Cornwall Conservation Commission Minutes of June 13, 2023 meeting

CCC Members present: Katherine Branch (chairing meeting), Mary Dodge, Michael Sheridan (recording secretary for this meeting), and Andrea Landsberg

Quorum declared Approval of minutes from May 2023 Round of introductions

Old Business:

I) Interview with Monica Pryzperhart, Middlebury College Environmental Studies program, about the possibility of doing a survey of wildlife movement and habitats All responses from MP are from notes taken by Michael Sheridan with additions from the CC. Zoom of the interview is available at: https://us02web.zoom.us/rec/share/3y2fzo6m9RD5LziJ0WHk4Sf30xsZW50yVy-

https://us02web.zoom.us/rec/share/3y2fzo6m9RD5Lzij0WHk4Sf30xsZW50yVy-Ft23S2e4QVmCdobX2QRiQBiq4Q55a.mxXfsEtspwEXQbJl Passcode: X?\$Q%+6n

Q1: What is the Champlain Valley's suitability for wildlife?

a. Why is the Champlain Valley an especially good place for a range of wildlife? MP: In terms of landscape ecology, the calcium-rich clayplain soils and warmer climate of the Champlain Valley have led to great biodiversity. These clay-based soils are good for forest growth and plant biodiversity. This was the most biodiverse and bioproductive area of Vermont before European settlement. Plants grow here that won't grow in other parts of the state and its agricultural potential has made it the most fragmented and least protected land as well.

b. Within an already-fragmented, developing landscape such as Cornwall's, what are the habitat needs of the town's larger animal predators (coyote, bear, bobcat)?

MP: In terms of connectivity, the focus on apex predators is not about protecting these particular species. The reason that ecologists focus on these animals is that they act as an 'umbrella species', indicating by their presence that there is sufficient forest connectivity to support a diversity of animal and plant species in addition to these wide-ranging mammals. That is, if there is enough connected forested habitat to support these species, that means that other plant and animal species are too. The core issue for overall assessments of ecological health and resilience is not 'how many animals are there' but 'are they present'. There is no general rule of how much connected habitat is needed for a particular species, because ecological niches vary widely, and it depends on the species and their ability to move among different niches. The question of 'how much habitat is needed' is more of a question of the town's values and goals than a scientific one, because there is no hard and fast threshold. There are two general ways to proceed with a wildlife survey: 1) if you have the time and the funds, a detailed highly granular survey is possible to identify precisely what is present (= often done for high-value endangered species); and 2) if time, labor, and money are all scarce, use landscape ecology models to direct you to where to focus your efforts.

c. Within Cornwall, what might endanger their survival; what will support their survival?

MP: Basically what these mammals need is sufficient habitat that allows them to successfully access the multiple ecological niches upon which they depend. This can occur by conserving and/or enhancing existing forest connectivity and by establishing new areas. In terms of where animals cross roads, if there is a concern about mortality, there might be ways to

Q2: If supporting existing wildlife diversity through preserving connectivity habitat is a goal in Cornwall, is an inventory that documents the town's extended habitat blocks and connector areas the place to start?

a. How effectively can a project like this define and describe these areas?

MP: An inventory that uses Cornwall's existing ecological data on habitat blocks and connectors would confirm whether wildlife use these areas. It will not tell you that they are the only or the best areas. And, it will be important in explaining to the town what we want to accomplish with the inventory to define the wildlife species we wish to focus on. Deer and coyote, in some instances, are not good indicator species for overall connectivity because they do not stick closely to forest cover, traveling through meadows and even completely bare ground. Bear, bobcat, fisher, and otter, on the other hand, stick closely to vegetative cover, and so are indicative of good connectivity areas. Again, the key issue is not abundance of these species, but their presence. If we wanted to focus on the question of abundance, a different type of survey method would be needed.

b. Has this approach been tried in other towns?

MP: Best to check with F&W's Jens Hilke. Bristol is working on an inventory right now, Monkton (Laura Farrell), and Salisbury completed one several years ago.

Q3: What else should be considered in taking on this inventory?

a. Should the inventory document not only existing habitat, but also present areas for possible habitat restoration to enhance town-wide connectivity?

MP: The inventory may indicate what areas are ripe for connectivity restoration by showing the absence of wildlife. This could be an indicator for a restoration effort. But this still doesn't ID *where* restoration should take place. There are two general approaches to habitat restoration; 1) Build it and they will come, as a result of establishing new habitat, and 2) determine the characteristics of the preferred habitat and remake that.

The identification of restoration areas would be a different project that could build upon the result of this initial survey. It is hard to use a survey that documents the presence and use of wildlife to identify additional areas for habitat restoration. Hard to survey for what should be restored because it depends on which species and which landscape features are being valued. The identification of areas for restoration is a human decision about values, not an ecological metric.

b. Would hunters take advantage of this information?

MP: Hunters are already highly knowledgeable about which species are where and maybe among the most knowledgeable people to consult about where wildlife in Cornwall would be. Deer would not be a major focus of a Cornwall wildlife survey, and most Vermont hunters are after deer. There could be some bobcat trapping happening in Cornwall. The Cornwall CC could consult Brehan Furfey at VT Fish and Wildlife to get data on the numbers of permits issued for the species targeted by a survey.

c. Is focusing on larger predators undercutting the importance of smaller animals that are the base of the food chain?

MP: This goes back to the larger predators as an index of overall ecosystem health and resilience that we already discussed.

d. Does the CC have sufficient human resources to lead the effort: securing funding, hiring the consultant, overseeing the connection with town residents, and bringing the project to completion?

MP: Hiring a consultant would be the simplest way. Training and using volunteers is a complex process. But, volunteers bring town-buy-in. This is about community capacities and willingness, not an issue about the amount of ecological data. Several people are doing this kind of work and will send list.

The CC thanked Monica for her insightful responses and she left the Zoom meeting.

II) County-wide meeting of conservation commissions. Likely to be a half-day meeting in October or November, on a Saturday morning. CC discussed what the focus should be. Some CC members see this as an opportunity for networking; others as a chance for coordinated regional action on environmental issues such as preparing Addison County for climate change. One CC member suggested that this meeting should be part of an effort to institutionalize citizen-led conservation, by working to create a Regional Conservation Commission, along the lines of the existing Regional Planning Commissions.

III) New Business:

- 1) Conservation-themed get-together for Ledges residents. Marc Lapin to give a presentation for property owners in the Cornwall Ledges about the ecological features of their land. MJS suggested that this meeting promote the idea that these people are collectively the group managing an area that is critical for Cornwall's environmental stewardship and biodiversity. The more that this group can recognize itself as a group with a shared interest in the health of a commons, the better.
- 2) Updates:
- a) Cornwall desperately needs a new Zoning Administrator
- b) Firefly event July 1 Andrea L is coordinating, poster is ready and going out to Sue J's townwide email list soon
- c) MJS and AL need to talk to the pickleball court group about getting the CC involved with their efforts; ideas include a pollinator garden, a natural history-themed info kiosk, and a nature path (possibly connecting to the TAM?)
- 3) Other updates, mostly discussed by email prior to meeting to create time for our interview with MP, to be followed up in July:
 - 1. Reports from SB, DRB and CPC
 - 2. Report from SB public hearing on Town Plan
 - 3. Blog storage (Andrea email of 6/5/23)
 - 4. Ledges letter property update (Mary)
 - 5. Firefly event details. Greg Pask. July 1. Late evening. 517 Snake Mountain Road, Cornwall.
 - 6. Alicia Daniel program. Reading the Landscape walk. Sunday, September 17th, 1:00-3:00 pm. 517 Snake Mountain Road, Cornwall.
 - 7. Proposal for possible carbon sequestration program (Mary)
 - 8. Follow-up from April meeting between Mary, Katherine & Simon Scheirer of MALT. Suggestion to replace a conservation-themed joint program with MALT with the county-wide conservation commissions meeting
 - 9. Assign newsletter for January '24 and April '24. 8:10-8:15. Please volunteer in advance of June 13th. (Andrea volunteered for Jan '24)

Other agenda items for July meeting (postponed to allow for Inventory discussion, chaired by DB, KB as secretary)

- 1. ARPA funds (All)
- 2. Blog options as outlined in Andrea's email of June 5, 2023 reply to CCC agenda
- 3. Community Forest discussion (Andrea)
- 4. Continued discussion of Inventory (Mary)
- 5. Other business?

Newsletter: July '23 (June-Katherine), October '23 (September-Mike), January '24 (December-Andrea), April '24 (?)

Rotation of chairmanship; chair will take minutes the month following the meeting they chair:

Branch (June 13; Mike recording secretary)

Burns (July 11; Katherine recording secretary)

Dodge (August 8; Burns recording secretary)

Landsberg (September 12; Dodge recording secretary)

Sheridan (October 10; Landsberg recording secretary)

Branch (November 14; Sheridan recording secretary)

Burns (December 12; Branch recording secretary)

Dodge (January 9, '24; Burns recording secretary)

Landsberg (February 13, '24; Dodge recording secretary)

Sargeant (March 12, '24; Landberg recording secretary)