

2007 Luis F. Bacardi Award for Advances in Tropical Conservation

The Luis F. Bacardi Award for Advances in Tropical Conservation is given to a young post-doctoral researcher (no more than five years after completing their Ph.D.) for the outstanding conservation-related talk at each ATBC annual meeting. The \$300 award is generously provided by the Lube Bat Conservancy, founded by the late Luis F. Bacardi.

The 2007 winner, among 13 candidates, is **J. Nicolas Urbina-Cardona** of the National Autonomous University of Mexico (UNAM), Mexico City. Nicolas' talk, entitled "Edge effects on tropical herpetofauna: the influence of seasonality and edge orientation," was a dynamic, data-rich synopsis of his cutting-edge doctoral and postdoctoral research on amphibian and reptile communities in fragmented forests of the Los Tuxtlas region in southern Mexico, and the landscape and ecological factors that determine species vulnerability.

Nicolas is a postdoctoral researcher at UNAM, and working on geographical niche distribution models of herpetofauna to design conservation area networks. He is also leading projects on landscape and anthropogenic effects on cloud forest amphibians at Guerrero, Mexico and dry forest reptiles at Cordoba, Colombia. He received his Ph.D. in 2007 from UNAM on "Edge effect on amphibian and reptile composition in areas with different land use and edge orientation in Los Tuxtlas Reserve, Veracruz, Mexico".

William F. Laurance

Smithsonian Tropical Research Institute

Edge Effect on Tropical Herpetofauna: The Influence of Seasonality and Edge Orientation

J. Nicolas Urbina-Cardona and Hugo Victor Reynoso. Instituto de Biología, UNAM, Mexico City, Mexico; e-mail: nurbina@yahoo.com

Anthropogenic activities are transforming tropical environments into semi-natural landscapes where between-patch isolation and

within-patch edge effects modify animal community structure and movements. We evaluated seasonal and edge-orientation effects on the abundance and species composition of amphibians and reptiles in a highly fragmented tropical rainforest at Los Tuxtlas, Veracruz, Mexico. A strong edge effect was detected in the species abundance and composition of reptiles that changed among seasons. Amphibians, however, did not respond directly to edge effects, but seasonality and orientation were important factors in defining species abundance and composition in edge and interior habitats. We suggest that high connectivity among habitats will facilitate the dispersal of edge species between forest patches and that habitat restoration projects must consider edge orientation and seasonal movements of species to ensure high habitat quality in degraded landscapes.



J. Nicolas Urbina-Cardona