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ABSTRACT	<p>The Luquillo Experimental Forest (LEF) has a long history of research on tropical forestry, ecology, and conservation, dating as far back as the early 19th Century. Scientific surveys conducted by early explorers of Puerto Rico, followed by United States institutions contributed early understanding of biogeography, species endemism, and tropical soil characteristics. Research in the second half of the 1900s established the LEF as an exemplar of forest management and restoration research in the tropics. Research conducted as part of a radiation experiment funded by the Atomic Energy Commission in the 1960s on forest metabolism established the field of ecosystem ecology in the tropics. Subsequent research has built on these early advances to develop new theories on ecosystem response to disturbance regimes and the role of the biota in ecosystem resilience. Recent and current research in the LEF has advanced understanding of resilience to hurricane disturbances, human land use, gamma irradiation, landslides, drought, and warming, showing that even following the most severe disturbances (e.g., landslides, agriculture) forests reestablish within 60 years. Work in the LEF has reversed the paradigm that tropical ecosystems are fragile, but instead exhibit remarkable resilience to many forms of disturbance present at multiple spatial and temporal scales. Current research is already advancing understanding of how climate change and attendant effects on the disturbance regime might affect the composition, structure, and function of tropical forest ecosystems.</p>
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