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Does the Method of Preparation Alter Measurements of Organochlorine Pesticide Levels in Avian Carcasses?

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Poster Presentation 11

**DOES THE METHOD OF PREPARATION ALTER MEASUREMENTS OF
ORGANOCHLORINE PESTICIDE LEVELS IN AVIAN CARCASSES?**

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Concern has been raised that measurements of avian organochlorine pesticide contaminants obtained from carcass material removed during preparation as museum study specimens may underestimate actual pesticide levels due to exclusion of the skin. In order to assess this potential underestimation, carcasses of 30 ovenbirds (Seiurus aurocapillus) were randomly assigned to one of three treatment groups: (1) skinned birds in which the skinned carcass was analyzed; (2) plucked birds in which the entire carcass minus the feathers was analyzed; and (3) bisected birds in which one half of each specimen was skinned and the other half was plucked. There were no statistically significant differences in levels of the most frequently detected compound, p,p'-DDE in skinned versus plucked birds or within pairs in the bisected birds. These data suggest that using carcass material left over after preparation as museum skin specimens has little effect on measurements of organochlorine pesticide levels. These results are important because they justify using tissues from skinned specimens for pesticide analysis, allowing data from museum study specimens to enhance the understanding of pesticide contamination patterns.