

A Tale of Two Forests: Community Engagement in Vermont and Puerto Rico

Equally important to the management of a forest is the degree to which its relative communities are considered and involved. A forest can be a place where neighbors and visitors can come together to share, develop, and celebrate their connections to each other and the land. Attention to community building and engagement in a forest setting can augment the ecological integrity through fostering local support and collaboration in management objectives. But what is community? How is it defined? Community can mean different things to different people in different contexts and may seem an abstract concept to some. However, two dominant conceptualizations of the term are prevalent: a community is based on defined geographic governmental boundaries or a community is based on common interests and shared identities, or a community can be also be based on some combination of the two.

This Place-based Landscape Analysis class has provided a unique opportunity to consider community engagement in two distinct settings: the Jericho Research Forest in Jericho, Vermont and throughout the island of Puerto Rico. Through research, site visits, key stakeholder interviews, and reflection, the tale of how communities interact with each place has unfolded and will be presented in the following pages. The Vermont site is owned and managed by the University of Vermont's Rubenstein School of Environment and Natural Resources. For Puerto Rico, the El Yunque National Forest is managed by the United States Forest Service, the Northeast Ecological Corridor is a designated nature preserve and is supported by the Sierra Club, and Las Casas de la Selva is a part of the business Tropic Ventures. While the degree to which the community is integrated in each place and the specific activities and opportunities for engagement vary, it is clear the land managers recognize the inherent value in cultivating intimate connects between people and the land.

Overview of Place and Community Engagement Themes

Puerto Rico: The history of the forests of Puerto Rico is complex. The United States acquired the island colony in 1898 and by 1940 it was cleared for the cultivation of sugar cane, tobacco, and coffee, leaving only 6% forested. A shift to industrial development and the subsequent agricultural abandonment mid-twentieth century have allowed the forests to begin to grow back, with nearly 57% of the island currently covered in secondary growth. With 78 municipalities and a population of 3.9 million on slightly more than 3,500 square miles, this is an impressive canopy cover. However, there is a general disconnect between people and the forest resources. There is very little timber harvesting and no infrastructure for livelihoods based on forest management, there is no forestry school in Puerto Rico, and the land use history on the island has resulted in a rift between people and their traditional connections to the forests. Engaging residents to understand the value of forests at a local, national, and global scale is the challenge.

Vermont: At 9,620 square miles and with a population of 625,000, Vermont provides an interesting comparison to Puerto Rico. Like the island, Vermont was nearly deforested for timber, agriculture, and livestock grazing in the nineteenth century but now boasts nearly 80% forest cover. The majority of forested land is privately owned in Vermont and there are significant efforts to support sustainable forestry practices and to integrate communities into the land use decisions across the state. The Jericho Research Forest has engaged with the University of Vermont community for close to 80 years and has in recent years begun to extend significant efforts to the integration of other communities of place and of interest.



Photograph above credited to Rachel Garwin



<http://www.chriskaylerphotography.com/blog/vibrant-fall-foliage-green-mountain-national-forest-vermont/>

The Jericho Research Forest



On the first Saturday of each month there is a themed community forest walk. Here, Vermont historian Bob McCullough tells community members about the 1832 Thompson House, a unique feature of the Jericho Forest.

Community engagement at the Jericho Research Forest has increased significantly in the past decade. Totalling 478 acres, the land was purchased by the University of Vermont in 1941 and was at that time a degraded agricultural site. Reforested and studied by UVM researchers throughout the late twentieth century, the Jericho Research Forest and is currently managed through the Rubenstein School of Environment and Natural Resources. However, with the creation of the Green Forestry Initiative in 2005, the focus of the Jericho Research Forest became more about connections: the forest has the potential to be right at the intersection of community, ecology, economics, recreation, and education. By creating opportunities for the communities surrounding Jericho to learn from and engage with the forest, the Green Forestry Initiative is providing a space to explore and converse about land use and land value. The forest management and conversation approaches used at the Jericho Research Forest embody the idea that successful conservation depends on viable links with local communities.

What are the “communities” of the Jericho Research Forest?

Communities of Place: The town of Jericho has a population of approximately 5,000 residents. Essex and Underhill are the neighboring towns and are similar in size. Burlington and the University of Vermont are roughly 15 miles west of Jericho.

Communities of Interest: Examples include silviculture, conservation, hiking, birding, local history, family forests, woodturning, wildlife tracking, wildlife monitoring, mountain biking, and crossing country skiing



The University of Vermont owns the Jericho Research Forest and the university community of faculty and undergraduate and graduate students have used the forest as an educational resource for classes and research for decades. An example is the Woodturning and Conservation class, where students create a bowl in the lathe studio on site. Students are also encouraged to recreate there; for example, the hand-built clay-topped pizza oven is available for use and the UVM Woodsman Team holds practice at the Jericho Forest. The Green Forestry Initiative, founded in 2005 by Vermont Forester David Brynn and now run by former UVM graduate student Brendan Weiner, has vastly expanded efforts to engage with the greater Jericho community. Free community forest walks and bonfires are held on the first Saturday of each month, the Orr Center (pictured above, left) is available for meetings and conferences, local schools have begun to use the forest for ecology and conservation education, and demonstrations of sustainable timber harvesting have been open to the public. Currently, ways to further incorporate the local community are being considered, such as having a council of community members that meets regularly with those who manage the Jericho Research Forest at UVM.

The photographs on this page are taken from the Green Forestry Initiative’s website and are credited to that organization.

The mission of the Green Forestry Initiative is to integrate sustainable design, land ethics, and real-world learning in community-based forest conservation.

Community Engagement at

El Yunque National Forest



The El Yunque National Forest is the only tropical rain forest in the United States National Forest System. Proclaimed a Spanish Crown Reserve in 1876 and subsequently designated a national forest in 1903 when the United States acquired the island, the forest is currently comprised of approximately 28,000 acres and is managed by the United States Forest Service. El Yunque has roughly 1.25 million visitors annually include mainlanders from the conterminous United States, researchers, Puerto Ricans, and internationals. Roughly half of the visitors are from Puerto Rico, providing an important connection to the forests of the island for local communities. Further, 20% of the San Juan metro area water supply comes from the streams and rivers of El Yunque and it is essential for the people of the island to understand the importance of preserving and protecting the forest's integrity.

El Portal Rainforest Center was opened in 1996 and is situated at the entrance to El Yunque National Forest. The facility has an information booth, special exhibits on the forest's history and features, a gift shop, an art gallery, and a small theater which plays a film about the rainforest, narrated by Puerto Rican native, actor Benecio del Toro. Admission to El Portal is \$3.

What are the "communities" of El Yunque National Forest?

Communities of Place: El Yunque National Forest is located roughly 25 miles east of the capital city of San Juan. The closest city is Rio Grande, which has a population 52,000.

Communities of Interest: Examples include tropical forestry, national parks, rare birds, ethnobotany, hiking, Puerto Rican history, forest interpretation, volunteering, scenic driving, watershed conservation, environmental education, camping, fishing, and biking.



Specific opportunities for community participation at El Yunque are numerous. Not only is there an extensive trail system (see map to the right) including both paved and unpaved options, but forest ranger tours operate seven days a week and El Portal Rainforest Center provides extensive educational opportunities. The Rent-a-Ranger program provides visiting school groups with forest interpreters and in 1998 a formal environmental education teacher's training program was established at El Yunque to promote the use of the forest in early education. The U.S. Forest Service also maintains picnic facilities, bbq pits and grills, gazebos, and public restrooms to make El Yunque a more community-oriented forest. Finally, there are numerous volunteer opportunities for local and visiting groups interested in contributing to the health and conservation of the El Yunque environment. The Friends of El Yunque is the group that coordinates volunteer activities and is always seeking help with infrastructure improvements and environmental education.

The photographs on this page are either credited to the author or taken from the El Yunque National Forest website and are credited to that organization.

The United States Forest Service is dedicated to restore and enhance landscapes, protect and enhance water resources, develop climate change resiliency and help create jobs that will sustain communities.

Community Engagement at

The Northeast Ecological Corridor



The Puerto Rican chapter of the Sierra Club was established in 2005 and the protection of the Northeast Ecological Corridor (NEC) is one of its major initiatives. The NEC is roughly 3,000 acres and meets the Atlantic Ocean on the northeastern coast of the island: it was designated as a nature reserve in 2008. However, current Puerto Rican Governor Luis Fortuno is proposing a cancellation of the designation to promote development in the area. The Sierra Club has focused on raising public awareness of the importance of the NEC for the leatherback turtle and other endemic and threatened species and also for the environmental integrity and natural resources of the local communities.

The Sierra Club's vision for the Northeast Ecological Corridor includes opportunities for recreation, ecotourism and community economic development, and, of course, the continued protection of the fragile leatherback turtle nesting habitat.

What are the "communities" of the Northeast Ecological Corridor?

Communities of Place: The town of Luquillo borders the Northeast Ecological Corridor to the west and is home to roughly 20,000 residents. To the southeast is the city of Fajardo with 41,000 residents. The NEC is 30 miles east of the capital of San Juan.

Communities of Interest: Examples include wildlife habitat protection, oceans, leatherback turtles, coral reefs, surfing, snorkeling, scuba diving, kayaking, mangroves, birding, hiking, ecotourism, and coastal conservation.



Camilla Feibelman (above, center) is a coordinator for the Sierra Club in Puerto Rico and she recognizes the importance of working with the community in her efforts to protect the natural area designation of the NEC. Each April the Sierra Club works with local Fajardo and Luquillo businesses and residents to host the Festival of the Leatherback to bring in the nesting season. The festival lasts a full day and includes activities for children, educational booths, food, music, and crafts. Last year, over 170 people, mostly locals, volunteered to clean the NEC beach in preparation for the leatherback nesting season (above, left). Last Halloween, dozens of children dressed as any of the 40 endemic and threatened species went to the governor's fortress to protest the removal of the protected nature reserve designation. Communities of interest engage with the NEC as well: students from the Bronx in NYC came to Puerto Rico recently to participate in a demonstration to protect the leatherback turtle habitat. The Sierra Club hosts excursions, talks, and presentations to garner further support for their efforts and has established The Coalition for the Northeast Corridor, composed of local, regional, island, national, and international organizations. Finally, Camilla trains local residents to guide groups through the NEC, empowering those invested to engage with their neighbors and local institutions around conservation of the NEC.

The photographs on this page are either credited to the author or from the Sierra Club's Puerto Rico chapter's website and are credited to that organization.

Since 1892, the Sierra Club has been working to protect communities, wild places, and the planet itself. We are the largest and most influential grassroots environmental organization in the United States.

Community Engagement at

Las Casas de la Selva



Tropic Ventures creates value-added projects and sells timber of the fast-growing and exotic Blue Mahoe tree (*Hibiscus elatus* Swartz), which can grow to 80 feet.

Founded in 1983 and owned jointly by the Global Ecotechnics Corporation and Decisions Team, Inc., Tropic Ventures is an organization that runs the Las Casas de la Selva Rain Forest Enrichment Project (Las Casas). The project encompasses 1,000 acres of forest in southeastern Puerto Rico, roughly 300 of which are actively managed. The objectives of the project are to develop and demonstrate ecological approaches to timber production. Further, dissemination of the research findings and promoting sustainable timber practices in Puerto Rico are important measures of success for the project. The community has been minimally involved in Las Casas to this point, but there are significant volunteer, research, and environmental education opportunities for community engagement. The small Las Casas staff is open to engaging the surrounding communities and have just begun to create links to residents and schools to foster better understanding of the economic alternatives and viability of rainforest communities.

What are the “communities” of Las Casas de la Selva?

Communities of Place: The closest towns to Las Casas de la Selva are Patillas, with a population of roughly 20,000, and Cayey, with a population of 47,000.

Communities of Interest: Examples include silviculture, value-added products, hiking, tropical plants, sustainable forestry, tropical wildlife, ethnobotany, homesteading, whole systems, and environmental volunteering.



The small staff at Tropic Ventures, who run the Las Casa de la Selva project, are aware of the value of incorporating local volunteers and residents in the initiatives in their forest. 3t Vakil, the Director of Tropic Ventures says that until a few years ago, the locals referred to her organization as “the hippies on the hill”. However, since then Andres Rua Gonzalez, a local resident, has become the director of Technical Systems at Tropic Ventures, and has provided an essential link between Las Casas and the local communities. Programs are offered to both local and international volunteers and youth to experience and study the rain forest. In fact, for 20 years Tropic Ventures has hosted volunteers, and has collaborated with Earthwatch volunteers since 2001. As of 2011, though, they have yet to have a Puerto Rican-based group. Currently, a PhD student from Cornell is engaging in research around the community’s perception of Tropic Ventures and staff hope to be able to reach out to targeted groups as a result. A project titled Talk, Walk, Tour has been established through Las Casas for groups of 15 or more (English or Spanish) to learn about the project and sustainable forestry in the rain forest. Further, outreach programs are being developed to encourage sustainable practices in the use of forest resources and forest management and Las Casas staff seek to establish regular visitations and collaborations with schools, colleges, and institutions from PR and abroad.

The photographs on this page were either taken by a student in this course or from the Tropic Ventures website and are credited to that organization.

The mission of Las Casas de la Selva is to research and demonstrate the economic use of rain forest land using methods that do not destroy the forest ecology.

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