

Norwich Trails Committee and volunteers monthly meeting

7 pm, June 2, 2021

Location: Kearney-Niles Pavilion, Huntley Meadows

AGENDA

- 1. Approval of agenda
- 2. Comments from those present

Trail infrastructure

- 3. Reports on recent trail blockages and actions taken or planned:
 - a. Upper Loveland Trail May 16th work day.
 - Story posted on Norwich Trails website.
 - Follow-up: Signage needed?
- 4. Scope of Norwich Trails responsibilities?
- 5. Work days to schedule:
 - a. June 13th
 - b. July 18th
 - c. August 15th
 - d. September 19th
 - e. October 17th
- 6. Planning scope of work on Lower Ballard Trail—Discuss:
 - a. Proposed Scope of work for FY 2022-3 from Upper Valley Trails Alliance
 - b. Clark questions about flooding robustness
- 7. Report on the May 22nd reconnaissance of the Upper Ballard Trail
- 8. Brown Schoolhouse Bridge (BSB) and Happy Hill (HH) parking areas: Liaison with town management, regarding configurations and signage?
 - a. Report on completion of BSB parking
 - b. Report on discussion about HH parking
- 9. Planning for "kids' bridge" Further organizing for the "Kids' Bridge"
 - a. Status
 - Funding status
 - Permit status
 - b. Planning steps
 - Likely construction date
 - Site staging area
 - Construction manual
 - Tools needed
 - Number of volunteers and supervisors needed

• Training needed (video, etc.)

Trail use

- 10. New mapping of trails: Parcel 5
- 11. Feedback on Appalachian Trail Corridor

Financial

- 12. Clarification of purchasing procedures—Guidance from town manager
- 13. Planning for FY 2022-23 budget: Parking—Draft report to Norwich selectboard
 - a. Gile Mountain
 - b. Burton Woods Road
 - c. Elm Street
 - d. Happy Hill Road

Other

- 14. Items for July meeting
 - a. Further organizing for the "Kids' Bridge".
 - Site staging area
 - Construction manual
 - Tools needed
 - Number of volunteers and supervisors needed
 - Training needed (video, etc.)
- 15. Items for future meetings
 - a. Developing a trails master plan, as required by the 2020 Norwich Town Plan.

16. Adjourn

Discussion material for agenda items:

3 a. Upper Loveland Trail May 16th work day. Follow-up: Signage needed?

From: Jim Faughnan <jimfaughnan74@gmail.com>

Date: Mon, May 17, 2021, 08:25

Subject: Upper Loveland Trail signage

To...

I would like to propose to the signage committee having trail head signs at both ends. I realize that the trail is only 120 yards or so. This was reclassified about 20 years ago to trail statis by the town. Unfortunately we never maintained it until yesterday. Right now there are no signs whatsoever at the Maple Hill end and only the ordinance sign at the Loveland end. Any thoughts or comments on this matter? If we need a meeting on it, great. Once it has been discussed, maybe it can be on the agenda at the next meeting. Jim

4. Scope of Norwich Trails responsibilities

From Gerry Plummer: part of the discussion should be to determine what specific responsibilities NTC should have regarding maintenance, and who are the "owners" of these trails (Fire District, Rec Dept, UVLT at least in part for the new Brookmead Connector, or whatever it should be called). See also https://norwichtrails.org/about/#trail-responsibilities:

Trail name	Total length (miles)	Maintained by Norwich Trails	Primarily maintained by others	Other organization
Norwich Nature	1.5	1.5		
Rosemary Rieser	0.3		0.3	UVTA
Hazen	1.8	0.7	1.1	Montshire
Appalachian Trail	7.0		7.0	GMC
Heyl	1.5	1.5		
Tucker	0.6	_	0.6	GMC
Cossingham	0.6	0.6		
Burton Woods Road	2.9	2.9		
TH 51	0.2	0.2		
Ballard	3.6	3.6		
Converse	0.4	0.4		
Brown Schoolhouse	0.8	0.8		
Parcel 5	3.1	3.1		
Brookmead	4.2	_	4.2	UVLT
Blue Ribbon	4.5	4.5		
Blue Ribbon Connector	1.3	1.3		
Gile Mountain (hiking)	0.7	0.7		
Gile Mountain (cycling)	0.8	0.8		
Bradley Hill	0.6	0.6		
Totals	36.4	23.2	13.2	

UVTA = Upper Valley Trails Alliance Montshire = Montshire Museum GMC = Green Mountain Club UVLT = Upper Valley Land Trust

6. Planning scope of work on Lower Ballard Trail—Discuss:

b. Clark questions about flooding robustness

On Sat, May 8, 2021, 3:46 PM George Clark <...> wrote:

Questions about Ballard Trail upgrading, cost and durability

The following comments and questions are intended to elicit discussion without offering a definite answer.

The Ballard Trail is among the more popular trails in Norwich, and therefore it's appropriate that the Trails Committee and volunteers continue working to keep the Ballard Trail in good condition.

However, much of the Ballard Trail is situated where severe flooding and moving slopes can conceivably destroy almost any infrastructure in a relatively short time. As a result of the varied water flows within recent years, numerous changes have occurred along Charles Brown Brook and its tributaries, and continuing changes seem highly likely.

Should then more consideration be given to proposed infrastructure projects along the Ballard Trail from the viewpoint of their potential resistance to flooding and slope changes? If considerable funding is required for a project, can it be assured that resulting infrastructure will be long lasting? For example, major rebuilding of a treadway can be quite expensive, but is that a worthwhile expenditure if that area is subject to severe flooding?

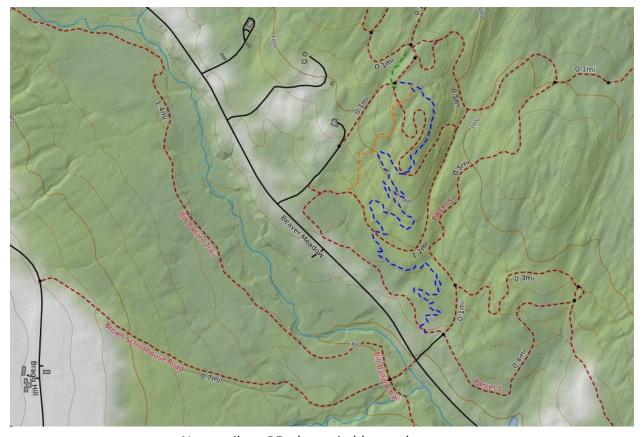
A case might be made that much or all of the Ballard Trail should remain as a relatively primitive trail and that major infrastructure requiring large expenditures should be reserved for popular trails less vulnerable to flooding and slope changes (such as, for example, has been done on Gile Mountain).

Nevertheless, if improvements on the Ballard Trail would enable a much greater use by the public, would substantial spending then be warranted even though the resulting infrastructure might not last very long?

- 7. Report on 22nd May reconnaissance of the Upper Ballard Trail (See Appendix A)
- 8. b. Report on discussion of Happy Hill Parking (See Appendix B)
- 10. New mapping of Trails: Parcel 5

From Gerry Plummer: discussion about 3 new trails in P5, including one bicycle trail wholly inside P5 which seems to probably be rogue (at least no sponsor/owner I've found willing to assert such role). See orange trail on W side of P,m5, on map below. This trail is poorly constructed, already eroding badly in places, and very challenging or even dangerous for kids.

The other 2 (also shown on map below) will be added to the P5 map on the website.



New trails at P5, shown in blue and orange.

10. Feedback on Appalachian Trail Corridor

From Christopher Mattrick, District Ranger, Forest Service: The scoping notice and opportunity to comment should be mailed out in June.

Appendix A



Trail Survey: Upper Ballard Trail

22 May, 2021

Stephen Flanders, volunteer

Background—This is a follow-up on a 25 April trail survey report of the Upper Ballard Trail from Brown School House Road to the upper trailhead. Six people joined in the May 22nd survey to assess the condition of the trail and its infrastructure during dry conditions. They were:

- Bob Fisken
- Stephen Flanders
- Elisabeth Hammer
- David Hubbard
- Nick Krembs
- John McCormick

The plan was to assess the need for puncheons or stepping stones at chronically wet places, where there is evidence of traffic bypassing the area and causing erosion.

In summary, we identified the following types of projects:

- A minor relocation of the trail in a perennially flooded area near some apple trees.
- Installation of two new bridges.
- Re-arrangement of stepping stones at the Grand Canyon stream crossings to provide footfalls in higher water than now accommodated.
- Boggy areas for puncheons
- Boggy areas for maintenance of drainage
- Area discussed for steps leading away from stream

The locations are keyed to numbers to a map in the Appendix.

It was the consensus that using dimensioned, pressure-treated lumber for spans would provide greater durability than materials sourced from the surrounding forest. The trade-off is the need to carry the materials to remote locations.

Perennially flooded area—The area at 43.744831, -72.350486, downstream of the Grand Canyon crossing where one steps across a fallen apple tree, is subject to overland flow, which has eroded the treadway and is impassable at high water. A relocation is indicated that connects a point mid-way along a fallen tree with an area upstream near a tree marked with a ribbon.



Frequently flooded area (l.) and proposed trail relocation (r.)—to the right when facing downstream

New bridges—After discussing the merits of stepping stones versus bridges, it was decided to span the following crossings with a 16-foot and 10-foot bridge.

• 16-foot bridge to be located at 43.743189, -72.347619, this is an area previously identified for puncheons as BTSC21.



16-foot bridge site

• 10-foot bridge to be located at 43.745833.-72.355356, a place previously indicated as a wash.



10-foot bridge site

Grand Canyon crossing—After discussing the ford-like nature of this crossing, the consensus was to take the flat stones in the immediate area and provide some higher stepping stones, with ample room for flow around them. There will continue to be high-flow conditions, where passers-by will either have to get their feet wet, or turn around. (Shown as "Ford" in the Appendix.)

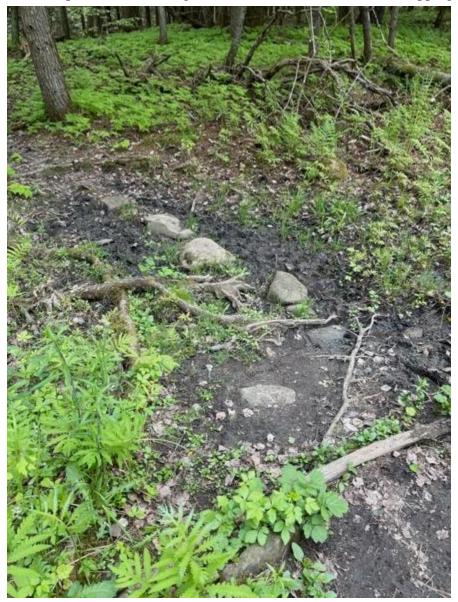
• Ford crossing at Grand Canyon 43.7455, -72.3531



Ford crossing at bottom of Grand Canyon

Stepping stone candidate areas—We identified stepping stone crossings where the spacing of stones was too close to promote good flow during peak runoff, yet poorly aligned for good sequencing of footfalls. These are illustrated in the following numbered images, keyed to the map in the Appendix.

• #1 Near the telephone line crossing at 43.739620, -72.346111: Add stepping stones.



#2 43.740845, - 72.346944: Add stepping stones.



• #3 43.741067, - 72.347500: Emphasize path shown.



#4 43.74669167 -72.35583333: Add stepping stones through muddy area.



• #5 43.74226667, -72.34777778: Improve apertures between stones. Emphasize flow where the small stone is. Add one more stepping-stone to that location.



• #6 43.74274167, -72.347500: Use existing stones to improve both aperture and stepping distance.



#6

• #7 Stepping stone crossing at 43.74486167 -72.35083333: Re-set existing stones.



#7

• #8 Wash with by-pass at 43.741488 -72.347778: Place some flat armor stones on either side of the wash on the bypass and a few stones leading to them.

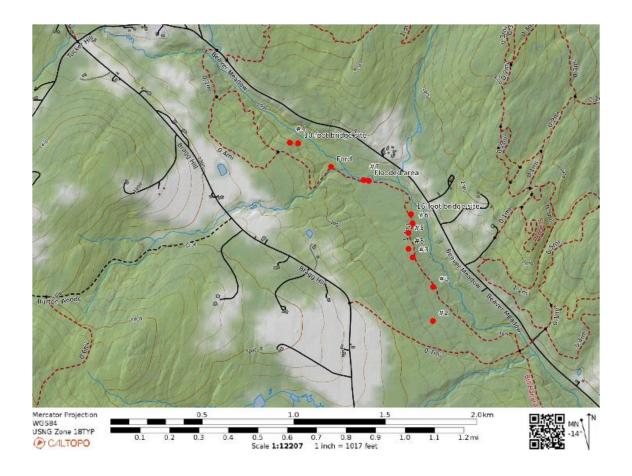


Eroding downslope—Bob Fisken pointed out that the descent toward the upper trailhead shows signs of erosion from runoff. The survey crew confirmed this phenomenon, but did not stop to arrive at a solution.

Perhaps, placing logs across the trail at intervals would create silting and cause the runoff to occur on the front of the logs. This could be done experimentally, mid-way down the slope. Such a treatment would have the further advantage of being less friendly to encroaching mountain bikes.

Mountain bike icons—There are two icons at the entrance to the trail. One could be placed on the step of the bridge to be in the sight line of a rider.

Appendix



Problem area locations, keyed to numbers, above (It's unclear whether locations away from the marked trail represent an error in GPS coordinates or the map, itself.)

Appendix B

DRAFT Engineering budgetary estimate request

May 17, 2021



To: Whom it May Concern

I am writing as a Norwich Trails volunteer, part of a cadre that provides advice and other services to the Norwich Trails Committee, a subcommittee of the Norwich Conservation Commission. This inquiry is informational only and does not represent the official business of the Town of Norwich, Vermont.

Your response to this query would help us volunteers advise the Town on the feasibility of permitting and budgetary cost of engineering services to develop expanded parking at the top of Happy Hill Road, uphill of an existing turn-around point.

The project would entail placement of gravel fill and a retaining structure in a 60 x 9-foot area. The fill would be about 3 feet deep, as shown here:



The proposed expanded parking area abuts a stream and wetland area, shown in these two views, looking uphill (l.) and downhill (r.):



In both views the fill would extend from the dividing line between the two images.

If you feel, from what you see, that it would be impractical to get a permit for providing fill in the direction of the stream, please let me know and consider the matter no further.

Otherwise, I would be interested in receiving an <u>itemized</u> budgetary estimate for the following phases of developing the proposed parking area:

- 1. Permitting
- 2. Developing design and specifications
- 3. Cost-estimation
- 4. Construction supervision

Stephen Flanders, volunteer stephen.flanders@icloud.com
802-356-0200

Norwich Trails
https://norwichtrails.org