

APPENDIX 1 – Planting Suggestions

1. Shade Tolerant – species to consider for underplanting

a. Trees

Red maple (*Acer rubrum*)
American hornbeam (*Carpinus caroliniana*)
Beaked hazelnut (*Corylus cornuta*)
Flowering Dogwood (*Cornus florida*)
American Holly (*Ilex opaca*)
Eastern hemlock (*Tsuga canadensis*)—with protection from adelgid

b. Shrubs

Hobblebush (*Viburnum lantanoides*)
Leucothoe (*Leucothoe axillaris*)
Mountain laurel (*Kalmia latifolia*)—*there is virtually no natural mountain laurel out there!*
Witch-hazel (*Hamamelis virginiana*)
Arrowwood viburnum (*Viburnum dentatum*)
Spicebush (*Lindera benzoin*) *tolerates high moisture content
Winterberry (*Ilex verticillata*) *tolerates high moisture content

2. Shade Intolerant and Moderately Shade Tolerant – species to consider for planting along forest edges

a. Trees

Red maple (*Acer rubrum*)
Chestnut oak (*Quercus montana*)
Hickory spp. (*Carya* spp.)

b. Shrubs

Bear oak (*Quercus ilicifolia*)
Nannyberry (*Viburnum lentago*)
Highbush blueberry (*Vaccinium corybosum*)
Arrowwood viburnum (*Viburnum dentatum*)*
Sumac spp. (*Rhus* spp.), including staghorn, smooth and winged sumac

c. Groundcover

Bearberry (*Arctostaphylos uva-ursi*)

*Note that arrowwood viburnum can become infested with an invasive insect, the viburnum leaf beetle. Some other viburnums that are more resistant could be considered, including nannyberry (*Viburnum lentago*). For more information, including a comprehensive list of alternative viburnums that are most and least susceptible, see https://portal.ct.gov/-/media/caes/documents/publications/fact_sheets/entomology/viburnumleafbeetlepdf.pdf

Chestnut oak, bear oak, pitch pine are rugged and very drought-tolerant, as future climate adaptation. Drought-tolerant species are more recommended today for general use on dry and moderate sites, although on any larger scale, natural regeneration and the silviculture to encourage it is more effective and efficient. Any naturally occurring native trees can also be planted to supplement natural regeneration.

American holly is a suggestion, as well, a species that is not commonly seen but is considered native or marginally native.

In **wetland** areas and damp floodplain areas, you could consider native blackgum, sycamore, silver maple, river birch, pin oak, willows (natives, not weeping willow), tulip-poplar, pin oak, swamp white oak, cottonwood, black walnut. Tulip-poplar grows straight, tall and fast in full sunlight and has the ability to be the largest hardwood tree on the east coast. Also great on those wet sites are alders, buttonbush, spicebush, winterberry, sweet pepperbush. Trees and shrubs from slightly further south can be considered as adaptation to a warming climate, included eastern redbud, a wonderful early spring flowering shrub, and sweetgum. Elderberry, red osier dogwood, gray dogwood, silky dogwood, and hazelnuts are great native plantings, as well. Always know the lighting requirements before selecting and planting. You are probably best consulting with an arborist or discuss with your nursery.

Here is a great slideshow of native plants for “wet meadows”: [PowerPoint Presentation](#)

You *could* also consider the following species that are borderline native or occur just to our south, as part of climate adaptation:

Hackberry
Post oak
Dwarf chinkapin oak
Bur oak
Willow oak
Red mulberry
Common persimmon
Sweetbay magnolia

Consult this comprehensive list!

[2025 Connecticut Native Tree, Shrub, and Perennial Availability List](#)

Deer-resistant plants:

[DEER RESISTANT NATIVE PERENNIALS | Connecticut Invasive Plant Working Group](#)

See also the handout from a DEEP Wildlife Biologist, next page, on native plants that tend to form great cover thickets and can replace your invasive shrubs.

APPENDIX 2

THICKET FORMING NATIVE PLANTS THAT CREATE PREDATOR AVOIDANCE COVER:

Fall Berries:

Arrowwood Viburnum (*Viburnum recognitum*)
Nannyberry Viburnum (*Viburnum lentago*)
Gray dogwood (*Cornus racemosa*)

Winter Persistent Berries:

Winterberry (*Ilex verticillate*)
Northern bayberry (*Myrica pensylvanica*)
Staghorn sumac (*Rhus typhina*)
Smooth sumac (*Rhus copallina*)
Pasture juniper (*Juniperus communis*)
Black chokeberry (*Aronia melanocarpa*)
Red Chokeberry (*Aronia arbutifolia*)
Swamp rose (*Rosa palustris*)
Carolina rose (*Rosa carolina*)
Virginia rose (*Rosa virginiana*)

Special thanks to Pete Picone, DEEP Wildlife Biologist, for this additional information, 860-424-3032, peter.picone@ct.gov.



On wet sites, sweet pepperbush makes an excellent native thicket-forming shrub (above photo from Woodbridge, CT). Alders can do the same.

APPENDIX 3 -- SILVOPASTURE

The basic recipe that works well here is:

1. Early summer or fall prior kill any understory invasive shrubs/vines (fully kill with herbicide or pulling out, not top-kill)
2. July-August during a dry period, harvest timber similar to how one might establish a shelterwood (leave 30-50 sqft basal area or so depending on what's there and mostly eliminate the midstory/low shade).
 - o Either whole tree harvest and chip slash or pile slash with a grapple skidder during the harvest to get it off the ground and off-site. Make some rabbitat
 - o Do not pull stumps, it'll wreck the residual tree health. Just have loggers cut stumps low, or grind stumps if the farmer has money to burn.
3. Mid-August – Mid September seed forages when timber harvest is complete. Broadcast seeding works well and I encourage the use of orchardgrass in the mix because it establishes well. Exclude livestock until the following spring.
 - o Skidding will create enough scarification to create a good seed bed.
4. Amend soils with lime if needed/desired (I tend not to because of cost but would like to). This can be done right after timber harvest but before forage seeding. It can also be done later in the fall on frozen ground or in future years.
5. Important! The site must be rotationally grazed starting the following May. Grazing should occur when grasses are about 6" tall in the spring and livestock must be removed when grazing brings those grasses to an average of 3" tall. Then grazing should occur about a month later in June and periodically through the growing season with short grazing periods (1-3 days) followed by long periods of regrowth (30-60 days depending on rain).
 - o The goal here is to create a disturbance regime that defoliates woody plants while favoring grasses by allowing them to regrow.
6. Woody vegetation management might be needed in future years if grazing does not meet targets and/or there is a lot of difficult vegetation in the seedbank.

Here are some resources:

- Attached is a simple guide I put together a while back. It has some images of good and bad practices.
- Also is a commentary I published in the Journal of Forestry
- The Graze Magazine article is from Brett Chedzoy and a good account of managing vegetation in silvopastures.
- Here's a link to a series of videos we made with CornellSmallFarms program. They are a good primer on forest > silvopasture : <https://www.youtube.com/playlist?list=PLB3pvIz7iiEGx8D6sc94ENzJFCkoryND>
- Here's a silvopasture assessment guide from Cornell: https://blogs.cornell.edu/ccforestconnect/files/2022/05/final_edits_Assessing-Woodlands-for-Silvopasture.pdf
- Here's a silvopasture site appropriateness checklist from Cornell: <https://cpb-us-e1.wpmucdn.com/blogs.cornell.edu/dist/d/5957/files/2015/03/Silvopasture-Site-Assessment-2017-2eceaouq.pdf>

Joseph Orefice, Ph.D.

Lecturer and Director of Forest & Agricultural Operations

518-354-3170

joseph.orefice@yale.edu



Yale School of the Environment

The Forest School

environment.yale.edu

<https://forests.yale.edu/>



Kycia Farm
Town of Wethersfield
Highland Street
31 total acres
Aerial Photo Base Map

Collier
Road


Highland
Street

Highcrest
Road

0 100 200 400
Feet

Prepared by David Irvin
DEEP Service Forester
david.irvin@ct.gov
Prepared for Town of Wethersfield
Oct. 2, 2025

Legend

 Kycia Town Parcels




Kycia Farm
Town of Wethersfield
Highland Street
31 total acres
Elevation-Hillshade LiDAR Map

0 100 200 400
Feet

Prepared by David Irvin
DEEP Service Forester
david.irvin@ct.gov
Prepared for Town of Wethersfield
Oct. 2, 2025

Legend

 Kycia Town Parcels



Kycia Farm
Town of Wethersfield
Highland Street
31 total acres
Farmland Soils Map



0 100 200 400
Feet

Prepared by David Irvin
DEEP Service Forester
david.irvin@ct.gov
Prepared for Town of Wethersfield
Oct. 2, 2025

Soils Farmland
Classification 2023
Farmland
Classification

Legend

- Farmland of local importance
- Farmland of statewide importance
- Kycia Town Parcels

All areas are prime farmland







Kycia Farm
Town of Wethersfield
Highland Street
31 total acres
Wetland Soils Map



Prepared by David Irvin
DEEP Service Forester
david.irvin@ct.gov
Prepared for Town of Wethersfield
Oct. 2, 2025

0 100 200 400
Feet

Legend

- Soils Inland
Wetland 2023
CTInWet
-  CT nonwetland
 -  CT wetland
 -  <all other values>
 -  Kycia Town Parcels



Kycia Farm
Town of Wethersfield
Highland Street
31 total acres
Greenways-Young Forest Map

0 100 200 400
Feet

Prepared by David Irvin
DEEP Service Forester
david.irvin@ct.gov
Prepared for Town of Wethersfield
Oct. 2, 2025

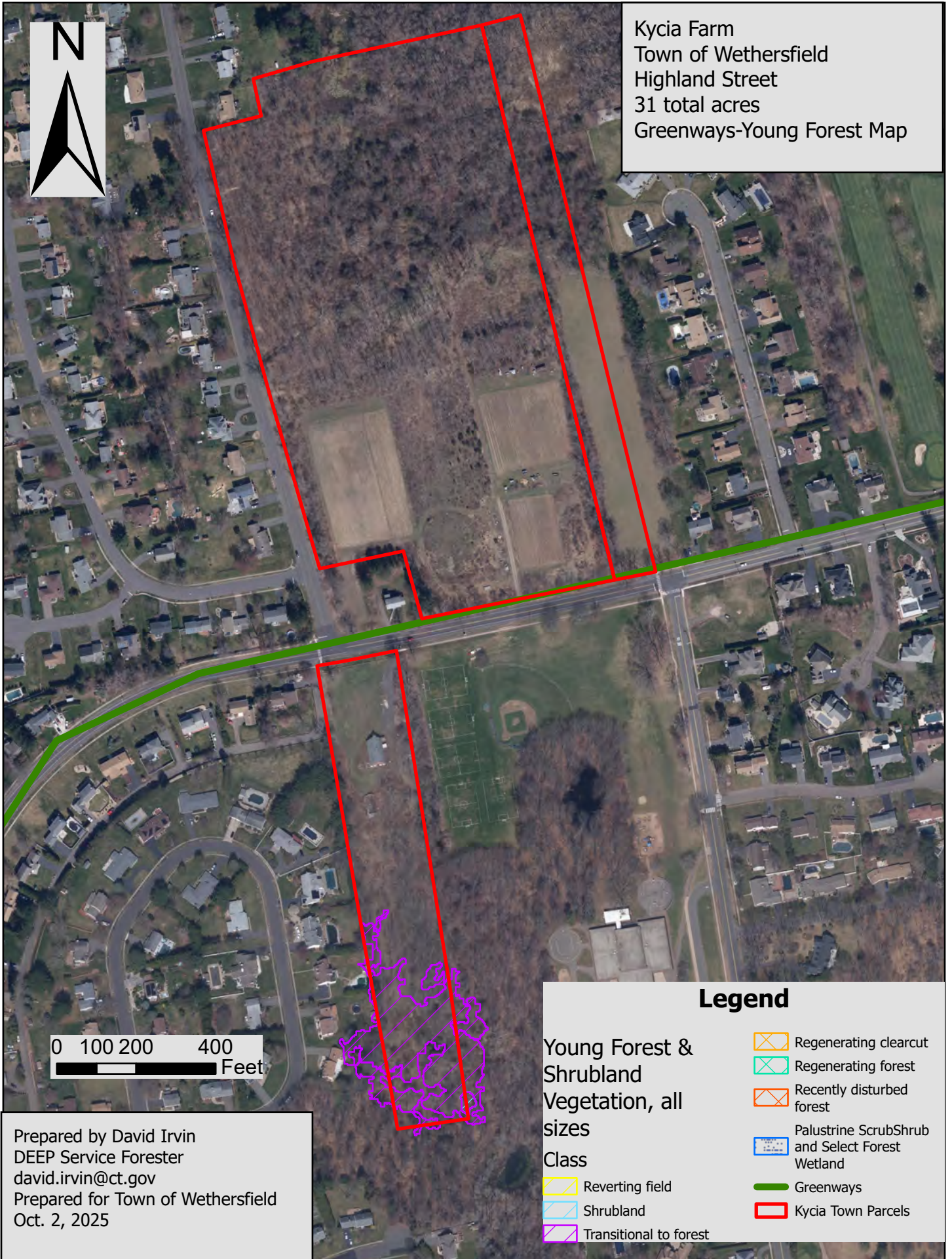
Young Forest &
Shrubland
Vegetation, all
sizes

Class

- Reverting field
- Shrubland
- Transitional to forest

Legend

- Regenerating clearcut
- Regenerating forest
- Recently disturbed forest
- Palustrine ScrubShrub and Select Forest Wetland
- Greenways
- Kycia Town Parcels





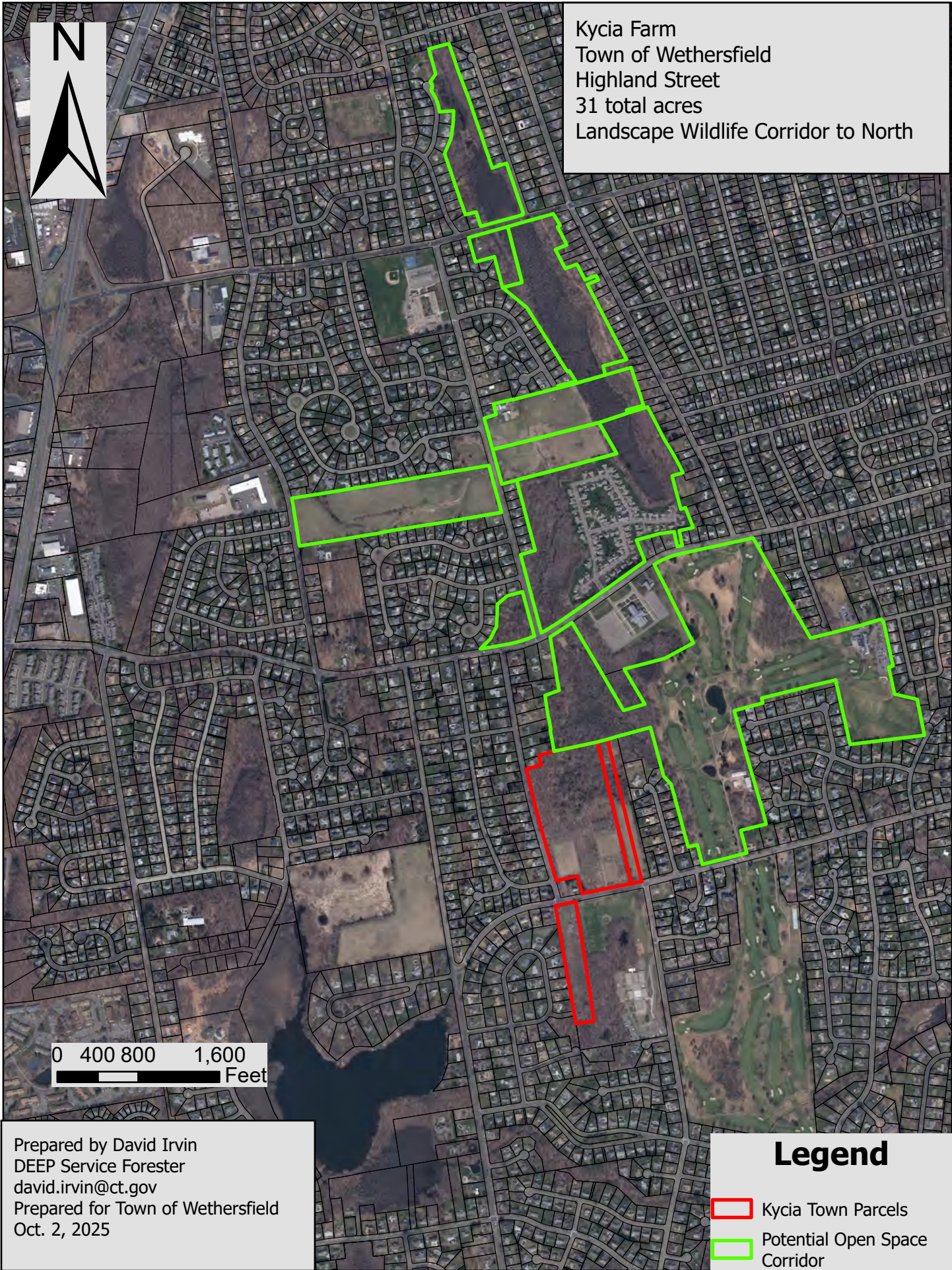
Kycia Farm
Town of Wethersfield
Highland Street
31 total acres
Other Protected Open Space Map



0 400 800 1,600
Feet

- Legend**
- Protected Open Space View
- Federal
 - Land Trust
 - Municipal
 - Private
 - State
 - Kycia Town Parcels

Prepared by David Irvin
DEEP Service Forester
david.irvin@ct.gov
Prepared for Town of Wethersfield
Oct. 2, 2025





Kycia Farm
Town of Wethersfield
Highland Street
31 total acres
Landscape Wildlife Corridor to North



0 400 800 1,600
Feet

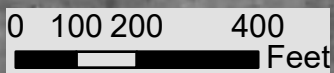
Prepared by David Irvin
DEEP Service Forester
david.irvin@ct.gov
Prepared for Town of Wethersfield
Oct. 2, 2025

Legend

-  Kycia Town Parcels
-  Potential Open Space Corridor




Kycia Farm
Town of Wethersfield
Highland Street
31 total acres
1934 Aerial Photo Map



Prepared by David Irvin
DEEP Service Forester
david.irvin@ct.gov
Prepared for Town of Wethersfield
Oct. 2, 2025

Legend

 Kycia Town Parcels