

## INTRODUCTION & PURPOSE

Invasive plant species pose a threat to local ecology. The average person walking through a forest may be in awe of all the greenery, but what they do not see are the invasives that hide in plain sight amongst the native species. Invasives can kill off native species by outcompeting for nutrients, water, and space. Invasive species tend to grow in disturbed areas such as: man-made fields, areas cleared in forests by humans, and the edges of trails.

This project focuses on invasive species found at Ansonia Nature Center (ANC) in Ansonia, CT. The four most abundant invasives found at ANC include multiflora rose, Japanese barberry, autumn olive and burning bush (Fig. 1). By identifying common invasives on the property, we hope to see the role that birds play in the spread of invasives at ANC.



**Japanese barberry**

*One of the top six invasive plants in the US, and has red berries that are attractive to birds (3).*



**Multiflora rose**

*Dense, prickly shrub that is spread when animals consume the seeds and subsequently defecate (1).*



**Autumn olive**

*Originally brought to the US in the 1950s for erosion control and wildlife habitat. It spreads when animals consume its berries and defecate nearby (2).*



**Burning bush**

*Forms dense thickets and spreads through animal consumption of berries (3).*

Figure 1. Common invasive species found at Ansonia Nature Center, Ansonia, CT.

## METHODS

- The project was conducted between October 2018- January 2019 at Ansonia Nature Center in Ansonia, CT (Fig. 2).
- Using the forest assessment plan that was done in May 2016, we toured the property, and collected waypoints using a Garmin GPS unit to identify areas of invasive species where they were most prominent.
- Using ArcGIS Online, an interactive map was created.

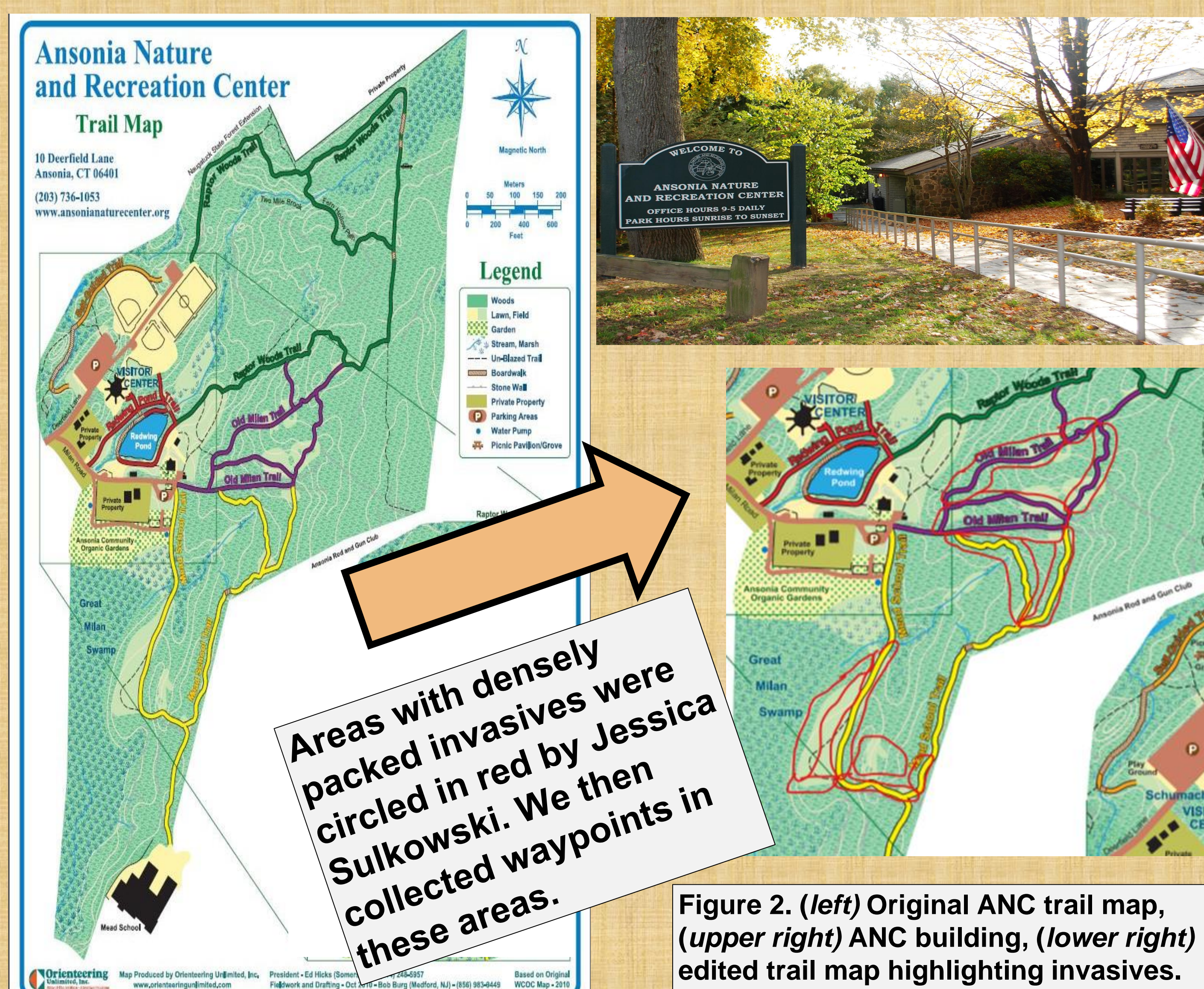


Figure 2. (left) Original ANC trail map, (upper right) ANC building, (lower right) edited trail map highlighting invasives.

## INTERACTIVE MAP

Below is the map, created using ARCGis Online. The pins represent the start and end point of a stretch of invasives. The line in between the same colored pins represent the path between the start and end points where specific invasives were present. Each color represents a different type of invasive. The invasives were not found to be uniformly present on the property, rather, there were pockets of dense invasive growth throughout.



## BIRDS & INVASIVE SPREAD

Invasive species decrease biodiversity, and are one of the largest causes of species extinction (3). Invasive plants that are fruit bearing, such as those found at ANC, are especially easily spread. The berries attract birds as an important food source, and often continue to bear fruit during the winter when food is scarce. The vegetation offers birds protection and habitat. Some of these birds include: waxwings, bluebirds, thrushes, catbirds and orioles (Fig. 4).



Figure 4. The Gray Catbird (left) and a Baltimore Oriole (right) often depend on fruit bearing invasive species, and spread seeds. Photos courtesy of (6) and (7).

## HOW YOU CAN HELP TO STOP THE SPREAD

1. Before and after a hike or time outside, check your shoes, clothes and pets for stowaway seeds
2. Plant only native plants in your garden.
3. Educate yourself on invasive plant identification. You don't want to accidentally remove a native or plant an invasive!

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