

## This Beauty Is A

Biosphere Foundation attempts to bust the invaders of the monsoon forest snatchers.



Invasive plant Lantana camera



The critically endangered Bali Starling

up" in a matter of weeks, providing a lush verdant landscape. These magical forests are highly threatened worldwide by cultivation clearing, development, human encroachment for fuel and fodder, and invasive plant species.

The invasive plant named Lantana (lantana camera), is particularly problematic in BBNP. It was originally introduced to this part of the world for its ornamental qualities. Despite being a very attractive flowering plant, it harbours a dark side:



Dense thickets of Lantana before planting

Working with "Friends of Menjangan" in Bali Barat National Park, Biosphere Foundation (BF) has initiated several land-based programs in NW Bali with YDAS (a project of the Sustainable Management Group) and The Indonesian Institute of Sciences (LIPI). One of them is a forest restoration project located in Bali Barat National Park (BBNP) to develop methods of reducing invasive plants in the monsoon forest.

A large stretch of the coastal forest in the BBNP consists of a tropical monsoon forest. Such forests exist all over the tropics and are especially adapted to areas with long, hot dry seasons, and shorter, wet monsoon seasons. The trees and plants in these forests, unlike those in the tropical rainforests, are able to cope with the former by going dormant and losing all their leaves. Once the rains come again, the forests "green"



Area cleared and planted with endemic trees



Taking out the Lantana

It moves in whenever and wherever there is destruction of the forest canopy.

Tree canopies are often destroyed by human intervention or fire, which allows the Lantana to grow quickly, creating a dense thicket that prevents the forest from regenerating. The habitat and feeding area for many local birds and animals are reduced, including the critically endangered Bali Starling, the exquisite Javan deer, and the long-tailed Macaque. The native trees, on which these creatures depend on for berries and leaves, can no longer grow through the clutches of Lantana.

In the spring of 2012, BF designated and marked out three research plots, each measuring 2,500 m<sup>2</sup>. The aim was to find the best method of removing the *Lantana* and preventing its return. We soon found out that cutting it only made things worse. It re-sprouted four times as many shoots as we cut!

Last December, BF took another tack and uprooted the *Lantana* in two plots, replacing them with 1,200 local tree seedlings that were raised in a nursery for 18 months. Monitoring the trees over the next few years will show if they are effective in shading out the *Lantana*. It is also critical to find out if this method of control is economically viable: It all depends on how many times we have to clear it before the *Lantana* finally gives up!

The new plantations look beautiful and now we can actually see the forest again instead of a *Lantana* jungle. Their invasiveness is a worldwide problem in the tropics for forests, farmers and ranchers. Much of what we learn here could eventually help others band together in the fight to eradicate the same beautiful "beast".

For more information about Biosphere Foundation, please see www.Biospherefoundation.org