

## Planning for Trail Maintenance, Improvements, and Potential Trail Connections at the Catamount Community Forest

### Summary Report

12 December, 2017

#### Objective Completion

We completed four of the six objectives put forth in our project proposal:

- Conducted a trail inventory and assessment of all the trails using the inventory form provided by the town (Objective 1).
- At the end, as well as the 15th, of every month (9/30, 10/15, 10/31, 11/15, complete by 11/19) roughly one-fifth of the trails were complete for each given date (Objective 6).
- The mapped trails have all been uploaded to a shareable Google Map, each problem area is geotagged with accompanying photo(s).
- The points and associated trail condition information were incorporated into an excel spreadsheet that can be used in conjunction with the map (Objective 2).
- As our team walked the trails, we identified potential trails to be expanded for multi-use and wrote a brief summary with recommendations to deliver to Melinda (Objective 4).

Our team was unsuccessful in mapping potential trail connections to adjacent properties (Objectives 3,5). We mapped the south-side of the property but time was limited for scouting new trail connections. As an alternate task, our team took an inventory of the lights used to illuminate the trails at night during the winter months and included it in this summary.

#### General Trail Conditions

- **Most mountain bike trails in good condition**
  - Will need continued maintenance as with any useage
  - Some trails used very little and hard to follow
    - ex.Trout Lily
    - Leaf blow to encourage usage
- **Gravel trail (Woodstrace/Sandman)**
  - Woodstrace
    - Trail in good condition, could use additional gravel in areas where geotextile underlayment is showing
    - Should mow along sides during summer to keep grass from encroaching
    - Should build bridge or install culvert where pond outflow crosses trail if trail is to be considered handicap accessible
  - Sandman
    - Trail degrading extensively since it is located in the woods
    - To upkeep would likely have to initially re-gravel then clear leaves multiple times per year
    - There are some very steep sections on Sandman that may prevent it from being considered handicap accessible
- **Bench Cutting steeper areas on single track trails (like Off The Wall)**

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- Consider bench cutting steeper areas on single track trails to make them better built, longer lasting, and more rideable (especially for climbing)
- **Wet conditions in the central part (like Geronimo)**
  - Consider making Geronimo winter use only
- **Many double tracks recently regraded (North-East Side of property)**
  - Will take multiple years to pack down (very rough current conditions)
  - Will need to be rebuilt/regraded in places as uncompacted soil settles or is washed out
  - Not all waterbars graded correctly
- **Inadequate/incoherent signage**
  - Trail signage (arrows) frequently changes
  - Most trails not labeled
  - Not 1 coherent/comprehensive map with consistent names (ours exists now and is accurate)
  - Some maps on trails, but only show double tracks
  - Some trails blazed but blazing could be redone to promote underutilized trails
  - Consider completely revamping signage system
    - Examples of good map systems
      - [https://www.muni.org/Departments/parks/Documents/Kincaid\\_ST\\_A\\_Trail\\_map.pdf](https://www.muni.org/Departments/parks/Documents/Kincaid_ST_A_Trail_map.pdf)
        - Includes winter nordic trails and summer mountain bike trails
        - Intersections between Nordic (double track) and bike trails (single track) labeled with numbers matching corresponding numbers on map
        - Maps at major trail sections
      - <https://vtstateparks.com/assets/pdf/underhilltrails.pdf>
        - Must be coupled with trail signs like <http://assets.midnightcheese.com/images/mount-mansfield/sunset-ridge-trail.jpg>
        - Typically printed copies available
        - Large trail intersections may be confusing still as many signs necessary
        - Name signs harder/more expensive to make
        - Some of these signs already exist
- **South Side trails**
  - Will need to be mowed during summer months
  - Dual Slalom and jump trails will need to be maintained
  - Field trails will need to be better defined in non-winter months, so as to clearly identify where trails are

## Trail Usage

- Already multi-use

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- Weekly bike and running races
- Saw both runners as well as bikers during weekdays
- Free access may encourage more widespread useage
- Potential action could be to post common set of right of ways
  - <https://www.imba.com/resources/risk-management/shared-trails>

### **Existing Infrastructure**

- 15 bridges
  - varying conditions
- 47 lights
  - 12 with minor damage due to squirrels eating exposed wiring (1 with extensive damage)
    - Fix by putting upper wires in conduit
- 2 sheds (waypoints 38 and 46)
- Arrow trail signs, some carved name signs, some printed maps on trails (only show double tracks and only at biggest trail intersections )
- Printed maps on trails should be replaced with new maps

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Trail Structures Inventory

<b>Waypoint (On Google Map)</b>	<b>Length/Width</b>	<b>Description/Comments</b>
1	NA	Main initial trail signage post. Highly confusing. Lacks any named trail signs. Consider development of new trail signage and naming system.
2	≈40ft	Four drainage ditches along trail, could be dug out & add gravel
3	NA	Major trail intersection - lacking adequate signage
4	≈4ft x 8ft	low bridge, good condition
5	NA	Intersection of Night & Woodstrace trails - signage needed
6	NA	Night trail sign
7	NA	Noneffective drainage ditch - Needs to be dug out
8	≈3ft x 3ft	Small puddle - drainage ditch needed
9	NA	Drainage ditch dug uphill - ineffective, causes puddle
10	NA	Night/Cabin Run sign overgrown, needs clearing (clipping/weedwhacking)
11	≈3ft x 3ft	Depression in trail forming puddle, needs to be filled in with gravel or dirt
12	NA	Leaning dead tree over trail, potential hazard
13	≈50ft	Steep, unpacked trail section. Additional water bars should be dug to prevent further erosion
14	NA	Scenic vista next to powerlines
15	NA	Slalom trail signage needed
16	NA	Slalom trail signage needed
17	NA	Three-way intersection: Indian Lookout, Off The Wall, Bear Run. Signage needed. Overhanging tree should be taken down.
18	NA	Leaning tree over trail, potential hazard

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19	NA	Scenic Vista, Indian Lookout. Trail signage needed on surrounding trail intersections.
20	NA	Intersection of Indian Lookout and Skidway. Signage needed
21	≈8ft x 10ft	Bridge, good condition
22	NA	Large trail intersection - signage required
23	≈8ft x15ft	Very muddy and poorly drained trail section, drainage ditch needed
24	≈30ft	Whole length of trail section very wet. Drainage ditches need improvement.
25	NA	Night and Geronimo intersection. New signage needed.
26	≈20ft	Very wet/poorly drained ground. Consider closing trail or converting to winter-use only unless drainage can be improved.
27	NA	Large trail intersection - Highly disorienting. Adequate signage and wayfinding map are needed.
28	NA	Tree down. Blocking trail.
29	NA	Geronimo and Three Rivers intersection. Signage needed.
30	NA	Wet area despite drainage structure, can be improved to eliminate standing water.
31	NA	VAST crossing
32	≈6ft x 10ft	Poorly designed bridge and drainage. PVC pipe under bridge not functional. Water bar is not sloped enough to drain water. Consider bridge reconstruction.
33	≈40ft	Poor drainage design. Slope of trail angled wrong way, resulting in muddy area.
34	8ft x 10ft	Bridge in good condition (Melinda - might need redecking)
35	NA	Intersection of Woodstrace and Sandman. Signage Needed.
36	≈10ft	Concrete culvert in functional condition.
37	≈8ft x 10ft	Poorly constructed bridge. Boards piled on top of each other. Consider reconstruction.
38	NA	Green shed
39	NA	Multi-trail intersection. Signage needed.
40	NA	Dead tree hanging over trail.

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41	NA	Fallen trees blocking trail.
42	NA	Fallen trees blocking trail.
43	NA	Mesh exposed on trail.
44	NA	Tree down. Blocking trail.
45	NA	Large intersection. Confusion as to which trail is the gravel trail. Signage needed.
46	NA	Old shed, potential conversion into a kiosk/wayfinding point?
47	≈20ft	Wet trail section, drainage ditches/gravel needed.
48	≈10ft	Standing water on trail, gravel or drainage ditch needed.
49	≈6ft x 8ft	Unimproved crossing. Consider building an actual bridge or boardwalk.
50	≈20ft	Unimproved crossing. Consider building boardwalk.
51	≈3ft x 8ft	Bridge/boardwalk, in functional condition.
52	≈6ft x 6ft	Outflow of pond. Consider reconstructing bridge or building boardwalk.
53	≈6ft x 8ft	Wet area with bridge over stream. Bridge very slick and in poor condition. Consider reconstruction.
54	NA	Trees down on trail. Trail very difficult to distinguish.
55	NA	Dead end, opening into field. Close off trail or continue trail to parking lot.
56	NA	Culvert sticking out of ground. Needs to be re-covered.
57	NA	Old shed
58	NA	Major trail intersection
59	NA	Mountain biking feature "fencing"
60	≈4ft x 36ft	Boardwalk through wetland area. Overgrown area, boardwalk needs maintenance
61	NA	Bridge in very wet area, overtaken by vegetation
62	≈4ft x 6ft	Improvised log bridge. May not be on property. (Melinda - definitely not.)
63	≈6ft x 12ft	Bridge, in good condition.

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64	NA	Exposed tarp on trail.
65	≈3ft x 15ft	Curved bike bridge. Good condition
66	NA	Gullywhumper trail sign
67	NA	Gullywhumper trail sign
68	NA	Pipe sticking out of ground on trail, also an old drainage culvert
69	NA	Mountain bike stairs and unused bike bridge
70	NA	Mountain bike stair feature
71	NA	Chairlift chair
72	NA	Start of dual slalom and jump trails, signage needed
73	NA	Mountain bike jump