

Do Now

Can you think of a situation in your life where there were different stakeholders?

Who were the stakeholders?

Group Roles: Becoming an Expert

- what kind of evidence will you need to collect in order to support or reject the hypotheses you developed last class?

Group Roles: Becoming an Expert

- Population Specialist
- Botanist
- Public Health Intern
- Bird Watcher

Population Specialist

There are many animals on the island, and most of these are changing over time. You'll learn important techniques for studying animal populations. We hope you can apply what you've learned to help us understand the changes that are happening.



Botanist

The trees are the most obvious and sometimes the most overlooked part of a forest. Some people consider the trees the backdrop for things that are happening in the forest, but the reality is that the forest itself is changing! We hope you can learn about how the vegetation is changing so that we can figure out what is going on.



Public Health Intern

Lyme disease risk has changed a lot over the years, but we don't fully understand why. Are there changes in the environment that can help explain something that is so important to human health in the local community? We hope you can learn enough about wood ticks, their life cycle and the environment to better understand what is causing the changes in Lyme Disease risk.



Bird Watcher

It is your job to follow up on some of the ideas shared by Bruce the bird watcher who lives in the community near the islands. Look for how the bird populations have changed on the islands over time. What might cause changes in bird populations?



Guide Sheets & Learning Quests

Learn more about the problem on Dover Island from the perspective of your Scientist Role.

Name: _____ Section: _____

Bird Watcher Guide Sheet

1. **Learning Quest.** Go to <http://ecomuve.gse.harvard.edu/Forest-LQ.html>

- Complete the learning quest called **Bird Basics** and the **Assignment Sheet**
- Habitat provides many resources that animal populations need to survive. Certain species are adapted to live in certain habitats. Based on the Learning Quest, **write down one example of 1 bird species you can find in EcoMUVE and describe the habitat it is adapted to live in.**

Name Bird Species: _____

Description of Bird Habitat: _____

2. **Data Collection.**
You are responsible for collecting data on **populations of birds**. Collect the population data for the 3 bird species in EcoMUVE: **Cerulean Warbler**, **Ovenbirds**, and **Red-Tailed Hawk** for each of the dates from 1975 to 2020.
(Note: Use the zoom tool to find the birds in the trees. To find the hawk, try to find a clearing so that you can watch for it in the sky.)

Cerulean Warbler



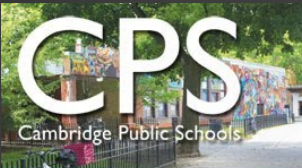
	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
Dover										
Willis										


Ovenbird

	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
Dover										
Willis										

Red-Tailed Hawk

	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
Dover										
Willis										





Learning Quests - Nerboso

Everyone do the following:

- Find the box that is your role.
- Complete the Learning Quests (on the left), and the Assignment (on the right).
- One suggestion is to arrange two windows side-by-side on your computer.

Botanist

- [Seeing the Forest & the Trees](#) | [Assignment](#)
- [Animal Signs](#) | [Assignment](#)

Bird Watcher

- [Bird Basics](#) | [Assignment](#)
- [Animal Signs](#) | [Assignment](#)
- [Tree Ring Tool](#) | [Assignment](#)

Population Specialist

- [Animal Signs](#) | [Assignment](#)
- [Tree Ring Tool](#) | [Assignment](#)

Public Health Intern

- [Lyme Disease in Neighborhood](#) | [Assignment](#)
- [Animal Signs](#) | [Assignment](#)
- [Tree Ring Tool](#) | [Assignment](#)

Goals for Today

1. Complete your Scientist Guide Sheets, using the Learning Quests and EcoMUVE
2. Gather Data and Analyze Graphs in EcoMUVE
3. What will go in your Food Web of the organisms involved in the decline in visitorship to Dover Island from the perspective of your role?