

Trail Use on Turkey Creek Trail
at Emma Long Metropolitan Park
2022 Update

Balcones Canyonlands Preserve Investigative Report IP 2022



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INTRODUCTION

Emma Long Metropolitan Park (ELMP) is dual-managed by City of Austin's Parks and Recreation Department and Austin Water as part of the Balcones Canyonlands Preserve (BCP). The BCP was established in 1996 under an Endangered Species Act permit to mitigate for habitat loss from development and to protect seven federally endangered species and 28 species of concern in western Travis County. ELMP is dominated by mature Ashe juniper (*Juniperus ashei*) and oak (*Quercus* spp.) woodland and supports a breeding population of endangered Golden-cheeked Warblers (*Setophaga chrysoparia*).

Visitor use on ELMP is "grandfathered" at 1996 levels (BCP 2018). The purpose of this report is to document visitor use levels over time. Turkey Creek is a popular 2.5 mile loop trail with public access and off-leash dog walking. The trailhead is located at 1600 City Park Road, Austin, TX (30.333517, -97.839999). Admission is free and parking for approximately 30 vehicles is available at the trailhead.

Turkey Creek Trail also coincides with a long-term Golden-cheeked Warbler (GCWA) monitoring plot. In 2000, BCP staff established a 100-acre (40.5 ha) monitoring plot that overlays the central loop portion of the Turkey Creek Trail. In 2009, BCP staff initiated a long-term demography study of GCWA that involves intensive monitoring of a marked (color-banded) population. A summary of intensive monitoring results is provided in the City of Austin and Travis County Annual Report (2021).

METHODS

Game cameras are a common tool for documenting trail use. They can be programmed to double-shoot and trigger at intervals to capture all but a very small proportion (~ 1%) of trail users (when clusters of people pass back and forth in front of the camera simultaneously). Data are downloaded in the field onto a portable storage device and reviewed later. Game cameras are excellent for tabulating numbers of dogs and humans and can be deployed for an extended duration to record average trail use over a period.

For the last three years, we've installed a game camera at the same location on Turkey Creek Trail about 200 yards from the trail head. The game camera is active for up to 3 weeks (18-22 days) during April and May. We select a date range that avoids the Easter holiday and includes three weekends. In 2020, the camera was active during the City of Austin lockdown for Covid-19. Since most trail users are making a looped return, we avoid double counting by only recording humans and dogs entering the trail traveling from right to left in the picture frame. The game camera is positioned at ground level to capture foot traffic only.

RESULTS AND DISCUSSION

Average Number of Trail Users in April-May from 2020-2022

Year	# Humans Weekday	# Dogs weekday	# Humans Weekend	# Dogs Weekend
2020*	171	77	450	180
2021	56	39	224	106
2022	68	60	265	141

*Cameras deployed during Covid-19 lockdown

Trail use surged during the Covid-19 lockdown of 2020. Weekends have typically 3-4 times greater traffic than weekdays, although the difference was less during lockdown.

Percent Increase in Number of Trail Users from 2021 to 2022

# Humans Weekday	# Dogs Weekday	# Humans Weekend	# Dogs Weekend
21 %	54%	18%	33%

With limited data, we cannot determine trends. High volume of trail use in 2020 was unprecedented and constituted an outlier. There was a marked increase in trail use between 2021 and 2022. Average number of dogs on weekdays increased by over 50%. Careful review of the photos reveals that the increase is mostly attributed to professional dog walkers.

Turkey Creek Trail has become popular with professional dog walkers promoting “adventure walks” where dogs are exercised in an outdoor, off-leash setting. Pack sizes of up to 16 dogs have been recorded (D. Hutchinson, pers. obs.). In general, these professional dog walkers are not licensed by City of Austin.

Game camera surveys can document the habitual use of Turkey Creek Trail by professional dog-walking companies. Between 19 April–10 May 2022, we documented up to 3 professional dog walkers exercising 8-10 dogs almost every weekday during favorable weather. Pack sizes are likely underestimates, since many dogs are off-leash and do not pass by the game camera. The walkers usually maintain a regular weekday schedule between 10 a.m. – 2:00 p.m. and avoid weekends.





Professional walkers often exercise their dogs off-leash and then leash-up close to the trailhead.



When two professional walkers meet on Turkey Creek Trail, total pack size can reach twenty dogs.

People with dogs – on or off leash – impact wildlife more than people without dogs. Wildlife perceives dogs as predators, which causes animals to move away, increases their stress levels, and reduces their opportunity to feed (Jennings 2016). Displacement and altered habitat use from increased dog activity has been documented for squirrels, rabbits, deer (Lenth et al. 2008), bobcats, and coyotes (Reed and Merenlender 2010). Pet waste in the water contributes nutrients that lead to overgrowth of harmful algae and weeds that can harm fish and other wildlife (Jennings 2016).

CONCLUSION

The Austin metropolitan area has nearly doubled in population since 2000 (*Austin Chamber of Commerce 2019*). Commensurate with urban growth, increased visitation to our parks may be impacting facilities, natural resources, and wildlife communities (Buckley 1991). We recommend continued data collection at Turkey Creek Trail to determine trends and track changes in average visitor use.

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