



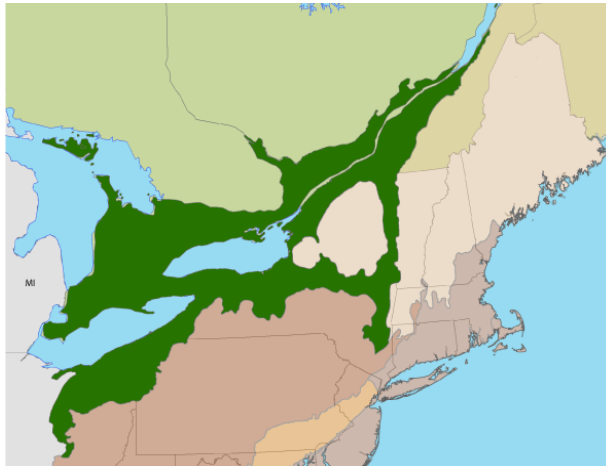
# Wheeler Park Management Proposal

*Shrubland Bird Conservation Management Actions*

*Margaret Fowle, Audubon Vermont*

*Katie Kain, US Fish & Wildlife Service Partner Program*

# Audubon Vermont's Work in the Champlain Valley



# Natural Succession and Young Forest



# Champlain Valley Young Forest/Shrublands





# Variation in bird community



## Priority Species

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American Woodcock

Eastern Towhee

Prairie Warbler

Blue-winged Warbler

Golden-winged Warbler

Field Sparrow

Brown Thrasher

# Habitat Elements from GWWA Working Group

[www.gwwa.org](http://www.gwwa.org)

- 30–70% tall shrubs and saplings (3–13 ft) unevenly distributed as clumps
- Herbaceous openings of mostly forbs with lesser proportions of grasses
- Overstory deciduous trees (5–15/acre) resulting in 10–30% canopy cover
- Well-mixed patches of native shrubs and herbaceous vegetation
- Adjacent hardwood forest



# Priority Management Actions/BMPs

## Remove Invasive plants

- Honeysuckle
- Buckthorn
- Etc.

## Retain few tall trees

- Perching & singing

## Retain native shrubs

- Dogwoods, viburnums, blackberries, etc

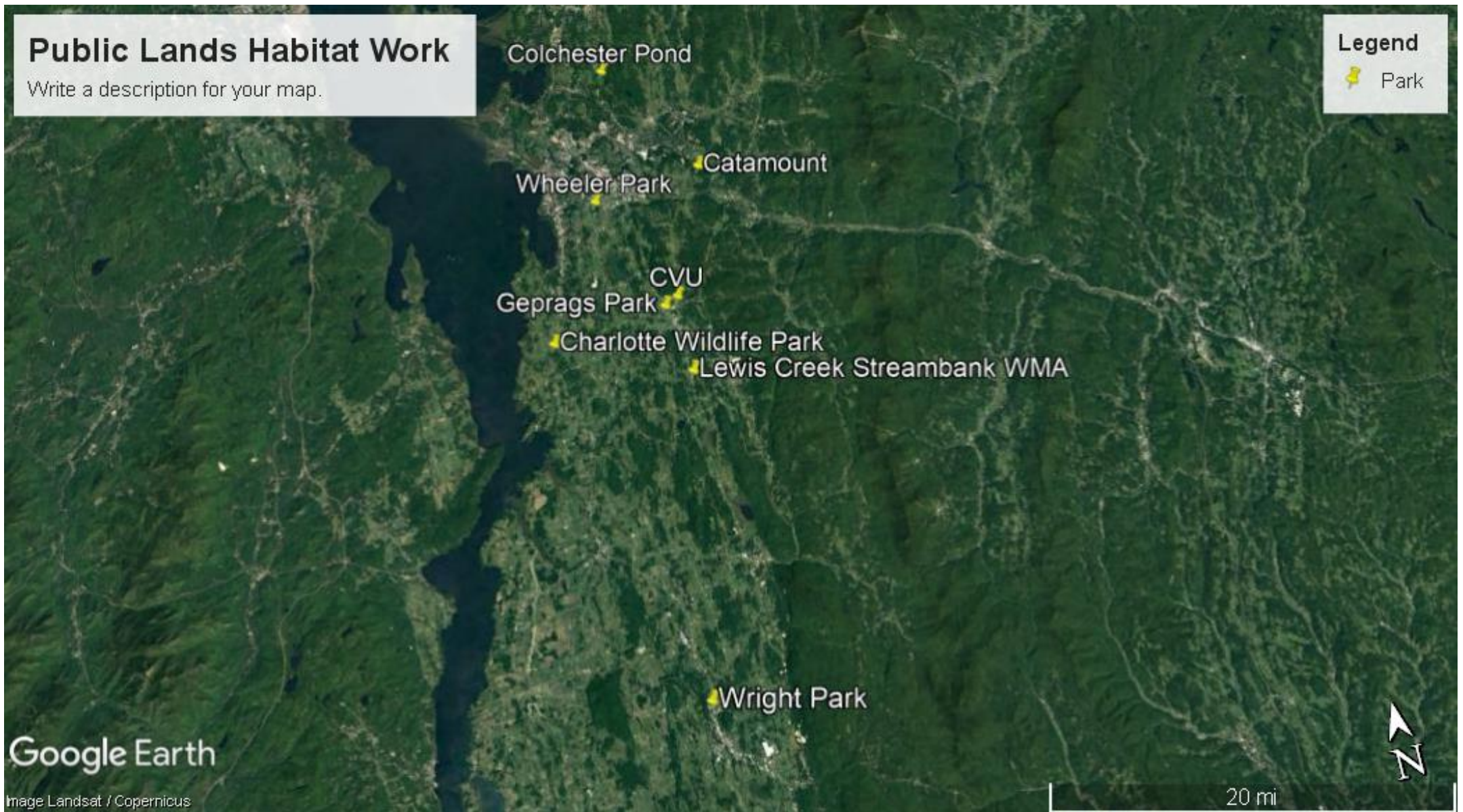
Before







# Public Lands Managed For Young Forest Birds



### Habitat Unit 1: Open Shrubland: 4.3 acres

- Brush hog existing openings in the open field and along the edges every 3-5 years to maintain this habitat
- Target some invasive species for removal
- Brush hog around small dogwoods and other native shrubs such as nannyberry (flagging would be necessary) to allow them to grow and expand
- Allow some native saplings to grow so as to create perching and singing trees

### Habitat Unit 2: Mature Shrubland: 4.1 acres

- Remove invasive plants (primarily honeysuckle and buckthorn) to create openings

*Wheeler Park Management Recommendations, 2020*

pg. 3

- Grind tall (more than 8-10 ft) dogwood thickets to allow for regrowth and height diversity
- Retain existing trees such as elm, oak, and ash
- Maintain openings with brush hog in subsequent years (cut every 3-5 years)

### Habitat Unit 3: Young Forest: 4.8 acres

- Use heavy mechanical grinding to create forb openings, as there is little-no existing forb component
- Invasive plant removal (primarily buckthorn and honeysuckle) would create some necessary openings
- Tall (more than 8-10 ft) dogwood thickets should be ground down to allow for regrowth and height diversity
- Remove small deciduous trees and softwoods such as red cedar and white pine while leaving some large deciduous trees in small patches
- Maintain openings with brush hog in subsequent years (cut every 3-5 years)



	Habitat Unit 1: Open shrubland, 4.3 acres
	Habitat Unit 2: Mature shrubland, 4.1 acres
	Habitat Unit 3: Young forest, 4.8 acres
	Open field/Pollinator habitat, 6.4 acres

## Habitat Management



“Brontosaurus” mulching head/forestry mower is used to mechanically remove woody invasives

## Habitat Management



Small equipment and skilled operator allow for desired habitat features (native shrubs and trees) to be retained

# Habitat Management

After



## Habitat Management: Follow-up

- Follow-up management after the brontosaurus work is crucial!
- Mature buckthorn and honeysuckle individuals that were mowed will re-sprout from the roots
- Existing seeds in the soil may remain viable and germinate in the years after removal
- Management plan must include follow-up to reduce the density of invasive re-growth



# Habitat Management: Follow-up

- Follow-up management can be mechanical (mowing) or chemical (herbicide). Follow-up management plan needs to be in place before starting initial management.

## Herbicide application

- Completed by licensed applicator
- Very targeted (backpack sprayer application)
- Less time intensive compared to manual methods

## Manual/Mowing regime

- Will be needed for several years to continue suppressing growth and deplete energy reserves in the roots
- Some areas (steep or rocky) may not be accessible
- Town's maintenance schedule capacity?





# Post-management Monitoring





# Funding

- Potential for funding availability through the USFWS Partners for Fish & Wildlife Program
- Requires a landowner agreement with the town agreeing to initial work and maintenance regime in future years
- Potential for educational signage, etc
- Follow-up monitoring and wildlife walks with Audubon

## PARTNERS FOR FISH AND WILDLIFE PROGRAM LANDOWNER AGREEMENT

This Landowner Agreement (Agreement), dated November 1, 2018, between Landowner, Audubon Vermont, and the U.S. Fish and Wildlife Service (USFWS) is entered into pursuant to authority contained in the Partners for Fish and Wildlife Act (P.L. 109-294), the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.) and the Fish and Wildlife Act of 1956 (16 U.S.C. 742a-j), as amended. This project was selected because the Landowner shares a common objective with the USFWS to restore habitat for the benefit of Federal trust species on private lands, and the project supports priority actions identified in the Regional Partners for Fish and Wildlife (Partners) Program Strategic Plan.

Landowner hereby agree to participate with the USFWS in conducting certain wildlife management practices on lands owned or managed in Chittenden County, State of Vermont, described as follows: \_\_\_\_\_.

In signing this Agreement, the Landowners join as a participant in a wildlife habitat improvement program and grants to the USFWS and any other cooperators signing this Agreement authority to complete the habitat improvement project or the Landowners may personally carry out management activities with financial or material support as described in attached Exhibit A. Any donation of supplies or equipment to the Landowners for carrying out the habitat improvements is included in Exhibit A. The activities conducted pursuant to this Agreement are not to replace, supplement or otherwise contribute to any mitigation or compensation that may be required of the Landowners or other parties as a result of any mandated requirements.

The term of this Agreement (also referred to as the habitat retention period) will be completed on December 1, 2028. This Agreement may be modified at any time by mutual written consent of the parties. It may be terminated by either party upon 30 days advance written notice to the other party. However, if the Landowner terminates the Agreement before its expiration, or if the Landowner should materially default on these commitments, then the Landowner agrees to reimburse the USFWS prior to final termination for the prorated costs of all habitat improvements placed on the land through this Agreement. For these purposes, the total cost of the habitat improvements to the United States is agreed to be \$ \_\_\_\_\_.

### Landowner:

The Landowner or his/her land manager, with legal authority over land management decisions, guarantees ownership of the above-described land and warrants that there are no outstanding rights that interfere with this Landowner Agreement.





# Questions?

