

Habitat associations of Neotropical migrants in Belize during the non-breeding season. Victoria D. Piaskowski, Mario Teul, Kari M. Williams and Reynold N. Cal. Birds Without Borders-*Aves Sin Fronteras* project, Zoological Society of Milwaukee. Milwaukee, WI and Belize, Central America.

From 1999-2003 we sampled four habitats in central Belize using mist netting and censusing to determine habitat associations of Neotropical migrant and resident species during the non-breeding season (December through March). The habitats studied included a transition zone from a karst hill forest to an adjacent seasonal wetland, riverine forest, scrub shrub (broken ridge), and secondary broadleaf forest. Mist netting data on 13 Neotropical migrant species for which twenty or more individuals were captured was analyzed to determine habitat associations based on the methods of Petit et al. (1989). To determine if the habitat associations for each species were different from the expected uniform distribution across the four habitat types, we used the goodness of fit G-test (Sokal and Rolf 1981). We found that the white-eyed vireo, wood thrush, gray catbird, American redstart, worm-eating warbler, ovenbird, northern waterthrush, Kentucky warbler, common yellowthroat and yellow-breasted chat all showed non-uniform use across the habitats studied. To determine whether a species was a habitat specialist, generalist or moderate generalist we used the modification described by Petit et al. (1989) of the niche breadth calculations of Levin (1968). We found that the white-eyed vireo was a habitat specialist; the wood thrush, gray catbird, American redstart, worm-eating warbler, northern waterthrush, Kentucky warbler, common yellowthroat and yellow-breasted chat were moderate habitat generalists; and the magnolia warbler, black-and-white warbler, ovenbird and hooded warbler were habitat generalists. This study emphasizes the importance of conserving a number of different habitat types that are used by Neotropical migrants during the non-breeding season.