"Scientific bases for the management and protection of Araucaria ecosystems"



Fig. 1. a. Araucaria forests are structurally complex stands characterized by the presence of large-decaying trees, sometimes a dense understory and a high availability of coarse woody debris. **b.** The stripped woodpecker (*Veniliornis lignarius*) breeds in araucaria forests.

On September 10th and 11th 2015, the Workshop "<u>Scientific bases for the management and protection of araucaria ecosystems"</u> was held in Aluminé, Argentina. This workshop was organized by the Lanín National Park (Argentina) in order to open spaces for the reciprocal learning and for finding the best approaches for the conservation of Araucaria (monkey-puzzle tree, *Araucaria araucana*) trees and biodiversity inhabiting these forests (Fig. 1.).

The meeting gathered more than 40 people, including Chilean and Argentinean scientists, policy makers and members of indigenous communities. The objective of the workshop was to present and discuss the results of scientific research on the natural and cultural values of these unique and threatened forests. Researchers and other actors gave talks on the ecology, genetics and the relationship of the Mapuche people with these forests. Other discussed topics included the impacts of fire, climate change, exotic pine plantations, livestock and other exotic herbivores on Araucaria regeneration and recruitment.

Our Rufford Small Grant project (14397-2) collaborated in the preparation of a talk on the ecology and conservation of cavity-nesting vertebrates (including birds and mammals) that inhabit these forests. We talk was led by Dr. Javier Sanguinetti (Department of Conservation and Management, Lanín National Park).

Thanks to the Rufford support (10637-1 and 14397-2), we have preliminarily found that 11 avian species and three small mammals depend on cavities available in old-growth trees and snags in Araucaria ecosystems. Although araucaria trees do not provide a high number of cavities, araucarias are an important feeding substrate for several birds, particularly Magellanic woodpeckers (*Campephilus magellanicus*). Also, this structurally complex forests harbour more than 40 avian species. The lenga tree (*Nothofagus pumilio*), which is commonly associated with araucarias in highland sites, provides a large number of high quality cavities that are used for nesting by at least 11 avian species (according to our preliminary records; Fig. 2).



Fig. 2. Austral parakeet (*Enicognathus ferrugineus*) nesting in a cavity available in a lenga (*Nothofagus pumilio*) tree (Photo by Diego Araya).