**Evaluation of a 30-year old restoration site in Wild Basin**
***(Continuation of 2014 study)***

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## INTRODUCTION

A 5-acre portion of Wild Basin was used as a municipal dump by the City of Austin beginning in 1947. This site was located along the southern drainage of North Hollow, a tributary to Bee Creek. In 1985, 0.5 acres of the historic dump site was restored and revegetated by David Mahler and Judy Walther through their research firm, Environmental Survey Consulting (Mahler & Walther 1987). The goal of restoration is to "create a self-supporting ecosystem that is resilient to perturbation without further assistance" (Ruiz-Jaen and Aide 2005). However, many restoration sites are not monitored or evaluated to determine whether the restoration was successful, and the Wild Basin dump site is no exception. In the almost 30 years since the restoration occurred, the site has been re-evaluated only once (in the year following the restoration; J Walther, personal communication). Researchers at Wild Basin investigated woody vegetation composition at the site in 2014, and the study was expanded in 2016 to investigate soil parameters and bird species.

## RESEARCH OBJECTIVE

The goal of this project was to evaluate the restored site 30 years after restoration efforts. We expanded on our previous study which quantified woody vegetation communities in the dumpsite and a reference site (2014); in 2016, we evaluated the bird communities and soil health parameters in the restoration site, an undisturbed reference site, and a disturbed but not restored site.

## METHODS

We evaluated three sites: the restored dumpsite ("restored"), a nearby un-disturbed reference site ("reference"), and a portion of the original dumpsite that was not ecologically restored ("not restored") (Figure 1). At each of the three sites, we conducted a ten-minute avian point count (Ralph et al. 1993) to record all bird species seen or heard within 50m of the center of the site. All point counts were conducted between sunrise and 9:30am on June 26, 2016.

Soil samples were also collected from low, mid, and high elevations of each site. Samples will be tested in the lab on campus at St. Edward's University for soil water content, soil water holding capacity, loss on ignition carbon (LOIC), soil pH, and other soil nutrients. This analysis is on-going and has not yet been completed.

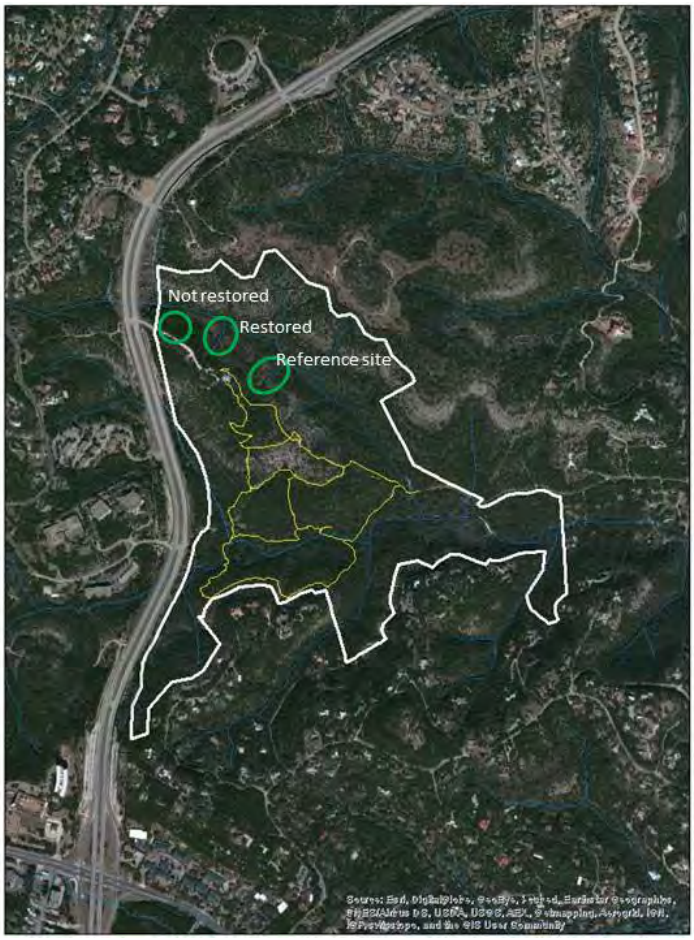


**Figure 1. Location of sites within Wild Basin.**

**RESULTS**

Similar avian species were reported in each of the three sites, with slightly higher species richness in the reference site (n=9) than in the restored and not restored sites (n=7 in both).

Analysis on the soil samples is on-going and has not yet been completed.

**LITERATURE CITED**

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