

Center for Community-Based Resource Management (CBRM)

Natural Resources Institute, University of Manitoba

CBRM Database

Date:	30/Nov/2014	Entry Number:	1343
Case Study Name:	Hurricane Disturbance and Tropical Tree Species Diversity		
Authors:	John Vandermeer, Iñigo Crazow de La Cerda, Douglas Boucher, Ivette Perfecto, Javier Ruiz		
Document Type:	Journal article		
Year:	2000		
Language:	English		
Document Location:	<i>University of Michigan, USA</i>		
Full Citation:	Vandermeer, J., Cerda, Inigo C. de La, Boucher, D., Perfecto, I., & Ruiz, J. (2000). Hurricane Disturbance and Tropical Tree Species Diversity. <i>Science</i> , 290, 788–791.		
Region:	Central America		
Country:	Nicaragua		
Ecosystem Type:	Tropical rainforest		
Social Characteristics:	Urban communities		
Scale of Study:	National		
Resource Type:	Forestry		
Type of Initiative:	Research driven-project		
Community-Based Work:	Ecosystem assessment		
Keywords:	Disturbance hypothesis, Pioneer trees, Hurricane, Tree-fall light gaps, Species richness		
Summary:	The debate over the maintenance of high diversity of tree species in tropical forests centers on the role of tree-fall gaps as a primary source of disturbance. Using a 10-year data series accumulated since Hurricane Joan struck the Caribbean coast of Nicaragua in 1988, we		

	<p>examined the pattern of species accumulation over time and with increased sampling of individuals. Our analysis shows that the pattern after a hurricane differs from the pattern after a simple tree-fall disturbance, and we conclude that pioneers are limited in large disturbances and thus do not suppress other species the way they do in smaller disturbances.</p>
--	--