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Herpetofauna of the Rio Guajalito Protection Forest, northwestern Ecuador:
biodiversity, community changes, and conservation issues

The herpetofauna of the Rio Guajalito Protection Forest, northwestern Ecuador, was studied over a period of four-years. The species richness and relative abundance of the amphibians and reptiles was determined through the application of 'inventory multiple methods' (visual encounter survey transects, leaf litter plots, larval survey, and random sampling points). A new species of frog of the genus *Phyllonastes* endemic to the area, several restricted-range species of the genus *Eleutherodactylus* (Amphibia), *Dipsas* and *Atractus* (Reptilia) are present at the forest. Using data obtained since the late 70's, several changes in the composition and relative abundance of species have been observed. At least three taxa of amphibians are extirpated or extinct and some local declines have been detected on anurans and lizards. The extinctions and declines at the area could be related to several factors working synergistically: habitat destruction, introduced species, diseases and local climate change. However, the patterns of changes of the community of amphibians and reptiles at the Rio Guajalito Protection Forest are similar to those reported for Monteverde, Costa Rica, not just for the herpetofauna but for birds as well, suggesting a link to recent climate changes. Issues concerning the conservation of the amphibians and reptiles of the region are discussed.
