

City of Keene
New Hampshire

CONSERVATION COMMISSION
MEETING MINUTES

Tuesday, February 22, 2022

4:30 PM

**Council Chambers,
City Hall**

Members Present:

Alexander Von Plinsky, IV, Chair
Councilor Andrew Madison, Vice Chair
Councilor Robert Williams
Art Walker
Ken Bergman (via Zoom; non-voting)
Thomas Haynes, Alternate
Brian Reilly, Alternate
Steven Bill, Alternate
John Therriault, Alternate

Staff Present:

Corinne Marcou, Administrative Assistant

Members Not Present:

Eloise Clark

1) Call to Order

Chair Von Plinsky called the meeting to order at 4:31 PM.

2) Approval of Meeting Minutes – January 18, 2022 & February 10, 2022

January 18 revisions: Mr. Reilly should be listed as present. The adjournment time should read 5:21. Line 129: replace “Piscah” with “Pisgah.”

Vice Chair Madison moved to approve the January 18, 2022 minutes as amended, which Mr. Walker seconded, and the motion carried unanimously.

February 10 revisions: on lines 149 and 150, language should be stricken that refers to the Goose Pond Stewardship Plan suggesting considering incorporating other parcels.

Mr. Therriault moved to approve the February 20, 2022 minutes as amended, which Mr. Reilly seconded, and the motion carried unanimously.

3) Guest Speaker – Matt Kelly, County Forester

Chair Von Plinsky welcomed guest speaker, Matt Kelly, who is the Natural Resource Field Specialist for the University of NH Extension. Mr. Kelly said he wanted to introduce himself and explain what he does as County Forester, highlight some significant forest resources in the area, identify some issues or concerns of interest to this Commission, and then welcome discussion. Mr. Kelly shared that he has degrees in forestry and forest resources management. Prior to arriving in NH, he taught at Michigan Tech University. He taught courses in forest resource management and forest operations, in addition to social sciences research.

Mr. Kelly continued sharing his core responsibilities as County Forester. He visits woodlots with private landowners, assists consulting foresters and other natural resource professionals, leads workshops and educational events, manages the County Farm, acts as the County Chair/Inspector for the American Tree Farm System, is the State Representative for Securing NE Forest Carbon (regional, grant-funded effort to make more people aware of science and management of forest carbon, climate change, and the emerging forest carbon market that offers benefits to landowners), serves on various committees, and fields email/phone inquiries related to trees/forests.

My. Kelly expanded upon his duty visiting woodlots with private landowners. His goal is to visit as many woodlots as possible in the county. He generally tracks walks with property owners, with photos and GPS points, which he can later share with the landowners for their viewing. During the walks, he talks with the landowners about their goals and objectives. He does a general assessment and discusses what interests that landowner (e.g., creating habitat, timber quality, applying to cost share programs, etc.). His goal is to get landowners further along the path to good stewardship. After the visits, he shares a summary and connects them with relevant local professionals, like arborists or conservationists.

Next, Mr. Kelly described his duties leading workshops catered to a broad audience, from tree identification for the general public to more technical projects, such as one on Beech control for private foresters' continuing education. Sometimes he leads forest ecology hikes like the recent one at Goose Pond. He delivers both in-person events and occasional online webinars via Zoom. There are a range of topics that can be addressed, he is starting to book those for the coming year, and he welcomed collaborations with this Commission.

Mr. Kelly shifted focus to the forests of Cheshire County. According to the USDA Forest Service, there are 343,234 acres of forestland in Cheshire County and about 85% is owned by private families or entities. He also interacts with state foresters and municipal leadership. The average annual net total forest growth across the county is 15.99 million cubic feet per year, the average annual harvest is 7.91 million cubic feet per year, and the growth-to-cut ratio is 2.02. He explained the growth-to-cut ratio, stating that we are growing twice as much volume in wood as we are removing annually. It is a broad indicator of "sustainability," but he said how those

harvests are conducted is another thing. In response to Councilor Madison, Mr. Kelly said that the private entities do include land conservancies and conservation trust funds.

Next, Mr. Kelly discussed the age of Cheshire County forests. He showed the percentage of forestland across various age classes. It showed that approximately 70% of the forest resources in the County are between 61–100 years old, with fewer forest acres in younger age classes (20–40 years old) and in the oldest age class (120+). He said it is challenging to say what age an old growth forest is because there are different species and different types live longer than others. In general, though, he said the Department of Natural Resources at the University of Minnesota classifies old growth as anything over 120 years. He likes to consider it 150 years or more, but it depends on the characteristics of the tree. He said old growth is not just age, but structure that has been allowed to develop without large scale disturbance (human or natural). It makes sense that a lot of our forests are in the 60–100 years age class after the 1938 hurricane. He said that to create resilient forests it is important to create young growth for wildlife in addition to sustaining old growth.

Next, Mr. Kelly shared challenges that foresters and forestry professionals encounter in the County and Statewide:

- Invasive plants and pests
- Degraded stands in need of rehabilitation; for example, from poor harvesting practices that only harvest the valuable trees. Rehabilitation is expensive.
- Deer browse/regeneration. Deer like to eat the most valuable seedlings, including red oak and sugar maple.
- Climate change effects
- Low-grade markets are always a concern and while okay right now, he understood that the chip market used to be robust and has taken a hit. He said that is important because to practice good forestry you want to remove the worst trees first and allow the healthy ones to grow and improve the stand. He said there needs to be a market for the low-grade trees.
- Diversity of stand ages (resiliency, structural diversity). It would be good to see more age class distribution.
- Housing/development pressure
- Parcelization/fragmentation

Mr. Kelly s discussed some challenges and opportunities for Keene. First, he discussed the Goose Pond forest, stating that he had hiked and biked it, and read the Stewardship Plan. He thinks a potential challenge is going from a document to implementation and prioritizing what it in the plan. He said some activities would have a cost and others would generate revenue; he agreed with the recommendation for an endowment. He also discussed the public perception and response to any changes implemented at Goose Pond, stating that it would be an opportunity to inform the public but also a challenge to make everyone happy. Mr. Kelly continued discussing the forest and the need for structural/age class diversity, which is good for wildlife, species

diversity, and forest resilience. Some work suggested in the plan includes patch cutting and group selection to create this diversity.

Next, Mr. Kelly talked about the red pine plantations scattered throughout Keene (Wheelock Park, Maple Avenue, Ladies Wildwood Park, Yale-Tourney Forest, & Robin Hood Park). He said that dead red pine threatens vehicular and pedestrian traffic. These plantations are monocultures, which are the opposite of biodiversity. They were planted 80 years ago, post-hurricane. They grow densely and are starting to show signs of poor health, most likely from salt, being close to pavement, and beetle infestations. Because there are concerns about risks to people and property, he suggested being proactive versus reactive, and having a plan in place for if something more dramatic happens. He met with the Director of Parks, Recreation & Facilities, Andy Bohannon, and others about these trees because of the possibility for red pine scale arriving in Keene. It is found currently in Rindge in Cheshire County. He showed Bear Brook State Park where approximately 120 acres of red pine had to be removed due to the disease. It takes about three years to kill trees once infested. It is moved by squirrels, birds, and even humans. It is not in Keene yet but would be a significant problem if it did. He said there is public concern about these visible locations that people cherish for providing sound buffers, shade, and a pleasant environment.

Mr. Kelly concluded his presentation, sharing his contact: matt.kelly@unh.edu and 603-397-3673. He welcomed questions.

Mr. Therriault asked if there is a native plant species list for Cheshire County or this region of NH. Mr. Kelly knew there was a native tree species list for NH, but he was unsure if it was broken down by county. He would inquire. In terms of shrubs and herbaceous plants, he imagined it was a large list and would inquire about that as well. Mr. Therriault asked if there were any linden trees native to the area. Mr. Kelly said he usually sees them planted as street trees. He said basswood was native if Mr. Therriault considered that a linden.

The Chairman discussed the red pine issue. He imagined if money were no object at Ladies Wildwood Park, for example, and asked if the ideal would be to clear the deadwood, weaker trees, and invasives like knotweed, and then to plant a more representative sample of native trees? If money were no object, Mr. Kelly said that getting something in there regardless of the threat of red pine scale to start transitioning it to something with more diversity would be a good approach in his opinion. He suggested planting things more resilient to the oncoming climate effects, like the red maple that can handle many conditions. He said we should not leave it to chance and let anything regrow that could be invasive. Rather than waiting for trees to regenerate on their own, he thinks planting some well established 15-year-old trees above any browse line would be a good approach.

Councilor Williams asked the current status of the hemlock wooly adelgid in Cheshire County. Mr. Kelly replied that it is in all towns. He said that despite a mild winter there were cold enough temperatures to subdue it, with up to 90% mortality possible. He said there is another non-native

insect, the hemlock looper, of which there was an outbreak south and east of Mount Monadnock. It is a native species that thrives when conditions are just right every 30 years and can devastate hemlock stands. Some in Jaffrey, for example, were 100% defoliated. Hopefully it was just a one-year outbreak. He said hemlocks are under threat and the elongate hemlock scale is also in Keene.

Mr. Bergman discussed the American chestnut. He said there were free growing chestnuts, usually sprouts from stumps, in Hinsdale, along the CT River, and in Brattleboro. He said people were also trying to breed blight resistant chestnuts. Mr. Bergman asked if the State has any activities promoting the establishment of chestnuts on public or private lands. Mr. Kelly was unaware of any. He said researchers from the State University of NY developed a transgenic chestnut, which is genetic modification by taking a small sequence of the common wheat plant DNA spliced with the American chestnut, which has shown very resistant to blight. They are now waiting to see if the transgenic chestnut can be approved by the federal agencies as a food source. There has also been some mild success crossbreeding the Chinese and American chestnuts. Mr. Bergman asked if there was a black gum swamp in Cheshire County. Mr. Kelly replied that there is one at the Horatio Colony Nature Preserve; it is in its northern range. Mr. Bergman said some in NH could be close to 500 years old.

Mr. Therriault asked Mr. Kelly's opinion of the Liberty Elm that is bred on Hastings Road in Keene. Mr. Kelly replied that he does not have enough information to have a strong opinion and would seek more information to weigh-in.

Mr. Bill was interested in the long-term carbon storage capacities of old growth forests and how that could fit in with Commission management practices; he mentioned soils too. Mr. Kelly said the science shows that up to 50% of carbon on a forest plot acre is underground and the other 50% aboveground. He said that holding onto old age classes of trees captures carbon for many years to come. He said that must be weighed against carbon sequestration, or the rate at which we pull carbon from the atmosphere through photosynthesis. Forests sequester carbon at the fastest rate between ages 25–50, when the trees are 5–6 inches and are in high competition with each other. In his view, there should be a balance between protecting old growth for storage and young stands that sequester at a fast rate. He said if wood product were removed from managed stands, then that wood product also stores carbon for many decades both as a usable product and in a landfill.

The Commission thanked Mr. Kelly for his time.

- 4) **Informational**
 - A) **Subcommittee Reports**
 - i) ***Outreach Subcommittee***

Mr. Haynes said this months' meeting was canceled and they hope to meet again soon. On their agenda is the Goose Pond Through the Seasons walk. A walk is planned with Jeff Littleton in the

fall, they are considering a possible birding event in the spring, and there was discussion of inviting Mr. Kelly back in the summer. The Subcommittee is considering revising its Tap to Toilet program about all facets of Keene's water system. Mr. Bill is potentially leading a geology walk at Robin Hood Park. Mr. Haynes appreciated the invasives schedule, so they do not overbook anything.

ii) *ARM Fund Subcommittee*
(1) *Update on Land Auction Purchase*

The Chairman reported that on February 17 he had a lively discussion with the City Council about the purchase. In the end, on a vote of 11 in favor versus three opposed, the City Council approved bidding on both parcels. The Chairman did not yet have further details at the time of this meeting, but he knew the City was outbid on both parcels. He will have more details in March about the buyer and potential plans for the parcels, stating that he does not believe either is developable. The Chairman asked for Commission permission to write a thank you letter to the City Council on behalf of the Commission.

Mr. Haynes moved that the Chairman write a letter thanking the City Council for approving the bids on behalf of the conservation Commission, which Mr. Therriault seconded, and the motion carried unanimously.

Mr. Haynes noted that he saw an email about the ARM Fund opening for projects again. The Chairman said he would inquire, noting that last round there were no funds for this watershed but that he thought some City projects were ready if funds were available.

iii) *Greater Goose Pond Forest Stewardship*

Mr. Haynes said the biggest news was that Lew Shelley agreed to do two trail workshops at Goose Pond, which have yet to be scheduled. The Subcommittee had identified maintenance needs that the type of wood signage they would like to implement.

The Chairman would look into Mr. Kelly's comments about payments to landowners for not cutting trees as a possible alternative to selective harvesting, as he would personally rather leave trees to become old growth.

B) *Invasive Species*
i) *Tentative Invasive Plant Removal Schedule*

Councilor Williams shared the following invasives removal schedule, stating that he tried to schedule one to two events during each month of the season, with most events on Saturdays and fall events planned for Veterans and Indigenous People's days when people are off work:

- Saturday, May 7, 11:00 AM–1:00 PM: Garlic Mustard Challenge (location TBD)

- We are in need of a new patch to target, and Councilor Williams welcomes suggestions during the month ahead of the event.
- Mr. Bill asked if there was a need to monitor the garlic mustard sites from last year and Councilor Williams said yes. The two sites from last year are in the Councilor's neighborhood and he will keep an eye on them. He said that garlic mustard grows over two years, so there is a chance there is still plenty to pull at the previous locations. Still, he wanted a fresh spot as well.
- Monday, June 20, 5:00 PM–7:00 PM: Japanese Knotweed (location TBD)
 - Councilor Williams thought this might coincide with Juneteenth observed.
 - June is the best time to cut knotweed with the expectation that it will grow back less that season. By cutting in June, the energy removed from the plant is maximized. The site could be revisited later in the season to address regrowth.
- Saturday, July 16, 11:00 AM–1:00 PM: Watercress at the Dillant Hopkins Airport
 - The same patch would be addressed as last year, where 30 bags were removed, in addition to some work further downstream.
- Saturday, August 20, 11:00 AM–1:00 PM: Placeholder
 - Possibly for a joint event with the Ashuelot River Park Advisory Board as was discussed last year.
- Monday, September 5 (Labor Day) 5:00 PM–7:00 PM: Buckthorn at the Old Stone Arch Bridge at the far end of Court Street
 - Mr. Bill noted that there is significant poison ivy at this location.
- Monday, October 10 (Indigenous People’s Day) 4:30 PM–6:30 PM: Norway Maple, Bittersweet and Japanese Barberry at Robin Hood Park
- Friday, November 11 (Veteran’s Day) 4:00 PM–6:00 PM: Burning Bush at the Industrial Heritage Rail Trail

The Chairman thanked Councilor Williams for his effort.

5) Discussion

A) Conservation Commission Speaking Events

The Chairman said that Ms. Clark’s suggestion of guest speakers like Mr. Kelly would continue with Amanda Littleton from the Cheshire County Conservation District in March, Councilor Madison in April, and Anne McBride from the Monadnock Conservancy in May.

The Chairman also wanted to kick-off the Commission speaking events this summer in May/June, when it is not too hot for outdoor events. Councilor Madison thought that was a great idea. The Chair mentioned Elm City Compost and a possible waste event, without reinventing the wheel. Councilor Madison suggested a trash talk and said he would start looking into it. Councilor Williams said the Library has great venues for something like this; they are making the courtyard capable of hosting outdoor events in addition to the space at Heberton Hall. There has been a lot of investment to ensure the Library can support hybrid events streamed live.

Mr. Bill wondered if these Commission events could piggyback on some other events already scheduled in the City. Councilor Madison agreed it was a good idea to take advantage of a captive audience and more diverse crowd. Chair Von Plinsky suggested something on food waste to accompany Taste of Keene. Councilor Madison noted that there is an amphitheater for events behind the Monadnock Food Co-Op, which is active in limiting food waste and would likely partner on such an event. Councilor Madison will take the lead and the Chairman will help. Councilor Madison will inquire about the library as a rain venue. Mr. Bill said it would be helpful to have a list of City events.

B) Beaver Brook to Cemetery

The Chairman had not had a chance to work on this. He did talk with Mr. Bohannon, who was excited about using green space we already have to spread the word on wildlife habitat and invasive species. The Chairman would follow-up more before the March meeting, especially after the auction process brought a lot of attention to the length of the Beaver Brook watershed, which he thinks the Commission could use as a spine for events to remove invasive species and highlight the great wildlife in Keene. Councilor Williams said she was in the neighborhood and would like to go on the next walk with Mr. Bohannon. The Chairman would try to schedule a Committee field trip before the next meeting to the cemetery for a short walk down the Brook with Mr. Bohannon, weather dependent.

C) Airport Solar Project Update Timeline

The Chairman reported that he requested more details from Staff on the solar array by the Airport, but Staff had been busy with the budget process. He hoped to have more details at the next meeting. Mr. Therriault had a phone call scheduled the next day with the Assistant Public Works Director. The Chairman asked Mr. Therriault to inquire about a brief overview on the size of the project and how much timber was removed. Mr. Therriault would also inquire about the possibility for a pollinator border on the inside or outside of the fence. Chair Von Plinsky said a Bill recently passed his desk about creating pollinator score cards for big solar projects, but it did not move forward; he would share a link. He also said there is more than just the fence perimeter, noting that ground cover could also be used under solar panels as pollinator habitat. Mr. Bill asked Mr. Therriault to also inquire about forthcoming solar projects in the City so the Commission can be proactive; the Chair was unaware of any.

Mr. Bergman asked for an update on the wildlife fence at the Airport, as he has had challenges reaching the Airport Director about the budget/planning status of that project. The Chair would add that to his discussion with Staff, noting that there had been a lot of turnovers in the Community Development Department.

6) **New or Other Business**

Mr. Bergman noted that the Harris Center petitioned the City Council to close Jordan Road for the amphibian migration and wondered if the City Council would have any objection or need to hear Commission support. Councilor Williams said the matter was referred to Committee, which would make a recommendation, and send it back for Council vote. He said the City Council had already been through the matter of amphibian migration for multiple years and heard the matter of Jordan Road right before Covid-19, when the Council did approve despite some safety concerns. Councilor Williams did not anticipate problems with the request but would be attentive.

7) **Adjournment**

There being no further business, Chair Von Plinsky adjourned the meeting at 5:38 PM.

Respectfully submitted by,
Katryna Kibler, Minute Taker
February 28, 2022

Reviewed and edited by,
Corinne Marcou, Administrative Assistant