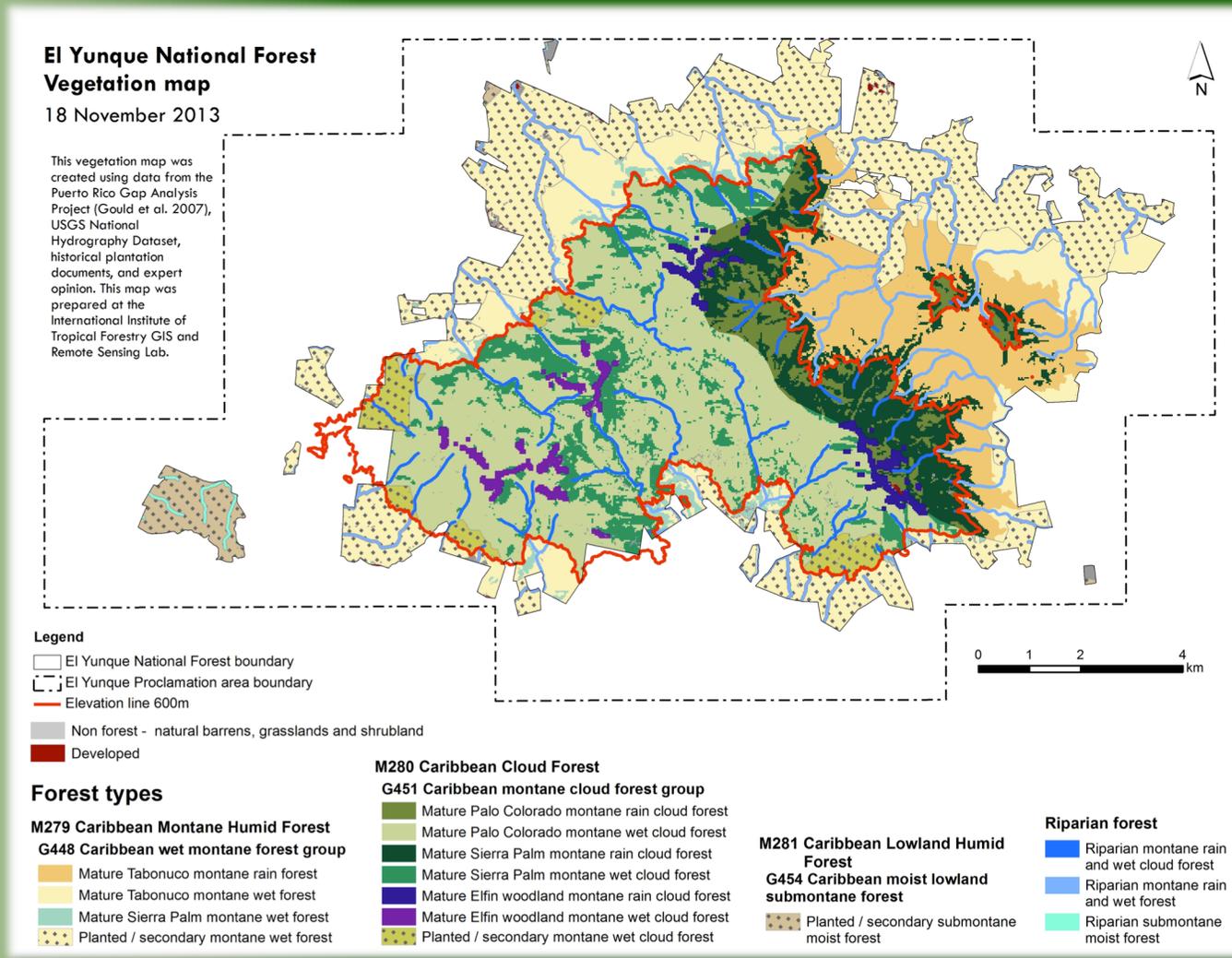


# ECOSISTEMAS

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# ECOSISTEMAS EN EL BOSQUE NACIONAL EL YUNQUE



## ECOSISTEMAS PRELIMINARMENTE HALLADO EN EL BOSQUE NACIONAL EL YUNQUE

<p><b>1. Mature Tabanuco montane rain forest</b></p>	<ul style="list-style-type: none"> <li>• Average Annual Rainfall = 183 in.;</li> <li>• AltR = 1312 – 2296 ft.;</li> <li>• Number of species = &gt;150 trees species.;</li> <li>• Species Association = Dacryodes excelsa-Prestoea montana-Sloanea berteriana; Located in Barlovento (windward) side of the EYNF, is the wettest zone, superabundance of epiphytes; covers 1420 ha (13% of EYNF); This system is Endemic to EYNF.</li> </ul>
<p><b>2. Mature Tabanuco montane wet forest</b></p>	<ul style="list-style-type: none"> <li>• Average Annual Rainfall = 78 - 156 in.;</li> <li>• AltR = 492 – 1968 ft.;</li> <li>• Number of species = &gt;150 trees species.;</li> <li>• Species Association = Prestoea – Dacryodes – Sloanea, contains epiphytic ferns, bromeliads, orchids and lianas.</li> </ul>
<p><b>3. Mature Sierra Palm montane wet forest</b></p>	<ul style="list-style-type: none"> <li>• Average Annual Rainfall = 78 – 156 in.;</li> <li>• AltR = 492 – 1968 ft.;</li> <li>• Number of species = 63 tree species.;</li> <li>• Species Association = Prestoea – Cecropia – Henriettea sp.; “Palm brakes” are nearly pure stands of Palms associated with saturated soils and disturbance on very steep slopes and wet areas.</li> </ul>
<p><b>4. Planted/Secondary montane wet forest</b></p>	<ul style="list-style-type: none"> <li>• Average Annual Rainfall = 144 in.;</li> <li>• AltR = 492 – 1968ft.;</li> <li>• Number of species = to be determine</li> <li>• Species Association = TBD; Is a “Novel Forests” product of reforestation efforts with local and exotic species and natural succession. Some of this lands are located inside the Wilderness Area.</li> </ul>

<p><b>5. Mature Palo Colorado montane rain cloud forest</b></p>	<ul style="list-style-type: none"> <li>• Average Annual Rainfall = 178 in.;</li> <li>• AltR = 1968 – 2952 ft.;</li> <li>• Number of species = 88 tree species;</li> <li>• Species Association = Cyrilla – Ocotea – Micropholis with abundance of epiphytes. Located in the Barlovento (windward) side of the EYNF, is part of the cloud forest and the system is endemic to EYNF. This system is subjected to strong winds and extensive exposure to clouds.</li> </ul>
<p><b>6. Mature Palo Colorado montane wet cloud forest</b></p>	<ul style="list-style-type: none"> <li>• Average Annual Rainfall = 164 in.;</li> <li>• AltR = 2296 – 3280 ft.;</li> <li>• Number of species = 53 tree species;</li> <li>• Species Association = Cyrilla – Ocotea – Micropholis with bromeliads common on the forest floor.</li> </ul>
<p><b>7. Mature Sierra Palm montane rain cloud forest</b></p>	<ul style="list-style-type: none"> <li>• Average Annual Rainfall = 178 in.;</li> <li>• AltR = 1968 – 2952 ft.;</li> <li>• Number of species = 88 tree species.;</li> <li>• Species Association = Prestoea – Cyrilla – Ocotea; Palm brakes located on the Mature Palo Colorado montane rain cloud forest area. Part of the endemic system located to the Barlovento (windward) side of EYNF.</li> </ul>
<p><b>8. Mature Sierra Palm montane wet cloud forest</b></p>	<ul style="list-style-type: none"> <li>• Average Annual Rainfall = 164 in.;</li> <li>• AltR = 2296 – 3280 ft.;</li> <li>• Number of species = 53 tree species;</li> <li>• Species Association = Prestoea – Cyrilla - Ocotea; Located in steep slopes with soils of long periods of saturation and floodplains periodically inundated</li> </ul>

<p><b>9. Mature Elfin woodland montane rain cloud forest</b></p>	<ul style="list-style-type: none"> <li>• Average Annual Rainfall = 171 in.;</li> <li>• AltR = 2952 - 3362 ft.;</li> <li>• Number of species = 54 tree species;</li> <li>• Species Association = <i>Tabebuia rigida</i> – <i>Ocotea spathulata</i> – <i>Eugenia borinquensis</i>; Canopy height is typically 3 to 5m, with variants up to 10m. Has windswept sculptured appearance. Found on highest peaks of the Barlovento (windward) side of EYNF. Trees and ground are covered with mosses and epiphytes. The system is endemic to EYNF and subjected to strong winds and extensive exposure to clouds. Represented at EYNF by Pico del Este, Pico del Oeste and Pico del Yunque.</li> </ul>
<p><b>10. Mature Elfin woodland montane wet cloud forest</b></p>	<ul style="list-style-type: none"> <li>• Average Annual Rainfall = 171 in.;</li> <li>• AltR = 2952 - 3362 ft.;</li> <li>• Number of species = 54 tree species;</li> <li>• Species Association = <i>Tabebuia rigida</i> – <i>Ocotea spathulata</i> – <i>Eugenia borinquensis</i>; Canopy height is typically 3 to 5m, with variants up to 10m. Has windswept sculptured appearance. Found on highest peaks of the Sotavento (leeward) side of EYNF. Trees and ground are covered with mosses and epiphytes. Represented at EYNF by El Toro Peak and El Cacique Peak</li> </ul>
<p><b>11. Planted/ Secondary montane wet cloud forest</b></p>	<ul style="list-style-type: none"> <li>• Average Annual Rainfall = 164 in.;</li> <li>• AltR = &gt;600m.;</li> <li>• Number of species = TBD</li> <li>• Species Association = TBD. These lands were part of a reforestation effort during the 1930' that are located in the newly identified EYNF “functional wetland”, cloud forest and Wilderness Area. Is a “Novel Forests” product of reforestation efforts with local and exotic species and natural succession.</li> </ul>
<p><b>12. Planted/ secondary submontane moist forest</b></p>	<ul style="list-style-type: none"> <li>• Average Annual Rainfall = TBD;</li> <li>• AltR = 1148 – 1804 ft.;</li> <li>• Number of species = TBD .</li> <li>• Species Association = TBD. This is a tract of land of approx. 500 acres , known as La Condesa, separated from the EYNF main body and that was planted with native and exotic species during the 1940's; Is a “Novel Forests” product of reforestation efforts with local and exotic species and natural succession.</li> </ul>

# RIPARIAN

<p>13. Riparian montane rain and wet cloud forest</p>	<ul style="list-style-type: none"><li>• Average Annual Rainfall = 164 – 178 in ;</li><li>• AltR = &gt;600m.;</li><li>• Number of species = TBD;</li><li>• Species Association = TBD</li><li>• This forest is located 100ft from each stream side. Covers approximately 700 acres of land.</li></ul>
<p>14. Riparian montane rain and wet forest</p>	<ul style="list-style-type: none"><li>• Average Annual Rainfall = 78 – 183 in. ;</li><li>• AltR = 150 - 600m.;</li><li>• Number of species = TBD;</li><li>• Species Association . = TBD, This forest is located 100ft from each stream side. Covers approximately 1350 acres of land.</li></ul>
<p>15. Riparian submontane moist forest</p>	<ul style="list-style-type: none"><li>• Average Annual Rainfall = TBD ;</li><li>• AltR = 1148 – 1804 ft.;</li><li>• Number of species = TBD;</li><li>• Species Association = TBD, This forest is located 100ft from each stream side. Covers approximately 60 acres of land</li></ul>

# HUMEDAL FUNCIONAL



- El terreno sobre 600 metros de elevación contiene suelo, vegetación y elementos hidrológicos de un humedal funcional. Esta área cubre 13,335 acres lo cual representa un 47% del terreno de EYNF.
- Nuevos mapas de suelos identifican suelos parcialmente hídricos a través del bosque. Esto cubre 11,914 acres lo cual representa un 42% del total del área del bosque.
- La Lista Regional Final de Plantas de Humedales de Puerto Rico del 2012; contiene 1,487 especie de plantas listadas; 556 o un 36% de la lista se reportan estar presente en Bosque Nacional El Yunque.
- A través del bosque como un todo la media anual de precipitación es aproximadamente 3,879mm anual<sup>-1</sup> (Harris et. al).

# CONCLUSIÓN

## PREGUNTAS?