

Refresher Webinar 2020 Connecticut Trail Census

Monday June 1, 2020 2:00-3:00 pm

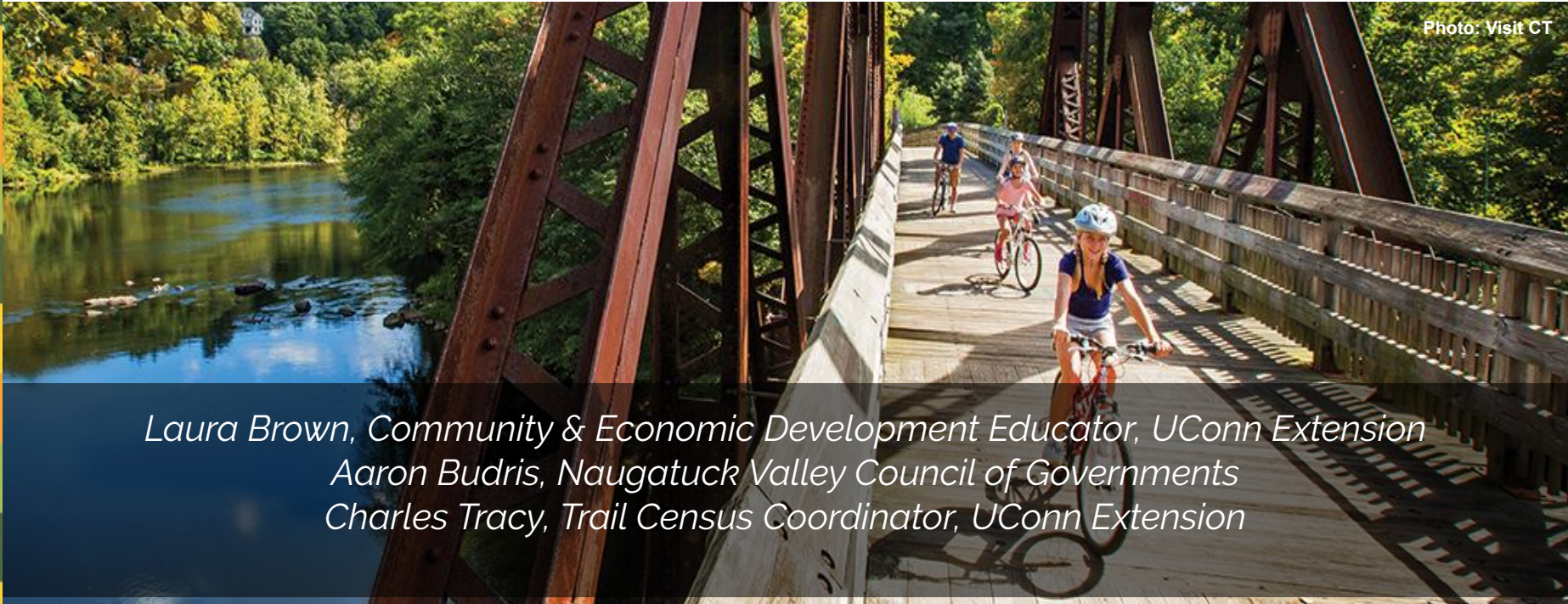


Photo: Visit CT

*Laura Brown, Community & Economic Development Educator, UConn Extension
Aaron Budris, Naugatuck Valley Council of Governments
Charles Tracy, Trail Census Coordinator, UConn Extension*

Agenda

- Trail Census Background
- Getting your data
- New online trail user survey for 2020
- Infrared counts
 - Monitoring the infrared counter
 - Manual counts
- New initiatives in 2020

<https://cttrailcensus.uconn.edu/volunteerresources/>

Statewide volunteer-based data collection & education program on multi-use trails

*To encourage data
informed
decision-making &
promote resident
participation in trail
monitoring & advocacy*

www.cttrailcensus.uconn.edu





STATEWIDE

Urban, rural and suburban multi-use trails - 20 sites in 2019



MULTI-YEAR

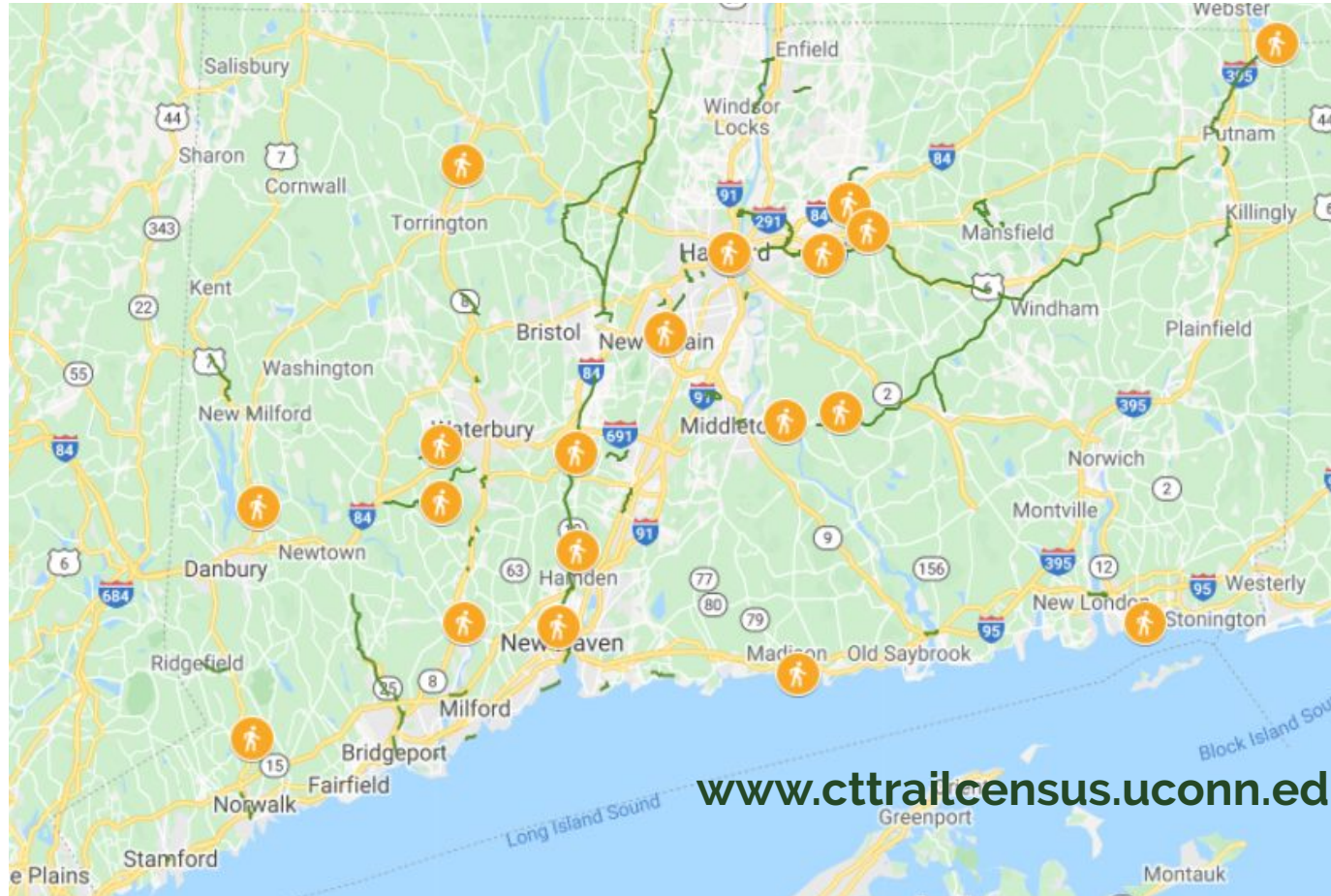
Multi-year information about trail use, user demographics, economic impacts, and trail amenities
Identification of patterns and trends



VOLUNTEER - BASED

Active community participation
Data informed decision-making

21 Participating Trail Sites



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Finding the Data

Counter Sites

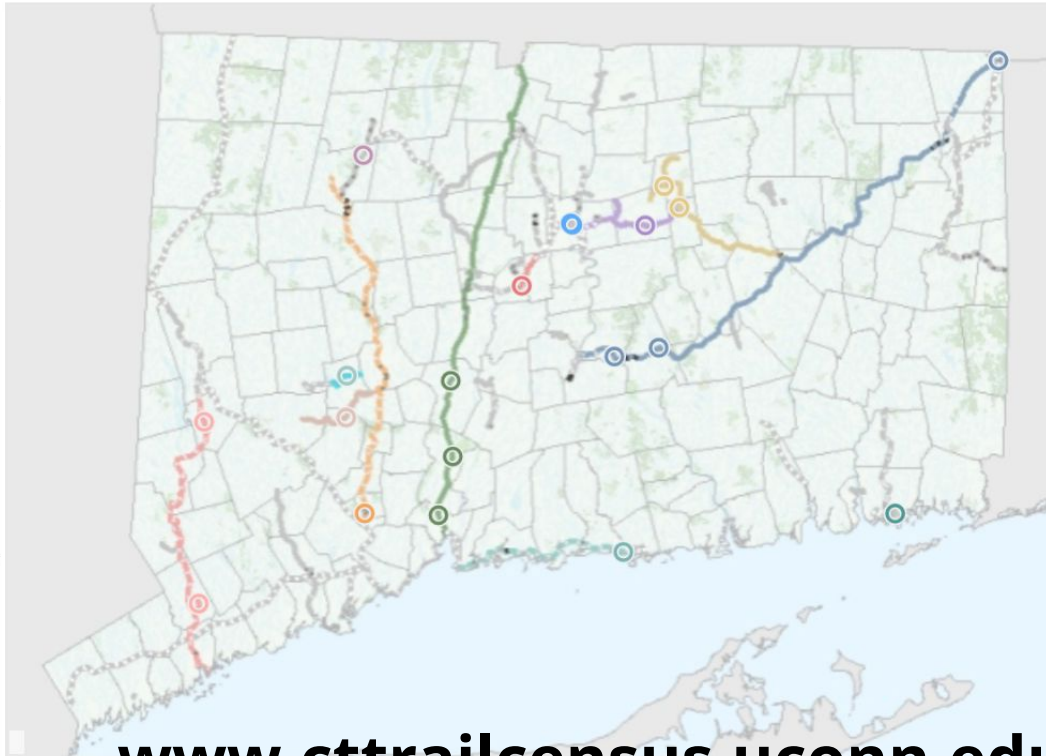
Click on a circle or the list to see trail statistics below. Multiple sites may be selected. Infrared counters report the number of times the counter is passed, which is different than the number of users or visitors. Additional calibration factors have been applied to account for known errors.

Total Uses* 393,537

Average Daily Uses 228

Missing Days* 95

* Aggregate of all sites selected



- Air Line Trail East Hampton
- Air Line Trail Portland
- Air Line Trail Thompson
- Charter Oak Greenway Manchester
- CTFastrak Trail New Britain
- Farmington Canal Heritage Trail Cheshire
- Farmington Canal Heritage Trail Hamden
- Farmington Canal Heritage Trail New Haven
- G&S Trolley Trail Groton
- Hop River Trail Bolton
- Hop River Trail Vernon
- Larkin State Bridle Trail Oxford
- Middlebury Greenway
- Naugatuck River Greenway Trail Derby
- Norwalk River Valley Trail Wilton
- Riverfront Recapture Trail East Hartford
- Riverfront Recapture Trail Hartford
- Shoreline Greenway Trail Madison
- Still River Greenway Brookfield
- Sue Grossman Trail Torrington

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REPORTS

TRAIL CENSUS REPORTS

Special Reports

COVID 19 Trail Impacts [.pdf](#) - April 13th, 2020

Making Connections: Completing the Hop River-Charter Oak Gap [.pdf](#) - March 9th, 2020

Farmington and Cheshire Trail Usage Report [.docx](#) - August 15th, 2020

Bolton Hop River Trail Zip Code Report [.pdf](#) - July 1st, 2020

Count Reports

2019 Trail Use Count Report [.pdf](#) - March 17th, 2020

2018 Trail Use Count Report [.pdf](#) - March 15, 2019

2017 Trail Use Count Report [.pdf](#) - February 12th, 2018

Survey Reports

2019 Intercept Survey Report [.pdf](#) - March 9th, 2020

2018 Intercept Survey Report [.pdf](#) - March 15th, 2019

2017 Intercept Survey Report [.pdf](#) - February 12th, 2018

COVID-19 Trail Impact Report



(image: National Park and Recreation Association)



April 13, 2020

Intercept Surveys

Volunteer assessed

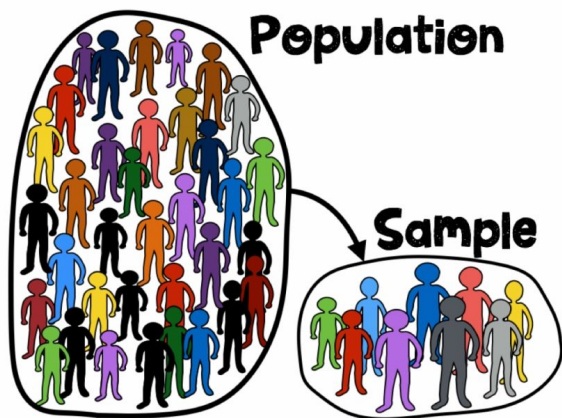
Paper survey (**suspended**)

Why and how are trails used

Demographics, spending & health



Why Survey?



We can't interview every trail user, so we take a sample.

Sampling recommendations aim to reduce error so the sample is representative of the total population.

About the survey

- Data collected by volunteers belongs to partners
- Partners provide data to the Trail Census for inclusion in annual analysis
- Survey reviewed annually by the survey workgroup
- NOT a way to generalize about all Connecticut trail users
- NOT a way to understand users on the entire trail
- NOT a university *research project*



Survey questions

Goal to understand trail users and their behaviors at a particular point on the trail

Where they come from?

When they use the trail, how often and how long?

Do they spend money on the trail?

Demographics

Experience: Favorite things/what could be improved

QR survey volunteer duties

Sites have been allocated lawn signs and posters for the QR Survey.

→ Check posters and lawn signs weekly and notify the Census of any change



How Was Your Visit?

Please take our 5 minute survey.
Share your experience so we can improve Connecticut's trails.



Connecticut Trail Census



Use the QR code or find survey online:
s.uconn.edu/trailcensus

Thank you!

Connecticut Trail Census: ctrailcensus.uconn.edu
Find us on Facebook or email us at ctrailcensus@gmail.com



Connecticut Trail Census

Statewide multi-use trail user study



This is a survey about trail use, conducted by the Connecticut Trail Census. It will take about 5 minutes.

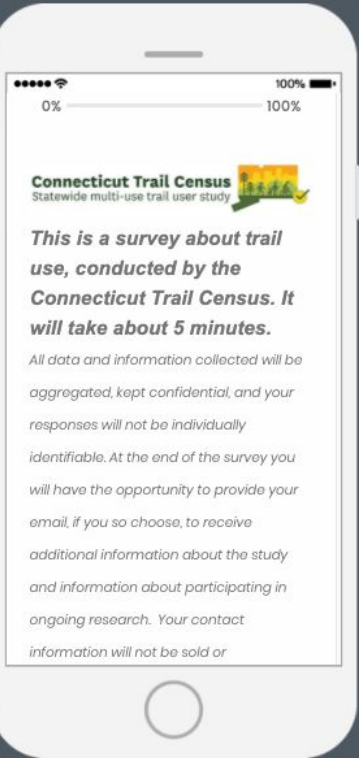
All data and information collected will be aggregated, kept confidential, and your responses will not be individually identifiable. At the end of the survey you will have the opportunity to provide your email, if you so choose, to receive additional information about the study and information about participating in ongoing research. Your contact information will not be sold or disseminated to any other parties for any other purpose. The aggregated data set and data report will be made publicly available for researchers and the general public at <http://cttrailcensus.uconn.edu>. You do not have to participate if you do not want to. If you agree to complete this survey, but later change your mind, you may stop at any time. There are no penalties or consequences of any kind if you decide that you do not want to participate. This project has been approved under UConn IRB Exempt Study Number X16-181. [Click to view the participant information sheet.](#)

For more information contact the Principal Investigator, Laura Brown, University of Connecticut Department of Extension, 203-407-3157, laurabrown@uconn.edu

Yes, I would like to participate in the survey.

I do not wish to participate at this time.

<http://s.uconn.edu/censuspreview>





Infrared Counters Volunteer Responsibilities

1. IR Counter Monitoring
2. Manual Counts

Counter Monitoring Why?

We only see counters quarterly

We want to catch issues early:

- Malfunction
- Insects
- Vegetation
- Vandalism



Counter Monitoring How?

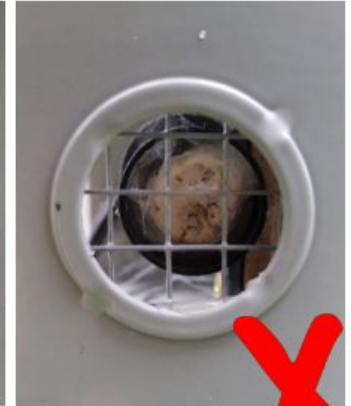
Periodic - At least 2x/month

- Still There?
- Vandalism?
- Obstructed? (Clear it if you can)
- Is it working?
 - Open it up
 - Red 1x/5 seconds
 - Green when tripped

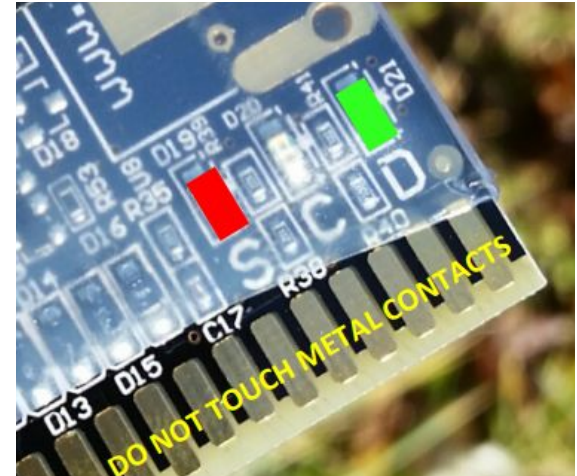
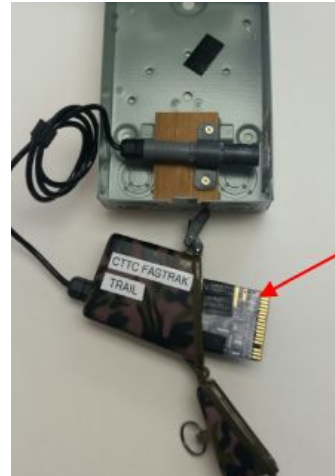
Beware of bees / avoid wet weather



Clean Sensor



Obstructed Sensor



Counter Monitoring How?

Report to cttrailcensus@gmail.com:

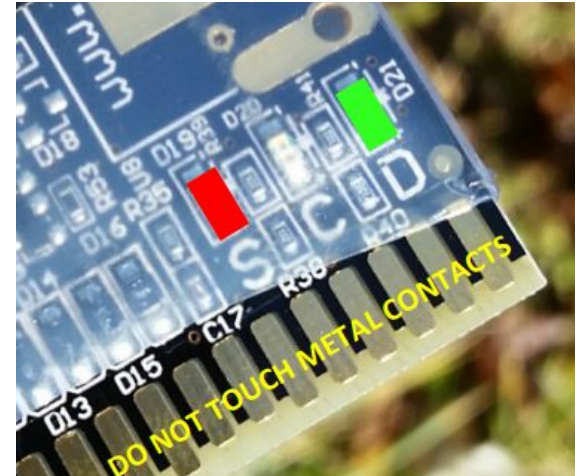
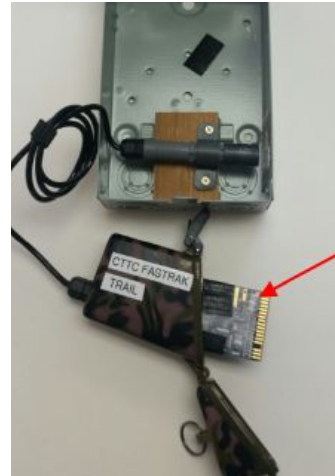
- Tampering/Vandalism
- Obstruction (even if cleared)
- Red light not flashing
- Red light flashing rapidly
- Green light not flashing when tripped
- Green light flashing when not tripped
- Anything out of the ordinary



Clean Sensor



Obstructed Sensor



Manual Counts

Why?

In-Person Counts:

- Used to develop a calibration factor for more accurate IR counts
 - Typically Undercount
- Collect information that IR counters cannot:
 - Mode (Bike, Ped, Other)
 - Group size
 - # of children



Manual Counts

How?

You will need...

- A watch with a second hand **OR** a smartphone with service at counter location
- Clipboard*
- Manual Count Form*
- Pen/Pencil*
- One page instruction sheet*

*Provided

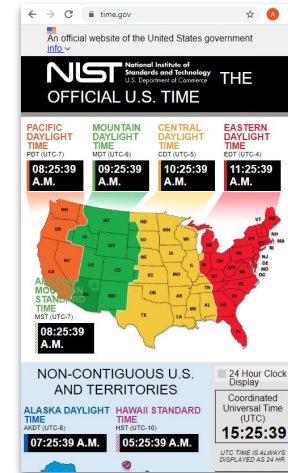
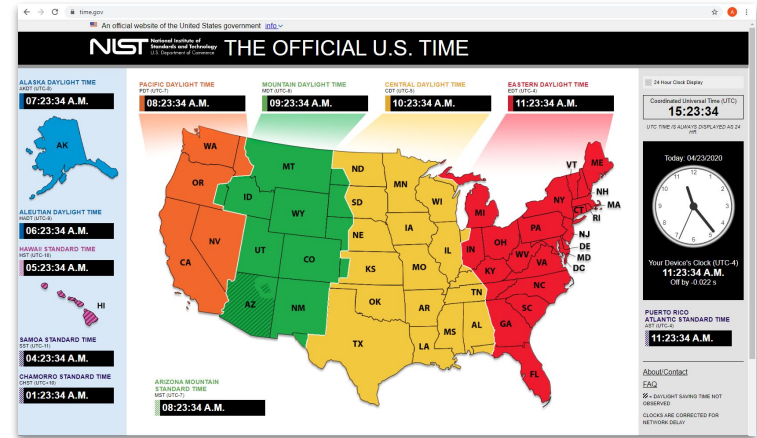


Credit: Boston Region MPO

Manual Counts

How?

1. **Synchronize with "Official US Time"**
 - Counters are on US Official Time (DST)
- www.time.gov
- All manual counts need to start at the top of the hour and continue for entire hour.



Manual Counts

How?

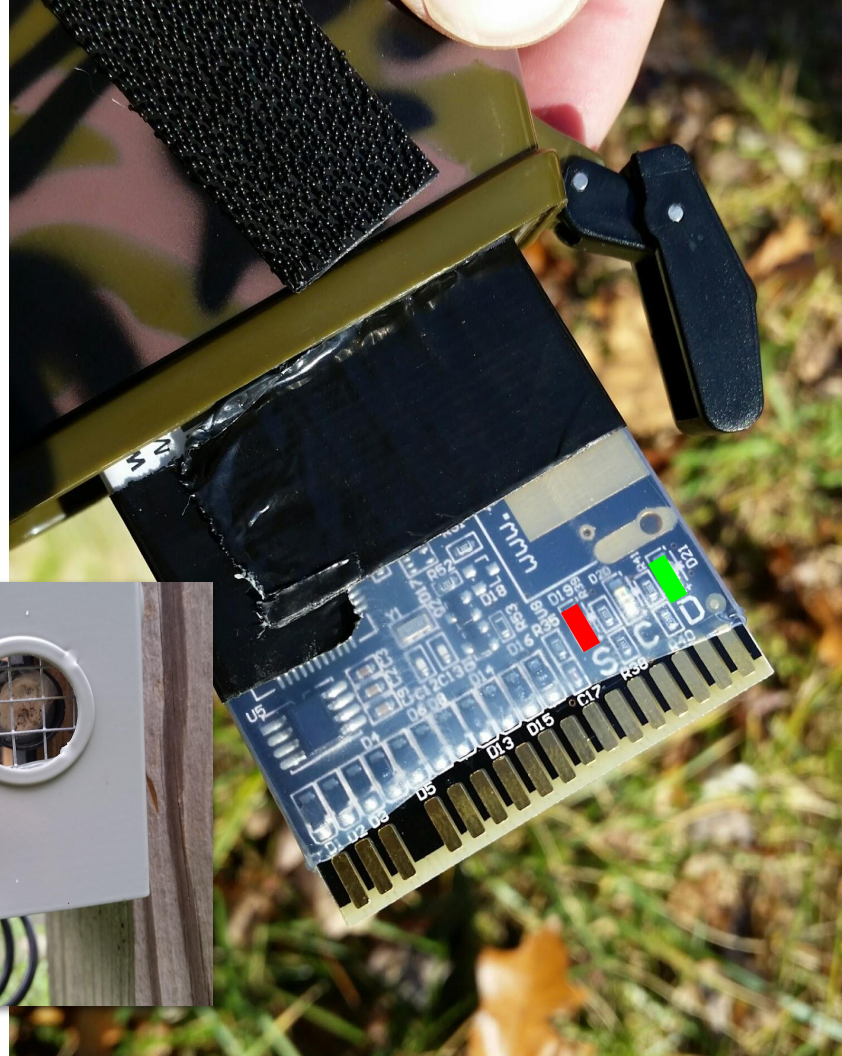
1. Synchronize with “Official US Time”
2. **Choose A Location**
 - Line of sight to counter
 - Bring a chair or sit in car
 - Be unobtrusive - you should be a ***passive observer!***



Manual Counts

How?

1. Synchronize with "Official US Time"
2. Choose A Location
3. **Check the Counter**
 - Is it working?
 - Clear Scope?
 - Red 1X/ 5 seconds.
 - Green when tripped.



Manual Counts How?

1. Synchronize with "Official US Time"
2. Choose A Location
3. Check the Counter
4. **Prepare Count Form**
 - Date
 - Location
 - Volunteer Name
 - Time Start (www.time.gov)
 - Weather



Connecticut Trail Census
Statewide multi-use trail user study

Manual Count Form

All times Eastern Daylight Saving (www.time.gov). Begin at top of the hour, record for full hour.
Record groups on the same line. Record bicyclists and pedestrians separately.
Record strollers, skateboards, wheelchairs, etc. as "other", list type in comments.
Record additional activity in comments - jogging, walking dog, etc.
Estimate the number of children (under 18) in the group in "# <18" column.
(note that children should be included as "Ped, Bike or Other" as well)
Send scanned completed forms to: cttrailcensus@gmail.com, and return original with surveys.

Date _____
Location _____
Name _____
Time Start _____ :00^{am} Count 1 Hour
Weather _____

#	Time	Ped	Bike	Other	Comment	# <18	#	Time	Ped	Bike	Other	Comment	# <18
1							41						
2							42						
3							43						
4							44						
5							45						
6							46						
7							47						
8							48						
9							49						
10							50						
11							51						
12							52						
13							53						
14							54						
15							55						
16							56						
17							57						
18							58						
19							59						
20							60						
21							61						
22							62						
23							63						
24							64						
25							65						
26							66						
27							67						
28							68						
29							69						
30							70						
31							71						
32							72						
33							73						
34							74						
35							75						
36							76						
37							77						
38							78						
39							79						
40							80						

HOURL TOTALS: _____ = _____

Manual Counts How?

At the end of the hour:

- Total up all peds, bike and others
- Begin a new sheet if continuing
- E-mail a scan or image of the sheet to cctrailcensus@gmail.com



Connecticut Trail Census
Statewide multi-use trail user study

Manual Count Form

Date 6/2/2019

Location Hop River - Bolton

Name Aaron Budris

Time Start 11:00 AM Count: 1 Hour

Weather 75 degrees, sunny

All times Eastern Daylight Saving (www.time.gov). **Begin at top of the hour, record for full hour.**
Record groups on the same line. Record bicyclists and pedestrians separately.
Record strollers, skateboards, wheelchairs, etc. as "other", list type in comments.
Record additional activity in comments - jogging, walking dog, etc.
Estimate the number of children (under 18) in the group in "#<18" column.
(note that children should be included as "Ped, Bike or Other" as well)
Send scanned completed forms to: cctrailcensus@gmail.com, and return original with surveys.


#	Time	Ped	Bike	Other	Comment	# <18	#	Time	Ped	Bike	Other	Comment	# <18
1	11:04	3			walking		41						
2	11:11	1			running		42						
3	11:15	1		1	walking with stroller	1	43						
4	11:17	1			walking dog		44						
5	11:18		1				45						
6	11:23		4		group of cyclists		46						
7	11:26	1			walking		47						
8	11:33	2	2		adults with kids on bikes	2	48						
9	11:40	2			running		49						
10	11:42		1		teen on bike	1	50						
11	11:45	1		2	walking w/ double stroller	2	51						
12	11:45	1			walking		52						
13	11:49	3		1	walking, 1 in wheelchair		53						
14	11:51	1		1	walking, scooter	1	54						
15	11:55	1			running		55						
16	11:57			1	teen on skateboard	1	56						
17	11:59	2		2	2 adults, 2 strollers	2	57						
18							58						
19							59						
20							60						
21							61						
22							62						
23							63						
24							64						
25							65						
26							66						
27							67						
28							68						
29							69						
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32							72						
33							73						
34							74						
35							75						
36							76						
37							77						
38							78						
39							79						
40							80						

HOURL TOTALS: 20 8 8 = 36

Manual Counts How?

For best results...

- 10 full hours per year per counter
- Varied days of week and time of day
- Avoid bad weather/ low volume times
- Get there early!
- Counts most important to record if you get overwhelmed
- Official US time & full hours
- Record anything else of note



Connecticut Trail Census
Statewide multi-use trail user study

Manual Count Form

Date: 6/2/2019

Location: Hop River - Bolton

Name: Aaron Budris

Time Start: 11:00 AM Count: 1 Hour

Weather: 75 degrees, sunny

All times Eastern Daylight Saving (www.time.gov). **Begin at top of the hour, record for full hour.**
 Record groups on the same line. Record bicyclists and pedestrians separately.
 Record strollers, skateboards, wheelchairs, etc. as "Other", list type in comments.
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 (note that children should be included as "Ped, Bike or Other" as well)
 Send scanned completed forms to: ctrailcensus@gmail.com, and return original with surveys.

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HOURL TOTALS: 20 8 8 = 36

Information/ Support Volunteer Resources Section

www.cttrailcensus.uconn.edu

2020 TRAIL SITE COORDINATOR (TSC) DUTIES

TSCs should check the survey package weekly for vandalism and the counter persons at least twice a month to ensure they are operating correctly and that the sensors are clear. Frequent checking of the counters ensures uninterrupted and accurate data collection.

- Ensure sensor is working correctly.

When operating normally, the **RED LED** indicator light (see below) should flash once every 5 seconds. The **GREEN** light should flash when, and only when an object passes the counter. Wave your hand in front of the sensor to make sure it is working. Do not touch the exposed metal contacts.

2020 CHECKING THE INFRARED COUNTERS

This video will show you how to check and maintain the TRAIL Infrared Counter.

Presented by: Aaron Baultis, Senior Planner; Neagusti Wiley, Council of Governments

2020 CONDUCTING MANUAL COUNTS

The CT Trail Census is a volunteer-based survey. Each site should complete at least 10 hours of manual counts during the course of the year.

Training Materials and Resources:

- Watch about the trail video (1) about how to conduct manual counts
- Watch this webinar (2) about how to conduct manual counts
- Download the Manual Count Form (3)
- View the Manual Count Instructions document (4)
- TSC Progress Tracker: Manual Counts (5)

2020 RESOURCES FOR QR SURVEYS

Due to social distancing requirements, no face-to-face interviews should be conducted in 2020.

- All data collection sites have been allocated barcodes and codes for collection of data through the QR Survey. Respondents can use their cell phone or mobile device to scan the QR code and link directly to the web-based survey.
- Volunteers should check the signs each week and notify the Census of any changes.

How Was Your Visit?

Please take every minute counting. Share your experiences so we can improve Connecticut Trails.

MULTI USE TRAIL RESOURCES

Click image for a list of interesting resources!

ENTER YOUR VOLUNTEER HOURS

Connecticut Trail Census
A volunteer-based trail user study

Manual Count Form

Location: _____ Date: _____
Record multiples passing counter simultaneously on the same line.
Record species, landmarks, observations, etc., as "other" in comments.
Record activity in comments: jogging, walking, dog, etc.
Form scanned completed form to: cttrailcensus@gmail.com
Return the completed original with surveys using the self-addressed envelope.

#	Time	Trail	Side	Other	Comment	#	Time	Trail	Side	Other	Comment
1						41					
2						42					
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
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Connecticut Trail Census
A statewide multi-use trail user study
www.cttrailcensus.uconn.edu

Infrared (IR) Pedestrian Counter Monitoring Instructions

The infrared counters for Trail Census are not put on certain stubble counter at the same as individuals stopping in several lines.

Trail Coordinators will manual counts of users to develop correction factors for discrepancy if the trail is being used, functioning properly, if counts before the end.

Some general guidelines:

- All counts must be sheet, beginning an 05:00 - 09:00 AM.
- Counts should be done normal activity on the counter, but not normal activity on the observer.
- Make sure the counter is clear.
- Only count people.
- Record multiples passing the counter.
- Cycles and pedes try in/ on wheels counted as "other".

We ask that Trail Coordinators check on the IR counters periodically (twice a month or so) to ensure that they are operating correctly and catch any issues early so that they can be resolved.

The IR Counters are locked in a metal junction box secured to a fixed object along the trail.

Questions? cttrailcensus@gmail.com

The CT Trail Census is a volunteer-based survey.

The infrared counters used for the CT Trail Census record the temperature differential between the counter's "face of sensor" and the air.

1. Make sure that the metal housing has not been tampered with or vandalized.

2. Check the scope sensor opening for foreign objects, insects or spider webs. You can use a Q-tip or small stick to GENTLY remove objects.

3. Unlock the housing and gently remove the waterproof plastic case. Make sure all components are still securely mounted to the box. Open the plastic case to view the counter electronics.

4. When operating normally, the **RED LED** indicator light (see below) should flash once every 5 seconds. The **GREEN** light should flash when, and only when an object passes the counter. Wave your hand in front of the sensor to make sure it is working. Do not touch the exposed metal contacts.

5. Seal the plastic box and place it back in the metal housing using the Velcro strips, close and lock the metal box.

What needs to be reported?

- Counter has been tampered with or vandalized.
- Scope was partially or entirely obstructed - even if you cleaned the scope out.
- Red light flashing rapidly or not at all.
- Green light not flashing when you pass your hand in front of the counter.
- Green light flashing without being tripped.
- Unsecured or broken components.


If you notice these or any other issues, report it immediately to cttrailcensus@gmail.com

The CT Trail Census is funded by a CT Pedestrian Trails Grant and is being conducted in partnership with the Connecticut Department of Transportation, UConn Extension, and the Research Valley Council of Governments. For more information about the project go to www.cttrailcensus.uconn.edu.

- Blank Manual Count Forms
- Short Instructional Videos
- Instruction Sheets
- **Volunteer Time Portal**
- Webinar Recordings

Other Volunteer Responsibilities

Volunteer hour tracking
Talk to local decision makers
Be in touch & get involved
Use the data!




Connecticut Trail Census

[Log Hours](#) [Events](#) [Organizer Dashboard](#)

Log Hours

Hours:

Date Volunteered: 

Activity:

Volunteer Name/Initials:

Trail:

Is this volunteer a state employee:
 Yes
 No
 None

Notes:

Next steps & opportunities

- Statewide Trailfinder mapping project - DEEP & DOT
- Research on Trails and Community/Family Resilience
- Bike Walk CT / community education programming
- Multi-State Colloquium on Bike/Ped Monitoring
- Advisory committee

Questions/Discussion



cttrailcensus@gmail.com