



THE ROAD AHEAD FOR INDONESIA'S RHINOS

Sumatran and Javan rhinos are possibly the rarest and most endangered large mammals in the world. Their combined populations probably number less than 175 animals.

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Sumatran and Javan rhinos were once bountiful and ranged over many hundreds of thousands of square miles stretching from India to Indonesia. Today, however, they survive almost entirely as relict populations in a handful of scattered tropical forests; the future for both species lies almost entirely in the hands of Indonesian wildlife authorities; and continued support for intensive monitoring and protection efforts is the last hope for avoiding extinction.

Elusive Sumatran rhinos: Population profiles needed



Forests through which only a couple of rhinos trod a year or so ago, recently yielded the tracks of nine distinct individuals

In 2013, rhino specialists from around the world gathered in Singapore for the Sumatran Rhino Crisis Summit, a call to action based upon reports that wild populations in Malaysia had dwindled if not disappeared in recent years and that the global population probably numbered no more than 100 animals. This conclusion came as something of a shock, considering that estimates less than a decade earlier had put the population at more than double that. The truth is that the Sumatran rhino has always stymied field biologists, remaining secretive and poorly documented throughout its range. Scientific journals contain numerous accounts of researchers spending months in the forest searching in vain for this species, and the same truth applies today for those given the job of protecting it.

To give you some idea, since 2010, seven Rhino Protection Units (RPU) – 28 men – have patrolled more than 37,000 kilometres within Indonesia's Bukit Barisan Selatan (BBS) National Park,

one of the last places on earth where Sumatran rhinos survive. That's the equivalent of traveling back and forth from London to Moscow at least half a dozen times. During their patrols, the RPUs recorded more than 800 rhino footprints, over 300 wallows, and more than 100 dung deposits. Yet, during the same four-and-a-half years, the rangers laid eyes on living Sumatran rhinos a grand total of six times – three times in 2011 and three times in 2013. In 2010, 2012 and thus far this year they've seen none. Still, the data the RPUs collect allows biologists to map distributions and monitor population density.

RPUs began operating in southern Sumatra's BBS and Way Kambas National Parks in the late 1990s and are supported by the international conservation community. They are now managed by the national NGO Yayasan Badak Indonesia (YABI). Their wildlife protection efforts have been commendable: the last documented rhino poaching in BBS occurred in 2002, the last in Way Kambas in 2006. In addition to rhinos, the RPUs help Indonesian government authorities monitor and protect other threatened species, most notable among them endangered Sumatran elephants and tigers. According to RPU reports, five elephants and two tigers have been killed by poachers in the two protected areas since 2010. More common are illegal hunting and trapping practices that target deer, small mammals and birds, captured to supply the local pet trade. Illegal fishing is also a threat, as is human encroachment into park land to plant agricultural crops, illegal wood-cutting, and the gathering of non-timber forest products. Combined, these activities negatively impact more than 50 other threatened mammals, birds, reptiles and amphibians that share the Sumatran rhino's habitat.

What's absolutely essential to saving Sumatran rhinos is reliable data regarding the size, sex ratios, age distributions and relatedness within remaining populations. Standardised survey methodology has been agreed upon by experts. RPUs are collecting dung samples for genetic analyses

The newly built Rhino Protection Unit base camp in Ujung Kulon has an impressive rhino feel to it!



STEPHEN BELCHER | 2014

Incredible Javan rhino photography

Earlier this year, **Stephen Belcher** crowd-funded an expedition to Ujung Kulon National Park. He succeeded in his mission; capturing 14 fascinating images of elusive Javan rhinos on camera

and monitoring camera traps in the parks to record wildlife movements. These new duties must be carefully balanced, however, with the RPU's standard patrol and survey practices, which are becoming increasingly focused on concentrations of rhinos within what are best described as intensive management zones. The long-term goal is to manage Sumatran rhino populations at an annual growth rate of at least 3%, to eventually reach carrying capacity for this species in its present habitat, and ultimately to re-establish populations in regions where it formerly occurred.

Javan rhinos: numbers on the upswing?

Though Javan rhino numbers may be only half those of Sumatran rhinos – 50 versus 100 – some experts contend that the Javan rhino is not as seriously threatened. That's because, while the Javan rhino population does not appear to have lost ground in recent years, the Sumatran rhino almost seems to be in freefall.

Ujung Kulon National Park is the final stronghold for the Javan rhino, and the most recent evidence suggests that its numbers may be slowly increasing. A video camera-trap census conducted in 2011 yielded estimates of 35–44 animals, while a similar but more robust study in 2013 appears to indicate a resident population closer to 50 animals or more. That would be incredibly good news, especially if the increase is shown to include new infants and not just animals that might have been missed in the earlier study.

Just as they do on Sumatra, RPUs patrol and survey Java's tropical forests for rhinos and other wildlife, including 25 species of threatened amphibians, reptiles, birds and mammals. There are no elephants on Java and the last of the island's tigers was killed sometime late in the last century. Endangered Javan leopards still roam the landscape, however, as does the elusive Javan banteng (a wild form of cattle) and rare silvery gibbon.

One major way in which rhino management practices differ on Java is the effort currently being put into habitat restoration, all of which are focused on an invasive palm known locally as langkap and as *Arenga obtusifolia* to the scientific community. Langkap is a fast-growing species that can quickly dominate the lowland forest canopy, crowd out other trees, and suppress plant growth on the forest floor. Since the langkap's fruit and leaves are not favoured food for wildlife, its dominance correlates negatively with healthy

populations of several threatened species, including the Javan rhino. This observation led to a formal programme for removing the Arenga palm to establish alternative native plant communities, preferably containing a high percentage of Javan rhino food species. This work has been underway for almost two years now, during which approximately 70 hectares of langkap are rapidly being replaced by regenerating forest. The project is based in a 4,000-hectare section of Ujung Kulon designated as the Javan Rhino Study and Conservation Area (JRSCA).

JRSCA encompasses the eastern boundary of Ujung Kulon, abutting the burgeoning human population of Banten Province, for which the Javan rhino is an official symbol. Although only a small portion of the study area has been cleared of the invasive palm thus far, researchers are already documenting some encouraging project results. First of all, the growth of recolonising plants is rapid, with some species towering above a man in a year or less. Secondly, the percentage of rhino food plants represented in the regrowing forest is exceptionally high – above 90%. Lastly, the rhinos are responding well to the effort, seemingly beating a path to JRSCA. Forests through which only a couple of rhinos trod a year or so ago, recently yielded the tracks of nine distinct individuals that are presumably venturing into unfamiliar terrain to partake of the new 'salad bars'. And only a couple of months ago, one adventurous rhino nonchalantly walked right through the yard of the newly-built RPU base camp, perhaps admiring its unique construction.

Grants

Since 1 April 2014, Save the Rhino has sent a total of £22,386 towards Indonesian rhino conservation, including £8,000 from Chester Zoo and £5,000 from our core funds towards the development of a Sumatran rhino strategy, \$2,000 from the Taiwan Forestry Bureau to help buy motorbikes for the RPUs, €5,000 from Wilhelma Zoo Stuttgart and \$4,000 from Save the Rhino International Inc. for ongoing RPU patrols, and £355 from Together Creative Ltd for the Sumatran Rhino Sanctuary.

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