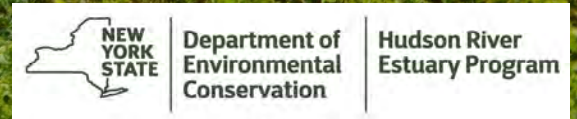


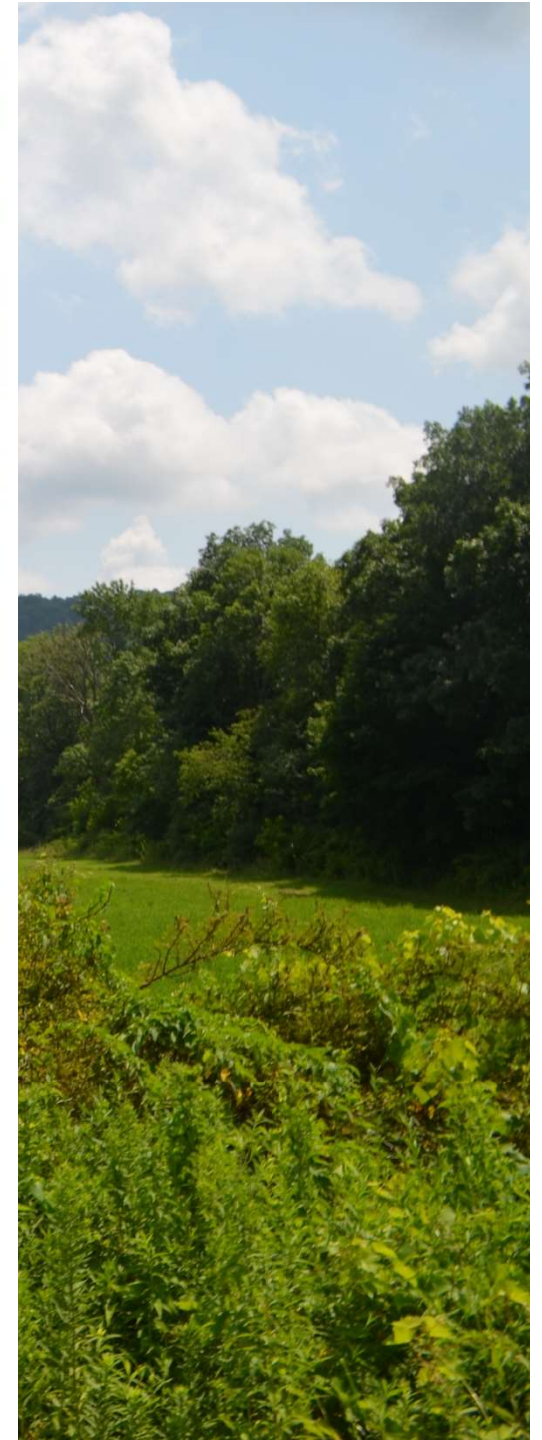
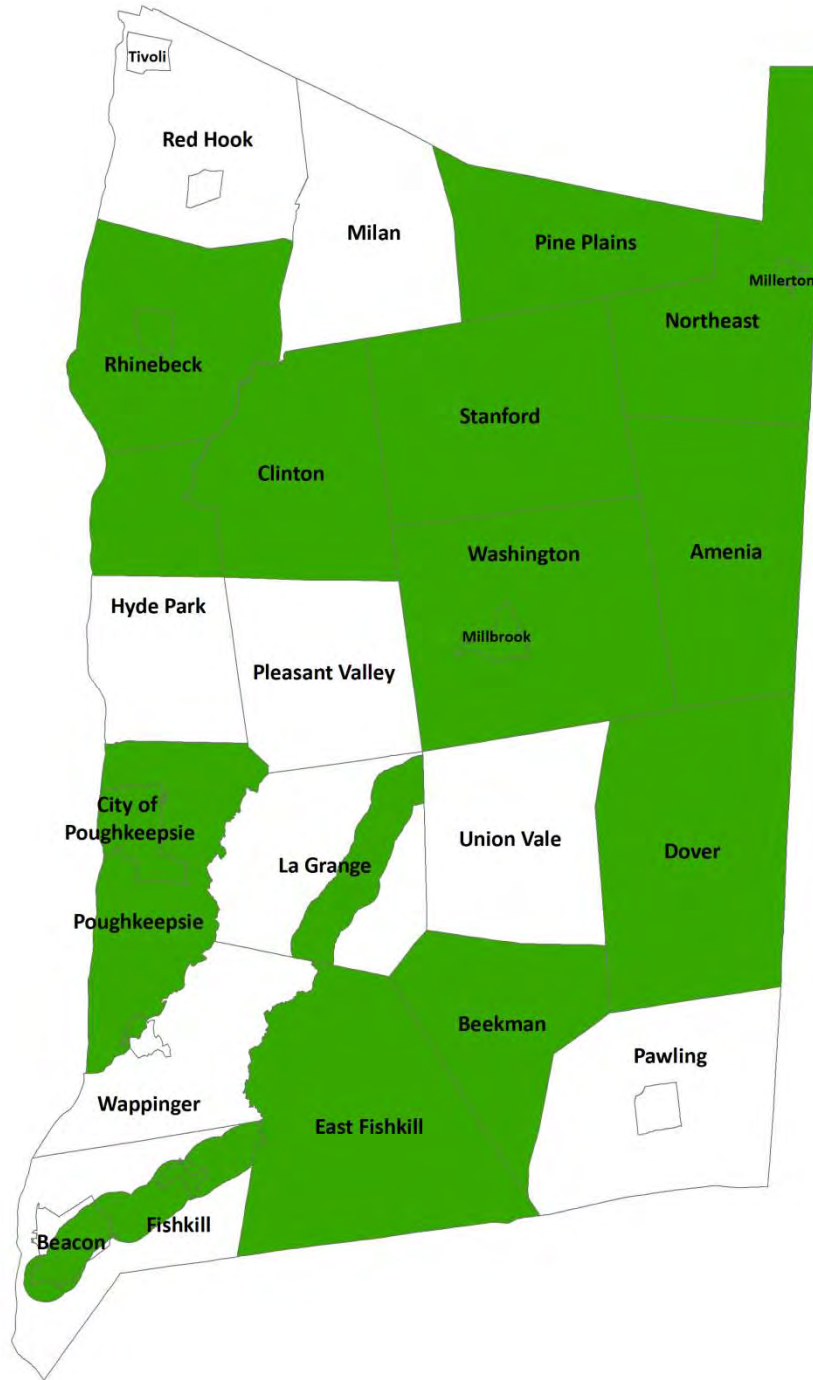
HABITAT MAPS FOR DUTCHESS COUNTY

Resources for Planning & Conservation

Gretchen Stevens
Hudsonia Ltd.
stevens@bard.edu

Hudsonia Ltd.





SIGNIFICANT HABITATS

**IN THE TOWN OF CLINTON,
DUTCHESS COUNTY, NEW YORK**

All reports are available at
<https://hudsonia.org/programs/biodiversity-resources-center/habitat-mapping/>

SIGNIFICANT HABITATS

**IN THE TOWN OF RHINEBECK,
DUTCHESS COUNTY, NEW YORK**

SIGNIFICANT HABITATS

**IN THE TOWN OF BEEKMAN,
DUTCHESS COUNTY, NEW YORK**



FUNDING SOURCES

City of Poughkeepsie

Dutchess Land Conservancy

Dyson Foundation

Hudson River Estuary Program

Marilyn Milton Simpson Charitable Trust

Millbrook Tribute Garden

Town of Beekman

Town of Dover

Town of Rhinebeck

Town of Poughkeepsie



PURPOSE:

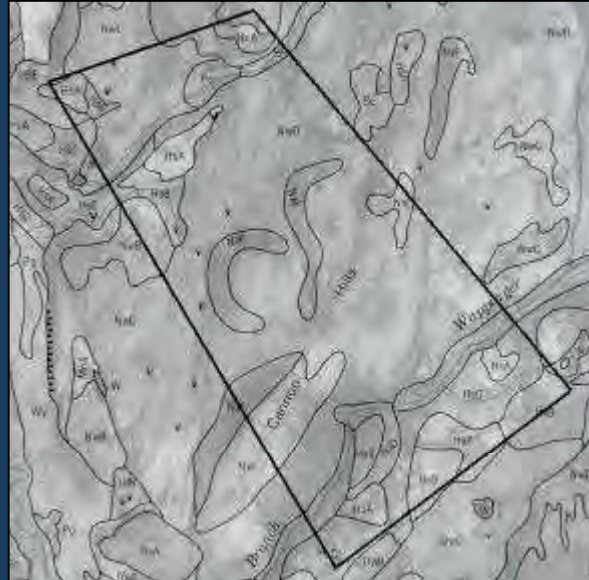
To bring the science of biodiversity
and water resource conservation
to land use planning and decision-making.

Methods: analyze remote data

topographic
maps



soils
maps



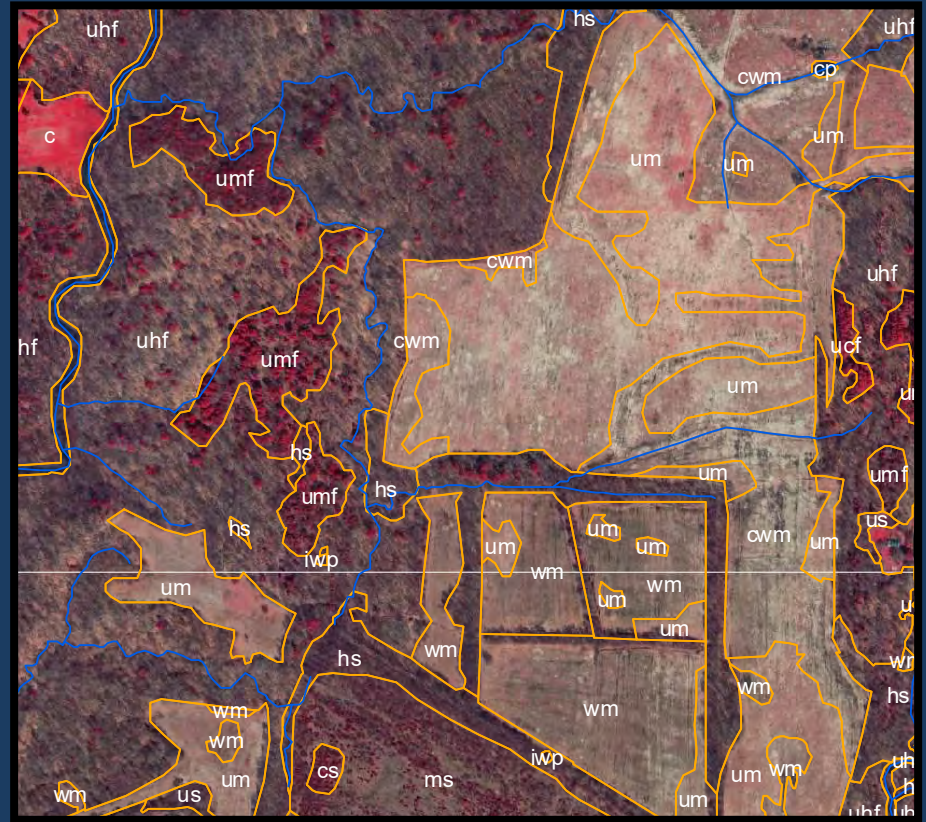
geology
maps



aerial
photos



Methods: preliminary map





Methods: field observations





Kristen Bell



Kristen Bell



Laura Heady

□ Town boundary

— Road

— Stream

Habitats

■ Upland hardwood forest

■ Upland mixed forest

■ Upland conifer forest

■ Red cedar woodland

■ Barren

■ Upland shrubland

■ Upland meadow

■ Orchard/plantation

■ Cultural

■ Waste ground

■ Hardwood & shrub swamp

■ Mixed forest swamp

■ Conifer swamp

■ Acidic bog

■ Intermittent woodland pool

■ Kettle shrub pool

■ Buttonbush pool

■ Marsh

■ Wet meadow

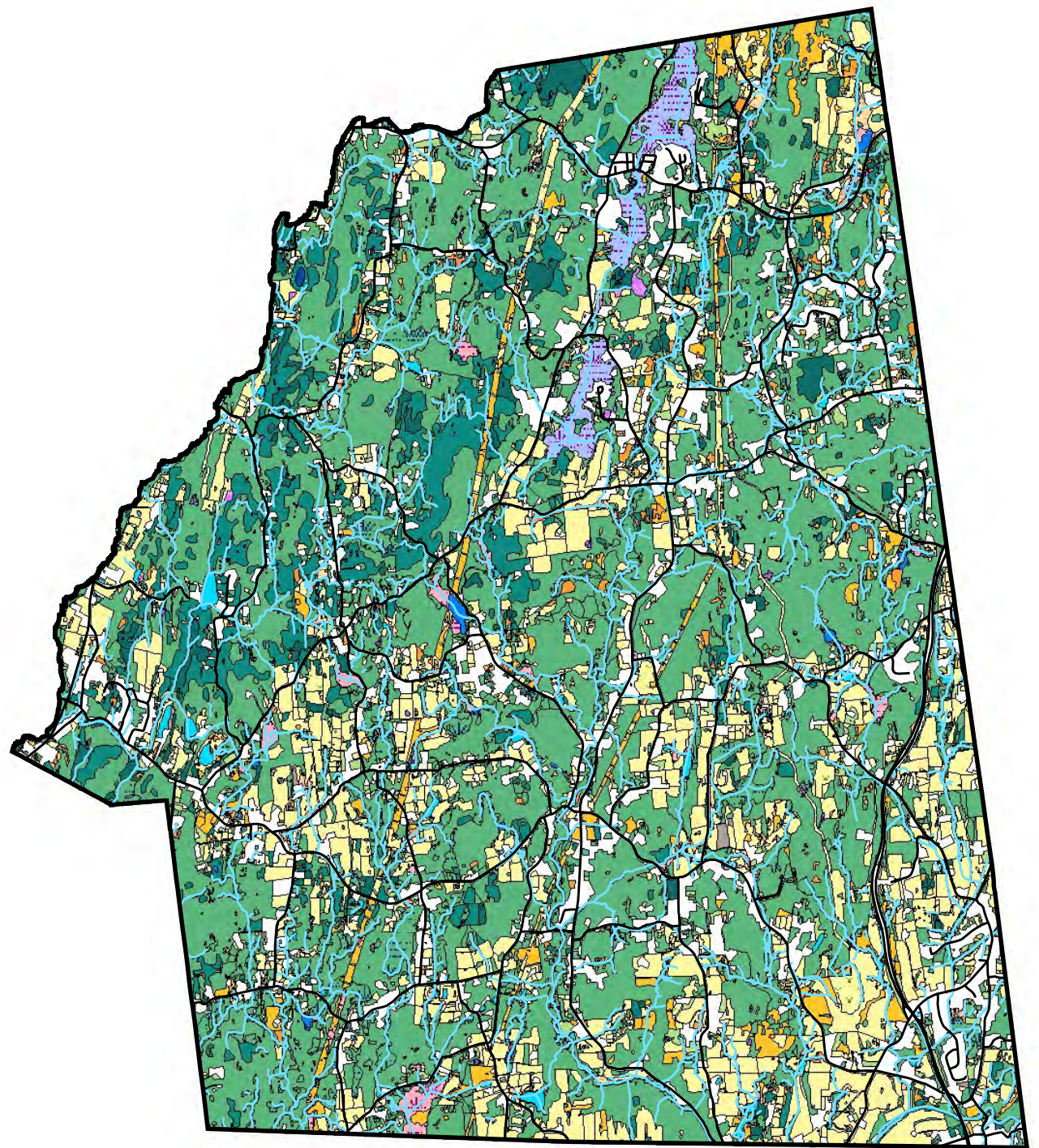
■ Calcareous wet meadow




■ Fen

■ Circumneutral bog lake

■ Open water

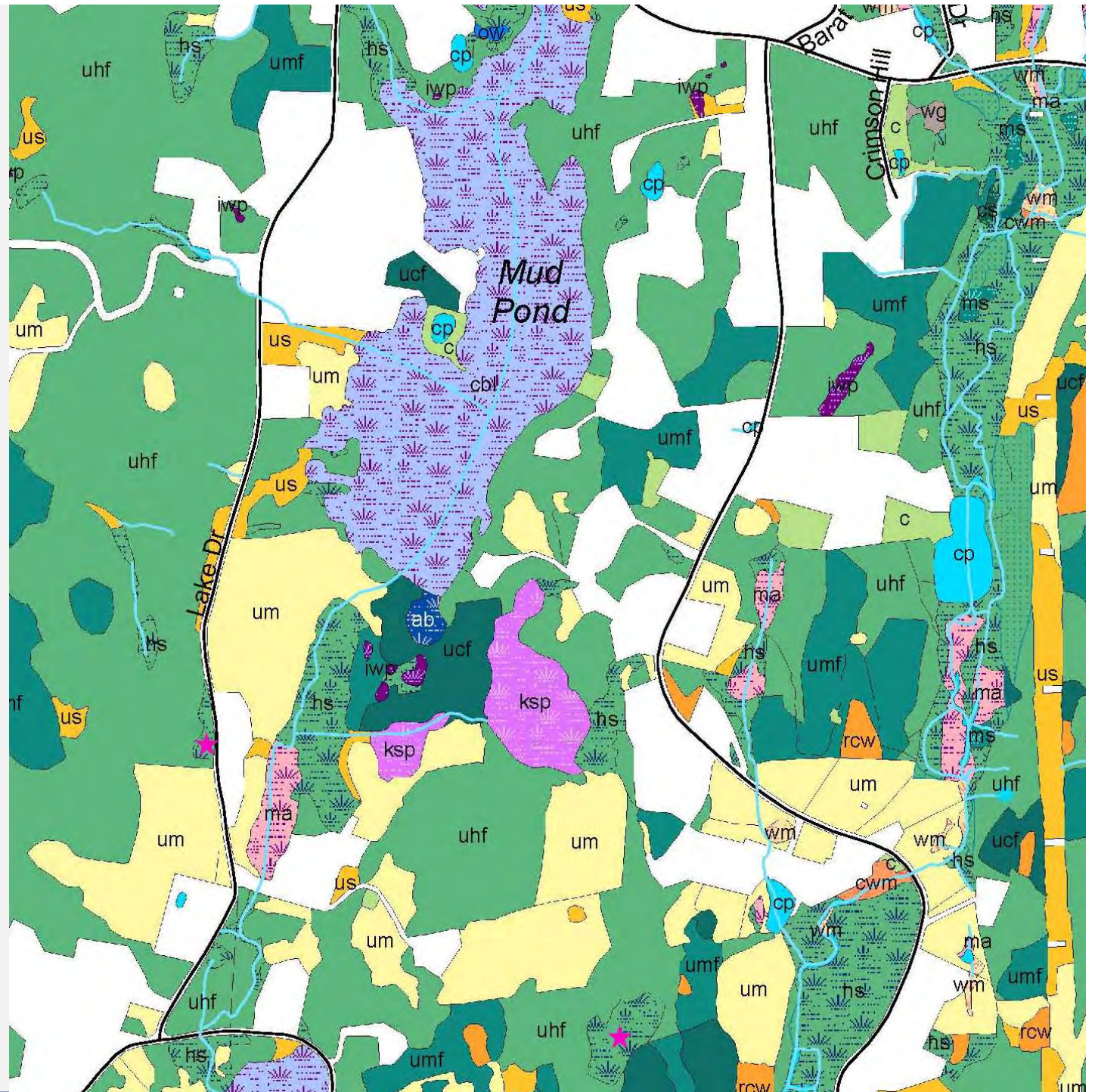
■ Stream/constructed pond



-  Town boundary
-  Road
-  Stream

Habitats

-  Upland hardwood forest
-  Upland mixed forest
-  Upland conifer forest
-  Red cedar woodland
-  Barren
-  Upland shrubland
-  Upland meadow
-  Orchard/plantation
-  Cultural
-  Waste ground
-  Hardwood & shrub swamp
-  Mixed forest swamp
-  Conifer swamp
-  Acidic bog
-  Intermittent woodland pool
-  Kettle shrub pool
-  Buttonbush pool
-  Marsh
-  Wet meadow
-  Calcareous wet meadow
-  Fen
- Circumneutral bog lake
- Open water
- Stream/constructed pond



A photograph of a large forest. In the foreground, several tall, dark tree trunks stand vertically, framing the view. The background is a vast, dense forest of green trees, extending to a hazy horizon under a bright sky. A blue rectangular box with white text is overlaid at the top center.

Large Forest

Chris Grahám



Chris Graham

Figure 4. Contiguous forest patches (swamps) in the Town of Clinton

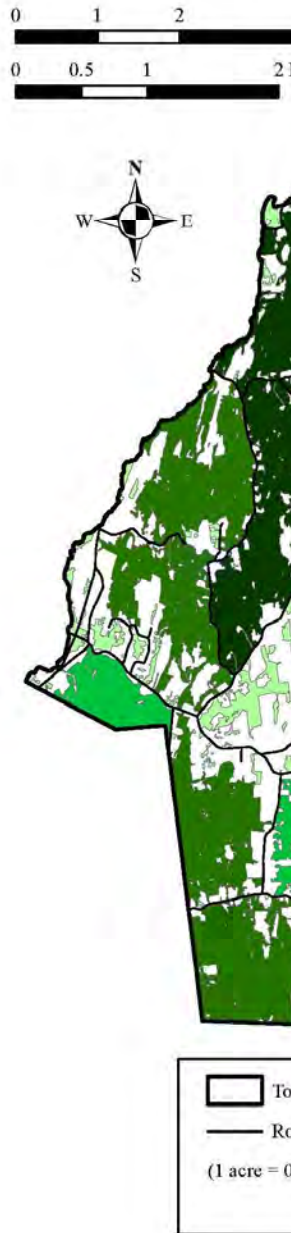


Figure 5. Rocky barrens and their 3,000 ft (914 m) buffer zones of calcareous and non-calcareous crustaceans in the Town of Clinton, New York. Crest, ledge, and talus loam. Hudsonia Ltd., 2012.

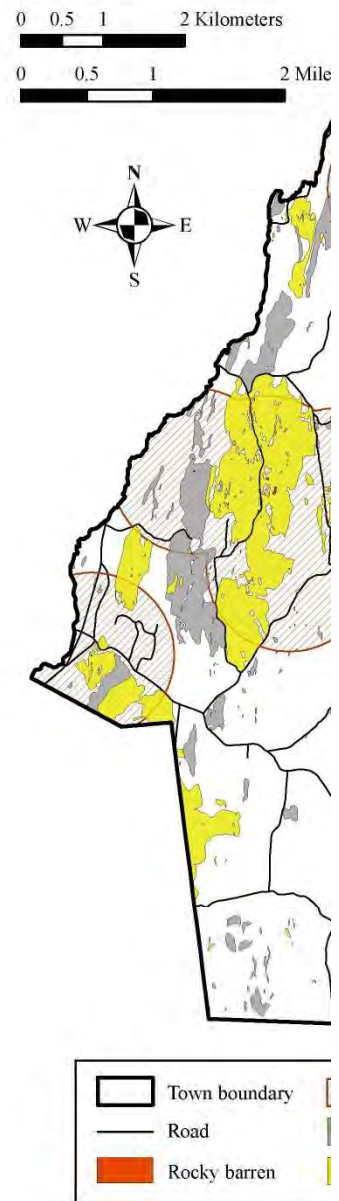
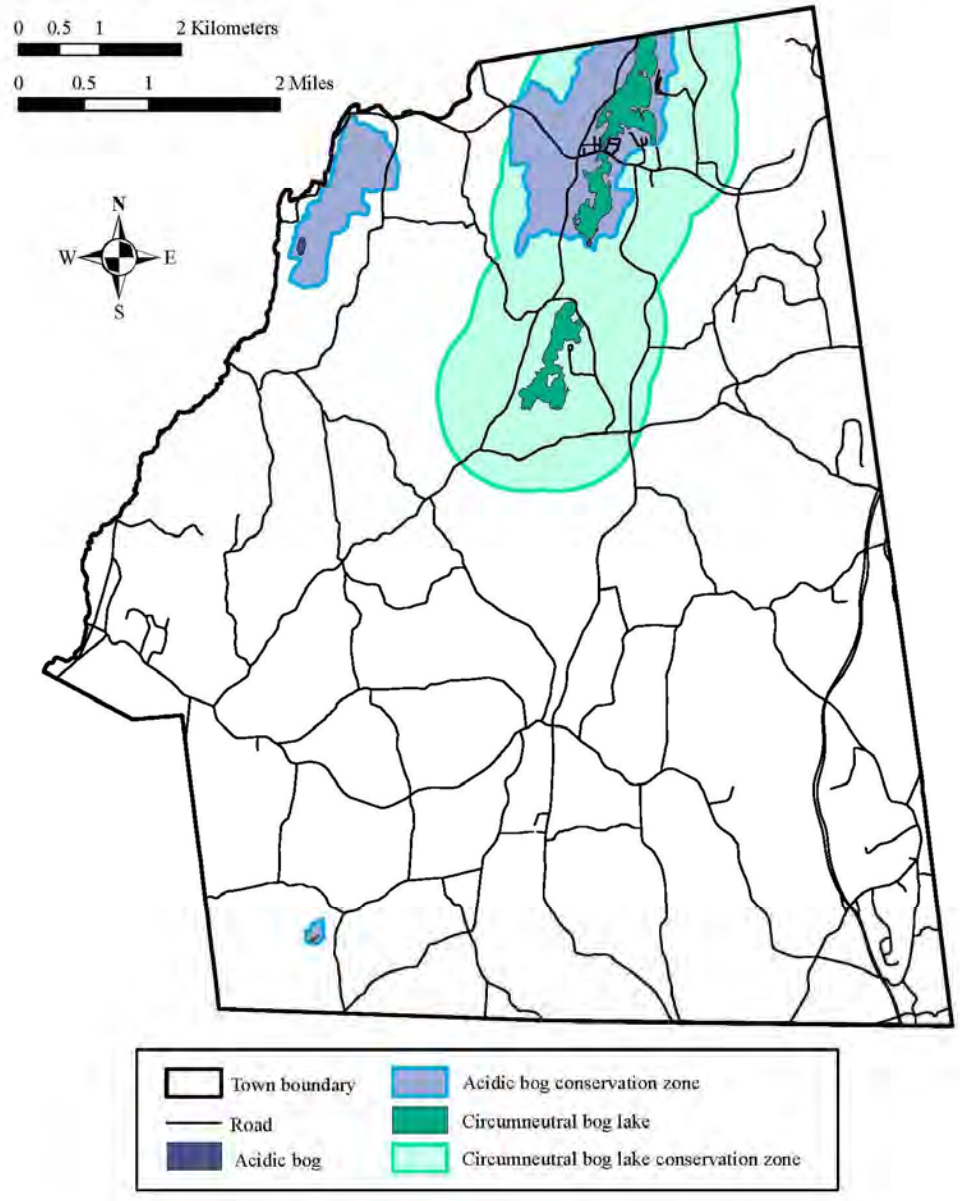


Figure 7. Acidic bogs and circumneutral bog lakes with associated conservation zones in the Town of Clinton, Dutchess County, New York. Acidic bog conservation zones encompass the entire bog watershed within the Town of Clinton; circumneutral bog lake conservation zones measure 3,300 ft (1,000 m) from the lake edge. Hudsonia Ltd., 2012.

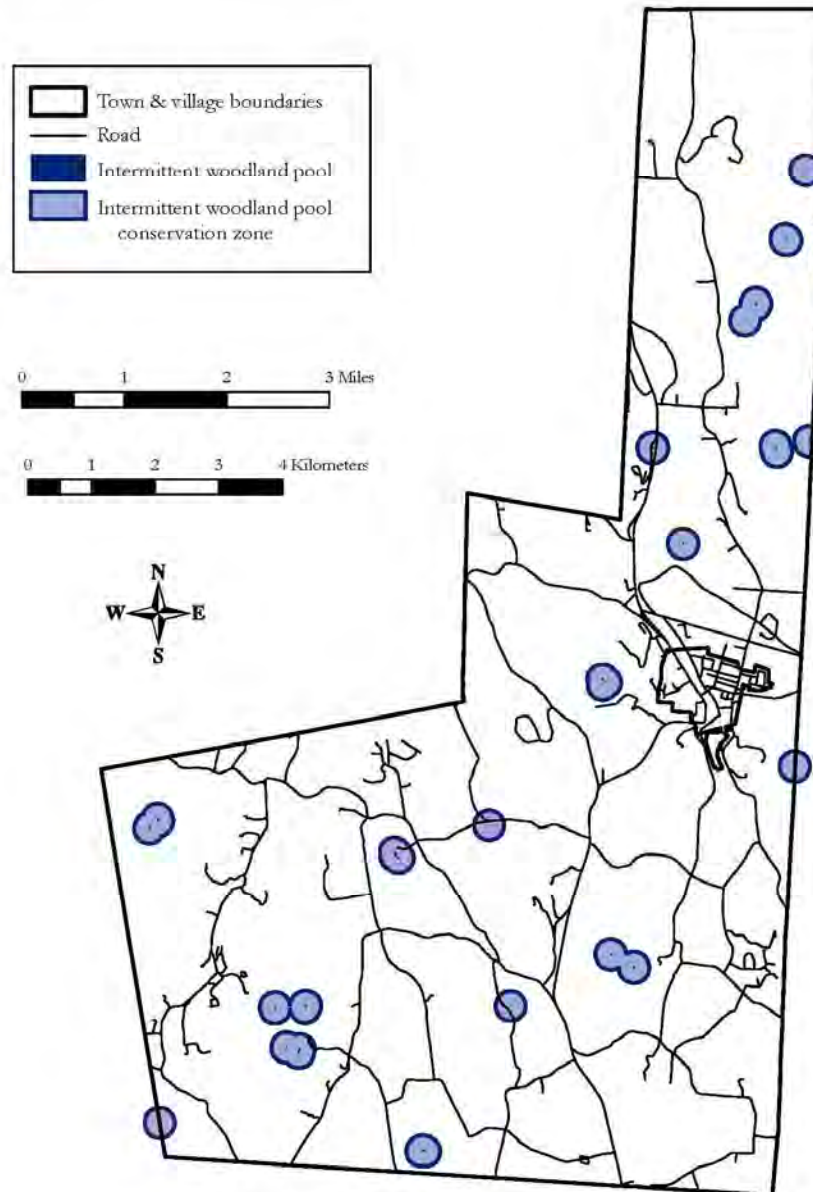


Meadow



Chris Graham

Figure 8. Intermittent woodland pools and their associated conservation zones in the Town of North East, Dutchess County, New York. Intermittent woodland pool conservation zones extend 750 ft (230 m) from wetland boundaries. Hudsonia Ltd., 2007.





Vernal Pool

(=Intermittent Woodland Pool)



A photograph of a forest floor with a blue text overlay. The background shows a dense forest with trees and fallen leaves. The text overlay is a dark blue rectangle with white text. The text reads: "Hudsonia's habitat maps for eight towns show many more wetlands than the National Wetland Inventory maps: 5434 more wetlands (+77%) 3962 more small wetlands (+115%) 3839 additional wetland acres (+24%)".

Hudsonia's habitat maps for eight towns show many more wetlands than the National Wetland Inventory maps:

5434 more wetlands (+77%)

3962 more small wetlands (+115%)

3839 additional wetland acres (+24%)

Municipal uses of habitat information



Photos: Chris Graham

Municipal uses of habitat information

- Identify local conservation priorities
- Update the municipal comprehensive plan
- Designate Critical Environmental Areas
- Improve zoning and subdivision regulations
- Inform the SEQR review of proposed development projects



Priority Conservation Areas (Amenia)

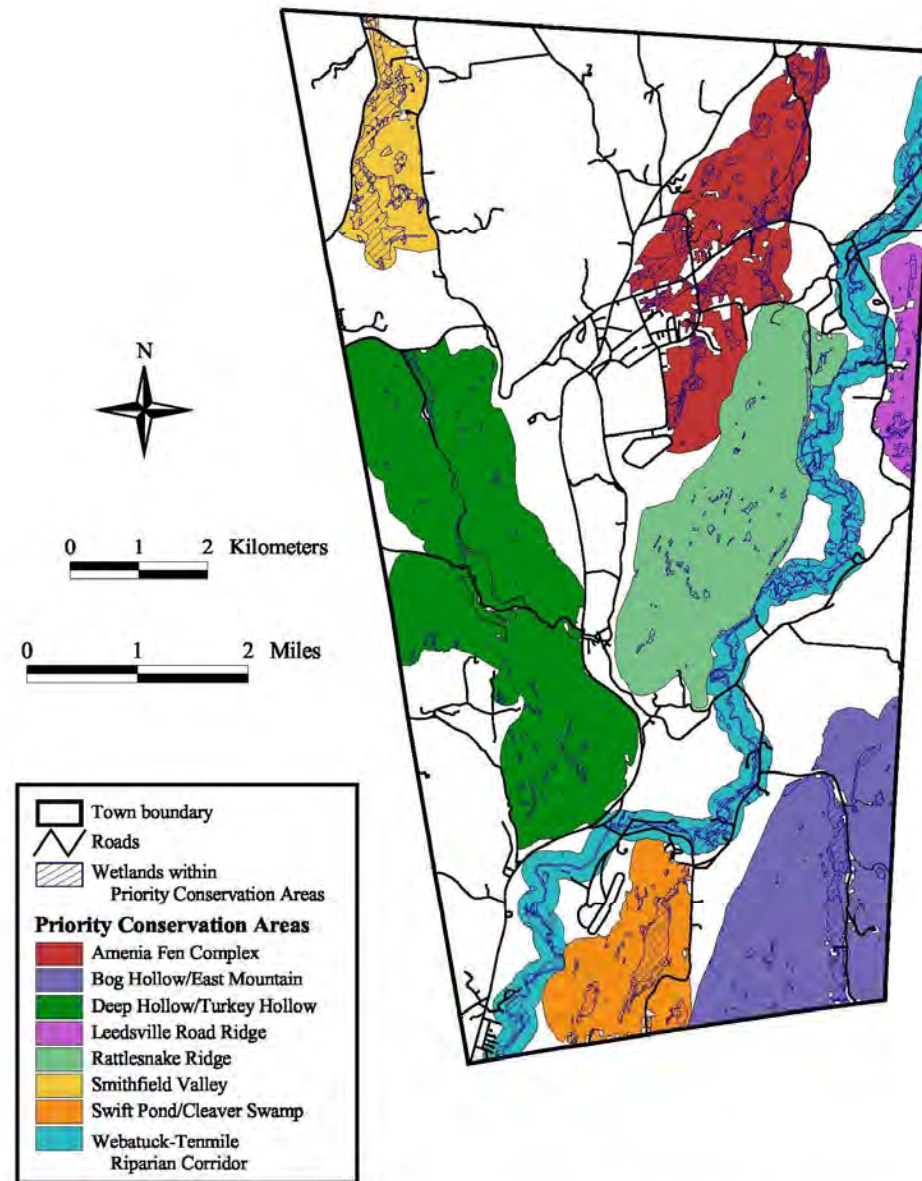


Figure 11. Priority Conservation Areas in the Town of Amenia, Dutchess County, New York. The map shows areas with especially high biodiversity value, but does not depict all areas of

Fen



Marble Knoll



Chris Graham © 2018

Priority Conservation Areas (Amenia)

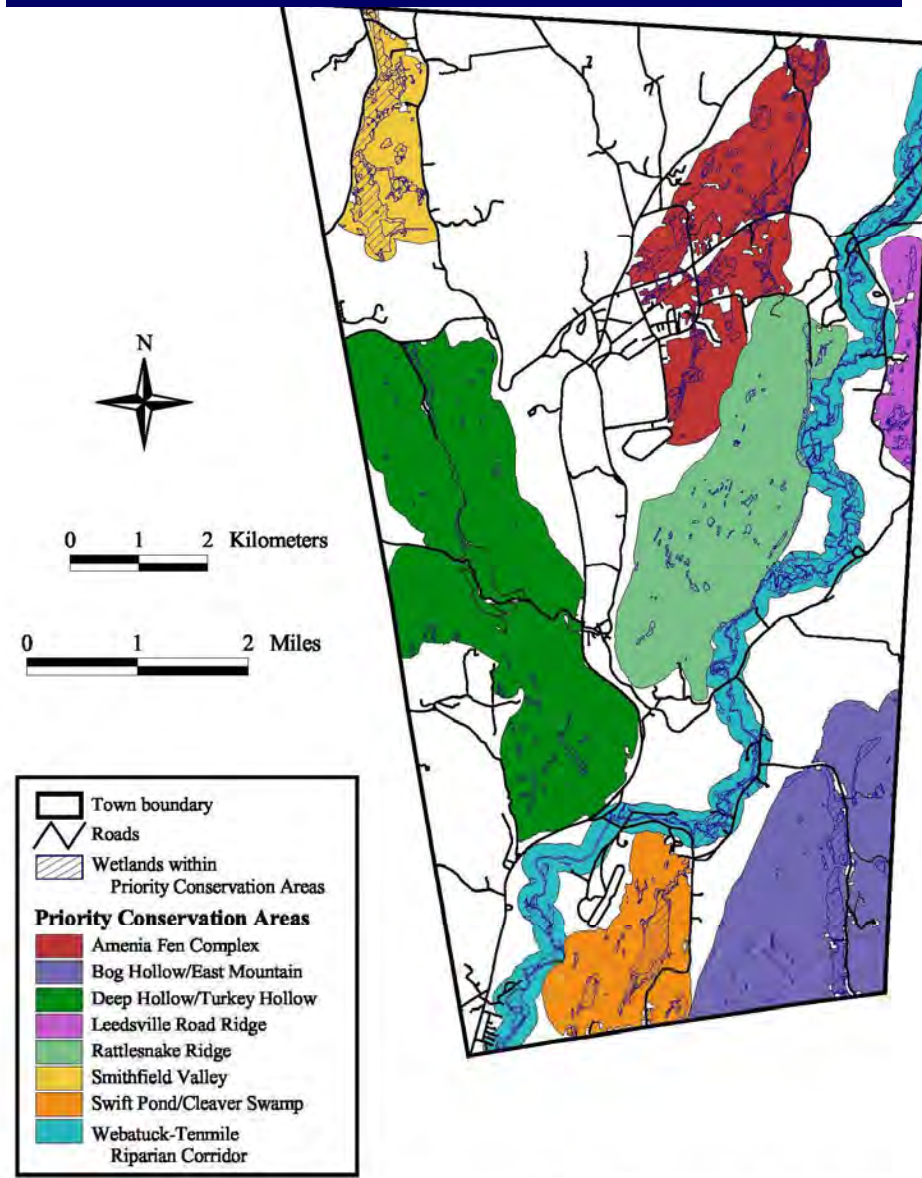


Figure 11. Priority Conservation Areas in the Town of Amenia, Dutchess County, New York. The map shows areas with especially high biodiversity value, but does not depict all areas of conservation concern. Hudsonia Ltd., 2006.

Priority Conservation Areas (Stanford)

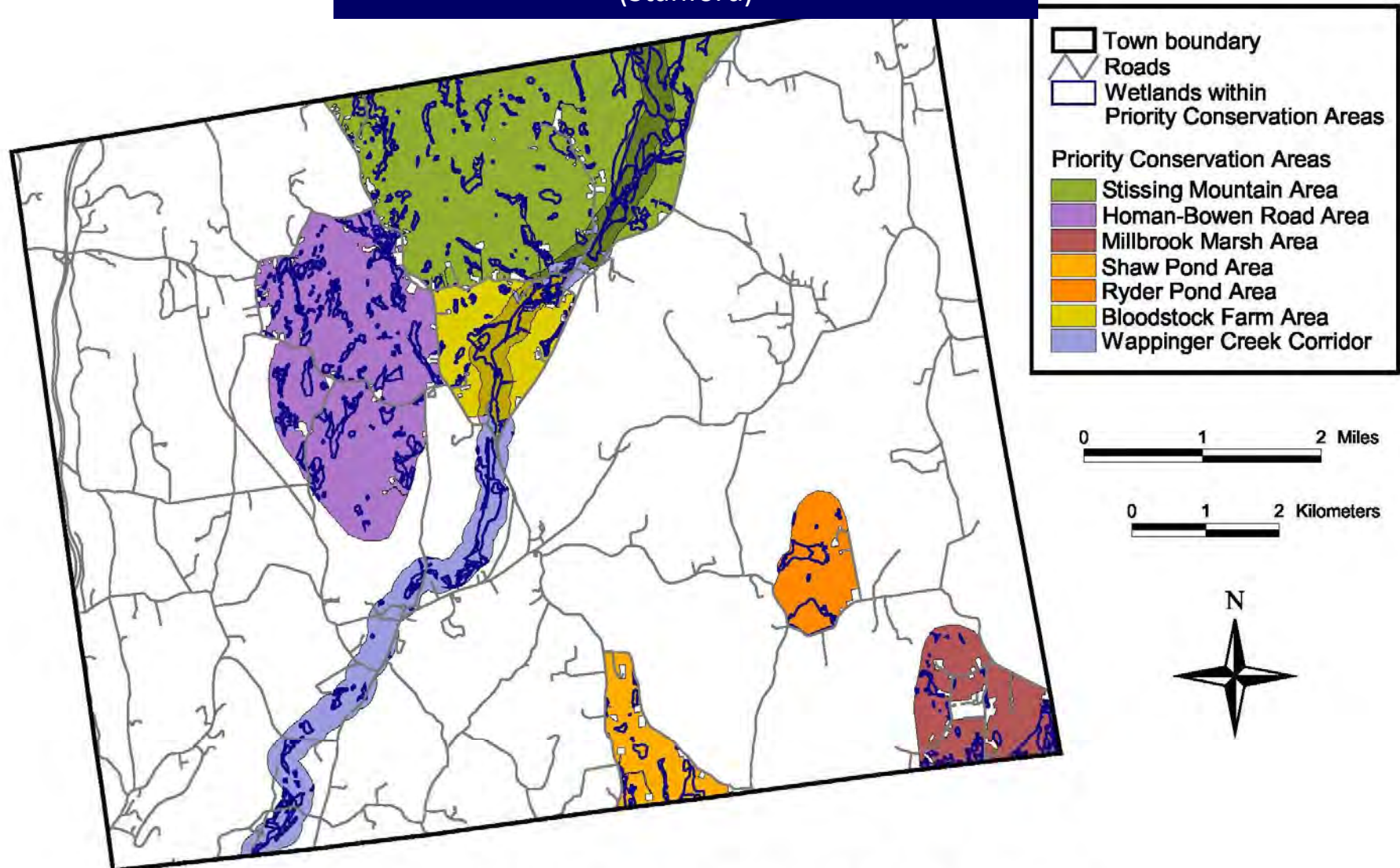
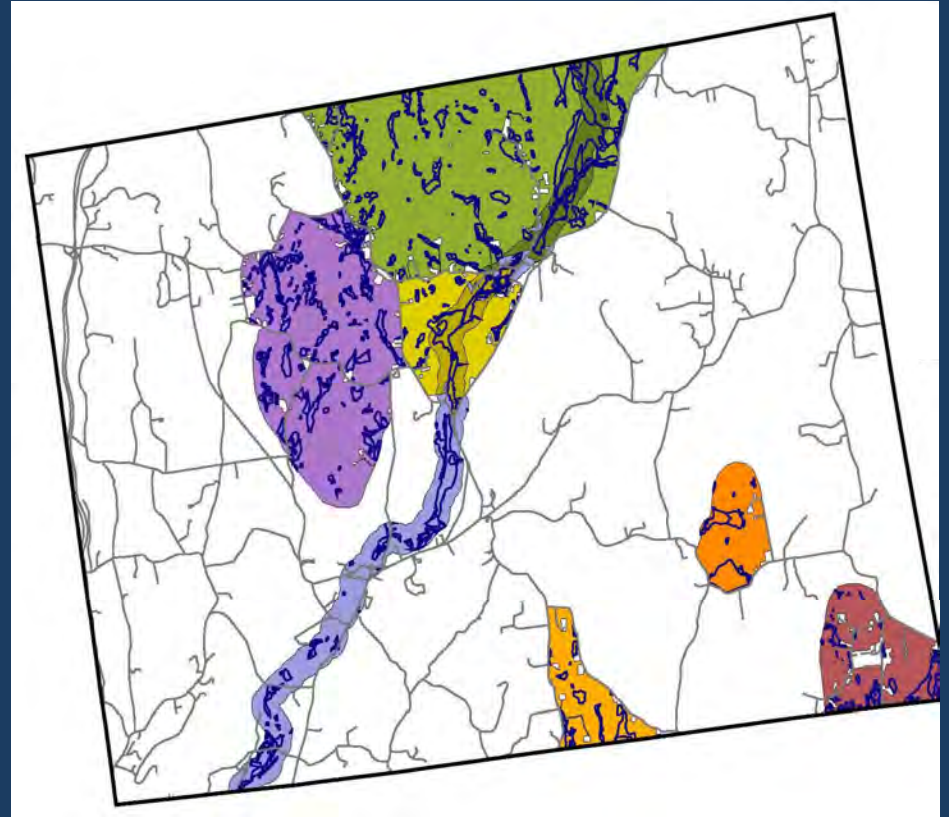
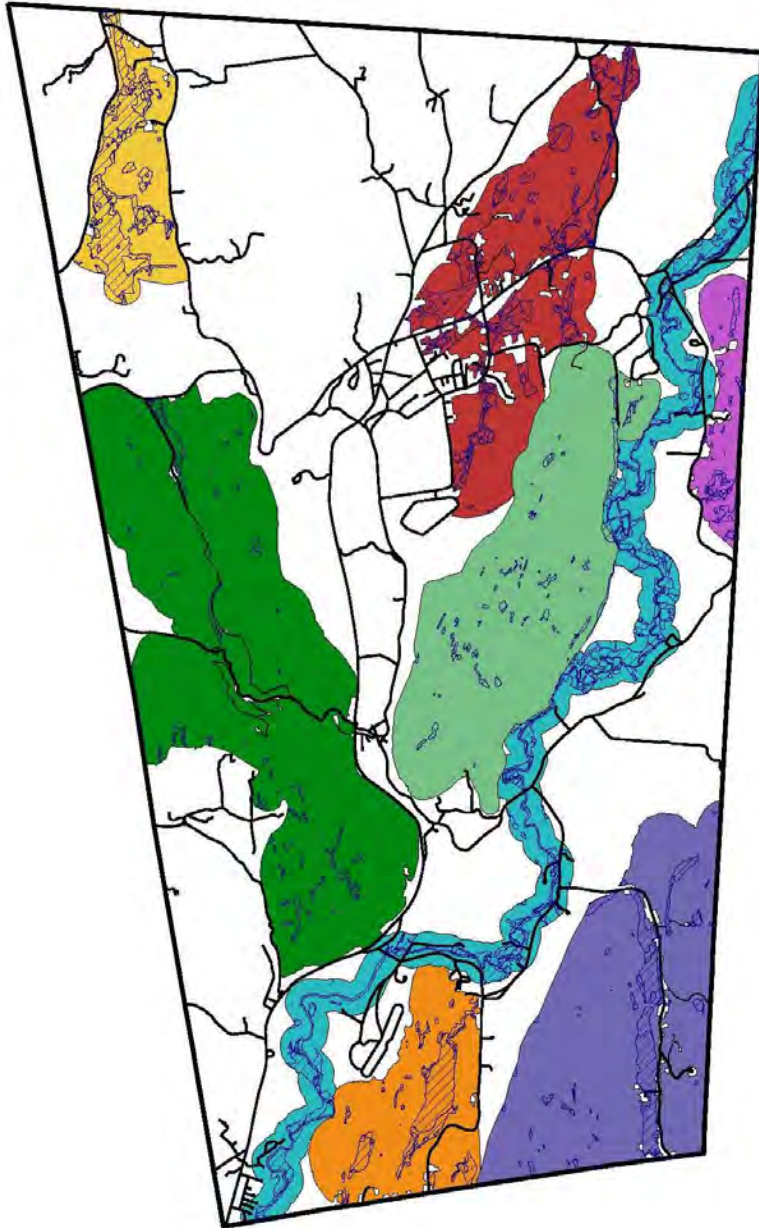
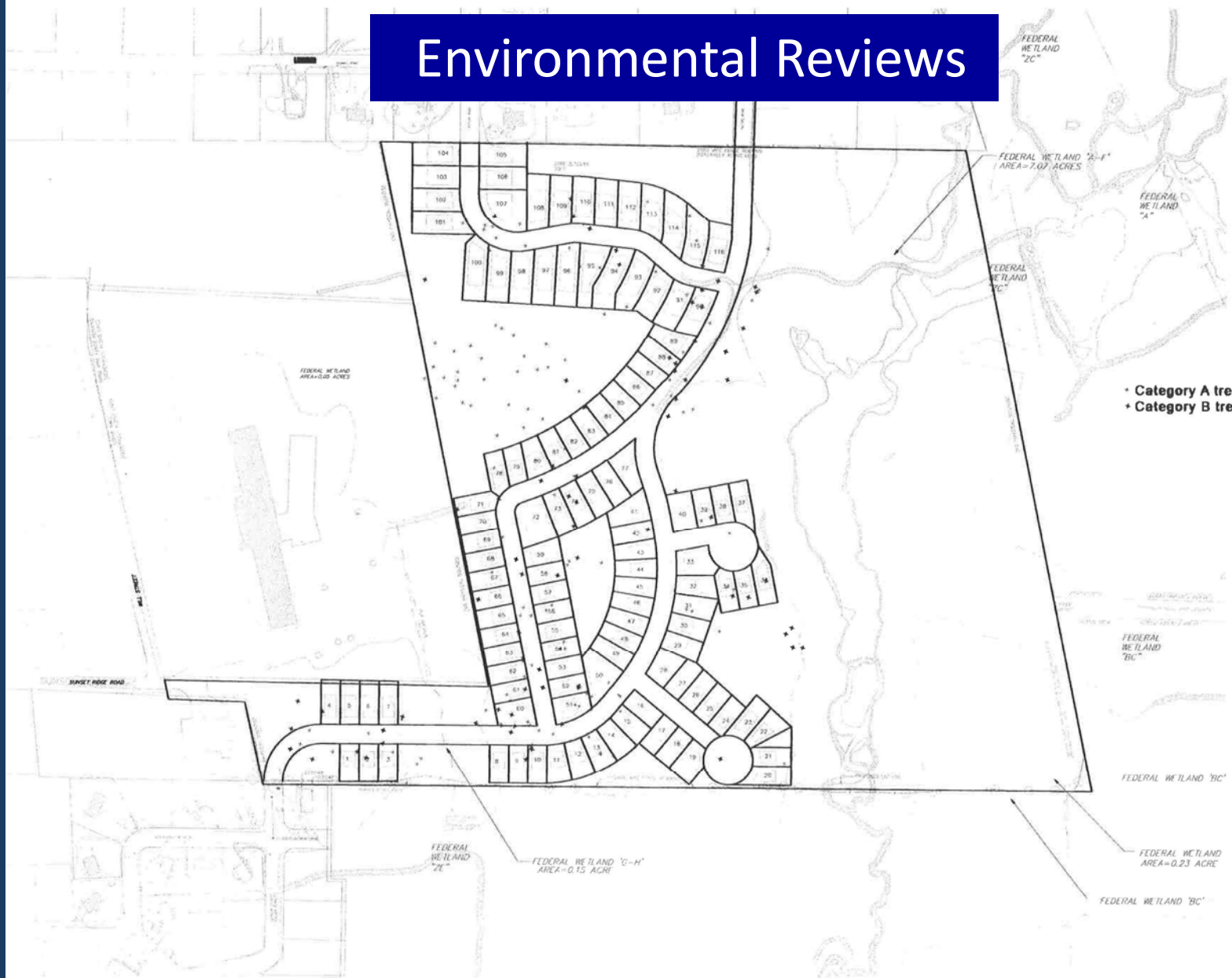


Figure 12. Priority Conservation Areas in the Town of Stanford, Dutchess County, New York. These are examples of areas with high biodiversity value, but not a complete list. Hudsonia Ltd., 2004-2005.

Priority Conservation Areas



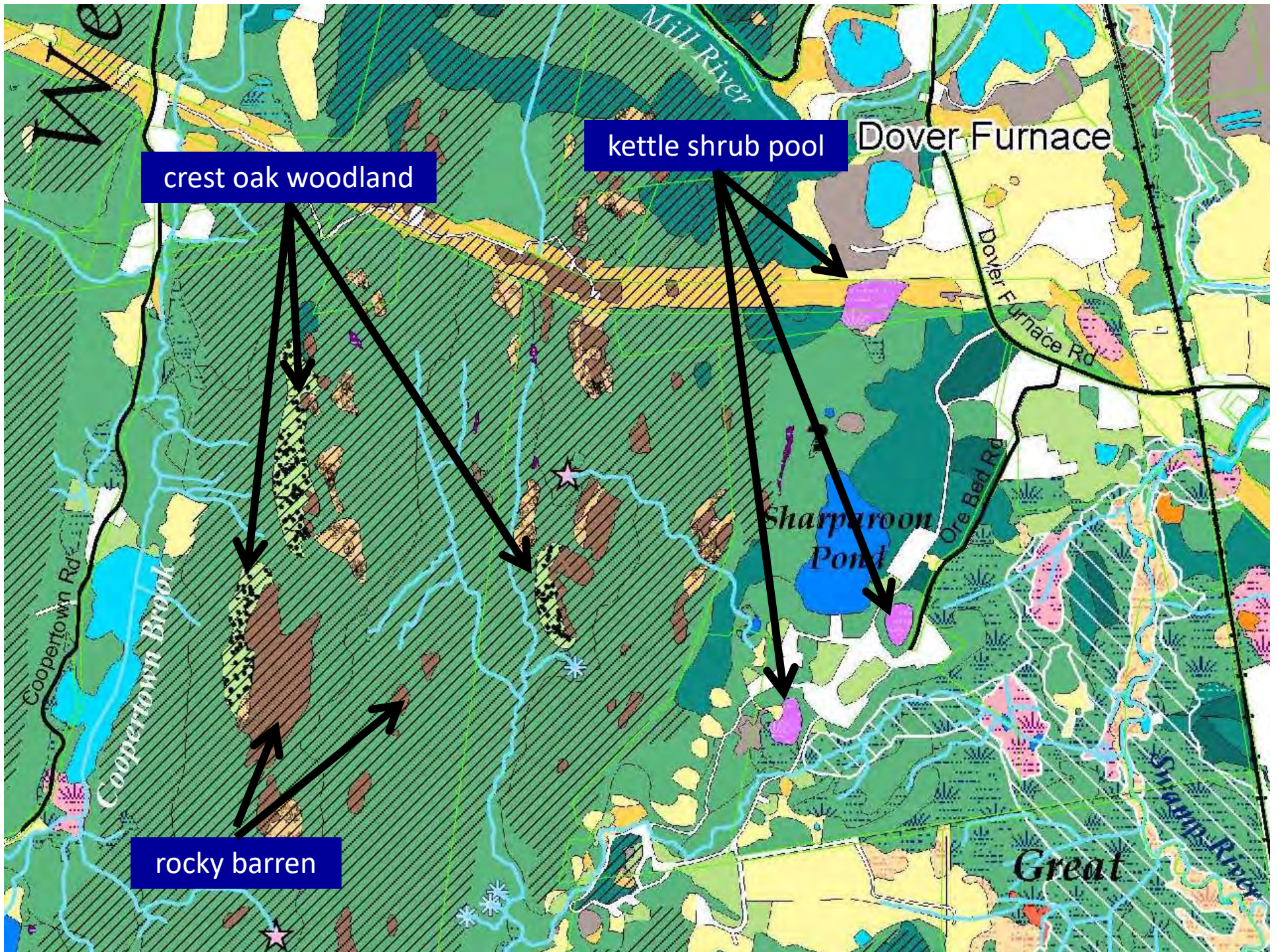
Environmental Reviews



Reviews of Development Projects



Kristen Bell



crest oak woodland

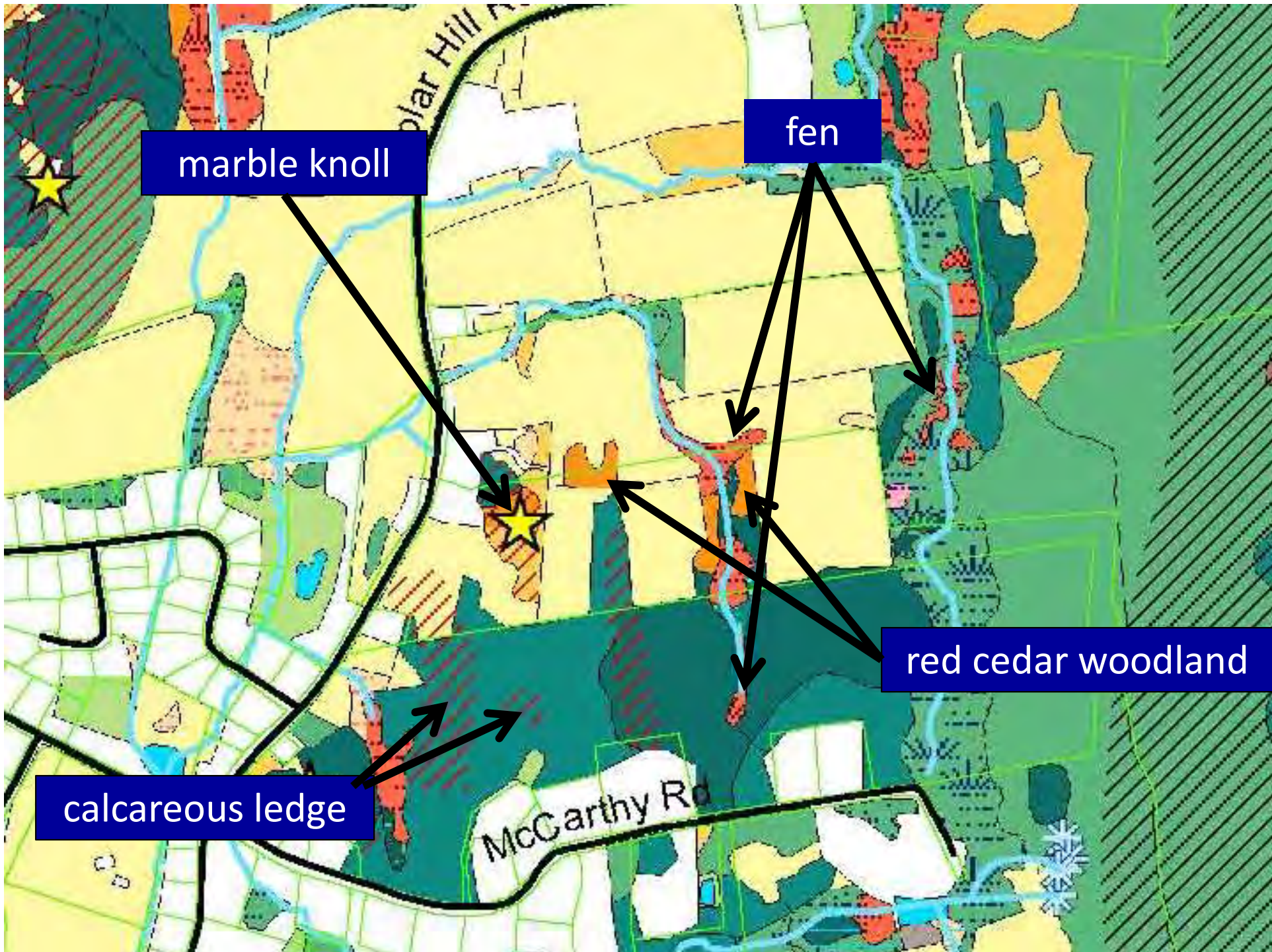
kettle shrub pool

rocky barren

Dover Furnace

Sharpshoon Pond

Great



marble knoll

fen

red cedar woodland

calcareous ledge

McCarthy Rd

Polar Hill Rd

SIGNIFICANT HABITATS

IN THE TOWN OF BEEKMAN, DUTCHESS COUNTY, NEW YORK



Photo: Nava Tabak

Report to the Town of Beekman

By Jamie Deppen, Nava Tabak,
Gretchen Stevens, and Kristen Bell

December 2009



Hudsonia Ltd.
P.O. Box 66
Red Hook, NY 12571

SIGNIFICANT HABITATS IN THE TOWN OF BEEKMAN, NY

(For greater detail see sheets 1-3)



SCALE 1:17,500

An important caution:
This map is suitable for general land-use planning, but is not suitable for detailed planning and site design, or for jurisdictional determinations (e.g., for wetlands). Boundaries of wetlands and other habitats depicted here are only approximate.



Hudsonia Ltd.
P.O. Box 66
Red Hook, NY 12571
www.hudsonia.org

0 1 2 Kilometers

0 1 2 Miles

Habitats were identified through map and/or aerial photograph comparison, and in many locations at remote sites field work. Mapping and field work were primarily by Gretchen Stevens (June, 2009), Jamie Deppen, and Kristen Bell (July, 2009). Field photographs in the 1:62,500 scale were taken in spring 1994 and 1995 (scale 1:40,000), some used for stereoscopic photogrammetry. Habitats were digitized from one color and one infrared photograph taken in spring 2009 and 2008, respectively, available from the New York State GIS Clearinghouse. The reports prepared in association with these maps (Heller & Deppen 2005, Deppen et al. 2007) explain the habitat identification and mapping methods, describe the ecological significance of each habitat type, and other conservation recommendations.

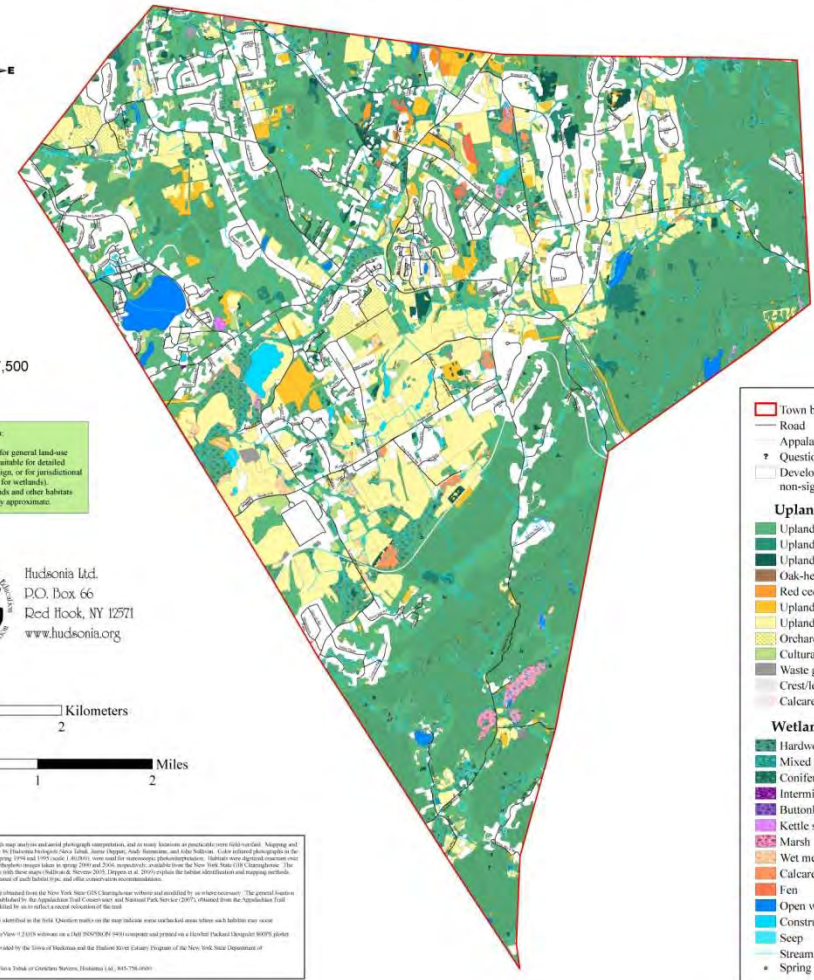
Local locations and names were obtained from the New York State GIS Clearinghouse website and modified by us where necessary. The general location of the Aqueduct Trail was established by the Department of Conservation and Natural Park Service (2007), obtained from the Aqueduct Trail Conservation website, and modified by us to reflect a recent relocation of the trail.

Some habitat types not only identified in the 2004 Question results on the map include areas not marked since such habitats may occur.

This map was created using ArcView 3.2 GIS software on a 100' (3052800) 24-bit computer and printed on a Hewlett-Packard DesignJet 3000 plotter.

Field data for this project were provided by the Town of Beekman and the Hudsonia Ltd. (Jamie Deppen) of the New York State Department of Environmental Conservation.

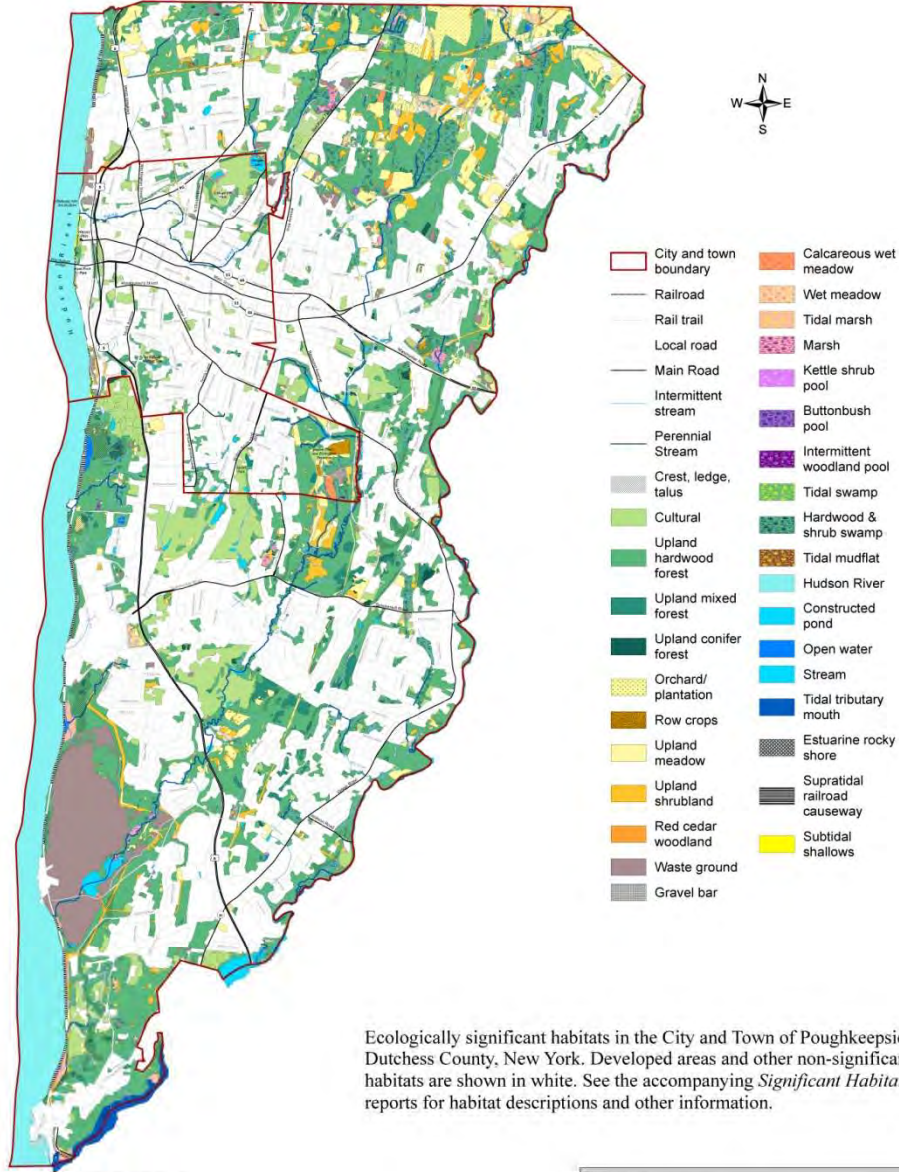
For more information contact Nava Tabak or Gretchen Stevens, Hudsonia Ltd., 345-758-0000.



- Town boundary
 - Road
 - Appalachian Tr
 - ⚡ Question
 - ◻ Developed area
 - ◻ non-significant
- Upland Hab**
- Upland hardwood
 - Upland mixed f
 - Upland conifer
 - Oak-beech barre
 - Red cedar wood
 - Upland shrubland
 - Orchard/plantat
 - Cultural
 - Waste ground
 - Crest/ledge/talu
 - Calcareous cres
- Wetland Hab**
- Hardwood & sh
 - Mixed forest sw
 - Conifer swamp
 - Intermittent wo
 - Buttonbush poo
 - Kettle shrub poo
 - Marsh
 - Wet meadow
 - Calcareous wet
 - Fen
 - Open water
 - Constructed pot
 - Seep
 - Stream
 - Spring

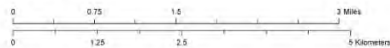
Kristen Bell

Significant Habitats in the City and Town of Poughkeepsie



Ecologically significant habitats in the City and Town of Poughkeepsie, Dutchess County, New York. Developed areas and other non-significant habitats are shown in white. See the accompanying *Significant Habitats* reports for habitat descriptions and other information.

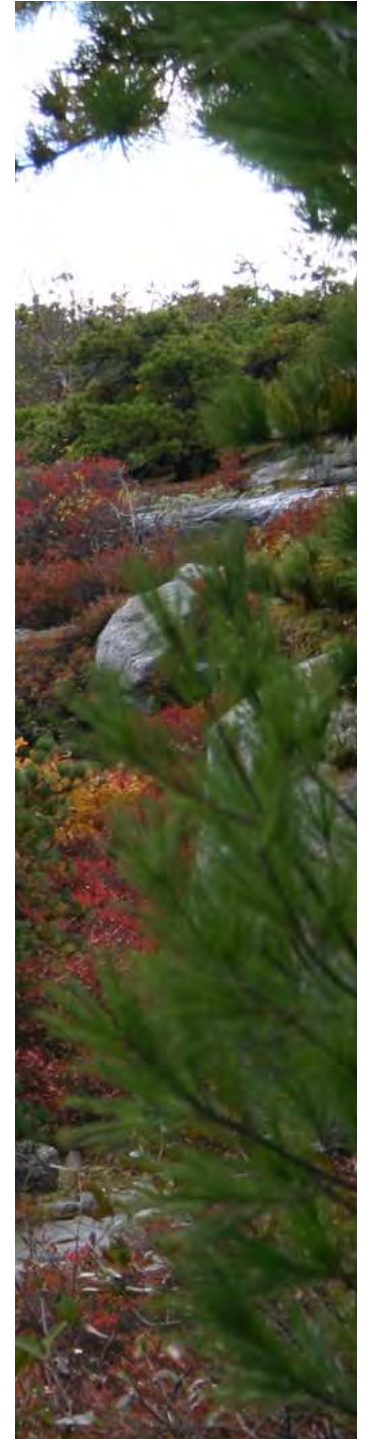
Map scale 1:20,000



Data Sources:
 Habitats for the City of Poughkeepsie were delineated from 2013 orthoimagery, downloaded from NYS GIS Clearinghouse (<https://gis.ny.gov/>), and field observations. Methods and habitats are described in *Significant Habitats in the Town of Poughkeepsie, Dutchess County, New York* (Tabak and Stevens 2008) and *Significant Habitats in the City of Poughkeepsie, Dutchess County, New York* (Heffernan and Stevens 2018). Road, boundary and railroad data from NYS GIS Clearinghouse. Map created by Hudsonia Ltd, Amundale, NY.



Kristen Bell





HABITAT MAPS FOR DUTCHESS COUNTY

Questions?

Gretchen Stevens
Hudsonia Ltd.
stevens@bard.edu