

# Protection and restoration of the Western Ghats forests

by Supi Seshan, Director, Gurukula Botanical Sanctuary

Restoration, rehabilitation, and what is now being called 'assisted migration of species to prepare for climate change', are all important undertakings. The Gurukula Botanical Sanctuary (GBS) in the Western Ghats of India specialises in this work and Rainforest Concern has been a steady ally since 2007.

GBS's work is about "saving the pieces", the herbaceous flora which are the first to die when habitats are fragmented. We have seen that, given time and support species and habitat return. GBS is run by a handful of ecosystem gardeners on a 63-acre re-wilded piece of land. In our 40 years, we have become one of the most biodiverse centres in India, a place of inspiration, knowledge and conservation strategy.

GBS's work is broadly speaking plant conservation, restoration and education. Project beneficiaries are 40-50% of the region's plant species, degraded habitats in various protected areas, local women, youth and land stewards. Here is an overview of the work accomplished since the Rainforest Concern-Planet Foundation grant of August 2013.

We have made significant extensions to nursery areas: the area of the grasslands nursery increased by 100%. Habitats for outplanting were increased and the area of rockery was extended. The outlay of habitats for edge plants resulted in an 20% increase. Propagation techniques have become more efficient and successful; however, the learning curve continues to be steep. We have been able to employ the help of two plant pathologists for controlling fungal infestations, insects and other pests, as well as fine-tuning nutritional factors.

Training of the conservation staff has intensified and our search for potential staff increased, including outreach to underprivileged communities, such as adivasis (tribals) and Tibetan refugees. We continue expanding our facilities for accommodating new residential staff, as well as for training and student programmes: we had three interns with us in the dry season and two residential camps for school students.

We continue monitoring and protecting the land in our care, including Rainforest Concern-supported acres, where the recovery of forest and wildlife is well underway. Wages have slowly increased and we now pay over 20% more than the local rate, which has only been possible thanks to the grant we received. We also continue to host day tours for local and regional visitors, a large number of whom are college and school students, participating in the mountain network, in the fractious and politicised debate on the conservation of the Western Ghats. Consultative visits with the Forest Department continue, especially in the upper Nilgiris. There is an interest from authorities in removing exotics, in part due to years of lobbying by GBS and partner organisations. However, their methodologies for removal require monitoring and support in order not to avoid damaging valuable habitats and waterbodies.

It is a fact that Western Ghat ecosystems have been decimated. There is little sign that the assault will stop, even with 93% gone and a clarion call from conservationists to protect the last natural areas from mining, urbanisation and real estate speculation. Protected areas have increased but pressures on



Supi Seshan

Volunteers at the sanctuary planting epiphytes.

them have increased too. A recent recommendation to institute a government authority to regulate regional development based on a rigorous scientific assessment has just been vetoed by six state governments, for being "too draconian". However, the pace of development is unquestioned, a mandate purportedly for the Indian poor but increasingly serving corporations and private wealth. 245 million people in south India are dependent on the Western Ghat rivers. These rivers emerge from lush forests full of endemic fauna and flora, living now on toeholds of time and space.

Hope lies with nature, not with modern civilisation. Those who make this last stand do it in the awareness that we may not see the return of the forests. But if we form an ecology of action, then plants gain what they need most: time. With the plants, the forests then have one added chance to return. In-situ conservation has to be urgently complemented by ex-situ measures.

Thank you to Rainforest Concern, and the Planet Foundation for recognising the need for this work.