

Report on Activities conducted on Barton Creek Habitat Preserve under Permit #
Wostl_Herps_BCHP_2021

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On 14 September 2021 I conducted a herpetological survey along a short section of Barton Creek, immediately downstream of the road crossing. Details are below. The purpose of the survey is exploratory. I am looking for study sites in the vicinity of Austin to study the long-term changes in herpetological species composition and abundance. My schedule did not allow me time to re-visit the site during the rest of the semester. Overall, my impression is that the property would be suitable for my study, but I have to evaluate access. I do not own a high clearance vehicle and it will limit what I can do there.

Start Date/Time	Finish Date/Time	Location	Start Temp	Finish Temp	Time (h)	Distance (mi)
9/14/2021 20:06	9/14/2021 21:05	Barton Creek Habitat Preserve. TNC	25.07	24.7	0.98	0.34

Species	Type	Count	Time	Temp	RH %	Degrees N	Degrees E	Substrate Temp	Age Class
<i>Lithobates berlandieri</i>	Anuran	2	20:11	25.8	74.6	30.30696	-97.91065	26.2	Adult
<i>Lithobates berlandieri</i>	Anuran	1	20:19	25.8	73.6	30.30678	-97.91122	25.1	Adult
<i>Lithobates berlandieri</i>	Anuran	1	20:23	25.4	75.7	30.30668	-97.91146	25	Adult
<i>Agkistrodon piscivorus</i>	Snake	1	20:24	25.2	75.4	30.30668	-97.91146	26.3	
<i>Agkistrodon piscivorus</i>	Snake	1	20:28	25.3	76.6	30.30664	-97.9115	26.1	
<i>Lithobates berlandieri</i>	Anuran	1	20:32	25.2	77	30.30653	-97.9117	26.1	Adult
<i>Lithobates berlandieri</i>	Anuran	1	20:34	25.2	76.6	30.30646	-97.91175	25.6	Adult
<i>Agkistrodon piscivorus</i>	Snake	1	20:42	25.4	76	30.30591	-97.91197	26	Adult
<i>Lithobates berlandieri</i>	Anuran	1	20:51	25.1	77.5	30.3054	-97.91244	25.7	Adult
<i>Lithobates berlandieri</i>	Anuran	1	20:56	25	77.8	30.30512	-97.91266	25.4	Adult
<i>Lithobates berlandieri</i>	Anuran	1	20:57	24.9	77.9	30.30499	-97.9128	25.4	Adult
<i>Lithobates berlandieri</i>	Anuran	1	21:00	24.9	77.8			26	Adult

<i>Agkistrodon piscivorus</i>	Snake	1	21:05	24.7	78.1	30.3049	-97.91306	24
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On 14 December 2021. I scouted out the property to assess how accessible the site would be for a low clearance vehicle. Access from the gate along SH 71 was easily doable for most of the way; certainly, sufficient for access to most of the preserve.

In Summer 2022 I used ArcGIS and Lidar data from the USGS to Identify habitats within Barton Creek Habitat Preserve that corresponded to my study sites at Wild Basin in terms of aspect, slope, vegetation height, and canopy coverage (Fig. 1). The next step is to ground truth the sites and, if still deemed similar, establish a series of pitfall arrays. The idea is to establish a comparative study site to Wild Basin. Several of these sites are near a controlled burn area and I would like to establish arrays there to assess the effects of burning.



Figure 1. A portion of the Barton Creek Habitat Preserve with habitats that match areas of herpetological sampling conducted at Wild Basin Nature Preserve indicated.