

Research needed in La Potenciana, Costa Rica



Arbofilia is a Costa Rican non-governmental organisation that works among farmers in the Central Pacific Region in Costa Rica on reforestation, protection of water springs, analogue forestry and education.

The **International Tree Fund** (ITF) is a Dutch organisation of volunteers, that aims for the protection, management and recovery of forests, in relation to the well-being of the people that live in and around these forests. The ITF raises funds for projects that are designed by the counterparts and that are in accordance with the objectives of ITF. With help of Dutch donors, the ITF supports small-scale projects in Costa Rica and Guatemala.



Threats The ecosystems in the region are threatened by illegal logging, fires, conversion into agricultural lands or exotic tree plantations, poaching and international development programmes like the SIEPAC powerline.



Summary

The aim of this flyer is to find researchers and research institutes that are interested to carry out studies of flora and fauna in the area of the Carara Ecological Corridor, and especially La Potenciana, in Costa Rica.

About Carara Ecological Corridor

The Carara Ecological Corridor aims at reconnecting the rainforest of Carara with the cloud forest of La Potenciana, and in the future the deciduous forest along the river Tarcoles and the mangroves along the coast. These four forest types can be found in a transect of only 30 km, but an altitude difference of almost 1800 m. Through land purchase and reforestation with a high diversity of indigenous tree species, forest remnants are connected.

The Carara Ecological Corridor is being realised in a joint effort of two NGO's, the International Tree Fund and Arbofilia. Arbofilia is responsible for land purchase and reforestation activities while ITF raises funds. Important decisions are made together in a joint responsibility.

Since 1999, more than 100 ha has been purchased and more than 100.000 trees were planted in the rainforest, premontane and cloud forest zones. Already, animal species have returned and migration between cloud forest and rainforest has intensified.

The objective of Arbofilia and the International Tree Fund with the Carara Ecological Corridor Project is to make the area a better place to live for plants, animals and humans together.



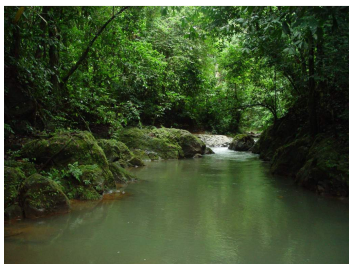
More about the area

No other area in Central-America harbours such a wide range of habitats and high levels of biodiversity as the Carara area. This because it represents the meeting point of Meso-American and South-American flora and fauna, and combines a wide range of life zones. These life zones range from mangroves along the coast, through tropical dry and rain forests in the lowlands, to premontane and Oak Forest higher up the Turrubares and Potenciana mountains, the only high coastal mountain range of Central-America. All these habitats can be found in a transect of only 30 km.

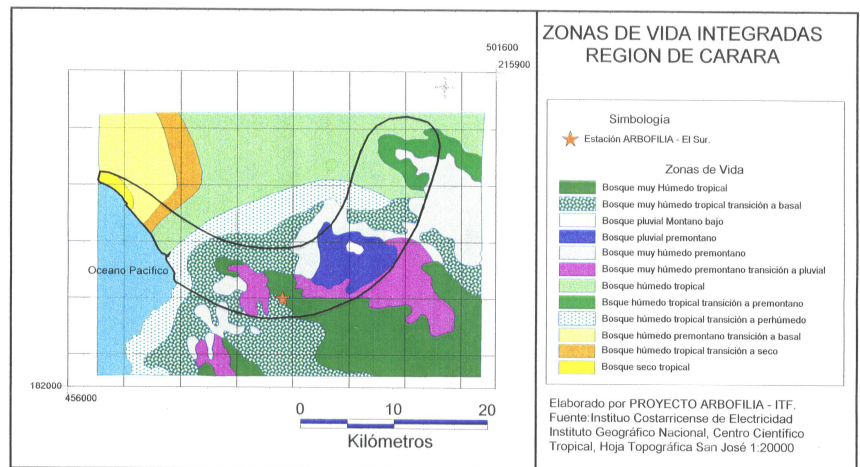
The various habitats in the area are isolated now as a result of farming, fires and monocultures of exotic tree species. Still several farms in the



Rough estimates indicate that around 500 threatened species are present in the CEC-area. These include many internationally protected species like Scarlet macaw, Ocelot, Puma, Monkeys, Ant-eaters, Sloths, Crocodiles, King Vulture, Roseate spoonbill, several specialist mangrove birds, Purpleheart, Mahogany, Rosewood and other precious hardwoods, orchids, tree ferns, several reptiles and amphibians, and many more.



area have primary or advanced secondary vegetation, and four protected areas already exist that incorporate large chunks of the mangroves (Refugio manglares Guacalillo), the lowland dry and wet forest (Parque Nacional Carara), the advanced secondary Vochysia forest (Refugio Forestal Fernando Castro Cervantes), and the montane oak forest (Refugio forestal Cerros de Turrubares).



What you can do

The Carara National Park and its environs are home to many species, nobody knows exactly how many. A solid scientific assessment and inventory of the flora and fauna in the Corridor area is necessary to underpin conservation activities, especially in the cloud forest of La Potenciana. Clues for a rich and specific ecosystem are:

- The situation of the area: much relief, near to the sea, and a mountain range that is not connected to other high mountains.
- The isolated character of the La Potenciana mountain range is illustrated by the occurrence of another *Cedrela* species than the in the Talamanca dominant *Cedrela* species
- Some wood samples from La Potenciana fence poles could not be determined by a San Jose laboratory because they were from unknown wood species.

Possible research areas include community ecology, population ecology, wildlife conservation, agroforestry, habitat restoration and hydrology.

Arbofilia and the ITF are looking for scientists that can independently develop a research programme. The volunteers of ITF and Arbofilia can inform you and introduce you to the area, but we cannot finance or supervise you.

Why research?

A solid inventory of the species and understanding of the main habitat types and keystone species is very useful for the Carara Ecological Corridor and will help us to:

- Achieve a higher protection status for the area
- Have more arguments for fundraising
- Stop illegal logging and poaching
- Make the right management decisions.

More information

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