

techniques, and habitat use was determined at 2 scales, second and third order (Johnson 1980). Results showed that home range size differed significantly between 2 of the 3 home range estimators, and that third order habitat selection varied depending on which home range estimator was used. Care must be taken when selecting one home range estimator over another, as we show that both home range estimates and habitat selection classifications can be affected by the which tool is used.

Literature Cited

Johnson, D.H. 1980. The comparison of usage and availability measurements for evaluating resource preference. *Ecology* 61:65-71.

METHODS TO REDUCE AVIAN BY-CATCH IN SMALL MAMMAL STUDIES USING SNAP TRAPS

**Vanessa R. Lane¹, Karl V. Miller¹, Steven B. Castleberry¹,
Darren A. Miller², and T. Bently Wigley³**

¹*D.B. Warnell School of Forestry and Natural Resources,
University of Georgia, Athens, GA 30602*

²*Timberlands Technology, Weyerhaeuser NR Company,
Columbus, MS 39704*

³*National Council for Air and Stream Improvement, Inc.,
Clemson, SC 29634*

Abstract: Avian by-catch, a common and undesired occurrence in small mammal studies, should be minimized by researchers. We examined trap covering, treadle color (copper or yellow plastic), trap size (mouse or rat), and trap weathering (traps <1 yr or ≥1 yr old) on avian by-catch during 3 years. We found that covered traps caught 81% fewer birds and 70% fewer small mammals than did uncovered traps, that mouse traps caught 30% more birds and 38% more small mammals than did rat traps, and no capture differences for treadle color or trap weathering. Covered traps effectively reduced avian by-catch and should be used when reduced small mammal capture rates are acceptable.