

Mata de Platanos Wildland Gradient Site
Arecibo, Northern Karst Region, Puerto Rico 18.416N 66.716W

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History: The site was established as a private forest reserve in 19 and is co-managed by the non-profit citizens group Citizens for the Karst and the Interamerican University in Bayamon. Subsistence agriculture and pasture during the first half of the 20th century. Currently secondary growth forest with ongoing studies on vegetation, reptiles and bats.

Key Contribution to Domain and Continental issues: Mata de Platanos will be useful for land use, invasive species, climate change, biodiversity, and biogeochemical. It will serve as a moist forest site along a dry-moist-wet gradient of wildland sites and as a wild site on a moist zone land use gradient. The northern karst region suffered high rates of clearing for agriculture in the first half of the 1900s and then abandonment of agriculture afterward. Land has since either reverted to forest or has been urbanized as the population of Puerto Rico has continued to grow.

Key Characteristics: Moist forest on calcareous soils. Historically about 25% of tree species are semi-deciduous. Currently a secondary growth forest designated as a research and conservation area. Cockpit country with hills, valleys, sinkholes and caves leads to high patchiness in plant and animal communities. Most of the hydrology is subterranean, since the site lies within the northern karst region and has a hydrologic relationship with the Río Grande de Arecibo/Tanamá. Average annual rainfall and temperature is 137 mm and 25.4°C. Elevation ranges from 100-200 masl.

Existing Infrastructure: Conservation area requiring regular construction permits- no important land use restriction. Ongoing research projects include Universidad Interamericana, UPR, Forest Service, University of Wisconsin, Penn State, University of North Carolina, and Eastern Michigan University.

Facilities: Housing facilities for 14 persons are available within this site. There are also apartments for lease within a 5 km radius. Wet labs are available and additional ones can be constructed. All utilities (e.g. electricity, gas, water) available at this site. Computer hardware not available for NEON- however space is available for building new laboratories and to furnish existing ones. Excellent road access and security.

