

Interactive Map of Benjamin Wildflower Preserve



Issue

Many people who visit the Benjamin Wildflower preserve in Weston, Connecticut cannot identify all flowering plants that are present on the preserve. Furthermore, the preserve lacks a trail map to help guide hikers.

Objectives

- To create an interactive trail map that is available to download onto anyone's mobile phone to identify wildflowers and flowering plants that are present along the trail.
- To allow hikers to collect flower data on the trail to be used in the interactive map.

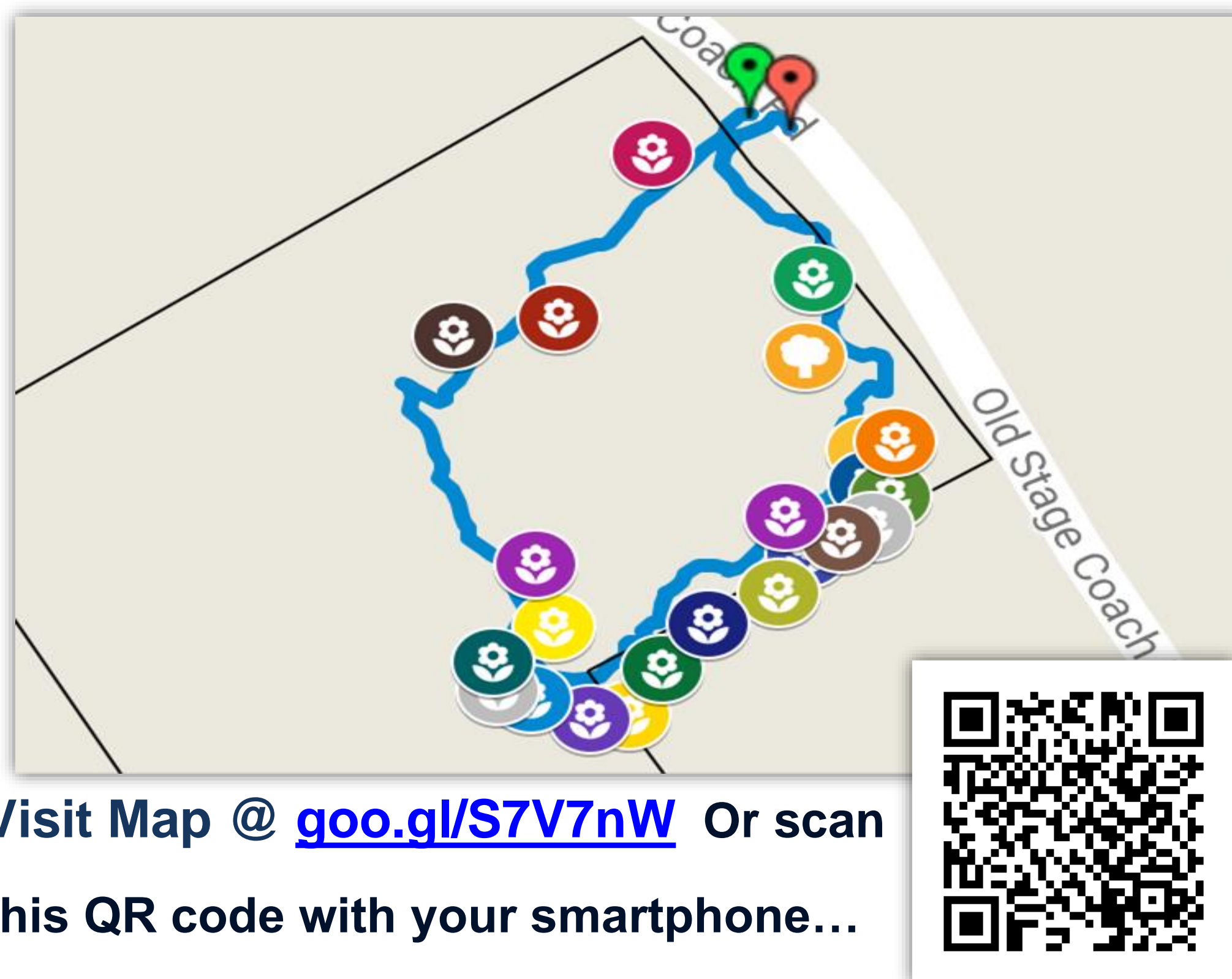
Species

- Jack in the pulpit (2)
- Bed straw (1)
- Clear weed (1)
- Enchanter's night shade (1)
- False Nettle (1)
- Halberd-leaved Tearthumb (1)
- Hog peanut (1)
- Indian pipe (1)
- Jewelweed (1)
- Jump seed (1)
- Mad dog Skullcap (1)
- Poke weed (1)
- Skunk cabbage (1)
- Smart weed (1)
- Spice bush (1)
- Tulip tree seedling (1)
- Unidentified sp. no. 1 (1)
- Virginia creeper (1)
- Wineberry (1)
- Winterberry (1)
- Other / No value (2)

Methods

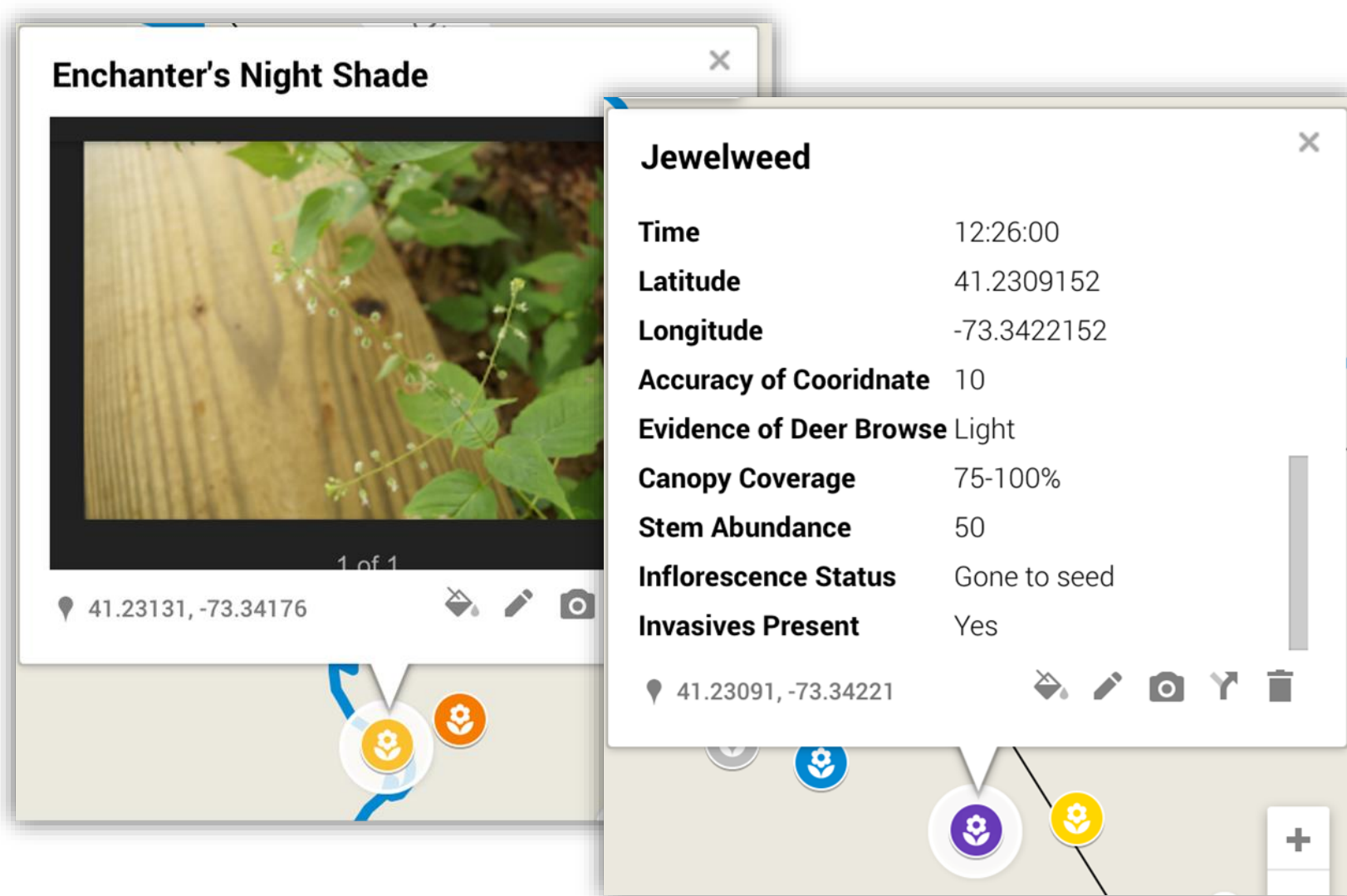
- Initial mapping was done on August 10, 2017.
- Mapped the trail (blue line in map) using Track Kit GPS App.
- Flower data were collected using Epicollect 5 mobile web form--allows anyone with the smartphone app to enter data into a database.
- We tailored the form to collect:
 - Time
 - Location
 - Species
 - Abundance
 - Evidence of deer browse
 - Canopy coverage
 - Presence of invasive species nearby

Map of Flower Observations

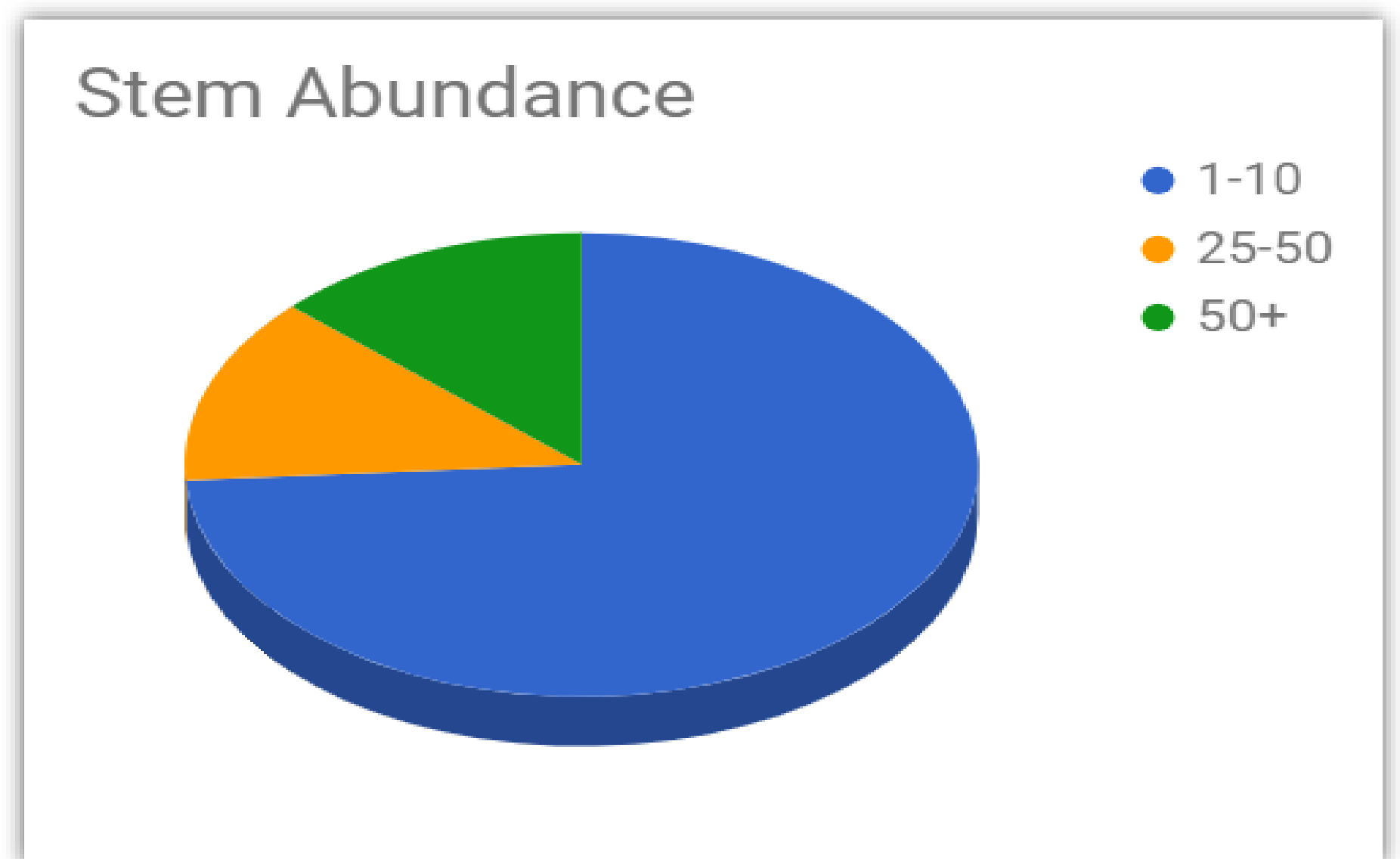


Features of Map & Results

The Interactive Google Map is easily accessible to anyone with a smartphone that can navigate to the link or QR code (see above).



The user can then tap on icons like those shown here to see the flower that was spotted at that location along with the data that was collected on that flower.



The data also allows for the analysis of canopy coverage, stem abundance, etc., as shown above. This is based on one survey and requires more sampling.

Next Steps

We plan to revisit Benjamin Wildflower Preserve in the spring to identify and document Spring Ephemerals, create a complete inventory of plants for the site, and conduct taxonomic verification of the plants down to species level. We then plan to give the map to a member of the Aspetuck Land Trust to maintain the map for future hikers to use.

Chris Leppla¹ & Anthony Zemba²

¹Youth Ambassador- Fairfield Warde High School, Fairfield, CT ²Sr Ecologist-Fitzgerald & Halliday, Inc. Hartford, CT