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Determination of Organochlorine Pesticide Levels in Migratory Songbirds

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DETERMINATION OF ORGANOCHLORINE PESTICIDE LEVELS IN MIGRATORY SONGBIRDS.

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During the last decade populations of Neotropical migratory songbirds have declined, possibly due to their acquisition of organochlorine pesticides. Such chemicals are widely used in Central and South America where Neotropical migrants may be exposed to them for three-quarters of their lives. Baseline levels of organochlorine chemicals in songbirds were quantified using gas chromatography with electron capture detection. Organocholorine chemicals were present in almost all of the Neotropical migratory songbirds that we surveyed. Recent studies of the wildlife have documented that such chemicals (eg. 4,4' DDE, Dieldrin, Heptachlor Epoxide) may serve as endocrine system disruptors and reduce reproductive success. The results from our study may have important implications in the conservation of Neotropical migratory songbirds.