

Illinois Wesleyan University Digital Commons @ IWU

John Wesley Powell Student Research Conference

1997, 8th Annual JWP Conference

Apr 12th, 1:30 PM - 2:30 PM

Organochlorine Pesticide Contamination in Neartic Resident, Neotropical Migrant, and Neotropical Resident Passerines

Tyler A. Sager Illinois Wesleyan University

Jeffrey A. Klemens Illinois Wesleyan University

Frederic H. Hollingworth Illinois Wesleyan University

Jeff A. Frick, Faculty Advisor Illinois Wesleyan University

R. Given Harper, Faculty Advisor Illinois Wesleyan University

Follow this and additional works at: https://digitalcommons.iwu.edu/jwprc

Sager, Tyler A.; Klemens, Jeffrey A.; Hollingworth, Frederic H.; Frick, Faculty Advisor, Jeff A.; and Harper, Faculty Advisor, R. Given, "Organochlorine Pesticide Contamination in Neartic Resident, Neotropical Migrant, and Neotropical Resident Passerines" (1997). *John Wesley Powell Student Research Conference*. 12. https://digitalcommons.iwu.edu/jwprc/1997/posters/12

This Event is protected by copyright and/or related rights. It has been brought to you by Digital Commons @ IWU with permission from the rights-holder(s). You are free to use this material in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you need to obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/ or on the work itself. This material has been accepted for inclusion by faculty at Illinois Wesleyan University. For more information, please contact digitalcommons@iwu.edu.

©Copyright is owned by the author of this document.

Poster Presentation 18

ORGANOCHLORINE PESTICIDE CONTAMINATION IN NEARTIC RESIDENT, NEOTROPICAL MIGRANT, AND NEOTROPICAL RESIDENT PASSERINES

<u>T. A. Sager, J. A. Klemens, F. H. Hollingworth</u>, J. A. Frick^{*} and R. G. Harper^{*}, Departments of Chemistry and Biology, IWU

Organochlorine pesticide contaminants detrimentally affect wildlife in many ways, including lowered reproductive success, endocrine disruption, and embryonic defects. Most organochlorine pesticides have been banned in the United States after the recognition of such effects. However, these pesticides are still used in Central and South America, and little information is available concerning the levels of pesticide contamination in wildlife from these areas. Furthermore, little data exist regarding organochlorine pesticide contamination in passerines (songbirds). The purpose of our study was to determine the presence in passerines of 20 organochlorine pesticides that are of concern to the United States Environmental Protection Agency. Neotropical resident species (i.e. those living year-round in Central and South America) were collected from Argentina and Peru in 1996, Neotropical migrant species (i.e. those the winter in Central and South America and breed in North America) were collected in central Illinois from 1991-1996, and Neartic resident (i.e. those living year-round in North America) were collected in central Illinois in 1995 and 1996. Contamination levels were compared between each of the above geographic locations. Predominate pesticides found in Neartic resident and Neotropical migrant species included DDE, dieldrin and heptachlor epoxide. No significant levels of organochlorine pesticides were found in the Neotropical resident birds. We are currently analyzing the data in relation to age class, gender, and foraging guild within each geographic location.