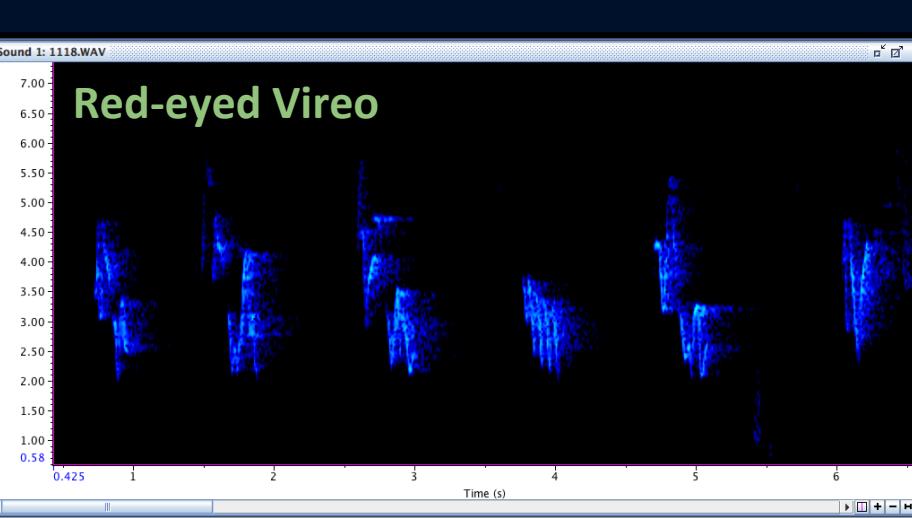


Birding the Audrey and Robert Tobin Preserve



Background Introduction & Issue

The **Audrey and Robert Tobin Preserve** is a large piece (242 acres) of forest located above Kent Falls that is protected by the **Kent Land Trust**. It consists of Hardwood (219 acres) and Wetlands (23 acres). Multiple vernal pools and headwater streams can be found on the property. It is in the Mohawk Landscape Level Important Bird Area. A lot of people are not aware of its existence, or its abundance of birds and trails. Since 2015, **60 species of birds** have been documented on the property by **Marvelwood School, Kent Land Trust** and the Tobin Family.

Our **University of Connecticut Natural Resources Conservation Academy Conservation Training Partnership Project (CTP)** involved documenting bird species via a variety of techniques and photographing the preserve to create an **ESRI Story Map** to inspire more people to visit the preserve to look for birds.



Objectives

- To bring greater awareness to the preserve by creating an ESRI Story Map about the preserve and the birds documented historically and during our CTP project utilizing a variety of techniques over the summer/winter of 2018 and spring of 2019.
- To create a trail map of the property and pinpoint areas to look for a few species.
- To contribute meaningful scientific data to the **Institute for Bird Populations, Kent Land Trust** and **CT Bird Atlas Project**.



Methodology Banding

- Banding research was conducted as part of Institute for Bird Populations Monitoring Avian Research and Productivity program. This was our fourth year of operations at this particular MAPS banding station.
- Banding commenced on May 31, 2018 and continued until August 2018. Banding sessions occurred every 7 to 10 days based on the MAPS protocol.
- Twelve nets were operated each period, nets were opened 30 min around sunrise. The nets remained open for 6 hours every session, unless weather complications forced an earlier closure.
- Net checks were made every 40-50 minutes depending on the environmental conditions.
- Birds were extracted and then taken back to base camp for banding & processing before they were released. When possible, record photos of birds were taken.
- On banding days, all birds encountered (seen/heard) were also recorded and their locations with respect to the different trails were recorded.

Methodology Bioacoustics

To learn about specific recording equipment and processing of raw recording files used for this project, please refer to our **Story Map**.

June - 2018

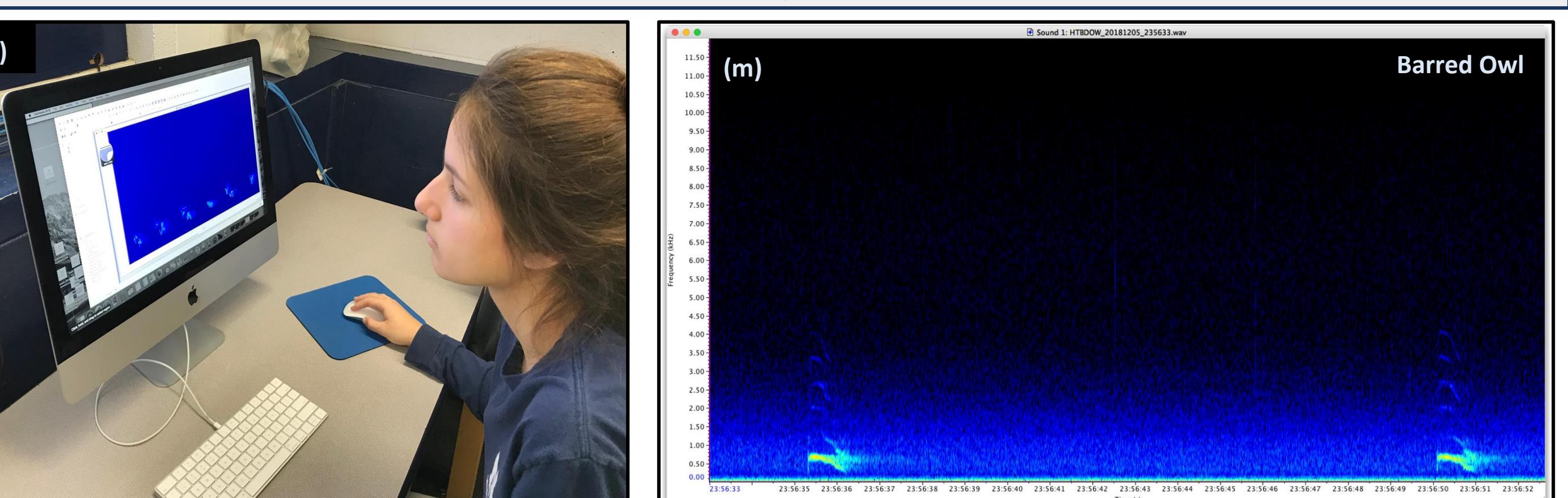
Recordings were conducted on two days during the month of June 2018. Recordings were captured only along the Homestead Trail and were taken in conjunction with our MAPS banding sessions. Approximately fifty recordings were made of birds, of which only half were decent to use.

December - 2018

Recordings were conducted during a 3 1/2 day period from 12/5/18 to 12/8/18 using passive acoustic recorders. One recorder was placed along the Laurel Loop Trail and another on the Homestead Trail. 168 hours of continuous recordings were captured.

Spring - 2019

Recorders will be rotated in different micro-habitats along each of the four trails during the month of April and species added to our Story Map.

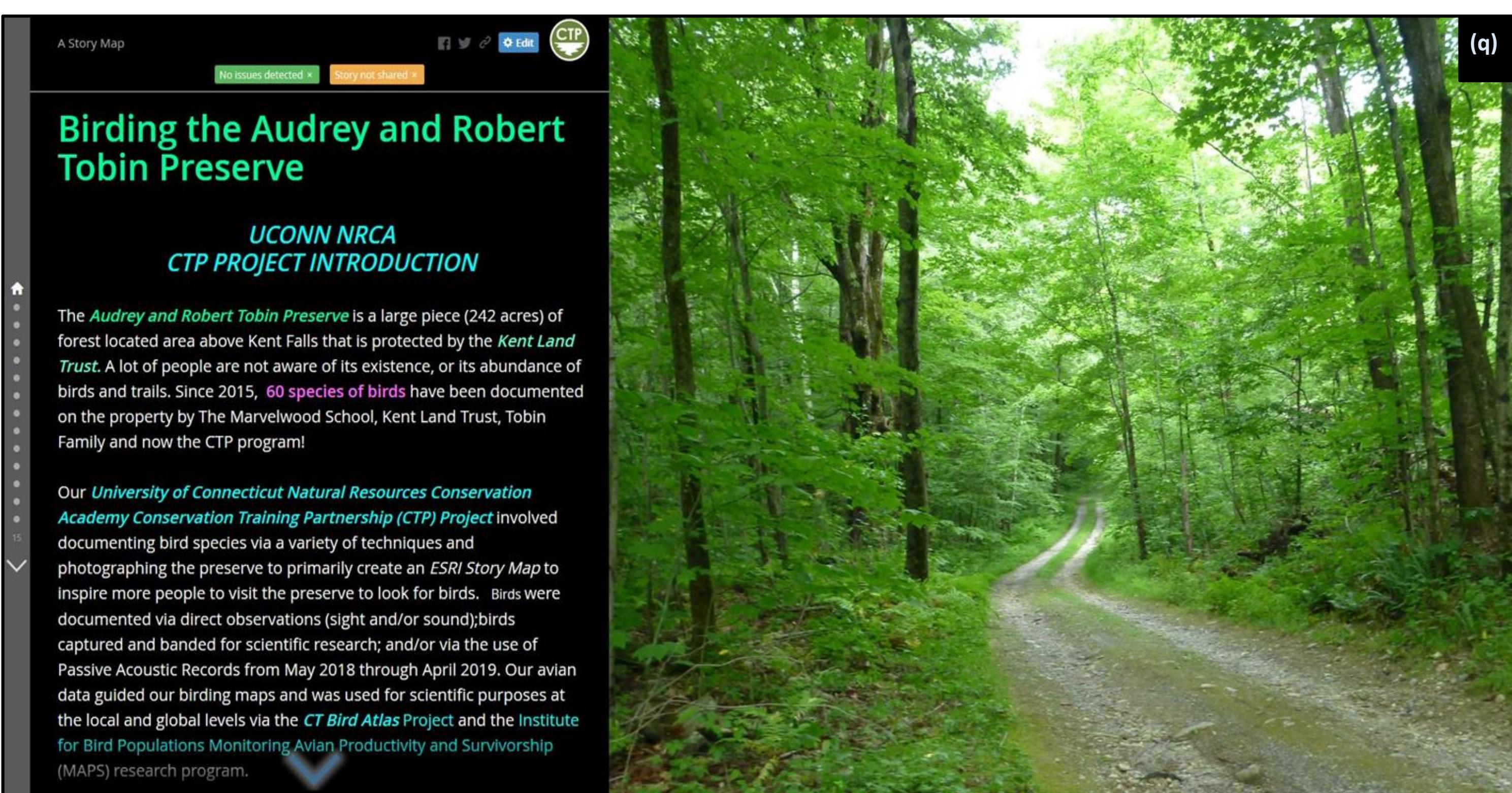
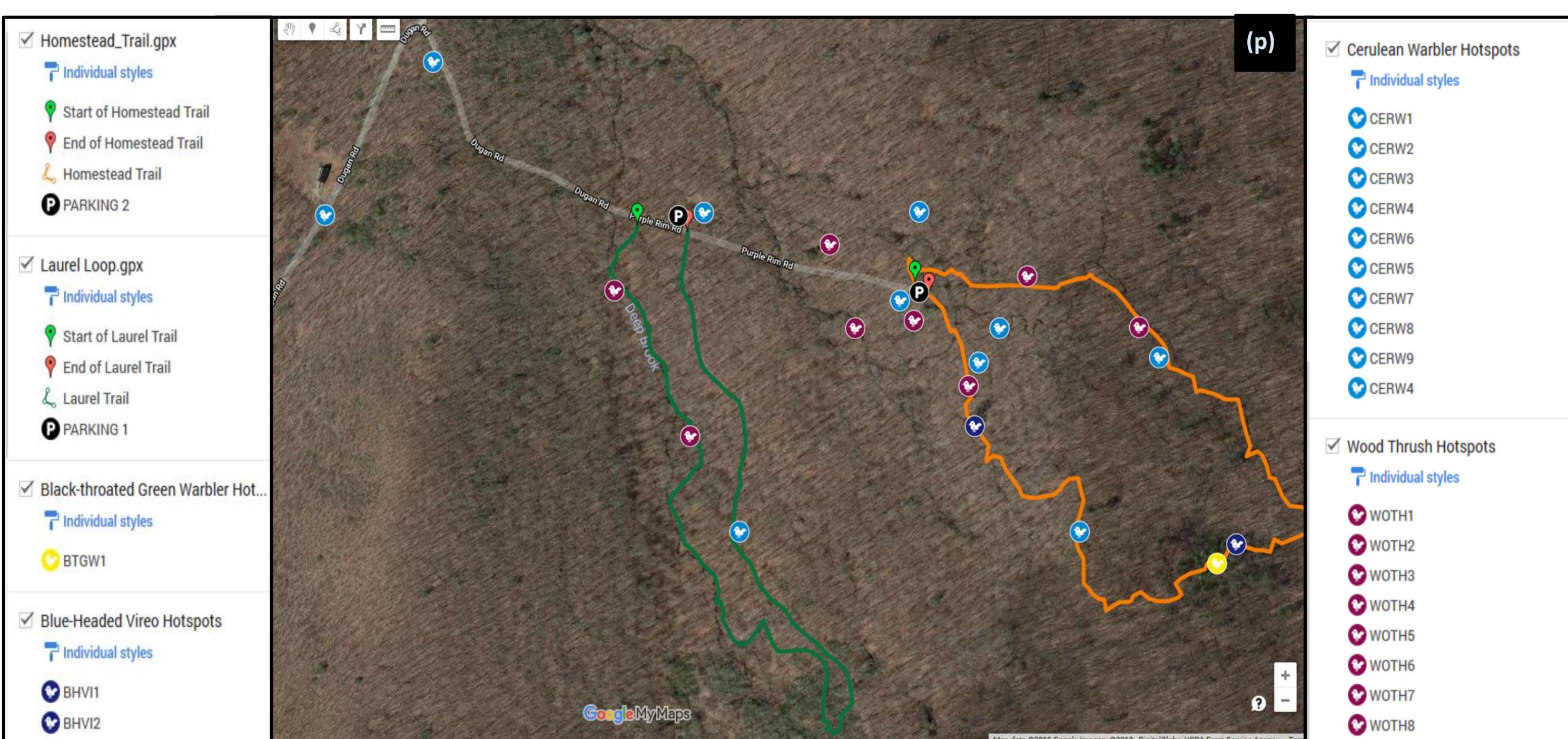
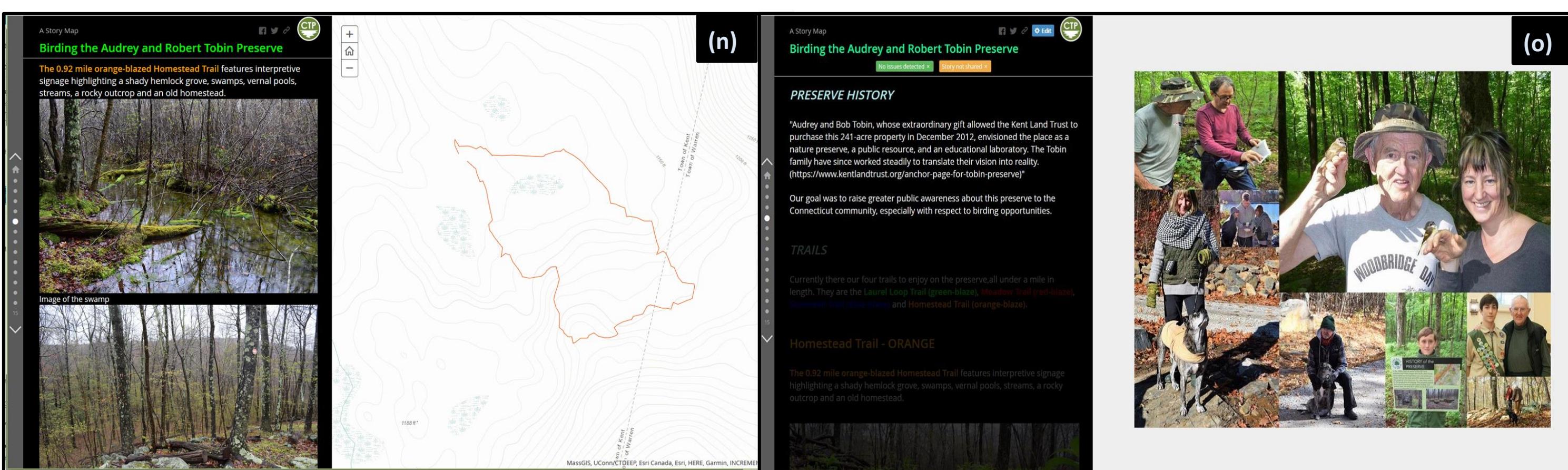


Methodology CT Bird Atlas & eBird

- Data collected for this project while banding and/or surveying for birds were also contributed to the CT Bird Atlas Project (CTBlock 31F), which is the block adopted by Kent Land Trust.
- Observations of breeding evidence, using specific breeding codes, were usually made in the mornings during our banding sessions when the birds were most active.
- Our banding data also provided key physiological evidence of breeding (i.e. brood patch, cloacal protuberance, etc.) to the project.
- All data were shared with the **CT Bird Atlas** via a shared checklist using **eBird**, a global, realtime, online checklist program.

Figures

- (a) Yellow-Bellied Sapsucker (JUV) (b) Yellow-Bellied Sapsucker (f) (c) documenting birds banded (d) documenting habitat (e) recording bird songs (June) (f) one of many headwater streams (g) passive acoustic recorder being placed near trail for December recordings (h) Yellow-throated Vireo (i) processing a bird captured (j) Least Flycatcher (k) Louisiana Waterthrush (l) Isolating a song from a recording (m) spectrogram of Barred Owl (n) screenshot of the Homestead Trail from Story Map (o) screenshot of Preserve History from Story Map (p) screenshot of map illustrating key locations to look for certain species (q) screenshot of the Introduction to the Preserve from Story Map.



- Within our Story Map the topics you will find (or eventually find) are:**
- Directions to the Preserve
 - Introduction to the Preserve
 - Preserve History
 - Overview of the Four Existing Trails and Trail Map
 - Banding Highlights from the Summer 2018
 - Bioacoustic Recording Highlights from Summer 2018
 - Resident/Winter/Migratory Birds You Might Observe
 - Bioacoustic Recording Highlights from December 2018 and April 2019
 - Key Birding Areas for Some Species
 - Summer Breeding Species You Might Observe
 - Tips on Identifying Birds and Ways to Contribute Data to eBird and the CT Bird Atlas Project
 - Birding Ethics and Trail Safety

Madelyn Malinowski ¹ & Laurie Doss ^{1,2}

¹ The Marvelwood School; ² The Kent Land Trust

