FRB
FONDATION POUR LA RECHERCHE SUR LA BIODIVERSITÉ

CESAB
CENTRE FOR THE SYNTHESIS AND ANALYSIS OF BIODIVERSITY

SynTreeSys

Synthesis of Neotropical Tree Biodiversity with Plot Inventories

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The Neotropics have greater biodiversity than any other region of the world, but its biomes are under severe threat from climate and land use changes. Over recent years, plot inventory networks have successfully generated syntheses on biodiversity, ecology and ecosystem function that floristic surveys or herbarium data cannot provide. While these networks are now the basis for ecosystem and biome-level synopses, cross-biome, plot-based studies in the Neotropics are still very rare, mainly because of the lack of cross-network harmonization.

SynTreeSys* will synthesize knowledge of Neotropical tree biodiversity across biomes, making an unparalleled compilation of forest and savanna inventory data, in order to dissect the patterns of diversity and abundance across biomes.** ***SynTreeSys will systematically compare biomes, assess species extinction risk and the species vulnerability in Neotropical forests. The project is divided into different work-packages to:

· harmonize cross-network datasets;

· assess patterns and drivers of tree species diversity and dominance across Neotropical biomes detect, and map hotspots of exceptional species turnover;

· evaluate threats to tree species, and their conservation status.

SynTreeSys will compile circa 8,000 plots from the seven network contributors to the project, across all major Neotropical biomes. The project will catalyze multiple new transnational and South-North collaborations, and the results will be of relevance for both the academic community and conservation institutions (e.g., IPBES, IUCN). ***SynTreeSys* will bring together world-leading expertise in tropical ecology to generate a new and comprehensive evaluation of tree biodiversity across the Neotropics and its state of conservation.**

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CESAB (CEntre for the Synthesis and Analysis of Biodiversity) is FRB's flagship program and an internationally renowned research center whose objective is to implement innovative work to synthesize and analyze existing data sets in biodiversity research.