
Argentina: The "forests of silence" or the pine plantations at the Yungas

The phyto-geographical region of the Yungas, or cloud forest, is a humid forest occurring in mountainous sectors linked to the cordillera of the Andes. It extends in a discontinuous way from Venezuela, through Ecuador, crossing Peru and Bolivia and reaching the north east of Argentina where its extreme remnants are to be observed in the provinces of Salta, Jujuy, Tucuman and Catamarca. In general, conservation of this zone comes under the National Park system: Baritú and el Rey in the province of Salta, Calilegua in the province of Jujuy and Campo Los Alisos in the Province of Tucuman. The Yungas is one of the environments containing the highest biodiversity in Argentina, and also one of the most threatened ecosystems in the world, mainly because of rapid fragmentation or destruction.

At an altitude ranging from 300 m to over 4000 metres, the Yungas may be divided into four zones of altitudinal strata: the Pedemontana Forest (foothills forest), which is transitional and of a subtropical nature, hosting 30% of all the biodiversity of this valuable ecosystem; Montane Jungle, Montane Forest, or Alder Forest (these two zones have been considerably devastated by the selective logging of their native timber species) and High Grasslands or Montane Range lands, relatively well conserved due to the difficulty in accessing them.

It is estimated that 67% of the original area of Argentine foothills forest has disappeared and the rest has been modified. Agricultural activities accompanying urban concentrations in this zone until the beginning of the twentieth century, which started replacing the forest, were characterised by the diversity of their production --mate tea, tea, cherymoya fruit, mango and coffee-- to supply local needs. However, as from the first decade of the twentieth century, with the inauguration of the railway line and the establishment of the tobacco and sugar industry --such as the Ledesma Industry in Jujuy-- a change took place in the model and the country entered a scale economy with marketing and industrial characteristics. Vast sectors of the foothills forest were replaced by large-scale monoculture plantations (sugar cane, banana, citrus) aimed at export. This process implied the concentration of land in the hands of powerful economic groups, in some cases multinational, in others national and provincial capital, set up as corporations or under the domain of families representing north-east Argentine agro-industrial capital (industries, sawmills, fruit and vegetable farmers). This appropriation was made to the detriment of the local population, causing social exclusion, rural migration and unemployment and disregarded the rights of the native communities, such as the Kollas, who had inhabited the area for centuries and carried out a leading role in defence of the Yungas (see WRM Bulletin No. 18).

Over the past few years, the alteration of the Yungas has become more serious because of a new factor of destruction: the large scale monoculture tree plantations, centred on exotic fast-growing species (pine, eucalyptus, *Grevillea robusta*, *Melia azedarach*). This type of plantation has been promoted and financed by multilateral institutions, such as the World Bank, mainly to supply the powerful pulp and paper industry and to satisfy unrestrained consumption demanded by packaging of goods within the present globalisation of markets model. Lately, monoculture tree plantation has been presented as the "solution" to climate change as they are supposed to act as carbon sinks. For this reason, native forests are being clearcut! (see WRM bulletins 38, 39 and 52).

Jorge Baldo, a Biologist, Master in Vertebrates, Francisco Cornell, a Tourism Technician and Freddy Burgos, a Gamekeeper are linked by their passion for birds and the conviction that if something is not done to protect them, soon none will be left. The three of them live in the Los Perales neighbourhood in the Argentine city of San Salvador de Jujuy, an enclave of the beautiful Montane forest landscape, at between 1200 and 1500 metres. So far they have identified 240 species of birds, some of which are endemic to the Yungas region, such as *Grallaria albigula*, other are visitors from the Northern Hemisphere, such as *Hirundo rustica*, *Riparia riparia*, *Elanoides forficatus*, *Ictinia mississippiensis*, *Vireo olivaceus*. They are also witnesses of the threats and have reported the results of a census, showing 189 species of birds in a forest, while there were only 23 in a pine plantation covering the same area.

There is no room for biodiversity in these plantations. They are "green deserts" that have lost ecosystem multi-functionality, and the neighbours have perceived this situation, baptising them "the forests of silence." How long will silence continue to be imposed on peoples and forests?

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