

**GOS WINTER MEETING ABSTRACTS  
14-17 JANUARY 2011  
TYBEE ISLAND, GA**

**CONSIDERATION OF THE NON-STATIONARY EFFECTS  
OF THE RED-COCKADED WOODPECKER AS AN  
UMBRELLA SPECIES**

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**Abstract:** Umbrella species can be a useful tool for the conservation of non-target species that share similar habitats and population trajectories. The influence that management actions have on non-target species is seldom evaluated with direct consideration for how they influence changes across the landscape. Examination of the spatially heterogeneous effects of management strategies can reveal patterns that can be used to identify locations where the umbrella is not working effectively. This study investigated the non-stationary relationship between endangered species management for Red-cockaded Woodpeckers (*Picoides borealis*) and 5 non-target avian species -- Bachman's Sparrow (*Peucaea aestivalis*), Field Sparrow (*Spizella pusilla*), Prairie Warbler (*Setophaga discolor*), Northern Bobwhite (*Colinus virginianus*), and Brown-headed Nuthatch (*Sitta pusilla*) -- listed as species of management concern by the International Partners in Flight and the Georgia Department of Natural Resources. Results suggest that management for Red-cockaded Woodpeckers on Fort Benning, Georgia, increases overall diversity of these non-target species, but the effect varies across the landscape.