

Lutz Creek watershed, Barro Colorado Island, Republic of Panama

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Watershed description:

The watershed is underlain by Oligocene tuffaceous and fossiliferous sandstone bedrock, rich in calcite, and clay-rich (Smectite) soils overlie a thick saprolite (Baille et al., 2007). BCI ranges in elevation from 26m asl to 167 m asl, is fully forested, with what has been characterized as a lowland seasonal tropical forest, with a mix of deciduous and evergreen trees. Annual rainfall averages 2,580 mm, with strong seasonality: the dry season is from December to May. BCI is one of the most intensively studied area of the global tropics because of the century-long presence of a research station and ongoing scientific investigation focused mainly on terrestrial forest ecology, entomology, animal behavior and related fields. The Lutz Creek data improve our understanding of basic hydrological processes and inform our ongoing research into the complex terrestrial ecosystems of the island and the region [bibliography below]. BCI is also home to the first of what is now a global network of more than 70 forest research plots known as the Forest Global Earth Observatory (ForestGEO, see <https://forestgeo.si.edu/>). ForestGEO is dedicated to advancing long-term study of the world's forests to strengthen science capacity in an era of rapidly changing landscapes and climate to understand and predict forest dynamics

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