



# The Guernsey 21<sup>st</sup> Century QR-Code Nature Trail

Judy Barr, Board Member

Wellesley Conservation Council, Inc



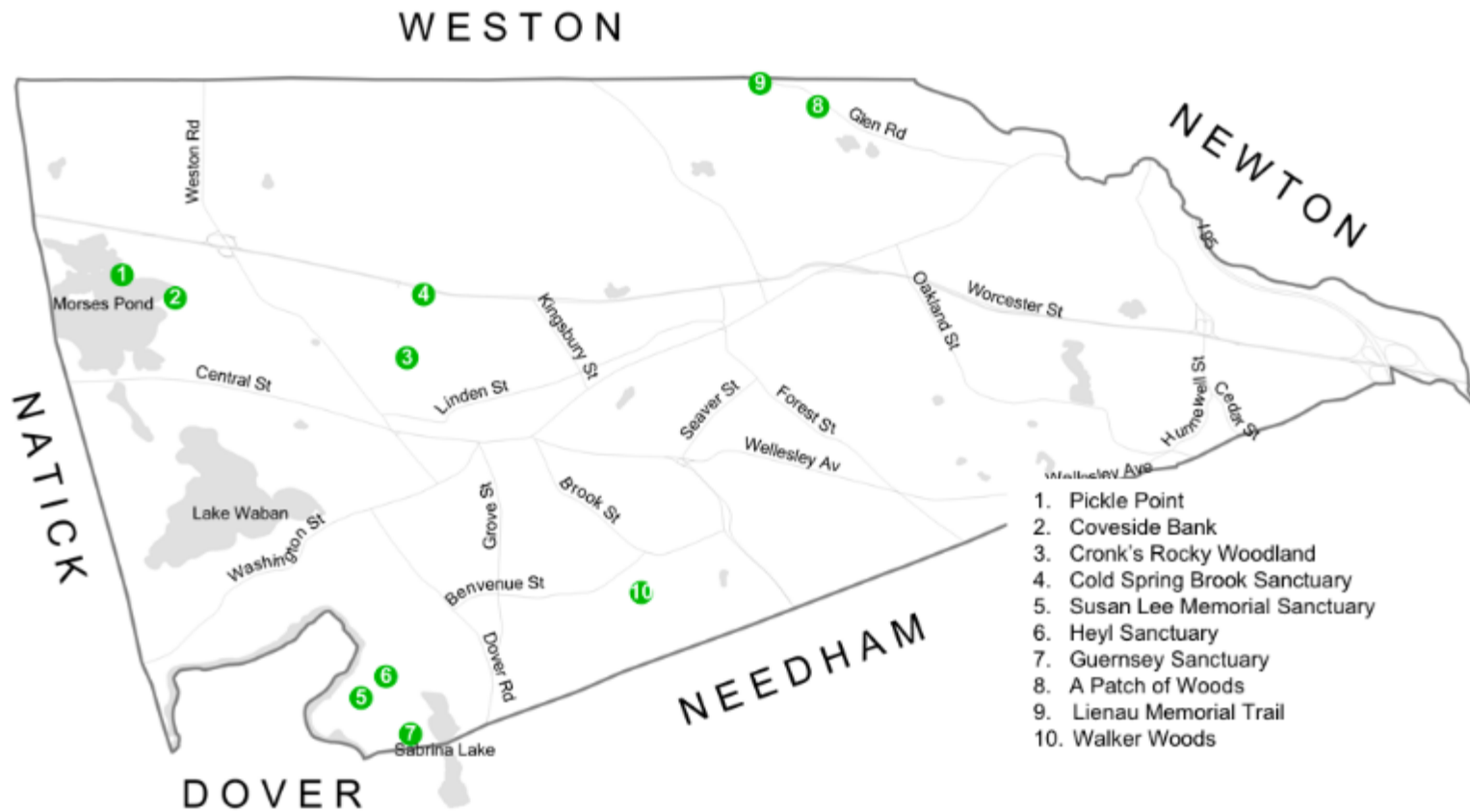
# Wellesley Conservation Council, Inc

Wellesley's Land Trust, founded in 1958

## 3-part Mission Statement

- Protect and preserve the natural environment in Wellesley
- Maintain sanctuaries open to the public for study and enjoyment
- Educate youth and interest adults in matters of conservation

# Location of WCC's 12 Properties





# 25 acres: mixed pine forest, swamp

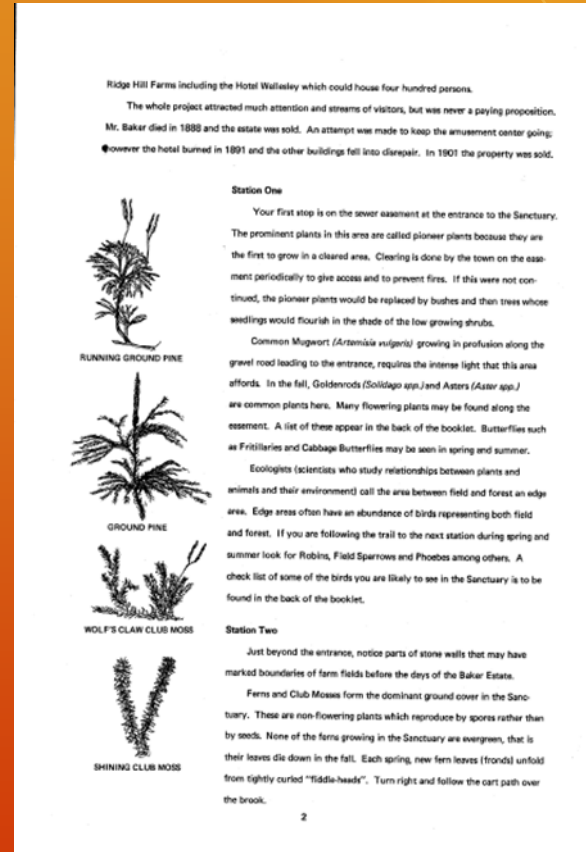
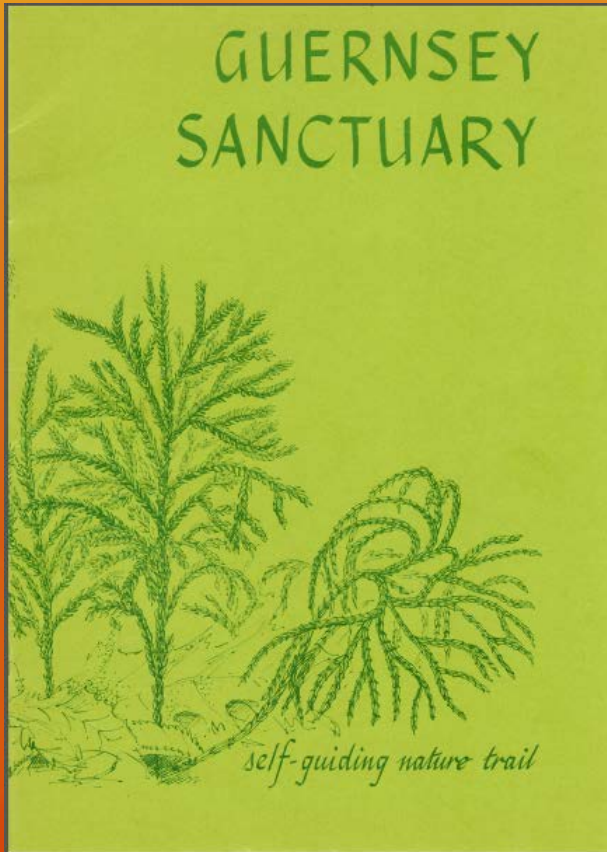
The Guernsey Sanctuary on Sabrina Lake was donated by Mr. and Mrs. William G. Guernsey in 1961 and is approximately 25 acres.

Play ▶





# 1972 Guernsey Sanctuary Self-Guiding Nature Trail, 18-page booklet



11 stations with 72 unique botanical specimens

# Wellesley Turkey Trot Foundation Grant

Provided partial funding for QR-code enhanced  
1-mile Guernsey Nature Trail



Photographer: Jim Barr

# What is a QR-code?

- **QR code** (abbreviated from **Quick Response Code**) is the trademark for a type of two dimensional bar code.
- It consists of black squares arranged in a square grid on a white background, which can be read by an imaging device such as cell phone app that connects it to a web site





# Methods

1. Monthly plant inventory walk on Guernsey
2. Select specimens for inclusion
  - Spread selection along 1-mile circular trail
  - Balance of trees, shrubs, wildflowers
  - Balance of plant-specific information, nature narrative, history of place, and sense of wonder
3. Select QR-code marker vendor
4. Write QR-code narrative for each marker
5. Placement of markers
6. Promote trail

# Methods: Monthly Plant Inventory



## Plant Inventory Team

Bill Gietzentanner  
Environmental planner

Judy Barr  
WCC BOD member

Ted Elliman  
Retired, Staff botanist,  
NE Wildflower Society

WCC Land Management  
Pete Jones  
Kevin Hanron

Photographer: Kevin Hanron

[www.plantsmap.com](http://www.plantsmap.com) (Bill Blevins)

Vendor



Connecting People with Plants®

March 2019





## INTERACTIVE PLANT TAGS

We also sell and manufacture interactive NFC and QR Code enabled plant tags that connect people with plants to a suite of Plants Map tools where users can catalog and map their plant collections, save photos, record growing notes, and share botanical and cultivation information.

Sales of interactive plant tags have been our primary revenue stream to date. These unique tags and signs have also been our top growth driver for acquiring new users.

Can individualize logo

Three lines of text --- WCC selected common, scientific, native vs non native  
Signs (4.75"x3.35") and Tags (3.28"x1.78"), stakes (12" and 20"), screws

# Examples of Marker/Tag Attachment:

- marker to post
- marker to tree
- tag to tree (good for shrub)
- stake marker in ground





# WHAT IS PLANTS MAP?

**PlantsMap.com is a suite of SaaS tools for organizations, businesses and individuals to document, map and share plant collections.**

Our customers include several of the largest companies in the world, some of the most respected horticulture universities in the United States, premier botanical gardens and historic arboreta, schools, parks, cities, plant societies, and individuals documenting and sharing their plants stories.



## Plant Database

More than 6,850 organizations and individuals document plant collections on PlantsMap.com.



## Interactive Plant Tags

More than 20,000 Plants Map NFC and QR Code enabled signs are installed in landscapes across the U.S.



## Find & Buy Plants

Using our Events tool, Resource listings and Plant Finder, users can discover new plants and connect to businesses that sell them.



# WCC Plant Maps

## Organizational Page on PlantsMap



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Search



Welle... ▾

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WELLESLEY CONSERVATION COUNCIL

P.O. Box 81129, Wellesley Hills, MA 02481 | 781-235-3090 | E-mail



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# My PlantsMap listing specimens by photo

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[My Plants Map](#) [My Plants](#) [My Collections](#) [My Tags](#) [My Events](#) [PLANT FINDER](#) [ADD NEW +](#)

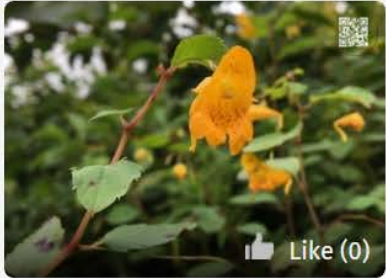
[Export Excel](#) [Sort by: Date ▼](#)



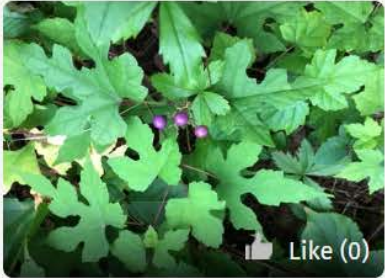
Like (0)

Poison Ivy




Like (0)

48. Jewelweed or Touch-...



Like (0)

44. Porcelain Berry or A...



Like (0)

25 and 41. Sugar Maple

# My PlantsMap listing specimens by alpha name



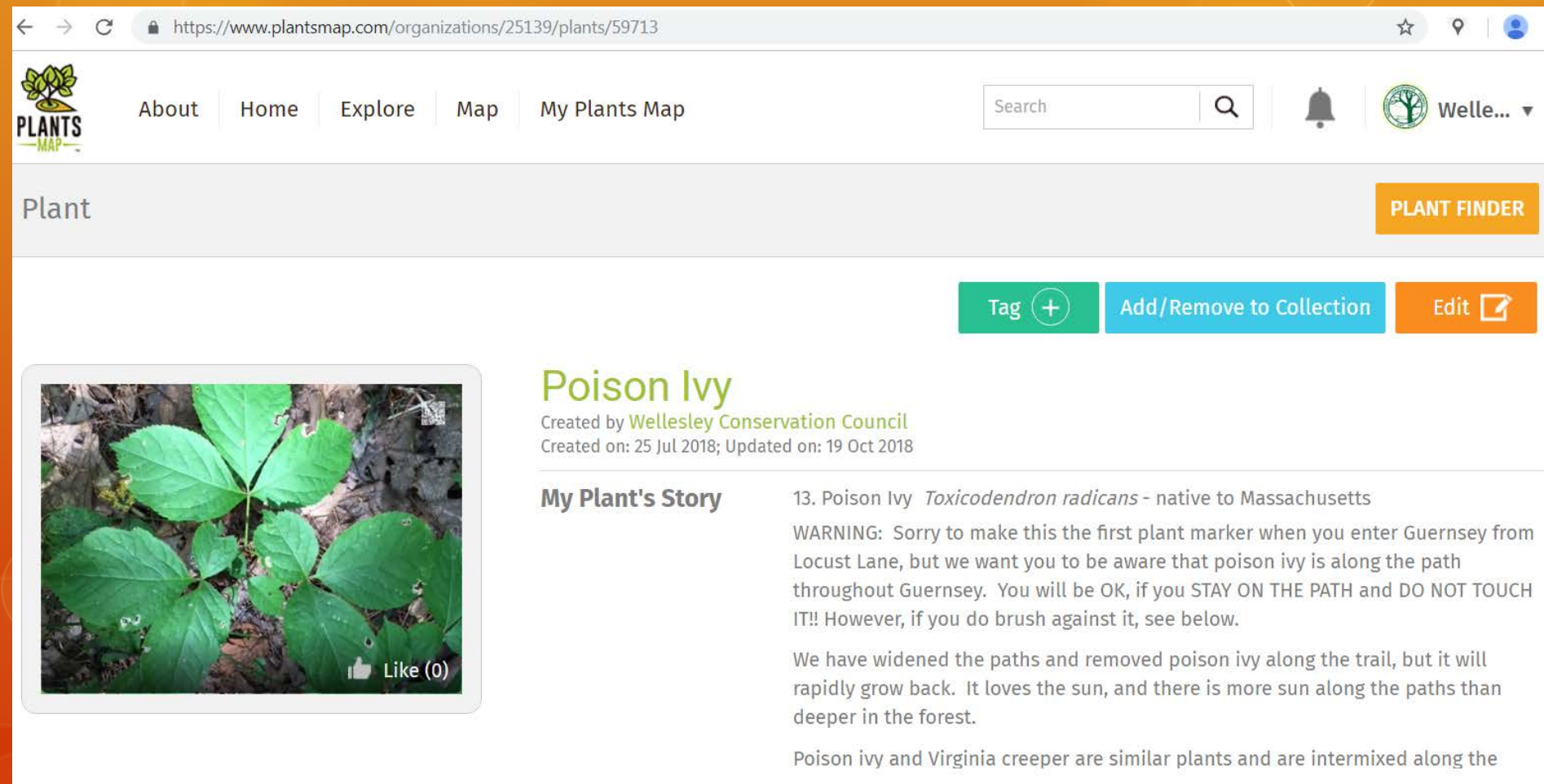
Available Not Available Private Location

All **A** B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Photo	Title	Botanical Name	Common Name	Map	Tag
	American chestnut (33)	<i>Castanea dentata</i>	American chestnut		
	American chestnut (51)	<i>Castanea dentata</i>	American chestnut		
	American Elm (31)	<i>Ulmus americana</i>	American Elm		
	Amur Cork tree	<i>Phellodendron amurense</i>	Amur Cork tree		



You then create a photo and narrative for each plant that is stored in the PlantsMap "cloud". The visitor is connected to it by scanning the plant specific QR-code on the marker

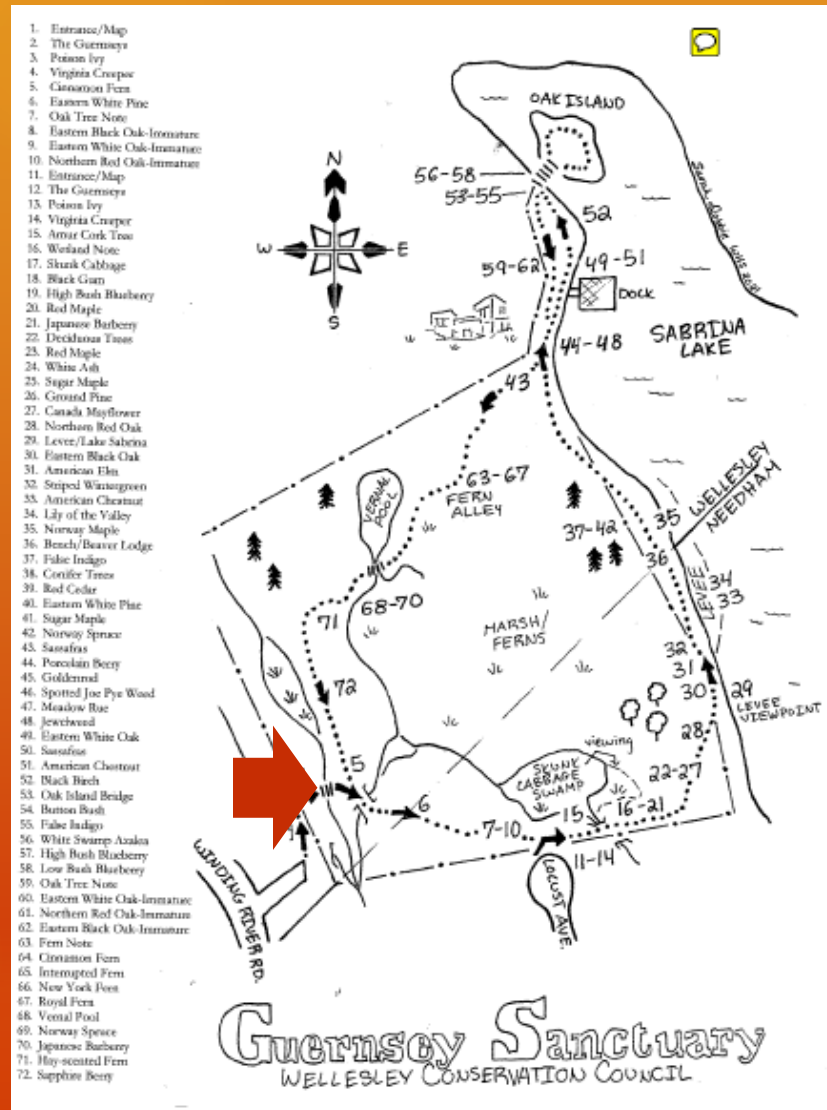


The screenshot shows a web browser window with the URL <https://www.plantsmap.com/organizations/25139/plants/59713>. The website header includes the PlantsMap logo, navigation links (About, Home, Explore, Map, My Plants Map), a search bar, a notification bell, and a user profile for 'Welle...'. Below the header, the word 'Plant' is displayed on the left, and a 'PLANT FINDER' button is on the right. A row of action buttons includes 'Tag +', 'Add/Remove to Collection', and 'Edit'. The main content area features a photograph of a Poison Ivy plant with a 'Like (0)' button. The title 'Poison Ivy' is in green, followed by the creator 'Wellesley Conservation Council' and the dates 'Created on: 25 Jul 2018; Updated on: 19 Oct 2018'. The 'My Plant's Story' section contains a numbered entry: '13. Poison Ivy *Toxicodendron radicans* - native to Massachusetts'. A warning follows: 'WARNING: Sorry to make this the first plant marker when you enter Guernsey from Locust Lane, but we want you to be aware that poison ivy is along the path throughout Guernsey. You will be OK, if you STAY ON THE PATH and DO NOT TOUCH IT!! However, if you do brush against it, see below.' A paragraph then states: 'We have widened the paths and removed poison ivy along the trail, but it will rapidly grow back. It loves the sun, and there is more sun along the paths than deeper in the forest.' The final sentence reads: 'Poison ivy and Virginia creeper are similar plants and are intermixed along the'.

# Let's walk the Guernsey QR-Code Trail: Entrance to Guernsey



# To Lake Sabrina and Levee



1. Entrance/Map
2. The Guernseys
3. Poison Ivy
4. Virginia Creeper
5. Clintonia Fern
6. Eastern White Pine
7. Oak Tree Note
8. Eastern Black Oak-Immature
9. Eastern White Oak-Immature
10. Northern Red Oak-Immature
11. Entrance/Map
12. The Guernseys
13. Poison Ivy
14. Virginia Creeper
15. Arbutus Bark Tree
16. Wetland Note
17. Skunk Cabbage
18. Black Gum
19. High Bush Blueberry
20. Red Maple
21. Japanese Barberry
22. Deciduous Tansy
23. Red Maple
24. White Ash
25. Sugar Maple
26. Ground Pine
27. Canada Mayflower
28. Northern Red Oak
29. Levee/Lake Sabrina
30. Eastern Black Oak
31. American Elm
32. Striped Wintergreen
33. American Chestnut
34. Lily of the Valley
35. Norway Maple
36. Bench/Beaver Lodge
37. False Indigo
38. Coriander Trees
39. Red Cedar
40. Eastern White Pine
41. Sugar Maple
42. Norway Spruce
43. Sassafras
44. Porcelain Berry
45. Goldenrod
46. Spotted Joe Pye Weed
47. Meadow Rue
48. Jewelweed
49. Eastern White Oak
50. Sassafras
51. American Chestnut
52. Black Birch
53. Oak Island Bridge
54. Burned Bush
55. False Indigo
56. White Swamp Azalea
57. High Bush Blueberry
58. Low Bush Blueberry
59. Oak Tree Note
60. Eastern White Oak-Immature
61. Northern Red Oak-Immature
62. Eastern Black Oak-Immature
63. Fern Note
64. Clintonia Fern
65. Interrupted Fern
66. New York Fern
67. Royal Fern
68. Vernal Pool
69. Norway Spruce
70. Japanese Barberry
71. Hilly-scented Fern
72. Sphagnum Moss

Artist: Sarah Dobbie



# History – Who are The Guernseys?



**Mr. and Mrs. William Guernsey**

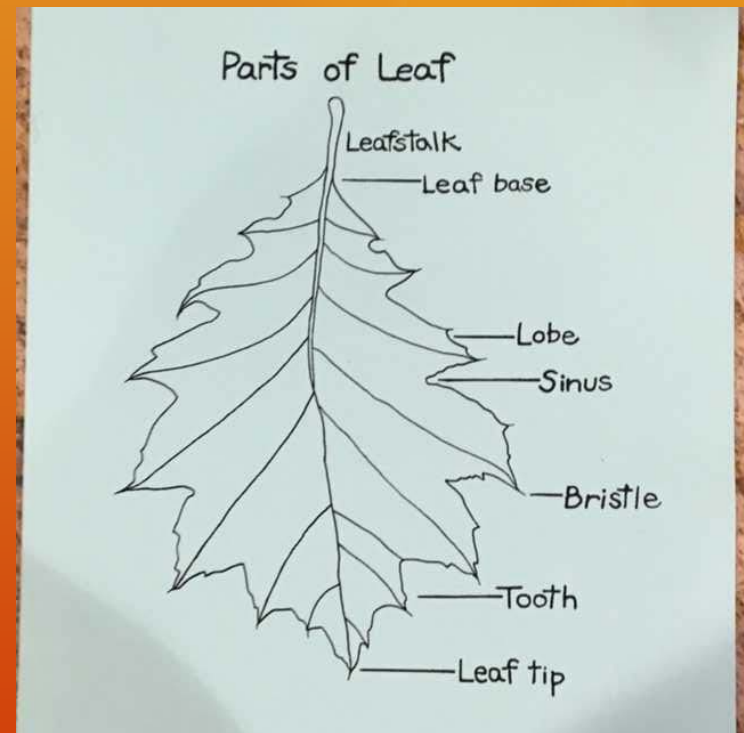
Wellesley Townsman

# White Pine Forest with Conifer Lane on Levee





# Oak Tree Note + 3 Oak Comparisons

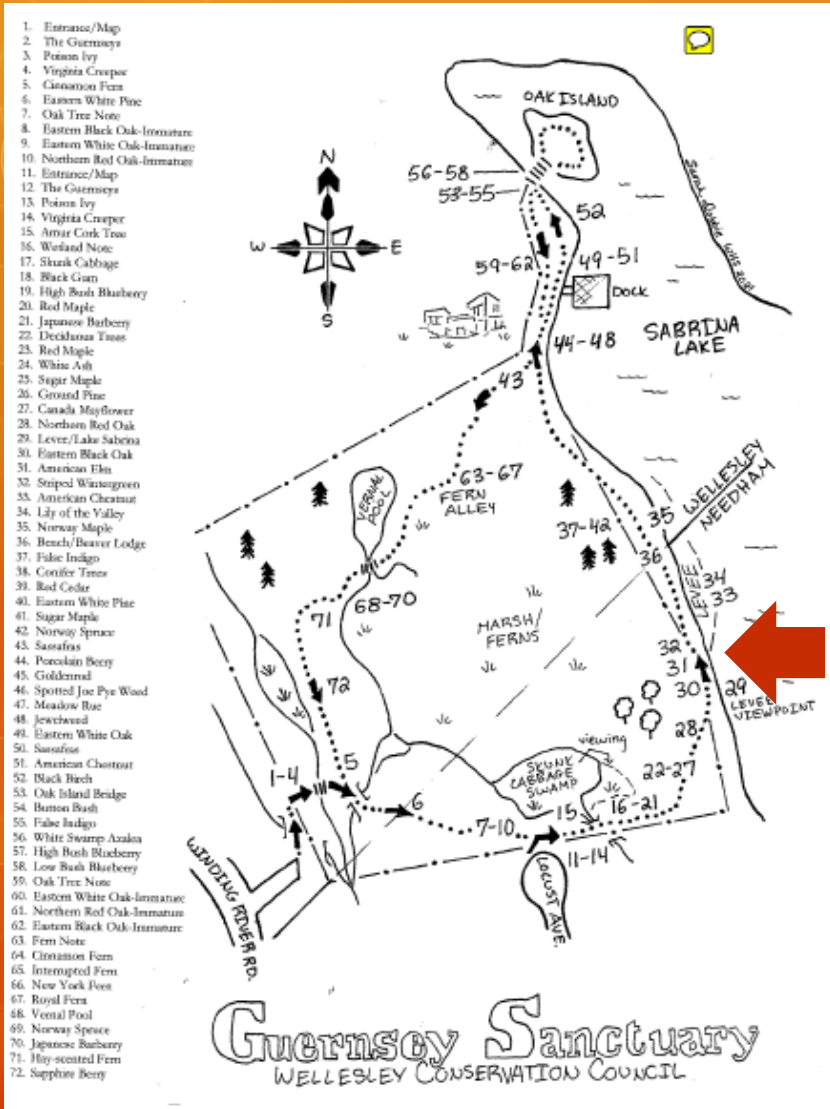




# Wetland Note

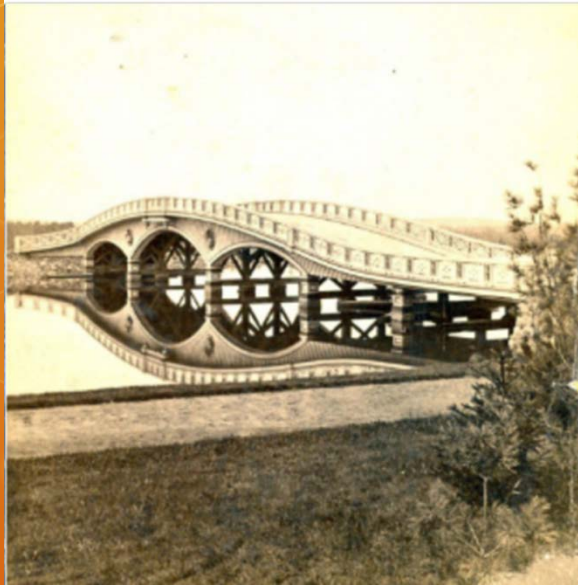


# What's at top of Levee, 150 years ago??

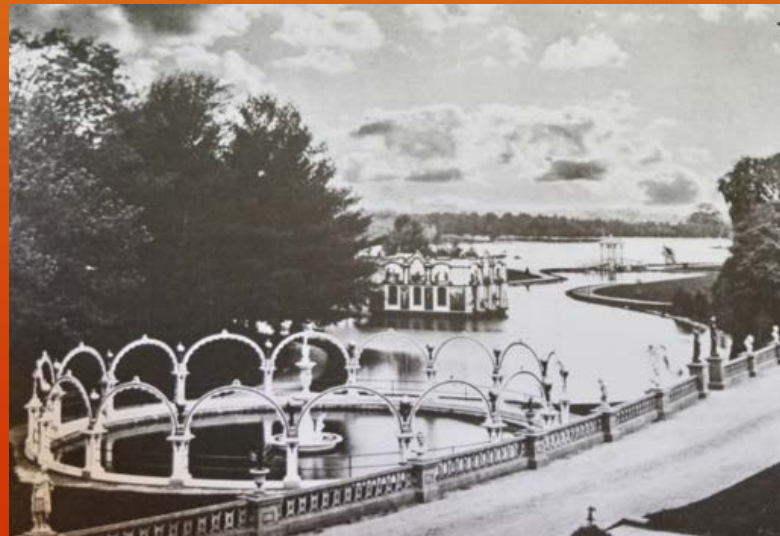




# Bridge to Ridge Hill Farms (Baker Estate)



- 755 acres with
    - 100 amusements/exhibits
    - Man-made Lake Sabrina
    - Formal gardens
    - 225 room hotel with 19 toilets/5 bath tubes
- Train line from Boston



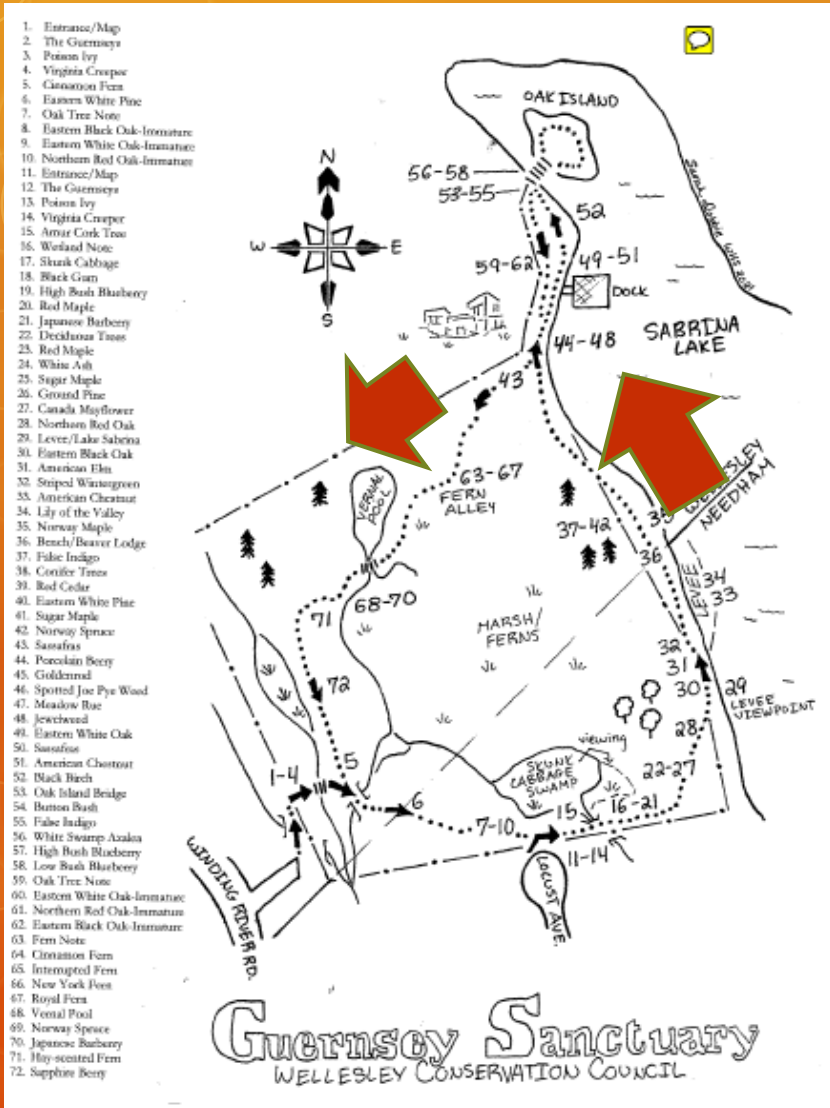


# Beaver Damage and Lodge

Lake Sabrina Levee



# Half way on Trail – What's Next?



To Oak Island  
 Wildflowers  
 Dock  
 Oak Island  
Return  
 Fern Lane  
 Vernal Pool  
 Return to Entrance



# Norway Spruce – junction of trail extension





# Wildflowers – North End of Lake Sabrina: Heavy fertilizer run-off





# Example Invasives: Porcelain berries





# EcoCamp On Guernsey





# Fern Lane Note



Overall note then individual QR markers for 5 ferns  
For each, QR code links to photos and narratives



# Vernal Pool Note



# Even Beautiful in Winter



And for study...

- comparing 1972 to 2018 flora
- starting next week

	Present	Present	Present
1972	+	+	-
2018	+	-	+



# Guernsey QR Code Nature Trail

Open to Public

Entrance  
163 Winding River Rd  
Wellesley



# Thank yous

- Wellesley Turkey Trot Foundation
- Bill Giezentanner and Ted Elliman
- Pete Jones and Kevin Hanron
- Bill Blevins and team at [PlantsMap.com](http://PlantsMap.com)
- Jim Barr
- Lawrence Knowles, Wellesley College
- Sarah Dobbie and Stephanie Osser