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A Survey of Organochlorine Pesticide Contamination in Costa Rican Taxa

Mark Wieland *Illinois Wesleyan University*

R. Given Harper, Faculty Advisor *Illinois Wesleyan University*

Jeffrey Frick, Faculty Advisor Illinois Wesleyan University

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Poster Presentation 10

A SURVEY OF ORGANOCHLORINE PESTICIDE CONTAMINATION IN COSTA RICAN TAXA

Mark Wieland and R. Given Harper* and Jeffrey Frick* Department of Biology, Illinois Wesleyan University

Amphibians, turtles, and rodents collected from a conservation area in Northwestern Costa Rica were analyzed for organochlorine (OC) pesticide contamination. Pesticides had not been used in this area for at least thirty years. Six of thirty-nine amphibians, three of six turtles, and one of eight rodents contained pesticides ranging from 12.96 ng/g to 277.70 ng/g. The average body mass of contaminated animals was 163.54 g, compared to 61.00 g for uncontaminated animals, suggesting that bioaccumulation of these compounds occurs in organisms from higher trophic levels. The presence of OCs in taxa from the conservation area indicates the possibility of long-distance transport of pesticides through the atmosphere, and these pesticides may be a contributing factor to the documented population declines of Central American amphibians and reptiles.