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Organochlorine Pesticide Contamination in Resident North American Passerines

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ORGANOCHLORINE PESTICIDE CONTAMINATION IN RESIDENT NORTH AMERICAN PASSERINES

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Organochlorine (OC) pesticide and metabolite levels were determined in resident North American passerines and woodpeckers collected in McLean County, Illinois. Sixty-nine of 77 individual birds contained OC compounds above detection limits, including all eighteen species examined. Total contamination levels in individual birds ranged from 7.47 to 2,274.23 ng/g. The most prevalent OC compound was p,pí-DDE, which was present in 45 birds; dieldrin was found in 30 birds, heptachlor and heptachlor epoxide were each found in 27 birds, and p,pí-DDT was found in 25 birds. There was no significant difference in total OC levels between males and females, between HY and AHY birds, and between birds that bred and wintered in more northern latitudes. There was a significant difference in total OC levels between diet categories. Omnivores had significantly higher total OC levels than granivores. House sparrows had significantly lower total OC levels than both white-throated sparrows and American robins.