

# City of Beacon

## Natural Resources Inventory



Photo Credit: Dennis O'Brien

**Prepared by the City of Beacon Conservation Advisory Committee  
and Natural Resources Inventory Committee**

**January 2020**

The Beacon NRI was developed with funding from the Environmental Protection Fund through the New York State Department of Environmental Conservation Hudson River Estuary Program and a partnership with Cornell University.

- What is an NRI?
- How did Beacon's come about?
- What was our process and methodology?



# NRI Overview

- How is the NRI organized?

- Maps & Interpretations

- What makes Beacon's unique?

- Urban environment
- History & The Seegers
- Scenic, Cultural, and Recreational Resources

## Other Resources Addressed:

- Geology
- Water (streams, watersheds, wetlands, stormwater, etc.)
- Biodiversity (wildlife habitat, forests and street trees, plants and animals)
- Land Cover and Greenspaces
- Current and Future Challenges: Population Growth, Flooding, Climate Change

# Sample Section

## 5.2 Forests and Street Trees

### Why This is Relevant to Beacon

Forests provide wildlife habitat, water filtration, and climate moderation. While large forests provide more ecosystem services and higher quality habitat, small patches of forest also have value. They can also provide habitat and contribute to a better quality of life in residential areas. Even single street trees help moderate temperature and intercept stormwater.

Along streams, networks of forest patches create riparian corridors that help maintain water quality and provide habitat for aquatic as well as terrestrial wildlife.

The large forested slopes of Mount Beacon are identified in the Beacon Comprehensive Plan as a “rare asset of the city” to be protected due to their tourism and recreational values.

### What This Map Shows

The southeastern border of Beacon contains the edge of a “regionally-significant” forest block (10,000+ acres). It includes forest communities such as Appalachian oak-hickory forest and oak-tulip tree forest. It covers Mount Beacon and extends beyond the city limits along Scofield Ridge and Breakneck Ridge toward the Hudson River and Cold Spring. It is part of a larger complex of Hudson Highlands forests that form a connected corridor of habitat used by breeding and migratory birds, resident amphibians and reptiles, and rare plants and communities (Penhollow et al. 2006). The forest complex has been recognized as a Significant Biodiversity Area by the Hudson River Estuary Program (Penhollow et al. 2006) and an Important Bird Area by the Audubon Society. Its proximity to Beacon provides benefits to residents, including clean air and water, scenery, and recreational opportunities that also attract visitors and tourism.

Smaller, isolated patches of forest are interspersed within the developed parts of Beacon. A notable example is the “stepping stone” forest block at the mouth of Fishkill Creek that extends in a narrow band to the northeast along the creek and further south along the Hudson River. While relatively small, this patch helps to create streamside habitat, protect water

quality, and mitigate the impacts of flooding along Fishkill Creek and the Hudson River.

Additionally, there are small wooded areas that contain forested wetlands as well as individual street trees, primarily along Main Street.

### Implications for Decision-making

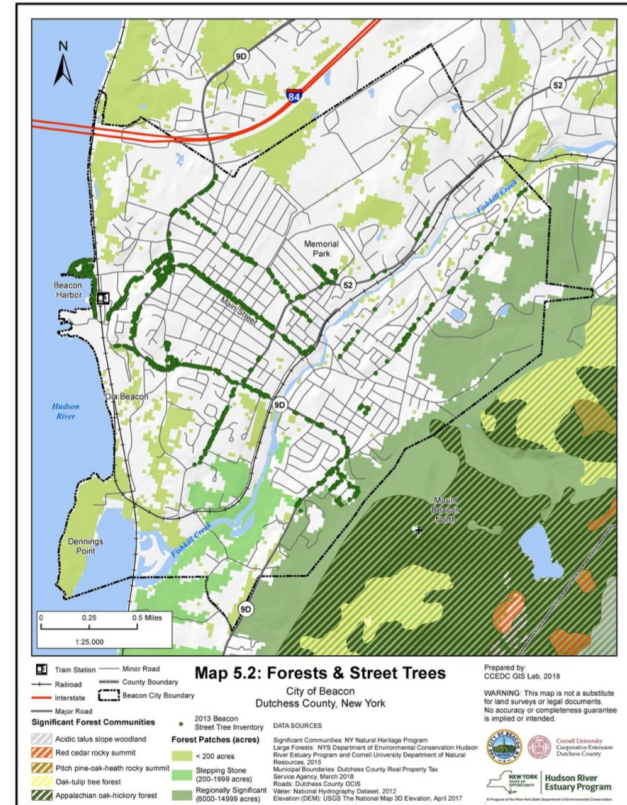
The Forests and Street Trees map, along with the Wildlife Habitat Index Map, can be used in concert with other NRI information to consider conservation and restoration opportunities in the city. Larger, intact wooded areas will benefit from conservation efforts that prevent further fragmentation. Streamsides and neighborhoods where there is limited canopy may present restoration opportunities that will improve quality of life for residents and improve stream habitat and water quality.

To protect forests:

- Keep large forests and mature forests intact and unfragmented;
- Minimize construction of new roads, houses, and other forms of development in forests, especially in large or mature forests;
- Concentrate any new development near existing developed areas;
- Maintain intact habitats between forest patches to allow for migration and dispersal of plants and animals;
- Avoid tree cutting on steep slopes, and leave tree crowns in the woods to conserve soil fertility and increase habitat diversity;
- Minimize gap size and road construction to prevent the establishment of non-native species (e.g., tree-o-f-heaven);
- Minimize off-road vehicle use, which damages vegetation, compacts soil and disturbs wildlife; and
- Update the 2013 Street Tree Inventory, and expand the planting of street trees for beautification, stormwater absorption, and temperature moderation.

This information largely comes from L. Heady Beacon Biodiversity Memo, Hudson River Estuary Program, and Hudsonia. For more information on these topics, see the References section.

Map 5.2 Forests and Street Trees



# Next Steps

- CAC welcomes feedback and is here to answer questions
- Adopting the NRI
- Example resolutions and local laws of adoption
- What's next

THANK YOU!