | 37 | 3 |
| Bukit Rabang5 | 5 |  | - | 1 | 1 |
| Bukit Rimbang Bukit Baling1 | 1,426 | 272 | 911 | 241 | 809 |
| Bukit Tigapuluh3 | 1,451 | - | 9 | - | 6 |
| Buluh Cina4 | 11 |  | - | 4 | 3 |
| Dangku1 | 483 | - | 31 | - | 36 |
| Dolok Sibual-buali2,\* | 50 | 390 | 1,351 | 45 | 9 |
| Dolok Sipirok2,\* | 72 |  | - | 53 | 56 |
| Dolok Surungan1 | 216 |  | - | 148 | 130 |
| Giam Siak Kecil1 | 787 |  | - | 21 | 147 |
| Gumai Pasemah1 | 482 |  | - | 87 | 198 |
| Gunung Marapi4 | 80 |  | - | 48 | 30 |
| Gunung Raya1 | 453 |  | - | 76 | 53 |
| Gunung Sago Malintang4 | 53 |  | - | - | 53 |
| Isau-isau Pasemah1 | 168 |  | - | 30 | 27 |
| Kerinci Seblat3 | 13,653 | 4,226 | 8,015 | 2,209 | 6,592 |
| Kerumutan1 | 953 |  | - | - | 7 |
| Lembah Anai2 | 3 |  | - | 1 | 2 |
| Lembah Harau2 | 41 |  | - | 22 | 14 |
| Lubuk Raya2,\* | 30 |  | - | 18 | 4 |
| Malampah Alahan Panjang1 | 394 |  | - | 220 | 131 |
| Maninjau2 | 220 |  | - | 118 | 34 |
| Mega Mendung4 | 1 |  | - | - | 1 |
| Orang Kayo Hitam5 | 183 |  | - | 38 | 79 |
| Rimbo Panti2,4 | 31 |  | - | 8 | 15 |
| Seblat4 | 78 |  | - | 1 | 9 |
| Singgalang Tandikek4 | 98 |  | - | 70 | 18 |
| Tasik Belat1 | 25 |  | - | - | 14 |
| Tasik Besar1 | 50 |  | - | - | 11 |
| Tasik Serkap-Tasik Sarang Burung 1 | 67 |  | - | - | 15 |
| Tesso Nilo3 | 822 | - | 41 | 6 | 159 |
| Wan Abdul Rahman5 | 218 |  | - | 26 | 8 |
| Way Kambas3 | 1,292 | 98 | 388 | 74 | 205 |
| Zamrud3 | 316 |  | - | 25 | 150 |
| Non-protected areas |  |  | - | 9,932 | 16,527 |
| Non-forest (*area penggunaan lain*) | 176,264 |  | - | 1,217 | 1,630 |
| Wastersheds-protected forests (*hutan lindung*) | 54,256 |  | - | 5,501 | 7,168 |
| Production forest (*hutan produksi*) | 63,146 |  | - | 1,179 | 3,322 |
| Convertible production forests (*hutan produksi konversi*) | 52,626 |  | - | 158 | 374 |
| Limited production forests (*hutan produksi terbatas*) | 38,361 |  | - | 1,877 | 4,033 |

Remark

|  |
| --- |
| 1 Wildlife reserve |
| 2 Nature reserve |
| 3 National park |
| 4 Nature recreational park |
| \*Batang Toru landscape |

**Figure S1.** The distributions of tapir presences and absences at camera trap localities in relation to each covariate used to model habitat suitability.