



# Bukit Barisan Selatan

## Sumatran Rhinos and Tigers on the Edge

At one time, Sumatran rhinos were present from the foothills of the Himalayas in Bhutan and eastern India, south through the Malay Peninsula, to the islands of Sumatra and Borneo. The range and population of Sumatran rhinos and tigers has since dwindled dramatically. Remaining rhino populations are scattered throughout the forests of Peninsular Malaysia, Sumatra, and Borneo. As recently as 1978, tigers were reported in all eight provinces of Sumatra, numbering an estimated 1,000 individuals. In only a little over 25 years, that number has receded to merely a few hundred remaining tigers. The World Conservation Union's (IUCN) Asian Rhino Specialist Group (AsRSG) ranks the Sumatran rhino as the most critically endangered rhino species. Fewer than 300 are estimated to survive worldwide in very small and highly fragmented populations. Important populations of rhinos, tigers and elephants still survive within the Bukit Barisan Selatan National Park (BBS) located in the provinces of Lampung and Bengkulu on the Indonesian island of Sumatra. Unfortunately, BBS is an island of habitat surrounded by an ocean of human activity, including villages, agriculture, and plantation forestry. Encroachment into the park is of primary concern to WWF; it is essential to the park's survival that illegal logging, agricultural expansion, the hunting of tiger prey, and poaching of endangered species not destroy the remaining forest. WWF is striving to educate and provide the support necessary for local communities to become self-sufficient through sustainable means not requiring encroachment into the park, thus providing a future for the endangered animals that reside there.

### Bukit Barisan Selatan, A National Park Worth Saving

BBS is the third-largest protected area in Sumatra. The park also has the distinction of being one of the few remaining places that harbors rhinos, tigers, and elephants in the same area. It is also home to over 300 bird species, sun bears, bearded pigs, tapirs, gibbons, leaf monkeys, great Argus pheasants, rare orchids, rafflesia flowers, and the *Amorphophallus titanum* – the world's tallest flower. Lakes and swamplands in the park shelter various waterbird species and two sea turtle species use the park's beaches to nest. BBS is also an important area for Asian elephants. Unfortunately, BBS has lost more than 20% of its original forest area and is facing the very real threat of having its remaining forests become highly fragmented into isolated patches if current deforestation rates and encroachment continue. If existing trends persist, by 2010, 70% of the park will have been converted to agricultural lands or village enclaves.

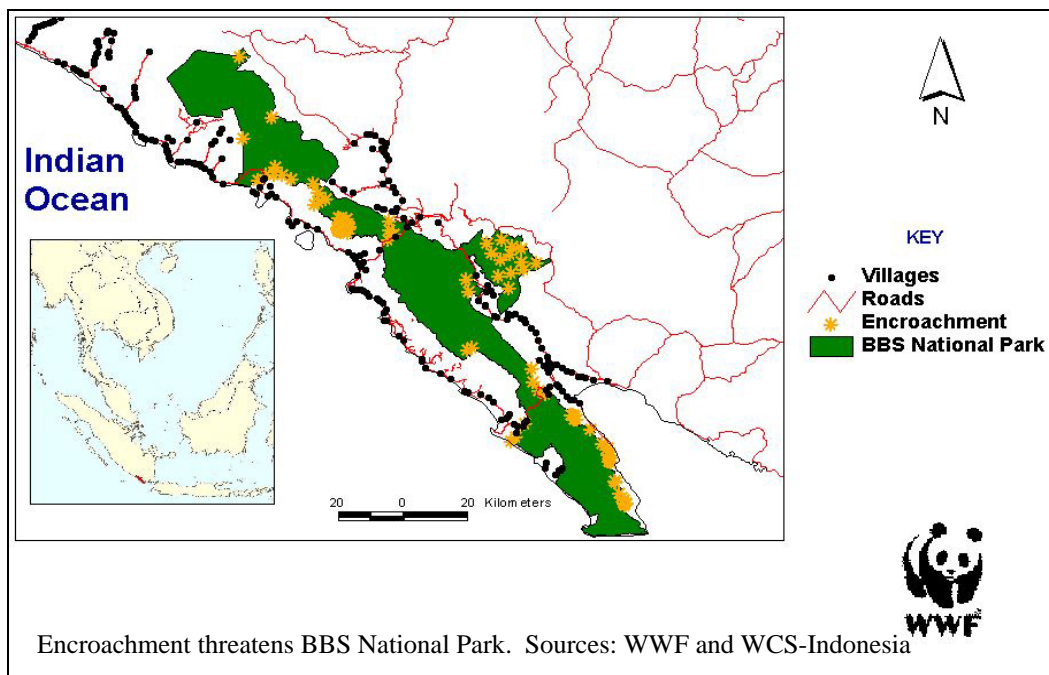


The Sumatran rhino - the only Asian rhino species with two horns - is the smallest rhino species in the world. It is now

Sumatran rhinoceros. WWF-Canon/Alain Compost

considered the most critically endangered species of rhino because, while surviving in greater numbers than the Javan rhino, Sumatran rhinos are more threatened by poaching. The Sumatran rhino population has been approximately halved in the last several decades. There are now likely fewer than 300 Sumatran rhinos remaining worldwide. Of this number, an estimated 60-85 are thought to survive in BBS. However, it is important to note that the park is capable of supporting a much larger rhino population.

While extremely adaptable to various types of habitats, the Sumatran rhino prefers denser lowland forests such as those that make up 70% of BBS. Rhinos, like other mega-vertebrates such as elephants, require large areas to support viable populations. They act as ‘umbrella’ species in the ecosystems that shelter them: their conservation requirements, by default, encompass those of other smaller species. The rhinos in BBS are facing increasing pressure from the range of human activities that surrounds the park and leads to severe habitat degradation and loss, especially encroachment into the park for illegal logging and agriculture. The rapidly increasing number of settlers in BBS is threatening it through the conversion of its forests for settlements, cultivation, and plantations. Compression into smaller and smaller blocks of forest increases the incidences of human-rhino conflict and augments another serious threat to the rhinos: poaching. Rhinos are poached for their horns which are used in traditional Chinese medicine (for fever reduction, for example) and to make dagger handles in the Middle East.



Indonesia is the fourth largest coffee producer in the world (second largest producer of robusta coffee after Vietnam), and has recently announced plans to expand robusta coffee production in Lampung province as part of its rural development program. Almost 70% of Lampung’s coffee production occurs inside of or adjacent to BBS. Since 1985, the park has lost more than 20% of its forest, mostly to agricultural conversion for production of robusta coffee. Robusta coffee does not require shade to grow, allowing entire forests to be cleared for plantation land. The constant demand for coffee beans by large international coffee corporations has provided a substantial market for coffee bean production, thus encouraging increasing deforestation and encroachment upon BBS.

### **Bukit Barisan Selatan National Park: Top Priorities**

- Eliminate poaching of endangered species.
- Combat forest fragmentation caused by intensive encroachment to increase agricultural production.
- Eliminate the conversion of park land to coffee and pepper plantations.
- Halt illegal logging.
- Decrease potential for human-wildlife conflict resulting from habitat fragmentation.
- Protect a major watershed; 70% of the park is lowland rainforest, a highly threatened habitat.

An area encompassing 8,600 ha of relatively good quality forest outside the park has been identified by the project as important habitat for rhino and other large mammal species and also as a buffer zone for the park. Rhinos, tigers, elephants, and other endangered large mammal species use the area frequently. Unfortunately, this area lies outside the park boundaries and has no protection from encroachment. WWF is stressing the importance of this area as large mammal habitat to the local government and parliament with the objective of having it incorporated into a proper regional land use plan.

Habitat loss and poaching have also had negative impacts on Sumatran tiger numbers and distribution in BBS. Tiger-human conflict has been increasing in and around the park, leading to losses on both sides. Poaching is reducing tiger numbers in the park. In 2001, at least six tigers were known to have been poached in BBS despite the presence of ongoing patrols by Tiger Protection Units (TPUs). Between 1998-1999, approximately 30 of 66 tigers known to have been poached in the country were from BBS. The latest tiger population estimate by the Wildlife Conservation Society (WCS) puts the number of tigers in BBS at approximately 40-45.

To combat poaching of rhinos in the park, Rhino Protection Units (RPU) were established in BBS in 1995. The main task of the RPUs is to arrest offenders and to remove traps for both rhinos and tigers by working closely with park staff, concentrating on the creation of high-security “Intensive Protection Zones” for rhinos through rigorous anti-poaching in core areas, intelligence operations, and community outreach work. RPUs also help monitor land clearing and illegal logging in BBS.



Seized wire snares. Foead, Yahya, Sumiadi/WWF

Each RPU normally is composed of one or two specially trained park guards and three specially trained members of the local community. The units have a proven track record, eliminating or drastically reducing poaching where they operate. Tiger Protection Units (TPUs) are identical in structure to RPUs and are actually integrated within the RPU management system. TPUs focus on areas of the park preferred by tigers and gather data on tiger poaching and the illegal hunting of prey species.

### **WWF Achievements to Date**

- Data on the distribution of neighboring villages, forest types, human encroachment, as well as rhino, elephant, and other large mammal distributions have been collected.

- Stakeholder consultations in Tanggamus and Lampung Barat districts and socio-economic surveys for 15 neighboring villages have been conducted. In two of the surveyed villages, intensive training programs have been held to educate villagers on treating the diseases of cocoa and in the production of green fertilizer.
- There are 8 well-equipped and trained RPUs patrolling in key parts of the park. One unit conducts intelligence gathering while the others search for illegal poaching and traps. As a result of their anti-poaching efforts, no new cases of tiger or rhino poaching have been documented since January, 2003.
- Staff members in the field have been trained to conduct camera trapping.
- Three community patrols have been established which utilize 11 community members and 4 forest rangers patrolling 6 villages adjacent to BBSNP.
- Three ranger stations have been rebuilt and repaired to support the community patrol teams.
- An intensive field study on the coffee market and how it influences deforestation and encroachment in BBS was conducted and published in the report titled “Gone in an Instant: How the Trade in Illegally Grown Coffee is Driving the Destruction of Rhino, Tiger and Elephant Habitat.. The results of this report will help us target the illegal production of coffee within the boundary of BBSNP.

### **Current and Future Objectives**

- Strengthen and ensure implementation of law enforcement in BBS by establishing a linkage between law enforcement authorities.
- Formation of Village Protection Teams which function as an early warning mechanism by communicating, informing, and reporting to the park authority or WWF on illegal activities inside the forest adjacent to their villages. If possible, the teams would also prevent illegal activities.
- Strengthen rhino and elephant conservation via the delineation of rhino and elephant distribution and habitat suitability within and around BBS, including the identification of essential core areas and habitat linkage options.
- Conduct an intensive biodiversity survey to support augmenting national park area to encompass more rhino habitat
- Expand anti-poaching and illegal trade intelligence network to ensure sufficient levels of protection so that no Sumatran rhinos or tigers are poached in BBS.
- Work with local communities to find environmentally-friendly alternatives to illegal coffee production.



Sumatran tiger. WWF-Canon/Alain Compost

**Conservation Partners:** To save BBS National Park’s Sumatran rhinos, tigers, and other wildlife, WWF collaborates with many governmental and non-governmental organizations. These include the US Fish and Wildlife Service, Wildlife Conservation Society, International Rhino Foundation, the International Center for Research in Agroforestry, Watala, and Tanggamus-based Panthera Rafflesia.

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