

Bosque del Pueblo Wildland Gradient Site
Adjuntas, Central Mountains, Puerto Rico 18.186N 66.6822W

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History: Located in the central mountains region of the island and in the heart of the Puerto Rican coffee growing area. The forest was originally established after local citizens protested the proposed development of strip mines in the area. Bowing to local pressure, the lands were turned over to the PR DNR Commonwealth Forest system with an agreement to be managed by Casa Pueblo. Since this agreement, Casa Pueblo has been aggressively developing environmental outreach and local management programs aimed at conserving forest resources.

Key Contribution to Domain and Continental issues: This site is relevant to research involving climate change, biogeochemical cycling, invasive species, land use change, and hurricane monitoring. Located on the PR's central mountain range, Bosque del Pueblo will intercept hurricanes, trade winds, and Sahara dust. Invasive and naturalized species are common components of secondary forests in the area and appear to help these forests respond to new conditions applied to the ecosystem by anthropogenic disturbance and climate changes. The site provides a wildland contrast to the wet forests of Bisley (BIS-PR-NEO) and dry core site at Guánica (GUA-PR-NEO). It also compares to Mata de Platanos (MP-PR-NEO) as another moist forest site, but with different soils. BP provides a wildland component of a moist zone land use gradient.

Key Characteristics: Moist subtropical forest with active agricultural lands, pasture, secondary and mature tropical forests nearby. Within the drainages of the Rio Grande de Arecibo basin and the reservoirs of Caonillas and Dos Bocas. Soils are derived from basic volcanic rock and of the same general Humatas-Maricao-Loa Guineos association as the Bisley site (BIS-PR-NEO) and much of central Puerto Rico. Mean annual rainfall at the site is 2000 mm, and ranges from 1400 mm in the adjacent valleys to over 3000 mm in upper peaks. Historically and presently the area was used for coffee plantations and some of the island's oldest, continually cultivated coffee areas can be found in the region. In comparison to the Bisley site, the area has similar bedrock and topography but slightly less rainfall, and a longer history of agriculture and lower frequency of direct hurricane impacts.

Existing Infrastructure: Land is adjacent to other public forests and private reserves (Hacienda Pellejas PEL-PR-NEO) the site has opportunities to study land uses ranging from active agriculture to mature forest. Annual rainfall and gauged streams are in the region. Long-term studies of environmental change can also be conducted using sediments of nearby reservoirs. Community and schools-based science education programs have been developed by Casa Pueblo staff.

Facilities: The forest has a dormitory that can sleep 30 people. Nearby are lab and dorm facilities managed by the University of Puerto Rico, Mayaguez Biology Dept and Adjuntas Agricultural Experimental Station (AES-PR-NEO). Casa Pueblo is active in scientific research with UPRM faculty and provides volunteer, logistical, and security support.

