LONGWOOD
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INSTITUTE FOR TEACHING THROUGH TECHNOLOGY AND INNOVATIVE PRACTICES

Citizen Science Projects

Henrico Professional Learning Day
October 14, 2019
Deep Run High School

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Citizen Science Projects

One person or millions of people collaborating towards a common goal.

Characteristics:

- Anyone can participate;
- Participants use the same protocol so data can be combined and is high quality;
- Data helps real scientists come to real conclusions; and
- Wide community of scientists and volunteers work together and share data that the public and scientists have access.

Reference: https://scistarter.com/citizenscience.html

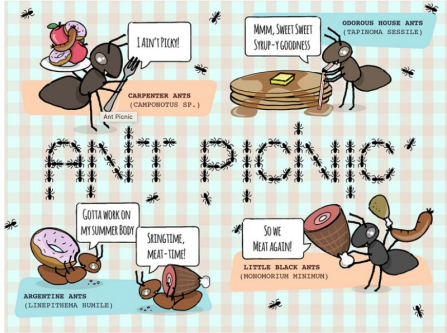
Citizen Science Projects: Some Examples

Journey North
Tracking migrations and seasons

Observational
(Shared Data)

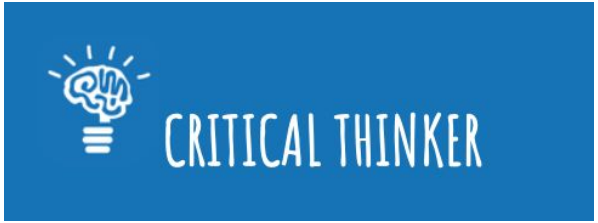
NASA/GLOBE

Ground Truth



Investigations

Citizen Science Projects Support:



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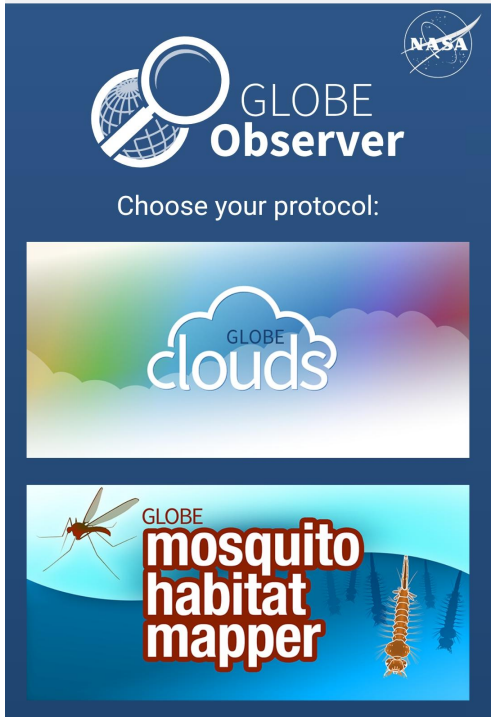
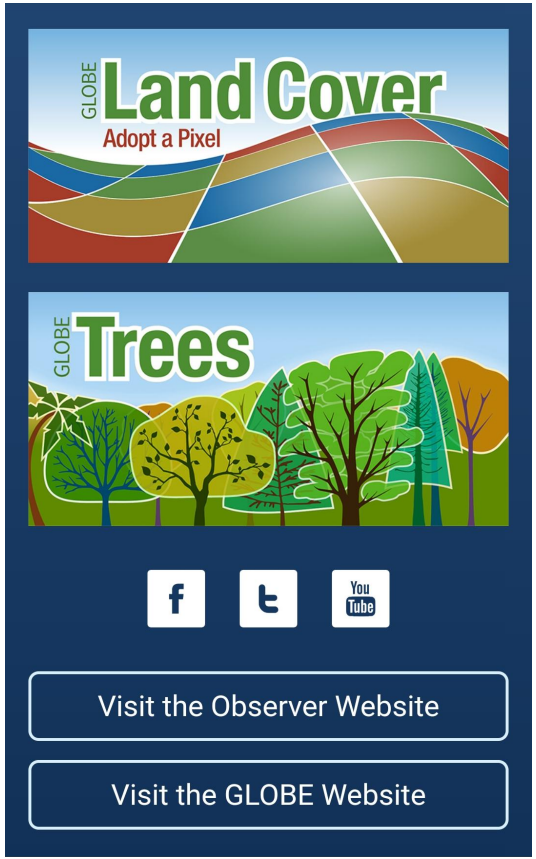
Journey North


GLOBE
Trees


NASA
GLOBE
Observer
Choose your protocol:
GLOBE
clouds
GLOBE
mosquito
habitat
mapper


GLOBE
Land Cover
Adopt a Pixel
GLOBE
Trees
Visit the Observer Website
Visit the GLOBE Website

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2:01 65° 66%

What Do I Do?

As a GLOBE Observer you can enter important information about the trees in your area

This tool guides you through steps to estimate a tree's height:

Step 1 - Find a spot 7–15 meters (25-50 feet) away from the tree that allows you to clearly see the top and bottom of the tree.

Step 2 - Aim the app's viewfinder at the tree's base and the tree's top.

Step 3 - Walk to the base of the tree counting your steps and enter the number of steps into the app.

Step 4 - Measure your location at the tree.

The tree height will be calculated for you.

You can also, optionally, enter the circumference of the tree.

After completing these measurements, make other NASA GLOBE Observer observations, especially land cover, to provide additional site information for scientists.

Next

Setup Information

The following setup information is necessary for us to perform tree height calculations.

Your height:

Centimeters

Next

From this we estimate the following. (You can change this while using the app if you believe the information is inaccurate.)

Your average stride length: Edit

Centimeters

Height of the phone (eye level):

Centimeters

Tutorial

Things to consider when selecting a tree

The tree should be **over 5 meters (15 feet) tall.**

When possible, take measurements of **isolated** trees.

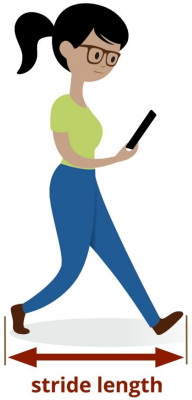
If trees are in a grouping, take measurements of the **tallest tree** in that group.

Next

Tutorial

We estimated your "stride length" at 65.3 centimeters. Improve this estimate by counting your steps across a known distance and dividing the distance by the number of steps.

Input the new stride length when you review your submission.



Next

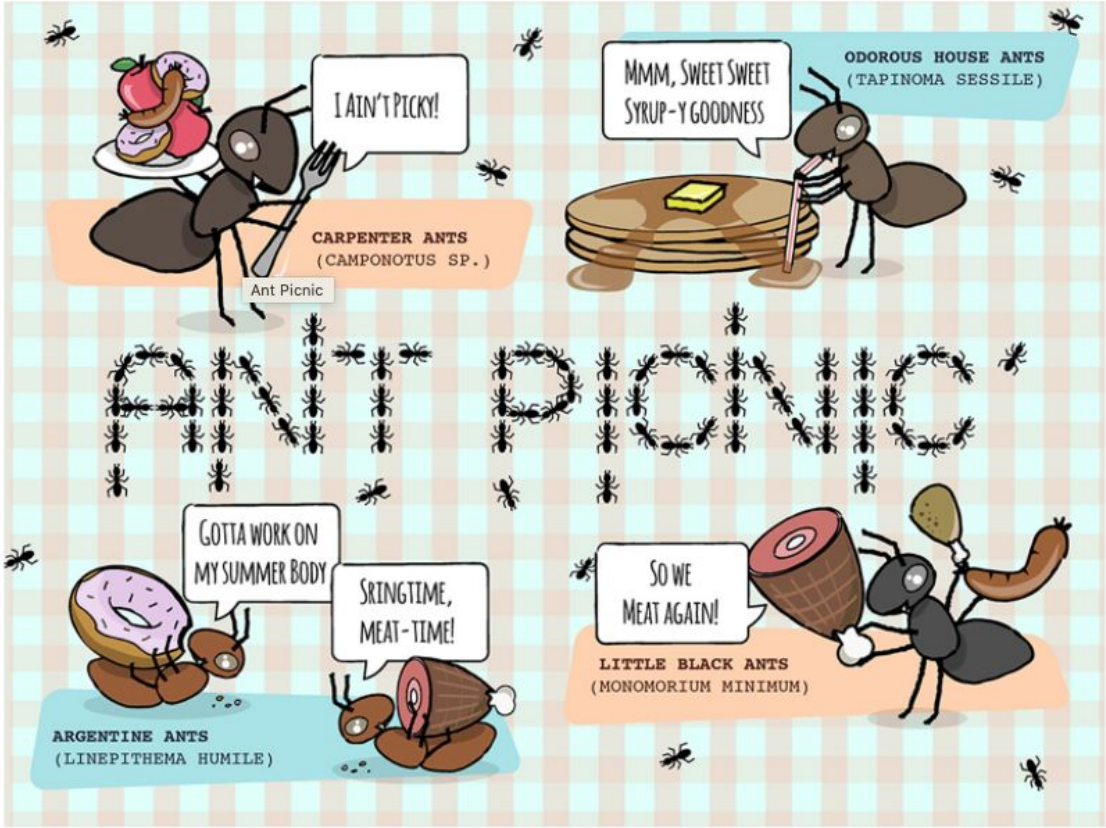
Time

Enter the local date and time of the observation:

10/13/2019

2:04 PM

Next


I AIN'T PICKY!
CARPENTER ANTS
(CAMPONOTUS SP.)
MMM, SWEET SWEET
SYRUP-Y GOODNESS
ODOROUS HOUSE ANTS
(TAPINOMA SESSILE)
Ant Picnic
ANT PICNIC
GOTTA WORK ON
MY SUMMER BODY
SRINGTIME,
MEAT-TIME!
ARGENTINE ANTS
(LINEPITHEMA HUMILE)
SO WE
MEAT AGAIN!
LITTLE BLACK ANTS
(MONOMORIUM MINIMUM)

Where to Find Projects:

iNaturalist

scistarter®
Science we can do together.

Where to Find Projects:

- Students Discover: Offers free, high-quality curriculum to middle school science teachers around the world. Created in partnership between scientists and educators to support student participation in a broad range of citizen science projects.

- Your Wild Life: Team of scientists, science communicators, students, and citizens who are passionate about exploring the ecological frontiers that exist right under our noses, from the surface of our skin to our backyards and neighborhoods.

Where to Find Projects:

World Moon Project: http://worldmoonproject.org

The GLOBE Program: http://www.globe.gov

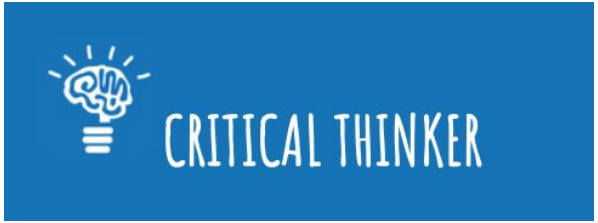
Down the Drain Project: http://www.ciese.org/curriculum/drainproj/

World Water Monitoring Challenge: http://www.monitorwater.org

Global Citizen Science (Zooniverse): https://www.zooniverse.org

Cornell Lab of Ornithology: https://www.birds.cornell.edu/citizenscience/

Citizen Science Projects Support:



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