IMPACTS OF GRAZING ON BIODIVERSITY AND STAND DYNAMICS OF ECUADORIAN DRY FORESTS

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Dry forests are among the most threatened tropical ecosystems worldwide. The Tumbesian dry forest is considered to be one of the most biodiverse ecosystems in the world but it is also affected by land use change and conversion to e.g. crop lands. For this reason, suitable forest management strategies are needed, which are able to provide income and take into account the effects of silvicultural interventions on species diversity or contain biodiversity forcing measures. Currently, the Tumbesian dry forests are mainly used for production of Non Timber Forest Products (NTFPs) or for goat grazing, both affecting their structure and biodiversity.

Installations of terrestrial sample plots in two different forest types (deciduous and semi-deciduous) and three different intervention levels are used in this study in order to assess the impact of grazing on the diversity of vascular plants and stand dynamics. 72 plots of $60m \times 60m$ are used to identify different stand structures, each plot including smaller fenced and unfenced areas ($20m \times 20m$) for monitoring of tree regeneration under natural and disturbed conditions. First results are expected to provide an insight on the impact of grazing on the current status of both forest types.

