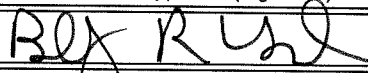


Entom

U.S. Department of Agriculture Accomplishments Report AD-421 U.S. Dept. of Agriculture, State Agricultural Experiment Stations and Other Institutions			Date (Month, Day, Year) 03/22/2012
1. Accession 0216069	Agency Identification No. 2. CSREES 3. LA.B	5. Work Unit/Project No. LAB93933	6. Status Annual Report
7. Title Forest Insect Responses to Disturbance and Management Practices			
12. Investigator Name(s) (Last Name and Initials) Schowalter, T. D.			
20. Termination Date 09/30/2013		40. Period Covered (mo/da/year): 01/01/2011 TO 12/31/2011	
Outputs: Results were published in two peer reviewed journals and in one book.			
Outcomes/Impacts: Data were reviewed to evaluate effects of disturbances, including fire, storm, drought and flood, on arthropods. Elevated herbivory in response to some disturbances can, in turn, affect ecosystem structure, processes and services in various, often complementary, ways. Reduced foliage area can reduce water demand during drought; accelerated nutrient and water flux may compensate for limitation. Results indicate that herbivore effects on primary production and other ecosystem processes are complicated and that some effects compensate for others. These data improve our ability to decide when outbreaks of forest insects should be treated.			
Publications: Schowalter, T.D., S.J. Fonte, J. Geaghan and J. Wang. 2011. Effects of manipulated herbivore inputs on nutrient flux and decomposition in a tropical rainforest in Puerto Rico. <i>Oecologia</i> 167: 1141-1149. Schowalter, T.D. 2011. What is a "natural" ecosystem? <i>Frontiers in Ecology and the Environment</i> 6: 358-359. Schowalter, T.D. 2011. <i>Insect Ecology: an Ecosystem Approach</i> , 3rd Ed. Elsevier/Academic, San Diego.			
Participants: T. Schowalter (PI), J. Geaghan, and J. Wang, LSU AgCenter; Steven Fonte, CIAT-TSBF-LAC Institute, Cali, Colombia.			
Target Audiences: ecologists, entomologists, forest managers, rangeland managers			
Project Modifications: Nothing significant to report during this reporting period.			
Approved (Signature) 		Title	Date