

PROJECT TITLE: Abundance and distribution of avian nest predators at Wild Basin

INVESTIGATORS:

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Objectives:

The goals of this project were to evaluate the abundance and distribution of several avian nest predators at Wild Basin. This project was focused on documenting year-round residents, especially the Western Scrub-Jay, Blue Jay, Cooper's Hawk, American Crow, and Common Raven, and will serve as a pilot project for future studies.

Methods:

We established a grid of 13 point locations across Wild Basin (Fig. 1). We conducted 10-minute point counts at each location using the "double-observer" method, and we recorded all occurrences (seen or heard) of nest predators within 100m of the point. Each site was surveyed four times between September 11-October 30, 2014, between sunrise and 10am on days with minimal wind and little to no precipitation. We also set up wildlife cameras at 6 of the point locations to document the distribution of other potential nest predators (as well as other wildlife species).

Results:

We have not analyzed the point count data yet, since the last point count occurred the day before this report was submitted to Travis County. However, we expect that this study will shed some light on fine-scale differences in nest predator abundance within an urban preserve and lay the groundwork for future studies.

The wildlife cameras have not been thoroughly analyzed yet, but so far, they have captured photographs of bobcats, coyotes, and deer.

Project status:

This project is on-going. We recently concluded the field work portion of the project, and data analysis will be conducted in November-December 2014. We plan to generate a type of "heat map" that illustrates the level of activity for avian nest predators, at a relatively fine scale, across the landscape of Wild Basin. This map may help us generate further hypotheses about nest predator distribution in urban landscapes that we can build on in future studies. We also

plan to evaluate the relationships between avian nest predator distribution and environmental variables using GIS and species distribution modeling.

FIGURE 1. LOCATIONS FOR POINT COUNTS

