

# Thielke Arboretum Glen Rock, New Jersey Environmental Education Center

## **Who We Are:**

Friends of the Glen Rock Arboretum (FOGRA) is a not-for-profit organization committed to conserve, maintain and preserve the 11-acre arboretum located in Glen Rock. FOGRA is staffed and maintained by volunteers, and governed by a 12 member Board of Trustees.

## **Objective:**

Construct a four-season ecological and environmentally sustainable 'green' Educational Resource and Visitors' Center that will bring the existing arboretum into it's next phase.

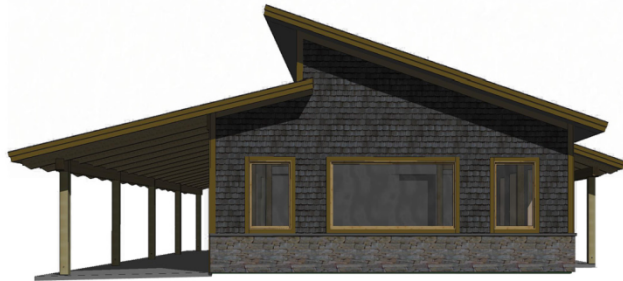
## **The Project:**

Design and build an educational resource and visitors' center. The site for the structure is located at the edge of woodlands, with a building footprint of approximately 1,750 ft<sup>2</sup>. Our goal is to utilize green design and construction concepts, to comply with LEED certification requirements. This project was granted approval by the Mayor and Borough Council of Glen Rock in 2010.

## **Building Purpose:**

Support individualized small classes (environment, nature, ecology, horticultural and associated arts), with office space, work area for small equipment repairs, shelter in inclement weather, storage of resource material, and a bathroom facility. The building would be used primarily by Friends of the Glen Rock Arboretum with access available to other groups for a variety of functions.





SOUTH



EAST



WEST



NORTH

NOTE: The building design has changed slightly from these drawings. We've added a large folding window/door system on the back porch, and aligned the windows for better symmetry.



## Google Earth View

The building footprint is approximately 70' x 25'.  
This view is an approximation of both size and placement

# Environmental Considerations

- Site location: The EEC meets all wetlands setbacks
- Designed to fit the landscape & maintain the right aesthetic
- Design features: access, natural light, maintenance, Low E glass and Southern exposure
- Timber framing benefits and FSC certification – sustainable materials
- Energy efficiency and low VOC emissions through select finishes



# Benefits & Uses

## Ecology

Recycling  
Composting  
Water Conservation

## Environment

Wildlife Habitat  
Earth-Friendly Gardening  
Solar & Alternative Energy  
LEEDS Explained

## Gardening

Nature Photography  
Tree and Plant Care & Identification  
IPM: Eco-friendly Pest Management  
Fall Color & Spring Bulbs  
Annuals & Perennials

**School Programs** Educating children from Glen Rock, Ridgewood and Beyond

**Sensory Adventures** 1 hour / Grades Pre-K - 1 / **New Jersey State Standards** Students use their senses of touch, smell, sight and hearing to explore their environment. As they walk through the Arboretum they will discover how plants and animals also use their senses.

**Pollinator Partners (Spring)** 1&1/2 hours / Grades K-3 / **New Jersey State Standards** Through hands-on investigation learn about the parts of a flower. Walk through the Arboretum and discover how plants, insects and animals work together to survive.

**Tree Power (3 Sessions)** 1&1/2 hours / Grades K-3 **New Jersey State Standards** Be a tree detective and use bark, twigs, buds, needles/leaves and shapes to help identify trees. Discover the functions of each part of a tree. Participate in hands-on- activities and walk through the Thielke Arboretum and observe seasonal changes.

**Fall:** Compare and contrast deciduous trees and conifers. Discover fall changes in trees.

**Winter:** Identify winter trees and discover clues that indicate a tree is alive.

**Spring:** Discover what's blooming at the Arboretum. Examine buds and learn to identify trees in spring.

## School Programs (Continued)

### **Habitats** 1-1/2 hours / Grades K-5 / **New Jersey State Standards**

Identify and investigate the components of a habitat...water, food, shelter, space. Identify smaller habitats (pond, pine forest, vernal pool, log) within the large Thielke Arboretum wetland habitat. Find out who lives there and why.

### **Wetlands Walk** 1&1/2 hours / Grades 2-5 / **New Jersey State Standards**

Explore the wonders of wetlands through hands-on demonstrations and an observational walk. Learn to identify plants that thrive and survive in this habitat and discover the importance of wetlands in managing storm water.

### **Pond Ecology (Spring)** 2 hours / Grades 3-5 / **New Jersey State Standards**

Investigate a pond ecosystem and its components. Explore the interaction of plants and animals in this habitat and discover the impact people have on pond ecology.



## 4<sup>th</sup> Grade Water Day

Every year, all Glen Rock 4<sup>th</sup> graders spend a day at the arboretum, learning about cause and effect of seasonal changes in our environment.

Students from other North Jersey communities visit regularly, too!

Thielke Arboretum



## Orchard School

Ridgewood's Orchard School visits the arboretum regularly. Here, Carol Thielke speaks to the 4<sup>th</sup> grade class about the environment

Glen Rock, New Jersey