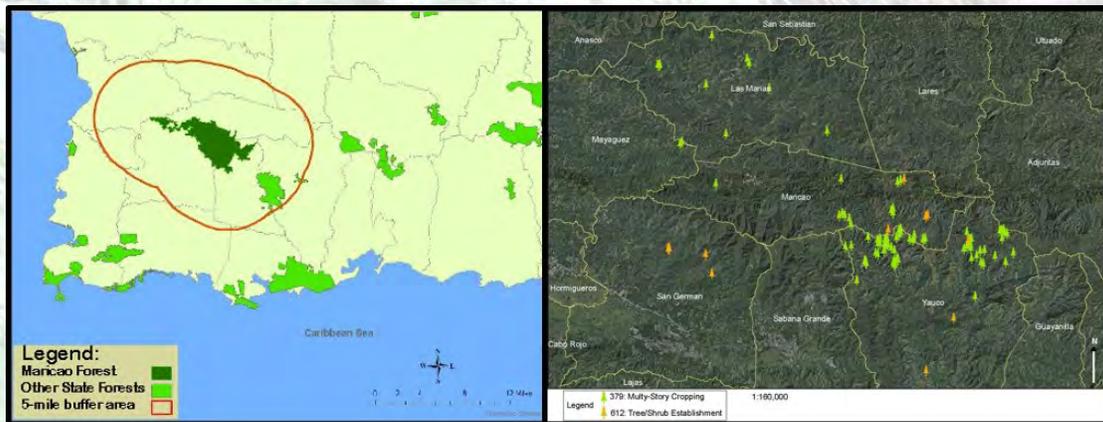


Success Story

Transitioning to Shade Coffee to Conserve Puerto Rico's Endangered Wildlife

Caribbean Area NRCS is helping Puerto Rico's farmers to convert their sun-grown coffee plantations to shade-grown plantations to protect, enhance and conserve wildlife habitat. The Shade-Grown Coffee Initiative is a partnership project between NRCS, the U.S. Fish and Wildlife Service (FWS) and EnviroSurvey, Inc., a non-governmental organization (NGO).

About 10 years ago, the NRCS State Technical Committee's Wildlife and Forestry Subcommittee recommended that NRCS designate a Shade-Grown Coffee priority area extending 5 miles around the perimeter of the Mariacao State Forest. The area includes the municipalities of Maricao, Mayagüez, Las Marías, San Sebastián, San Germán and Yauco.



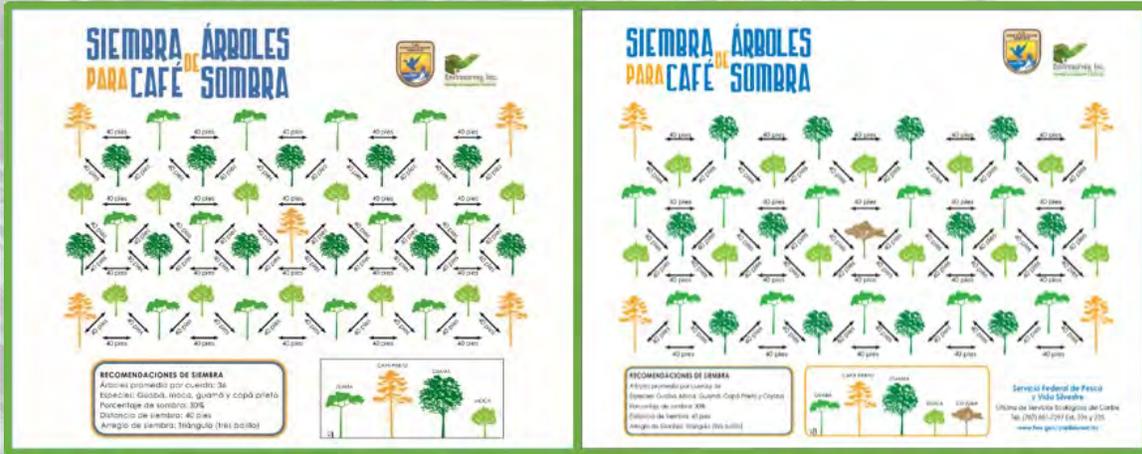
Maps showing location of Mariacao State Forest in southwestern Puerto Rico (left) and trees planted from 2010-2016.

Shade-grown coffee plantations provide important wildlife habitat functions such as refuge, shelter and nesting sites. They also create a biological corridor between the Maricao, Susúa and Guilarte State Forests (above right). These forests provide habitat for many threatened and endangered species:

- *Amazona vittata*, Puerto Rican Parrot
- *Accipiter striatus*, Puerto Rico Sharp-shinned Hawk
- *Caprimulgus noctitherus*, Puerto Rico Nightjar
- *Dendroica angelae*, Elfin woods warbler
- *Epicrates inornatus*, Puerto Rican boa



NRCS and partners used two Agroforestry Shade Grown Coffee Models (below) to promote shading of up to 30% of the acreage on coffee plantations.



Five native tree species traditionally used by coffee producers in Puerto Rico were distributed to farmers for planting:

- Guaba (River koko, *Inga vera*)
- Moca (Dog almond, *Andira inermis*)
- Guamá (*Inga laurina*)
- Capá prieto (Spanish elm, *Cordia alliodora*)
- Cojoba cojoba (*Cojoba arborea*)

Since 2007, project partners have distributed about 83,000 shade trees and NRCS has contributed \$408,350 to improve 979 acres of coffee plantations, providing the following benefits:

- Reducing pesticide and fertilizer use on coffee crops
- Reducing soil erosion
- Lowering temperatures
- Providing pollinator habitat
- Improving coffee and bean quality
- Extending tree production lifetime
- Providing wildlife habitat



A farmer in Maricao plants shade trees on his coffee plantation.



A lizard searches for insects amongst coffee berries.



Coffee shrubs growing in shade in Maricao (photos by Nidia Trejo).



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