closure were more likely to have been LCSP points than random points. Points with greater canopy height, greater vertical vegetative cover between ground level and 0.5 m, less litter depth, and reduced canopy closure were more likely to have been LCSP points than HESP points. The mean distance between HESP points (28.9 m) and the nearest prairie edge was significantly less than that for LCSP points (40 m, P = 0.001).

Relationships Between Eastern Whip-Poor-will and Chuck-Will's-Widow Abundance and Landscape Composition and Management

Melissa C Roach, Frank R Thompson

Eastern Whip-poor-will (Antrostomus vociferous) and Chuck-will's-widow (Antrostomus carolinensis) are nocturnal aerial insectivores that have experienced steep declines in abundance over the last 50 years across their ranges. There is little information on the effects of forest management practices on these species, in part, due to their secretive nature. However, increased efforts to restore savanna and woodland in the Eastern U.S. could potentially benefit these species. Our objective was to relate abundance of Eastern Whip-poor-will and Chuck-will's-widow to land cover, forest structure, and woodland restoration practices in the Missouri Ozarks. We conducted 385 nocturnal roadside point counts in the Ozark Highlands, Missouri during the 2014 and 2015 breeding seasons in areas with and without pine woodland restoration. We detected 375 Eastern Whip-poor-wills and 111 Chuck-will's-widows with a range of 0-5 and 0-2 individuals per point, respectively. We used Bayesian time-removal models in an information theoretic approach to evaluate the effects of management treatment, canopy cover, basal area, and forest cover. Abundances of Eastern Whip-poor-will and Chuck-will's-widow were positively related to the proportion of the landscape forested but negatively related to canopy cover in the forest. Abundance was also positively related to the proportion of the landscape treated by forest thinning. Pine woodland restoration appears to be benefiting these species of conservation concern in the Missouri Ozarks.

The Shorebirds May Disappear from Around the Largest City in South America

Fábio Schunck

Shorebirds and their migratory routes are globally threatened, and one such region in South America is situated near the center of the city of So Paulo, one of the largest urban centers in the world, with more than 21 million inhabitants. Characterized as "Vrzea of the Enbu-Mirim River", this wetland is in the basin of the Guarapiranga River, with aquatic habitats partially protected within a municipal reserve. Between 2007 and 2010, this region was impacted by a public works Project called "Rodoanel", a thoroughfare around the city of So Paulo. With the aim of identifying possible environmental impacts of the Rodoanel affecting migratory shorebird populations, an ongoing, voluntary monitoring project started 15 years ago, thus covering the periods before, during, and after the Rodoanel. Monthly censuses were conducted from 2007 to the present, totaling 143 over 150 field-hours. The study registered Bartramia longicauda, Actitis macularius, Tringa solitaria, T. flavipes, T. melanoleuca, Calidris fuscicollis and C. melanotos, that use the region between August and April. Before the Rodoanel project was begun, groups of up to 400 T. flavipes and 300 T. melanoleuca were registered; during the public works activities, these numbers fell drastically. After the completion of the Rodoanel, T. flavipes returned in good numbers, but T. melanoleuca stopped using the area, probably due to the grounding that affected their preferred feeding areas. B. longicauda also seems to have disappeared. These data reveal the impact that the Rodoanel has had on this group of birds, and show that the Guarapiranga region needs urgent, formal protection in the face of disorganized urban sprawl and other anthropogenic alterations of relictual urban wetlands.

Shorebirds Use the Surroundings of the Largest Urban Area of South America

Fábio Schunck

Brazil possesses 32 species of migratory shorebirds. The country has several reserves recognized internationally as priority areas for conservation of these migratory birds, but there exist many other regions with few available data, which limits their priority for conservation attention. One of these areas lies near the center of the metropolis of So Paulo, with 21 million inhabitants ranking among the most heavily populated cities in the world. So Paulo is situated about 50 km from the Atlantic coast (750 m a.s.l), between two migratory corridors: the Atlantic littoral and the Brazilian interior. In light of the lack of data from this region, an ongoing, voluntary research project has been conducted over the past 19 years in wetlands in the city, with the aim of identifying which species and