

**City of Keene**  
**New Hampshire**

**GREATER GOOSE POND FOREST STEWARDSHIP**  
**PLAN ADHOC COMMITTEE MEETING MINUTES**

**Thursday, December 7, 2017**

**10:30 AM**

**2nd Floor Conference Room,  
City Hall**

**Members Present:**

Bettina Chadbourne, Councilor  
Andrew Madison  
Dorothy Howard  
Andrew Bohannon  
Peter Poanessa  
Tad Lacey

**Staff Present:**

Tara Kessler, Planner

**1) Introductions**

The meeting adjourned at 10:31 a.m. and introductions were made. Jeff Littleton of Moosewood Ecological LLC, the firm hired to oversee the project, introduced himself and the other members of his team. Josh Ryan noted that his role on the project is the completion of a trails assessment. Swift Corwin introduced himself as the consulting forester for the project.

**2) Project Review**

Tara Kessler explained the origins of the project. She noted that the conservation easement on the Greater Goose Pond Forest land, which is held by the Society for the Protection of NH Forests, references a Stewardship Plan to guide land management activities. Although there have been numerous studies and plans developed for the Forest, there is no current Stewardship Plan. The Conservation Commission developed the Scope of Services for this project with a focus on forest management, recreation/trails assessment, and wildlife/ecosystem protection. The City Council approved the use of Land Use Change Tax Funds to fund the project. The City Parks and Recreation Department has contributed some funding to support the trails assessment component of the project. After a competitive solicitation, Moosewood Ecological LLC was hired by the City to undertake the work of this project. The firm began work in the late fall of 2017. It is anticipated that the work will be completed in the summer of 2018.

Mr. Poanessa inquired about the timeframe for the plan. Mr. Littleton responded that it will be a ten year plan that may require minor updates over time to keep it current. Mr. Corwin responded that this is the standard length of time for a forest management plan.

**3) Future Meetings**

Mr. Littleton noted that he anticipates the Ad-Hoc Committee will be meeting again in early January to review land management goals and objectives and to discuss public outreach and education, specifically, the proposed walking tours of the forest. He noted that much of the trail and forest assessment work has been completed. He will be continuing to inventory the wildlife and habitat in the forest into next June of 2018. The public outreach will begin in the winter with

walking tours. In addition, there will be two presentations to City Council and two public presentations in the late spring/early summer.

#### 4) **Project Updates**

##### **a) Wildlife and Habitat Inventory**

Mr. Littleton noted that he has been reviewing a number of documents that have been completed for the Forest. He has also been reviewing aerial photography and interpreting the vernal pools inventory that was completed for the Forest area in the 1990s. He has conducted preliminary mapping of habitat and natural communities and will be surveying winter mammals via tracking and wildlife cameras. He will also be conducting a survey of birds, amphibians, and reptiles.

##### **b) Forest Inventory**

Mr. Corwin noted that he looked at 12 separate parcels, but he is still in need of survey maps. He conducted a grid overlay with 335 points. At each point, he recorded the height of trees and record of sapling, gps its location, and took pictures. He began his survey at the north end of the Forest. In this area he observed iconic stands of red oak. The richest hardwood in the Forest is in this area.

Moving toward the center of the Forest there are high ledges, which flatten out. The Forest is thinner in the northern areas of this area of the forest. In this area there are the remains of old farm sites. However, he only observed one cellar hole. Ms. Howard noted that there is another cellar hole by Gunn Road on private property. Mr. Corwin noted there is little evidence of people living in this area and that the land had been cleared back to the 1880s. At that time, the land was all grass. Mr. Poanessa inquired about the Dam by Timberlane Drive. Mr. Corwin replied that he was unfamiliar with it. He noted that by East Surry Rd, he saw a foundation that looked like an old mill. The Historical Society found a picture of a mill there and at one time there had been four mills.

Mr. Corwin noted that the south central section of the Forest has a very rugged landscape with lots of fallen trees. The Forest is primarily pine-hemlock at the lower ledges. The understory is shade-tolerant beech-hemlock.

Mr. Corwin noted that some forest vulnerabilities include pests such as the hemlock wooly adelgid. Also, it is an even age forest and there are risks associated with forests growing at an even age. Mr. Corwin stated that there is evidence of catastrophic blowdown that predate the 1938 blowdowns. There is a sign of a blowdown from 1850, or potentially earlier. Mr. Lacey stated that it would be interesting to examine what the forest composition was in 1938 compared to today. He noted that the potential for damage as a result of a hurricane may be even greater today than it was in 1938. Mr. Corwin stated that there is a gigantic pine tree that is greater than 40" in diameter in the Forest that lived through the 1938 hurricane.

Mr. Corwin observed for invasive species in the Forest and observed some at the base of Drummer Hill by the residential neighborhoods. There is some burning bush, buckthorn, and honeysuckle concentrated in a few areas. He did observe a homeless encampment. Mr. Bohannon asked Mr. Corwin to inform him of the location of this encampment.

Mr. Corwin noted that the property lines are not well marked and should be. He observed a well-laid out sugar operation that has encroached onto the Forest from abutting private property.

Mr. Lacey inquired about the average volume and predominant species per acre of the Forest. Mr. Corwin responded that he doesn't have statistics compiled yet but that there is an incredible red oak stand in the north and a stand of large white plan in Drummer Hill. Ms. Howard inquired about maple trees. Mr. Corwin noted there is not much maple, but there is a lot of red maple saplings in the understory.

Mr. Littleton noted that he observed painted barbed wire in some areas near the property boundary to the Forest. He thought it was painted to draw attention to it to prevent hazards. Mr. Poanessa asked about the legality of cutting this wire out. Mr. Littleton noted that he often leaves it on the landscape, as it is part of the its history, but will identify it with either flagging tape or paint.

Mr. Poanessa asked if any wildlife were observed in the Forest during the surveys. Mr. Corwin noted that he did not see much because the understory is so wide open. He saw only a few deer when he was walking in the forest. Mr. Littleton noted that there is a lot of opportunity to provide habitat for wildlife. He will discuss this in more detail in his report.

Mr. Corwin, in response to a question about timber value, noted that the red oak stand is the most valuable in the Forest. To provide context, he joked that the value generated from the stand would equal only a small fraction of Keene School District's annual budget.

### **c) Trail Assessment**

Mr. Ryan noted that he attended Antioch University New England Institute in the early 2000s. He became familiar with Keene and did a trail assessment of the Forest following his graduate studies.

He started his assessment in the main parking area of the Forest, with the goal of analyzing all trails from the lens of safety and sustainability. He uses measuring wheels to take a photo every 100' or so and to observe the trail conditions. He surveyed the Forest for 4 hours and realized there were many more miles of trail than had been initially estimated. Mr. Poanessa noted that there are approximately 25 miles of trails in the Forest. Mr. Ryan noted that they had budgeted for 8 miles of trails.

Mr. Ryan observed that the soils in the Forest are well-draining and, in general, there are not many issues. Many of his observations are related to maintenance and not necessarily management issues. However, he did find himself lost numerous times, and will be recommending the City focus on improved wayfinding.

Mr. Ryan explained that are two distinct areas of the Forest, with different user experiences. The area around Goose Pond, which is managed by the City, is catering to people walking or running either a few hundred feet or around the pond. These main trails are not blazed, the kiosk at the entrance needs maintenance, and there is lack of signage. The other areas of the Forest are catering to mountain bikers. These trails are well marked. At a trailhead in the Drummer Hill section of the Forest there is a kiosk with a clearer map and rules. He observed this to be a more welcoming entrance than the main parking area off East Surry Road. Mr. Poanessa noted that mountain bikers tend to stay away from Goose Pond, and that the Mountain Bike club maintains

the kiosk at Drummer Hill. They also produce the map that is at the kiosk. Mr. Bohannon noted that the City has a Memorandum of Understanding with the New England Mountain Bike Association (NEMBA), who is tasked with maintaining the trails that they build. A number of club members have attended training on trail maintenance and construction. He noted that an Eagle Scout installed the kiosk at the main entrance to Goose Pond.

Mr. Ryan noted that many of the trails are designed specifically for mountain bikers and would not be well suited for walkers. He observed that it is possible for these trails to be multi-use, but they are not welcoming for walkers. He noted that the trail around Goose Pond needs a fair amount of work.

Mr. Ryan stated that he spoke with the City about an upcoming project to improve the Dam at Goose Pond to identify opportunities to make improvements as a result of the construction effort. There is a plan to install a second parking area south of the existing primary parking area. This new parking area may afford the opportunity for a more inviting and accessible entrance into the Forest. The main trail off the current parking area is very steep and not very accessible.

Mr. Ryan recapped his primary observations of the trail system. These include that the trails and property boundaries are not marked well. He recommends remarking all the trails and that the City develop a marker with a City-specific logo that can be affixed to trees with aluminum nails at a height of 8' up from the tree's base. This style of marker should be used throughout the Forest for consistency. Another recommendation would be to install kiosks that are of the same style. One kiosk would be at Drummer Hill and one would be installed at each parking lot.

Mr. Ryan proposed a concept for a bike friendly trail, similar to the style of carriage roads in Arcadia National Park that would be approximately 8' wide and would provide a short, family-friendly bike loop that connects to the proposed parking area as well as to other areas of the Forest. When the construction occurs for the Dam, he encourages the City to ensure that the access road is developed with consideration for making this bike path.

Mr. Ryan observed that no part of the Forest is currently handicapped accessible. He noted that, following the creation of a second parking area, a short, handicapped accessible viewing trail could be installed that connects to the parking area. It would not loop around the Pond, but it would provide an opportunity to attract others to the Forest and for the less mobile to enjoy it. He stated that if the City is interested in this concept, he would volunteer to develop a design for it at no cost to the City.

Mr. Ryan stated that the main loop trail around Goose Pond has many exposed roots and that a lot of erosion is happening in the form of cupping. At the bridge near the delta of the stream there is a need to keep people on the trail and to keep water off of it. Mr. Ryan observed a more narrow area across the waterway and recommends the City consider relocating the bridge to this area. It would be a modest reroute. Mr. Ryan noted that there is a second bridge in the wetland. This bridge needs to be moved up and over to get it higher. This trail would not be relocated. The bridge would need to be longer. Councilor Chadbourne noted that many people fall in this area. Mr. Ryan noted that he proposes installing stone curbing along the trail to the right. There is a need for stone steps at the trail past the bridge.

Mr. Ryan recommended that viewing areas in the Forest be formalized by incorporating benches. Mr. Corwin noted that at the Far Side Black Trail there is an interesting set of ledges that could serve as a destination.

Mr. Ryan noted that the carrying capacity for trails in the lower quadrant (Drummer Hill area) has been reached. Mr. Poanessa noted that the Society for the Protection of NH Forests has made similar comments and that NEMBA is considering closing off some of these trails.

Mr. Ryan recommends that pressure treated lumber not be used for bridges, and instead white oak or black locust be used. Mr. Poanessa noted that NEMBA has been building with wood from blowdowns instead of hauling lumber into the forest.

Mr. Ryan noted that there is good signage in Drummer Hill and along the mountain bike trails; however, it is placed too low on the trees for mountain bikers and varies in style. Mr. Poanessa stated that he is unsure of who is installing these markers.

Councilor Chadbourne asked if snowmobiles are allowed in the Forest. Mr. Bohannon stated that snowmobiles are allowed; however, ATVs are not. She then asked if cross country skiing is popular in the Forest. Mr. Poanessa noted that there is a little activity of that nature, but fat-tire biking is more popular in the winter.

Mr. Ryan noted that many of the trails are well thought out. There is a hemlock blow down that is of concern where a trail goes underneath it. Mr. Lacey asked about frequency of trail use. Mr. Poanessa noted that every weekend there are approximately 50 people riding and for every walker there are approximately 4 riders. Mr. Corwin noted that he saw people out on the trails every time he was out surveying. Mr. Lacey stated that he wonders about wildlife management and the impacts of human use on habitat. He asked if this impact is part of the assessment. Mr. Littleton noted that he will be assessing this to a certain extent in his report. Mr. Bohannon noted that it is very difficult to balance all of the user groups and the Forest habitat. Mr. Corwin noted that any forest management will have an impact on the wildlife. However, he observed that while the trail network may appear dense on the map, it does not appear this way when out in the forest.

Mr. Ryan noted that the biggest safety hazard he observed was the bridge that goes over Lewis Pond that sits on top of railroad tracks in the middle of Drummer Hill. He recommends installing a railing on this bridge.

Mr. Ryan will work with City staff and Mr. Poanessa to further discuss the proposed recommendations before finalizing his draft report.

**5) Other Business** – None at this time.

**6) Adjournment** -

There being no further business, the meeting adjourned at 12:30 pm.

Respectfully submitted by,  
Tara Kessler, Planner