Trail Counter Report
As of April 5, 2022

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April 6, 2022

Trail Counter Program

Background

In early 2020, the Waltham Land Trust purchased a trail counter which uses infrared light to count how many people (and larger critters) pass by.

Program Goals

The key goals of the trail counter program are to:

- Bolster conservation efforts with hard data on trail usage.
- Learn which areas of Waltham's trails receive the most usage.
- Understand daily and monthly usage patterns to aid with event planning and stewardship.

See About the Trail Counter for detailed info

Counter Data Findings

9/1/2020 – 4/5/2022

POPULAR DAYS 2020-2021

Holiday	Date	Day	Count
	10/18/2020	**Sunday**	**420**
	11/21/2020	Saturday	353
Thanksgiving	11/27/2020	Friday	312
	11/28/2020	Saturday	336
	11/29/2020	Sunday	331
New Years	1/1/2021	Friday	374
	1/10/2021	Sunday	375
MLK Day	1/17/2021	Sunday	306
	1/18/2021	Monday	319
	3/21/2021	Sunday	343
	4/4/2021	Sunday	342
	5/9/2021	Sunday	325
	10/9/2021	**Saturday**	**444**

- The most popular dates of the year appear to be holiday weekends

- No 300+ visitor days happened after 5/9/2021 until 10/9/2021 event; none after that

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POPULAR DAYS 2022

Holiday	Date	Day	Count
NYE	12/31/2021	Friday	148
	1/1/2022	Saturday	151
	1/8/2022	Saturday	206
1st beautiful weekend	3/18/2022	Friday	190
	3/20/2022	Sunday	215

- The definition of "popular" changes to lower overall numbers in 2022

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Trail Counter Data 9/1/2020 to 4/5/2021 – Per Day by Year
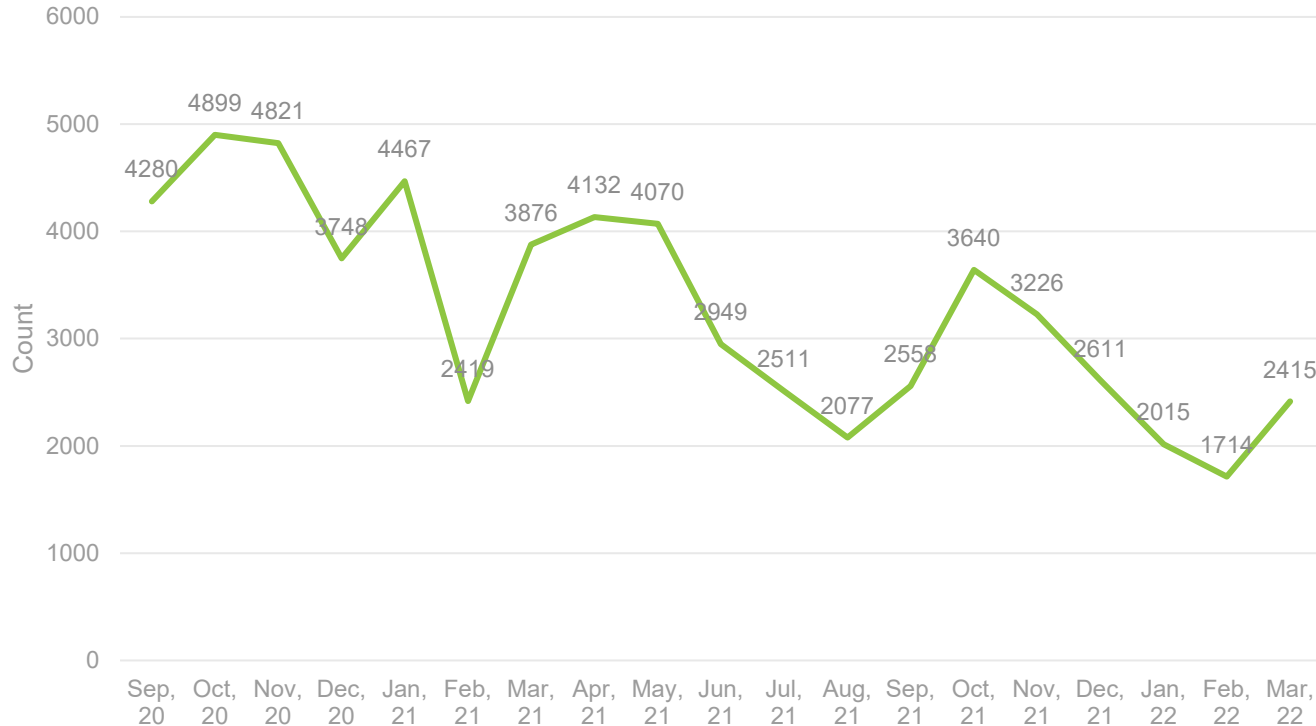
Total Count per Day by Year
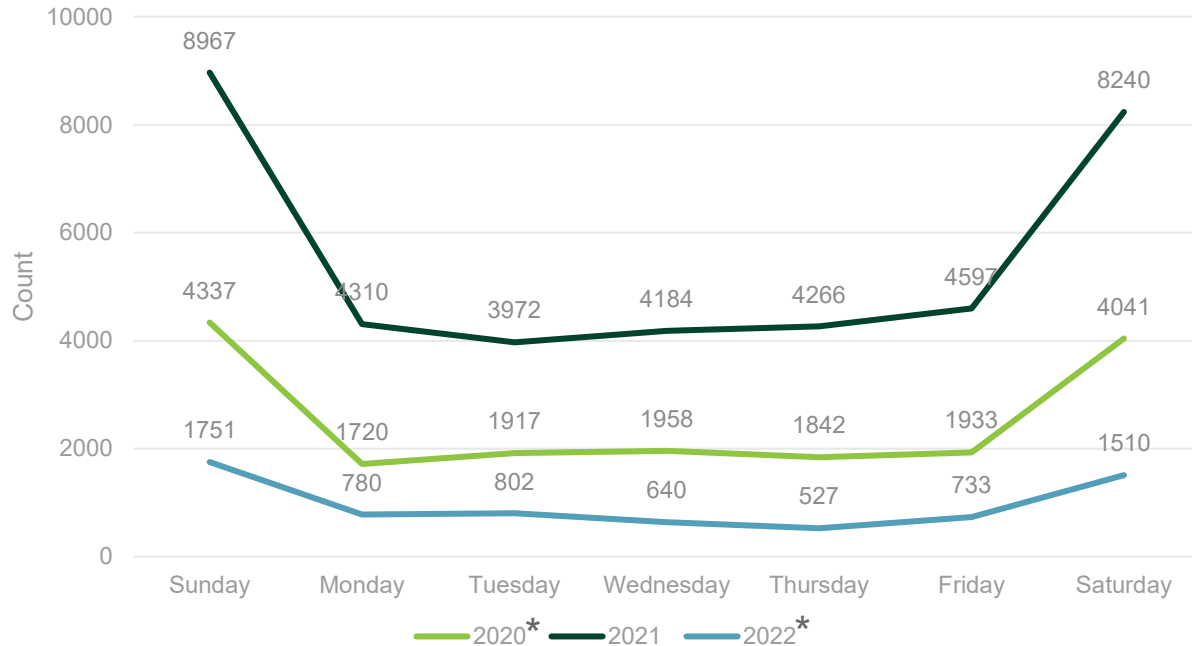
No change:

- Weekends continued to be the most popular

- *Slight* lift on Friday in 2021
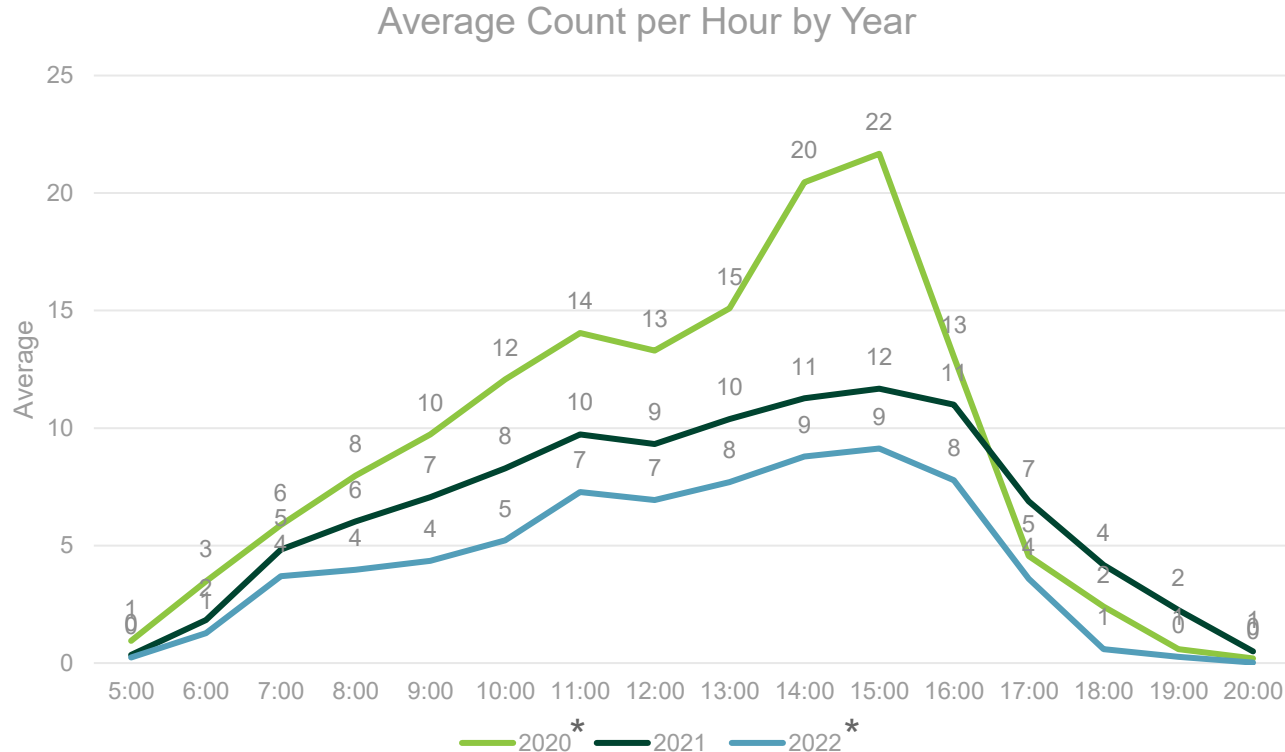
* 2020 only includes Sept-Dec; 2022 only includes Jan-Mar

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Trail Counter Data 9/1/2020 to 3/31/2022 – Monthly Count

Total Count by Month

- Activity dropped in February (cold!) and throughout the Summer (skeeters!)

- October and November 2020 remains the highest usage

- January, April, and May had the highest usage in 2021

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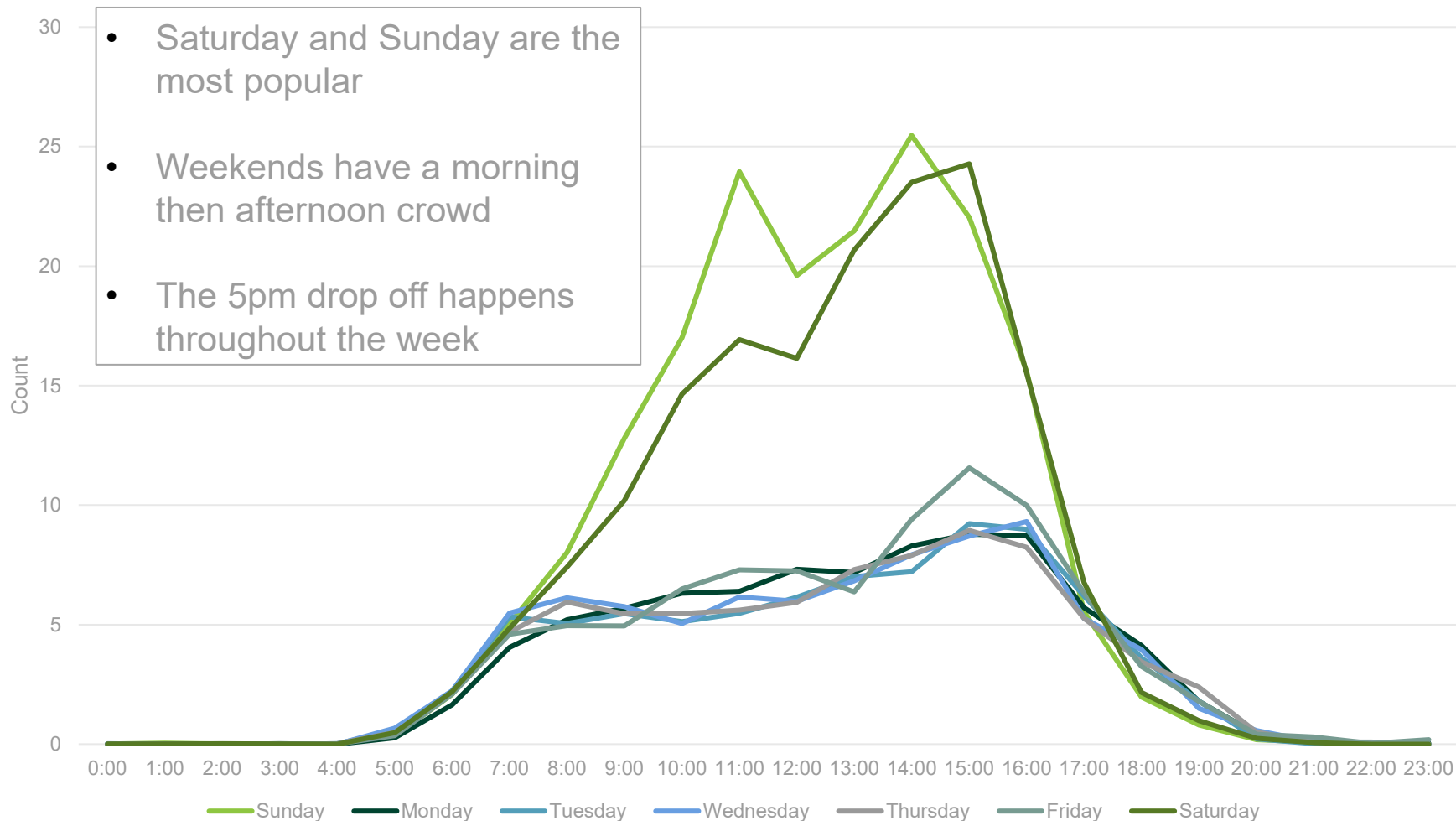# Trail Counter Data 9/1/2020 to 4/5/2021 – Per Hour by Year

Average Count per Hour by Year

- 3pm appears to be the most popular time, with a drop-off at dinner time

- Slight 11am to noon drop-off is evident in each year

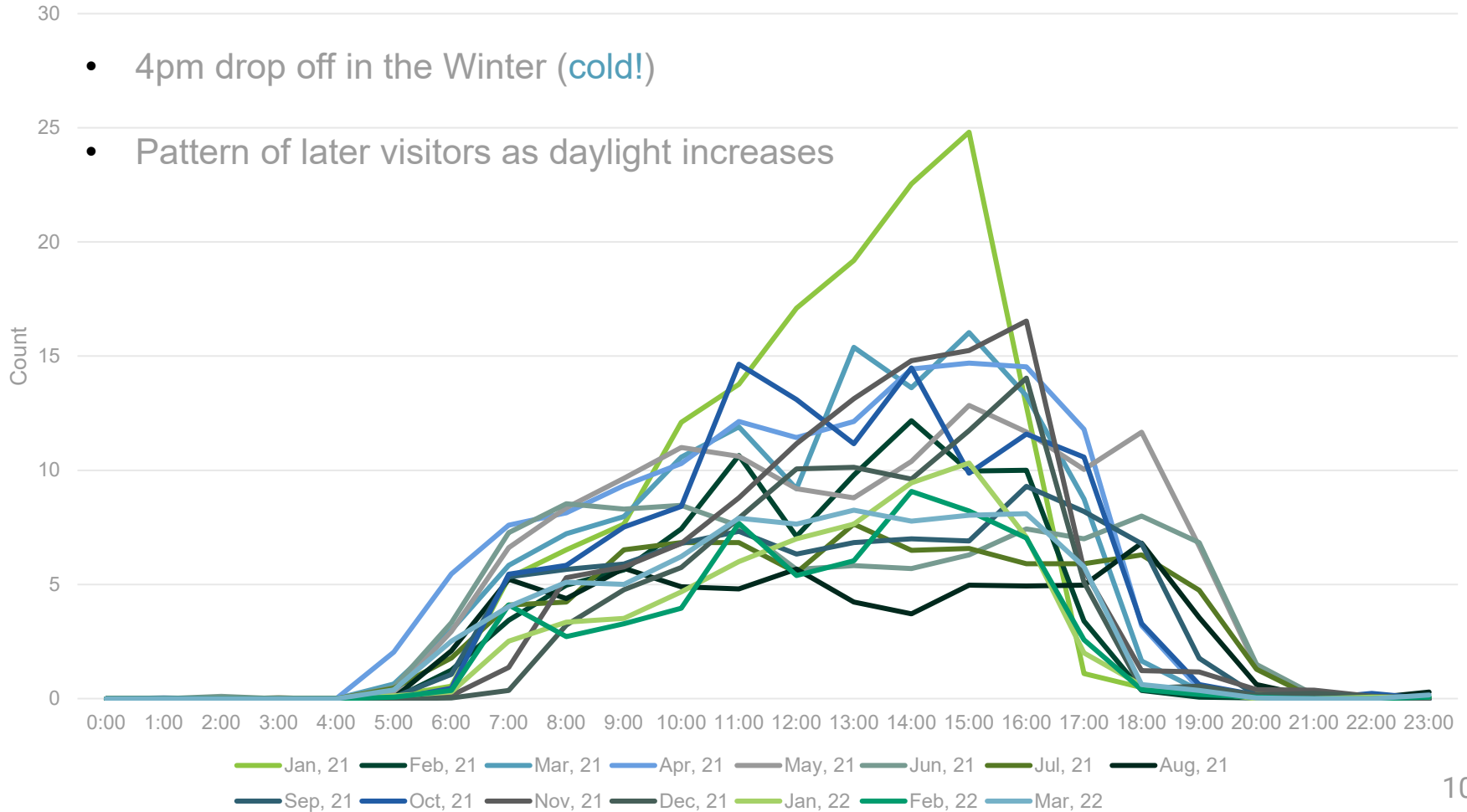- This graph has remained consistent over time

Legend: 2020* — 2021 — 2022*

* 2020 only includes Sept-Dec; 2022 only includes Jan-Mar

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Average Count per Hour by Day

- Saturday and Sunday are the most popular

- Weekends have a morning then afternoon crowd

- The 5pm drop off happens throughout the week

Count

Sunday — Monday — Tuesday — Wednesday — Thursday — Friday — Saturday

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Average Count per Hour by Month (Jan, 21 – Mar, 22)

- 4pm drop off in the Winter (cold!)

- Pattern of later visitors as daylight increases

Count

Jan, 21   Feb, 21   Mar, 21   Apr, 21   May, 21   Jun, 21   Jul, 21   Aug, 21
Sep, 21   Oct, 21   Nov, 21   Dec, 21   Jan, 22   Feb, 22   Mar, 22

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About the Trail Counter

How it works and where it is

HOW IT WORKS

After looking at different options and emailing with people at other conservation organizations, including the Application Mountain Club, we decided the trail counter from Trafx would be our best option. It has two components:

Infrared Camera and Field Case

Docking Station

11cm (4.3")

- The camera is installed in the field and uses infrared light to detect people who pass by within 10 feet.

- The docking station is used to collect data and bring it back to a computer.

- The docking station can collect the data from multiple cameras, so if we expand the program, only additional cameras are required.

CAMERA LOCKBOX

To fend off vandals and other curious critters, we built a lockbox according to Trafx's guidance:

Sandwich bag to protect from water damage
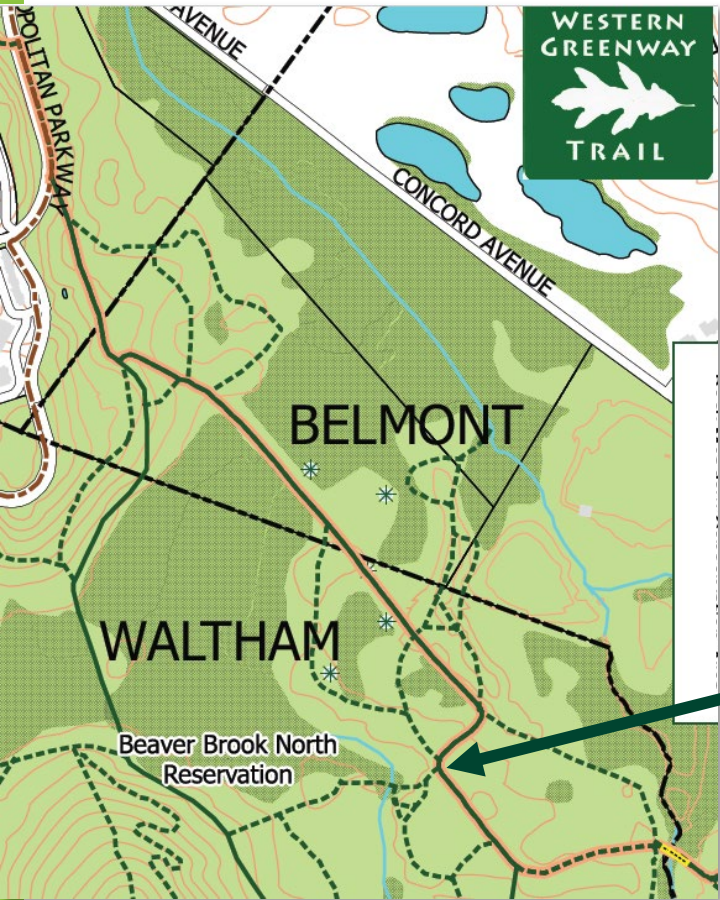
CAMERA LOCKBOX

To fend off vandals and other curious critters, we built a lockbox according to Trafx's guidance:

A message on top to allay concerns

Obligatory picture of Shadow

LOCATION

- The chosen location is at a crossroads between other trails and the Western Greenway

- The counter will capture people using the Greenway going to and from Rock Meadow