

Conservation and Forestry in the American Tropics: John Clayton Gifford in Puerto Rico

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When the United States acquired formal colonies in the Philippines and Puerto Rico after the Spanish-American War of 1898, it developed its first serious encounter with tropical forests as part of the construction of US conservation policy. The creation of national parks was not at the forefront of US concerns in the islands. Rather, the government scouted for likely sources of timber for commercial development, and to conserve forest areas to prevent future world timber famines.



Distant view of El Yunque National Forest. The mountain was said to resemble a blacksmith's anvil.

Photo by Stan Shebs, 2004

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El Toro Wilderness is the core of the park as traversed by John Gifford in 1903.

Photo by the US Forest service, 2006

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A little known phase of this work was the investigation of the Luquillo forest reserve in Puerto Rico, established in 1876 by the Spanish. Before 1916, no unified [US national park system](#) existed. The boundaries between the definitions of parks and forest reserves were still being set. The island empire, with its colonial “subjects,” facilitated emphasis on multiple-use and scientifically managed forests, whereas Hawai‘i, an incorporated territory with US citizenship, achieved a national park in 1916.

A NEW NATIONAL PARK.

WONDERS OF PORTO RICO.

Dr. Gifford's Discoveries in the Government Reservation.

San Juan, P. R., Sept. 15 (Special).—Dr. John C. Gifford, of the Bureau of Forestry, of Washington, and formerly of Cornell University, will this week sail for the United States to report the results of his investigations in the Luquillo reservation, near the eastern coast of Porto Rico. Dr. Gifford is averse to talking for publication until he has made his official report, but from those who accompanied him on some of his trips it is learned that his researches have been full of interest. He will carry with him a hundred photographs and numerous specimens of vegetation. He crossed El Yunque range at its highest point, where it is probable that no white men have gone since the days of the Spanish explorers four centuries ago. The poems who accompanied him frequently cut with their machetes a pathway through tropical growths as dense as any in South America.

In other parts of the preserve Dr. Gifford found beautiful streams, which would afford valuable power, tumbling and foaming over precipices hundreds of feet high. Where some of these streams emptied into little basins he discovered natives panning gold, from which, by the crudest methods, they netted from 80 cents to \$1 a day each.

Huge aromatic gum trees, forty to fifty feet high and five to six feet in diameter, were found, exuding a gum highly prized by Porto Ricans, who use it in torches for lighting purposes. In the rural districts it is often moulded into candles in a crude fashion, the gum being pressed about a fibre wick. Dr. Gifford has forwarded twenty-five pounds of this gum to Washington for analysis, to learn if it possesses any considerable commercial value. All the well known native fruits, plants and trees were found through the reservation in great abundance, but at present the place is so inaccessible that nothing can be brought to the seaboard except at great expense. There are no trails and most of the journeying must be done on foot.

Dr. Gifford's wife was with him on many of his trips and proved to be an excellent pioneer. He also had with him for several days Professor O. E. Barrett, the entomologist and botanist of the United States Agricultural Station at Mayaguez, Porto Rico.

Professor Barrett procured numerous botanical specimens which he admits are "puzzlers," and which he is now trying to class. He is enthusiastic to cover the bosom of the reservation, and will doubtless make a technical report to add to that of Dr. Gifford.

It is not at all improbable that the researches of Dr. Gifford will lead to the establishing of the first national tropical park of the United States within the confines of this Luquillo reserve. It is splendidly adapted to such a purpose, and could be made at comparatively small expense one of the most beautiful spots in the world and a resort for travellers from all climes, but especially from the United States. In winter, Acting Governor Hartzell and others interested in the future of Porto Rico are ardent supporters of this scheme. Mountain valleys, forests and never failing streams unite their attractions, and whatever will live to perfection. If the United States should take hold of the matter in earnest it would make the national park of Porto Rico one of the wonders of the world, and the investment would undoubtedly prove also to be profitable. The botanical gardens could easily be made to exceed in beauty the famous gardens of St. Pierre, Martinique, which now lie buried under the ashes from Mount Pelée.

The reservation of the lands as a national park would prevent the granting of mining concessions or other private rights, and would prevent the gold seekers, who have already been stirred by the little knowledge they have of the gold streams found by Dr. Gifford, from prospecting for the precious metal. Since a recent dispatch reported the finding of gold many letters from the States have come to Dr. Gifford asking for further information.

An effusive press report of Gifford's trip

New York Tribune, 21 September 1903, p. 3

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An obscure figure in American forestry policy, John Clayton Gifford became an advisor on the use and preservation of the Luquillo forest. Gifford is significant because of his role in the multinational transference of forestry knowledge between the continental United States, Germany, the colonial dependency of Puerto Rico, and other American spheres of Caribbean influence. Born in New Jersey in 1869, Gifford studied in Germany, the home of scientific forestry policy, graduating from the University of Munich in 1899 with a PhD in forestry. Having taught at Cornell University's forestry school until 1903, he then worked for the Bureau of Forestry in the US Department of Agriculture as an agent from 1903 to 1906. As part of this work, Gifford submitted a report in 1904 of a survey undertaken the previous September into the forests of "Porto Rico." This covered the rugged El Yunque Range in the eastern part of Puerto Rico. Newspapers hailed the report because it might lead to the creation of the "first national tropical park" in the United States park portfolio; they effused about the reserve as evidence of the tropical "wonders of Porto Rico." It became a state-regulated space as part of US

national and imperial development to be defined by the conservationist criteria of efficiency. But the US Government did not consider national park status appropriate for its colonies, despite the identification in US historiography of the US as the originator of the national park idea (America's "best idea"). Bearing in mind his superiors' inclination towards utilitarian forestry rather than official national park creation, Gifford recommended that the Luquillo forest remain reserved for timber use. It became the Caribbean National Forest in 1935, and in 2007 the name was changed to El Yunque National Forest to better represent the sentiments of the Puerto Rican people.

Gifford's report shows a mixture of functions that American forestry officials hoped that the forests in the new colonies would fulfill. Gifford favored a multiple-use strategy in keeping with Progressive Era conservation's utilitarian approach, but the reserve "should also be made accessible to the public for its scenic attractions." Gifford saw no incompatibility between preservation and utilization for a variety of purposes, including those akin to a modern national park. Underlying Gifford's thinking was the need to study all of the nation's newly acquired tropical forest resources, generate cooperative research across the colonial system, and network with other imperial powers to improve tropical forest knowledge. He urged creation of a "center of forestry" with "educational value." In 1907 President Theodore Roosevelt made the area the Luquillo National Forest, the first US national tropical forest reserve. Luquillo became valuable for transnational research and exchanges of information on tropical plants, but it was not until 1939 that an official Tropical Forest Experiment Station was established.



Photographs then and now emphasized the lush tropical greenery and the prevalence of natural "wonders" such as waterfalls and tall trees.

Photo by [andrewm123](#), 2012

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Gifford used his Puerto Rican experience to advocate importing tropical plants to make southern Florida a center of forest production. This was unrealistic, since only the Caribbean islands, not Florida, were truly frost-free. Ominous, however, was Gifford's advocacy of Australian melaleucas to soak up southern Florida's swamps to create farms and real estate. He was an early advocate of draining and canalizing these areas he called "muck lands". Though "scientifically" trained, Gifford recalled the nineteenth-century acclimatization movement's ideas of an abundant garden landscape, in which the world's plants would be experimentally mixed for both productivity and aesthetic appeal, and where land should be "improved" rather than preserved. In this respect his work was old-fashioned. But his respect for the earth's life support systems ("Living by the Land"), and research into tropical forestry for sustainable use globally, looked very much to the future.

Arcadia Collection:

[The Nature State](#)

Further readings:

- Brinkley, Douglas. *The Wilderness Warrior: Theodore Roosevelt and the Crusade for America*. New York: HarperCollins, 2009.
- Gifford, John C. *On Preserving Tropical Florida*. Coral Gables: University of Miami Press, 1972.
- Gifford, John C. "A Porto Rico Forest Reserve." *Forestry and Irrigation*, no. 11 (January 1905): 38–40.
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- Grunwald, Michael. *The Swamp: The Everglades, Florida, and the Politics of Paradise*. New York: Simon & Schuster, 2006.
- Troetschel, Henry Jr. "John Clayton Gifford: An Appreciation." *Tequesta*, no. 10 (1950): 35–47.

Related links:

- Ken Burns, "National Parks. America's Best Idea" (documentary) <http://www.pbs.org/nationalparks/>

How to cite:

Tyrrell, Ian. "Conservation and Forestry in the American Tropics: John Clayton Gifford in Puerto Rico." Environment & Society Portal, *Arcadia* (2015), no. 10. Rachel Carson Center for Environment and Society. <https://doi.org/10.5282/rcc/7042>.

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ISSN 2199-3408

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