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

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Poster Presentation 18

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

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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.