

If you cut it, they will come!

Habitat availability significantly limits the number of Javan rhinos in the species' final stronghold, Indonesia's Ujung Kulon National Park. Only a few dozen animals manage to survive on a remote peninsula at the western tip of Java.

Bill Konstant | Programme Officer, International Rhino Foundation

Unfortunately, much of the tropical forest within the National Park is dominated by an invasive palm species, *Arenga obtusifolia*, which crowds out other native vegetation and provides the rhinos with little sustenance. Neither its leaves nor its fruits are on their menu. This has focused biologists on the problem of how to effectively remove Arenga palm (referred to locally as langkap) and increase Javan rhino numbers in the process.

For the past decade, Indonesian biologist and International Rhino Foundation liaison, Sectionov (known as Inov to friends and colleagues), has been hard at work trying to solve this problem. His research began with an initial study of the Javan

trunks with a chemical herbicide. As these methods were being tested, workers began collecting seeds of Javan rhino food plants to develop a nursery for re-planting purposes.

The results of the applied research are promising. One important finding was that the herbicide used left no harmful environmental residues. The injected palms died in place in a few months and there was minimal regrowth of langkap from surface roots. Seedlings of other plant species began to appear as the palm fronds withered and the forest canopy opened, allowing sunlight to reach the forest floor. Experimental plots that were cleared by cutting produced rapid growth of other plant species, but also a higher rate of palm regeneration. Removing the cut palm required more time per hectare, but quickened the speed at which new vegetation appeared – without seedlings having to be planted. One of the most encouraging results is that, of the dozen or so species of plants that appear after the langkap is gone, more than 90% are Javan rhino food plants.

To date, more than 100 acres have been cleared, and at least the same number of local workers have been employed in the effort, as well as to construct a perimeter fence around JRSCA and to build a new base camp for the Rhino Protection Units that patrol the area. As for the rhinos, only two or three animals were known to inhabit the forests of Gunung Honje before the JRSCA project began. Today, footprints reveal that at least nine have come to sample the tropical forest 'salad bar' created to help save their species.

Grants

We gave £5,000 from our own funds, together with £900 from Blair Drummond Safari Park, for a project to build Indonesian leadership capacity — supporting the studies of Inov — to establish how best to eradicate Arenga palm and support Javan rhino conservation efforts, as well as £467 received from miscellaneous donations for work in the JRSCA.

Right: Local workers constructing a perimeter fence around the JRSCA

Below: A Javan rhino, caught on camera trap, reaches for tropical plants



BILL KONSTANT



UJUNG KULON NP, WWW.INDONESIA

MAIN IMAGE: SECTION INOV

banteng, an endangered species of wild cattle that also occurs in Ujung Kulon and has a diet similar to that of the rhinos. The list of plants eaten by Javan rhinos exceeds 200 species, many of which are losing out in the competition with langkap. Inov developed a research protocol that compares both physical and chemical methods for clearing langkap, examining their environmental impact, cost-effectiveness, re-vegetation rates, and impact on local communities.

This research effort is underway in the Javan Rhino Science and Conservation Area (JRSCA), a 10,000-acre tract of lowland tropical forest on Ujung Kulon's eastern border surrounding Gunung Honje (Ginger Mountain). Part of this area was formally inhabited by people that lived illegally within the National Park, but they were relocated by government authorities a few years ago. Subsequently, Inov and his team began clearing plots of langkap within an experimental research grid. In some cases, the palms were chopped down with machetes and left in place. Other plots were cleared in similar fashion, but the cut vegetation was piled along the perimeter. Other plots were cleared by injecting the palm