



Field Visit to Property Lydall Woods Colonial Village in Manchester, CT

Present parties: Patricia McGuiness (President), other members of board Leslie Jean (Vice President), Regina Picard (Treasurer), Debbie MacGlaflin (Director) and property manager Rich Wilson (KWA Group).

Andrea Urbano (Service Forester)

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Lydall Woods Colonial Village is a homeowner’s association with over 100 homes and abutting forested acreage owned by the Manchester Land Trust, with which the HOA is responsible for managing. Home lots are clustered so that the wooded areas are less fragmented. The present members of HOA board and Manchester Land Trust are currently most interested in managing the resource to reduce hazards and risk of property damage, and to promote forest and landscape health.

The wooded acreage is comprised of several parcels separated by development and/or roads. The total acreage of forested land is roughly 30 acres.

Observations and Notes

Tree Cover

The woodlot is comprised of mixed hardwood species. Species composition and structure varies slightly throughout the different wooded parcels. Overstory trees sawlog sized, and consist primarily of white oak, black oak, and red oak, and some hickories, eastern white pine, and yellow birch. Red maple is also present. Site quality is varies and appears to be mostly influenced by soil type and terrain. Overstory trees range in quality, but most are of good quality.

Overstory Species
Red Oak (<i>Quercus rubra</i>)
Red maple (<i>Acer rubrum</i>)
White oak (<i>Quercus alba</i>)
Black oak (<i>Quercus velutina</i>)
Yellow birch (<i>Betula alleghaniensis</i>)
Hickory spp. (<i>Carya spp.</i>)

Parts of the wooded acreage depict structural diversity by having more than one size class in the overstory and advanced regeneration in the understory. Other parts of the acreage are more

homogenous in structure. The more structurally diverse and complex a forest is, the more resilient to disturbance and change it is.

Understory and Forest Floor

Though a dense, contiguous understory lacks throughout the acreage, present understory vegetation consists of oak saplings in areas, white pine saplings in areas, and yellow birch saplings and pole sized trees. Some oak and pine pole sized trees are also present in the industry. Muscle wood is also scattered throughout the understory.

In recently-disturbed areas (blow downs, tip ups, etc.), regeneration will likely (and hopefully) establish and/or advance to occupy the recently formed canopy gaps. This is a healthy, natural dynamic with which forests are adapted and require for regeneration.

Shrubs are present in the understory, but their continuity and density varies. Blueberry, huckleberry, and pepperbush are present. Invasive shrub and plant species are also present and consist of multiflora rose (within forest and abutting private properties), oriental bittersweet (within forest, but primarily in forest edges near retention ponds), and common reed (in retention ponds).

Native understory plants	Invasive plants
Highbush blueberry (<i>Vaccinium corymbosum</i>)	Multiflora rose (<i>Rosa multiflora</i>)
Huckleberry (<i>Vaccinium membranaceum</i>)	Oriental bittersweet (<i>Celastrus orbiculatus</i>)
Sweet pepperbush (<i>Clethra alnifolia</i>)	Common reed (<i>Phragmites australis</i>)

The forest floor is largely comprised of leaf litter and fine and coarse woody materials. Tree seedling establishment could not be surveyed accurately at the time of this visit, though oaks, black birch and white pine were observed. The observed seedlings are established in pockets.

Wildlife

Sign of deer presence is evidenced by browse, which can have a significant impact on establishing regeneration.

Three bobcats were identified when walking the property. Several birds of prey were also observed while walking.

Inferences about wildlife presence in this woodlot can be made from its plant species and structural composition. Nut and fruit producing species attract wildlife. Certain wildlife needs early successional growth to survive while others require older growth characteristics.

Oaks and hickories are hard mast/nut producers. They provide birds with an important source of protein during the nesting season. They also prove to be a valuable food source for some mammals. Native fruit-producing species are of particular importance to birds when they're nesting season is over and their need for protein lessens and sugar increases (mid-late summer). Native berries/fruit provide greater nutritional value to naïve wildlife populations than those produced from invasive or nonnative plants.

Black birch seeds (catkins) are particularly favored by turkey.

The component of leaf litter could support ground-nesting bird habitats, such as that of the oven bird, some warblers and other species.

Birds and small mammals utilize downed woody materials, standing dead trees, cavity trees, and/or old wolf trees for shelter, habitat, and/or feeding grounds. These woody materials foster healthy populations of arthropods, which benefit soil health and function as important sources of protein.

Tree and Forest Health

Deer browse is compromising this forest's health. This is supported by the lack of understory vegetation and advanced tree regeneration in areas.

The presence of invasive species populations is not yet of great concern, as populations are relatively small and concentrated. These populations should be removed/controlled prior to any overstory removal in the woodlot. In areas where bittersweet is particularly prolific (around retention pond(s)), a defense line may need to be established so prevent spread seeds from establishing.

[Nectria canker](#), though not prolific is present on overstory yellow birches.

[Hemlock woolly adelgid](#) and [elongate hemlock scale](#) are present on most hemlocks. Hemlocks found were not woodlot trees, but instead were landscape trees near resident homes. These can compromise the health and vigor of hemlocks, and ultimately lead to mortality if not controlled naturally (with cold winter weather) or by use of insecticides.

Though not a significant threat (due to lack of host species), the [Emerald Ash Borer](#) is present and has infested the few ash trees observed, most of which are located within close proximity to homes or other infrastructure.

The downed woody materials present in this forest will recycle important nutrients into the soil through the decomposition process. Ultimately, it will contribute to maintaining a healthy soil structure and profile.

General Recommendations

1. Monitor and control for the presence and spread of invasive species. Populations are highest near and within the retention ponds, though multiflora rose was found within forested acreage. Populations do not appear to be extensive. As such, if any formal timber harvesting operations are conducted or nearby trees removed, populations should be controlled both pre-and post harvest. If not controlled in advance, it is likely that invasive species will spread before trees have the opportunity to regenerate. Click the following links to learn more about the species present in your woodlot:
 - a. [Oriental bittersweet](#)
 - b. [Multiflora rose](#)
 - c. [Phragmites](#)
2. Consider establishing a soft edge/ecotone where open space (grassy areas) surrounding retention ponds meets the forest.
 - a. The forest edge appears to be the source of invasive species, so creating a soft edge could help prevent their spread.

- b. One method of implementing an ecotone is removing 75-100% of overstory trees within one tree length field. Remove approximately 50% of overstory trees from another tree length in from the field's edge. Remove invasive species in these areas, and plant with [native shrub alternatives](#). For more alternative resources, [click here](#).
 - c. Since the removal of trees may not be realistic, it is possible for an ecotone to be established by removing invasive species and thinning out edge tree density If possible and planting the field's edge with a mix of native shrubs and beneficial [pollinator plants](#).
 - d. Doing this will reduce recreational-associated hazards and will provide a zone of transitions beneficial for wildlife.
 - e. Perhaps you can work with Manchester Land Trust for assistance with acquiring plants and planting.
3. For homeowners' landscape/street/yard trees: Visit [Connecticut Tree Protective Association's](#) website to find and hire an arborist. [CT's Tree Warden Association](#) may also have helpful resources for the care and maintenance of these trees. You may also find some valuable resources for pruning and other tree maintenance here: <https://portal.ct.gov/DEEP/Forestry/Urban-Forestry/Tree-Planting-and-Maintenance>
4. Become familiar with CT Tree Laws as they pertain to your concerns and interests. You can find these and other valuable resources by clicking [here](#).
5. If any forest management practices are pursued, consider implementing ones that enhance structural complexity. This can be achieved through many different silvicultural prescriptions, but generally, canopy gaps of different sizes must be present to foster the establishment and regeneration of a variety of tree species. A percentage of dead trees should be left standing (if not close infrastructure) and on the ground.