Birch Ridge Community Forest Management Committee

28April 2022; New Durham Community Room; 6-8PM

AGENDA

- I. Minutes of 20Oct2021 MC meeting
 - a. Approve minutes
 - b. Update status of action items (quick review)
- II. Trails BRCF1 and BRCF2
 - a. Act on TWG Recommendations from 1Feb2022 meeting

(Note: we will move quickly to the recommendations. Please review TWG minutes and related documents prior to the meeting.)

- b. BRCF2 proposed trails (review Lew's report prior to meeting)
- c. Hiking trail maintenance need interested people & coordinator
- d. Brief update on Snowmobile trails
- **III. Land Management**
 - a. 2022 work plan & budget
 - b. Status of SELT Stewardship staff positions
- IV. Management planning for BRCF2 (Stell & Young addition)
 - a. Revised plan timeline & approach
 - b. Recreation, forestry & wildlife habitat reports (questions or thoughts)
- V. Cabin Thoughts on work needed and approach to completing
- VI. Special Use Permit application for third party events
- VII. Possible Tree Farm designation
- VIII. Field tours
 - a. MU1 forestry tour for neighbors & friends 25June2022
 - b. MC interest in BRCF2 field tour???
- IX. Other business?

Birch Ridge Community Forest Management Committee Meeting – 4th Meeting

20 October 2021 6:00 - 8:30pm, Zoom video

<u>Minutes</u>

Participants: Charlie Bridges (Chair), Debbie Goard (SELT), and Parker Shuermann (SELT) Lee Alexander, Lorrie Drake, Ronda Fernald, Mike Gelinas, Brad Helfer, Matt Murphy, Victor Piekarski, Emma Tutein, Dennis Thorell, and Russ Weldon. Public listening: Steve McKnight and Jim Mathews.

1. Welcome

Charlie Bridges welcomed the participants.

2. Approval of the 20 September 2021 Minutes

Accepted with minor changes.

3. Updates

a. <u>MMRG</u>

Lorrie Drake provided a brief update. There was a 'Hawk Watch' event on 26 Sep that ~20 persons attended.

b. <u>Powder Mill Snowmobile Club</u> (see PP slides)

Mike Gelinas gave a brief update on activities.

- There will be trail checks to be performed later this fall.

- The Club has two portable kiosks (with signs) to be installed. One will be at the Cabin.

- Matt and Parker have started exploring potential access points to BRCF from South Shore Rd.

Action: There may be locations for the Trails WG to evaluate and make recommendations to the Management Committee.

c. <u>Status of Actions from 20 September 2021 Meeting</u> (per Agenda Item # as listed in Minutes to 20 Sep 2021 meeting)

3. c - Lion's Camp Pride Trail

- Lew Skelly and Mike are scheduled to perform a reconnaissance visit in late October Action: After a recommended route is determined, an archaeological review (e.g., indigenous people sites?) will need to be performed.

3.d – 2021 Trail Work

- Mike withdrew his proposal to establish a a groomed X-country ski trail for this year.

- The Rattlesnake Mountain loop trail has now been completed.

- Parker briefly mentioned the Trail Workshop that Lew and Parker held in late October. Focus was on establishing a new trail from the Blueberry Patch to the summit of Birch Ridge. Ideally, the trail should should be suitable for both hiking and mountain biking.

3. e – Two ongoing actions

- Matt has expressed interest in chairing the Trails WG.

Action: Once a chair is designated sub-working group leaders should be designated to focus on trails-related activities (e.g., horseback riding, mountain biking, etc.). In particular, there should be a sub-group to focus on maintenance of the hiking trails.

3. f. <u>Mowing at cabin</u>

Action: A maintenance schedule needs to be developed. Potentially two mowings will be performed per year (e.g., mid-July and late September).

3. g. Stell & Young parcel management planning

A similar process will be used as done for the original BRCF Management Plan. Target date for completion is May 2022.

Action: Once Jon Martin completes the Forest Inventory, Charlie and Lee will prepare a draft Management Plan. Target date for completion of a draft is late January 2022. The Management Committee will have an opportunity to review prior to the March 2022 meeting. The intent is to submit the final plan to USFS in May 2022.

3. h. Forest MU-1

Parker and Jon have started on-site planning to implement the NRCS practices. Parker mentioned that the initial focus will be to restore the former 'blueberry barrens' site.

Action: Parker and Jon to complete the Forest Management Plan, and initiate practices.

d) 2021 Budget Update

Debbie introduced a sheet called the "Budget vs. Actuals: 2021 – FY21 P&L Classes". It provided a listing of the revenues and expenditures related to BRCF.

4. Historical signs feedback from Cathy Orlowicz

Cathy was unable to attend the meeting. However, prior to the meeting she provided preliminary cost estimates for metal signs. She recommended that historical information about a site should be provided on separate signs from signs showing visible mountain peaks. She will continue to refine language for signage.

Action: Charlie feels that Cathy should become a designated member of the Management Committee.

5. Horses

a. Feedback from October 16th ride

Parker gave an update regarding a horseback ride evaluation on 16 October. Rachel and Christina Keim liked both the Rattlesnake Mountain Trail and Scenic Loop and had only a few minor suggested improvements. They did not ride the Birch Ridge Look trail.

b. Discussion

There was discussion about about the design of the trail gates for both horse and wheelchair access. Russ also mentioned that the current location of combination locks on the gates are difficult to use.

Action: Parker has already spoken to the New Durham Fire Chief and the locks will be modified.

Rhonda and Brad mentioned that equestrian trail etiquette signage is needed. It was agreed that BRCF should use the same guidance on equestrian trail use and what occurs on NH State Parks and Recreational Rail Trails.

Action: Horseback riding on designated trails will be allowed in Spring 2022. This needs to be addressed in the next version of the BRCF Management Plan.

6. 2022 Work

a. Work Plan

Debbie provided a series of PP slides to explain the 2022 Work Plan. She matched work projects with objectives and strategies from the Management Plan.

1) Access and recreation

- Accessible bathroom and parking space for accessible trail.

- trail markers are too small and difficult to follow

- trail signage at junctions needs improvement

- Trail access points from South Shore Rd.

Debbie advised that updated trail signs will be installed in Spring 2022.

2) Education and Outreach

- There is a need for an Outreach WG. It was asked if SELT would take the lead on establishing this.

- SELT policies and procedures are still being updated. Expect a draft by end of December 2021.

3) Forest Management

- Discussed how to make firewood available to needy local families from the clearing activity on the Blueberry Barren site.

4. Wildlife Habitat

- Matt commented that much more wildlife has been seen during the past few years.

5. Water Quality

- Debbie mentioned that this may be underway already.

b. 2022 Budget

SELT plans to provide \$41K of the estimated total of \$145K of the entire draft budget. NRCS-EQIP is expected to provide about \$100K. A major consideration will be the cost to construct the accessible trail.

7. Cabin Area

A general discussion ensued on potential uses of the cabin & surrounding area. While Many ideas were offered including those below. Additional discussion is needed:

a. An observation deck could be constructed on the easement exclusion area with interpretive signage.

b. Education activities could have both indoor & outdoor settings

c. Use for scheduled events & a storm shelter for bikers, hikers, snowmobilers, etc.

d. Cabin is not totally weather tight, nor does it exclude insects & mice. Wood stove and

ladder are hazards. Improvements could be done. Cleaned up would be more inviting.

e. Question was asked if funding is available – answer: not currently.

Russ expressed the hope that people would be able to view two fireworks displays next summer 2022. They will be sponsored and conducted by MM Lake Marina (9 Jul and 3 Sep 2022). He has meet with Fire and Police Departments and they are receptive.

Action: Russ asked for a go/no go for using the Cabin site by February 2022.

8. Other Business

There was no time for any additional discussion.

BRCF Trails Working Group Meeting – Minutes

Attendees:

SELT: Debbie Goard (first hour), Lew Shelley (trails consultant) Meeting Participants: Charlie Bridges, Lee Alexander, Matt Murphy, Mike Gelinas, Russ Weldon, Brad Helfer, Cathy Orlowicz,), Avis Rosenfield, Dennis Thorell, Ronda Fernald, and Victor Piekarski

Charlie Bridges opened TWG meeting, welcomed the participants, and served as chair.

There were eight (8) agenda items.

1. South Shore Road (SSR) Access

Matt Murphy gave a PP Presentation of five (5) points along South Shore Rd. (SSR) that are suitable for access, and potentially could be designated as such for use principally by the local lakeshore community. Prior to the meeting he had e-mailed a review of 17 BRCF points (20' wide strips) that intersect SSR, plus three locations on private property whose owners have traditionally allowed the public to cross over existing trails from SSR to what is now BRCF. As part of Matt's report, he numbered and mapped these points as 1 through 20 going easterly along SSR. Matt's Trail Working Group Site Visit Report (18 Dec 2021) recommends three (3) main access points and two (2) alternatives. Trail use would be primarily for hiking, mountain biking, snowshoeing, and snowmobiling. Parking would not be provided at these sites, although gates and kiosks are also recommended.

Debbie and Charlie clarified that it is SELT's preference that designated trail access be at locations that are already part of the BRCF landholding. After much discussion, two locations meeting this criterion were supported by the group. These are #11 and #19 on Matt's list. Location #11 is close to an abutting structure, but has a gradual slope and will be easy to clear seedlings and brush. Location #19 is near the end of SSR and will link directly to the Lion's Camp Pride trail reroute. A third location is the New Durham Town Beach parking lot where the Lake Trail enters BRCF. Parking is available at this location for Town property owners.

The TWG discussed three locations on privately (#5, #10, & #12) that have long allowed lake shore residents to cross their properties. It is expected that these informal arrangements will continue. The TWG expressed the hope that at some future point formal agreements or land acquisition at these locations may secure public rights of access. The TWG will advise the Management Committee about this possibility.

There was considerable discussion regarding snowmobile use over these access points from SSR. All meeting participants generally support snowmobile access. It was acknowledged that specific trails from the access points for snowmobiles on the BRCF need to be identified after the winter, and then added to the designated snowmobile trail system to comply with the conservation easement. The TWG agreed to forward the following recommendations to the Management Committee:

(1) The three reports Matt that prepared.

(2) That the two (2) SELT owned access locations (#11 and #19 in Matt's report), along with the Lake Trail form the Town parking lot, be designated and developed as public access points,

(3) That trails from these access points be evaluated for snowmobile use and identified as part of the designated snowmobile trail system.

(4) That the Management Committee & SELT be advised of the other desirable access points on private land along SSR for possible future acquisition or access agreements.

2. Update on Camp Pride Trail Reroute

Mike Gelinas reported that three site studies are required before trail construction can start. This includes (1) survey for long-eared bat roosting habitats, (2) archaeological survey (e.g., indigenous people activity), and (3) a botanical survey to determine if small whorled begonia is found near the proposed trail route.

3. Cross Country Ski Trail from Birch Hill Road

Mike gave a brief PP Presentation on a proposed cross country ski trail that starts and ends at the Birch Road Parking Area. The approximately one-mile loop is over mostly level ground and would require very little clearing activity since it follows logging skid roads. He believes there would be a benefit to having a "beginner" (e.g., familyfriendly) X-country ski trail. Matt stated that there is interest as people ask where they can X-country ski. Lew believes this type of trail would be popular.

Discussion focused on the proximity of the ski trail to the planned accessible trail. The general feeling is that the trails should be separate although sections could be adjacent to one another. While the ski trail would be groomed, the accessible trail would not be in order to protect the trail surface from possible damage. Lew mentioned that he will also be evaluating x-country ski use of the accessible trail.

Lee suggested that both "beginner" and "intermediate" x-country ski trails be created. The "intermediate" trail (a parallel track) would be on one side of the "Scenic Loop" that is also used by snowmobiles. Both trails would be intended for "young family" use. There was full support for this to occur.

The TWG recommends the Management Committee authorize the development of beginner and intermediate cross country ski trails that will be groomed and are separate from the accessible trail with the exact path of these to be determined this year after winter.

4. Update on Accessible Trail

Lew gave an update on the recommended trail route. A site visit with Lew, Debbie, Lee, and Charlie was conducted last December. The route will be from the Birch Hill Rd. parking lot to the cabin with a small loop in front of the cabin. This path will be about ½ mile long. A side trail of about 850ft off the main path will also provide views to the southeast. Lew is preparing a report with preliminary cost estimates that he hopes to complete by 1 March 2022. Trail construction could possibly start in Fall 2022. Likely the overall cost would be >\$100K.

5. Birch Ridge Trail through Blueberry Restoration Area (Lew, Mike)

Charlie briefly summarized the recent logging operation to restore the former blueberry field and associated timber stand improvement cutting that occurred in MU-1. Lew explained his hiking trail layout work through this area last fall. He will reassess how the timber operations might affect the route that he previously flagged. Mike suggested that the previously agreed to snowmobile trail through this area could be a loop around the perimeter blueberry patch following some of the recently developed skid trails. In keeping this type of trail open would also allow it to be used as fire break if/when controlled burning is used to maintain the blueberries. Brad suggested the hiking and snowmobile trails be separate paths.

The TWG supported Mike's suggested snowmobile loop and recommends the management committee work with Lew and Mike after winter to locate and develop both the hiking and snowmobile trails.

6. Update on Equestrian Trail Use

Charlie mentioned the equestrian trail evaluation ride that Christina, et al, did last fall. He further explained that the Management Committee decided equestrian use will start this year, with a riding season of 15 May – 15 November. Trails open to horses will be the Lake Trail, Scenic Loop, Corridor 22 and the trail from the Merrymeeting Rd parking lot around the north end of Rattlesnake and down to Corridor 22. Parking for horse trailers will be the Merrymeeting Rd parking lot. Horse trailer parking will not be allowed at the Birch Hill Rd lot due to the slope and condition of the Class VI road.

Avis Rosenfeld asked if horseback riding was open during the winter. Charlie confirmed that the current season ends in November. She then suggested that horseback riding be allowed at appropriate times during the winter season (e.g., when the ground is frozen or there is dense packed snow).

The TWG recommends the management committee agree to winter horseback riding with the ability to close the BRCF to equestrian use when trail conditions may result in damage.

7. Update on Rattlesnake & Eleanor Trails

Lew briefly described what was done this past summer to complete and maintain these trails. Lew has asked SELT to host another workshop this summer/fall that will focus on trail maintenance, targeting work that needs to be done on the Eleanor and Rattlesnake trails. Charlie suggested that a volunteer Trail Maintenance Team should be established. Matt suggested this be coordinated with MM Lake Association.

8. Other Trail-related Business

a. Possible Sledding Hill

Jeff Allard suggested (via e-mail) that a sledding hill be considered. The group expressed strong support. Russ Weldon pointed out that rocks and trees are major obstacles in New Durham. However, he suggested that the north facing slope across from the Birch Hill Rd parking lot was a good possibility. He offered to evaluate further this spring.

The TWG recommends the management committee support the identification and development of one or more sledding hills on the BRCF.

b. <u>Community's 260th Commemorative Celebration plans</u>

Cathy Orlowicz, Town Historian, briefly described some of the planned events. She invited SELT and the BRCF to participate. A planning committee has been established and it welcomes ideas and involvement. A planning meeting at Town Hall is scheduled for 16 Feb 2022. The Town webpage will have information as well.

Recorded by Lee Alexander

Birch Ridge Community Forest Work Plan 2022

Below is the work plan for 2022 at the Birch Ridge Community Forest. The work plan is driven by the Goals, Objectives & Strategies outlined in the 2020 BRCF Management Plan. The final budget, found after the work plan provides additional details in the planned work.

General

Finalize update to Management Plan for Stell & Young addition Place boundary signs along boundary where they are still needed SELT staff conducts required annual monitoring visit as required of all fee-owned land MMRG conducts required annual conservation easement monitoring visit

Property Access and Infrastructure

Identify additional public access to the BRCF – Objective IV

Finalize the design for the All Access Trail and explore funding opportunities for installation (Strategy 1)

Explore/determine access point from South Shore Road and determine a timeline for installation (Strategy 2)

Evaluate the cabin and need for other public amenities – Objective V

Determine appropriate public and management uses for the cabin that are consistent with community needs, SELT's programmatic needs, SELT policies and funding sources (Strategy 1)

Assess the current condition of the cabin to support desired uses (Strategy 2)

Determine the need and approach for providing sanitary facilities (Strategy 3)

Recreation and Public Uses

Finish any needed work on Birch Ridge loop – Objective 1

Determine locations and use of additional trails – Objective 2

Finalize the design for the All Access Trail and explore funding opportunities for installation (Strategy 1)

Maintain cooperative working relationship with Powder Mill Snowmobile club - Objective IV

Assess post-winter trail conditions with club and identify annual work (Strategy 1)

Evaluate status of temporary trails and determine necessary adjustments (Strategy 2)

Review agreement (to be in place for winter 2021/2022 with Club governing use and responsibilities (Strategy 3)

Provide information to the public on recreation at the BRCF – Objective V

Update trail maps to reflect current trails (Strategy 1)

Installation of trail junction signs (Strategy 1)

Place trail blazes along public recreational trails (Strategy 1)

Create formal trail guide for paper and mobile use (Strategy 1)

Update kiosk panels and other relevant information in kiosks (Strategy 2)

Install kiosk at Brienne Road entrance (Strategy 2)

Education and Outreach

Education and Outreach by core partners - Objective I

4-6 programs annually conducted by SELT and MMRG (Strategy 1)

Formalize Outreach working group to:

- Assemble list of potential partnering organizations (Strategy 1)
- Determine efficient and cost-effective approaches to engaging partners (Strategy 2)

Determine policies and procedures for group activities – Objective IV

Review policies and procedures that apply to other SELT properties (Strategy 1)

Management Committee recommends a course of action to SELT (Strategy 2)

Scenic Views

Identify locations to establish and maintain scenic views along trails - Objective II

Maintain/create scenic views in conjunction with forestry and wildlife habitat work (Strategy 2)

Forest Management

Begin to restore the former blueberry field area – Objective III

Remove standing trees/shrubs by mechanical means (Strategy 2)

Determine prescription and carry out silvicultural treatments to improve stocking quality - Objective IV

Remove undesirable tree species such as beech through mechanical means to improve stocking quality of desired tree species and create early successional habitat patches in MU 1 (Strategy 1)

Manage and monitor condition of log landings – Objective VI

Inventory landings that need to be reseeded in future years (Strategy 1)

Mow landings periodically to maintain herbaceous conditions (Strategy 2)

Wildlife Habitat

Maintain old-field habitat down-slope from the cabin = Objective I

Mow to keep open after September to protect ground nesting birds

Begin to restore the former blueberry field area – Objective II

Remove standing trees/shrubs by mechanical means (Strategy 2)

Manage and monitor condition of log landings – Objective III

Inventory landings that need to be reseeded in future years (Strategy 1)

Mow landings periodically to maintain herbaceous conditions (Strategy 2)

Determine wildlife management recommendations for MU 1 – Objective IV

Incorporate wildlife management recommendations to be performed with forest silvicultural work (Strategy 2)

Water Quality

Assess water quality and habitat conditions of perennial streams - Objective II

Support the existing water quality monitoring occurring on the BRCF (Strategy 1 & 2)

Identify stream crossings and culvert locations requiring repair or improvement – Objective III

Assess existing infrastructure such as culverts and water bars (Strategy 1)

Maintain infrastructure such as swales and ditches (Strategy 2)

Climate Change Mitigation

Seek opportunities to achieve connectivity to other conserved forest lands within the region to facilitate plant and animal dispersal and movement – Objective I

Birch Ridge Community Forest 2022 Budget - updated 4/2022

			Source of Funds		
Activity/Code	Expense	Comments	SELT	Short-term Capitol Funds	NRCS-EQIP
5210 · Printing & copying	\$30	2 pages @ \$0.30/ page - 100 trail guides	\$30		
8600 · Property Taxes	\$1,700	based on assumed cost of \$1662 in 2021	\$1,700		
5531 · Building Maintenance	\$500	Bring building up to code	\$500		
5532 · Mowing & Brush Hogging	\$400	1.5 hrs/month May-Oct around cabin = 9 hrs @ \$45/hr =\$400.	\$400		
	\$675	trails \$45 per/hour 10 miles or trails, in and out (10 wide) \$450; large landing by cabin if doing while mowing trail 5 hours \$ 225	\$675		
	\$315	mow cabin 7 hours both side of stone wall \$315;	\$315		
5533 · Snowplowing	\$375	assume 5 storms @ \$75 each for Merrymeeting Road parking lot	\$375		
5538 · Road Maintenance	\$3,000	Maintenance of Birch Hill Road;	\$3,000		
9412 - Archaeological Services	\$2,000	Phase 1B survey	\$2,000		
9416 - Trail Consultant	*	possible costs for All Access Trail			
9418 - Graphic Designer	\$175	Cathy - map design	\$175		
9445 - Printing	\$320	4 temporary trail maps for kiosks @ \$80 each	\$240	\$80	
9612 · Timber Stand Improvement		NRCS contract item 6a			\$11,247
9618 · Early Succession Habitat	\$44,849	NRCS contract item 3a and 4a			\$44,849
	\$48,120	NRCS contract item 5a	\$25,600		\$22,520
9652 · Parking, Grading and Earthwork	\$21,120	EQIP access road contract item 1a;			\$21.120
9654 · Trail Construction	\$4,000 *	Birch Ridge Trail *possible costs for All Access Trail	\$4,000		
9658 · Signs, Kiosk Panels	\$799	Assumes 1 a panel (225), 1 b panel (250) and shipping (\$24) for the Brienne Rd entrance.; estimate of 10 signs for trail intersections @ \$30 each includes shipping on Stell/Young		\$799	
	\$1,642	estimate of 45 signs for trail intersections @ \$30 each includes shipping on original BRCF	\$1,642		
9659 · Land Management Services	\$800	gate installation at Brienne Rd		\$800	
	*	installation of All Access Trail			
9660 · Lumber and Hardware	\$440	22 sign posts @ \$20 each on original BRCF	\$360		
	\$1,500	Kiosk materials for Brienne Rd; 4 sign posts @ \$20 each on Stell/Young		\$1,580	
	*	possible costs for All Access Trail			
9662 · Gravel, Rock and Other Material	*	possible costs for All Access Trail			
9664 · Gates, Bridges etc	\$1,200	Gate at Brienne Rd		\$1,200	
9668 · Other Miscellaneous					
Total expenses	\$145,207		\$41,012	\$4,459	\$99,736

*Costs for All Access trail estimated to be \$125,000 - costs to be covered by fundraising

Note: Budget expenses do not include staff time which for 2021 was approximately 15 weeks

To: BRCF Management CommitteeFrom: Deborah Goard, Stewardship & Land Engagement DirectorDate: April 22, 2022

Re: Existing, Planned and Recommended Trails at the BRCF

Background

After several years of planning, site walks and work, the trails on the BRCF have come a long way. Following is a brief summary of the approximately 20 miles of existing, planned, and recommended trails that are shown on the attached maps. The trails are broken down into 1) existing trails 2) seasonal snowmobile access, not included in the public trail system 3) trails that have already been discussed and agreed to whether or not the exact location has been determined 4) trails that are being recommended to include in the public trail system.

If agreed upon, these trails would be included in the updated Management Plan for the BRCF for the BRCF Management Committee to review and recommend for approval to SELT's Land Stewardship Committee.

Existing public trails:

- Lake Trail
- Merrymeeting Trail (formerly part of Rattlesnake)
- Rattlesnake Trail
- Mt. Eleanor
- Scenic Loop
- Birch Ridge Trail
- Corridor 22
- South Ridge (formerly part of Birch Ridge)

Seasonal snowmobile trails:

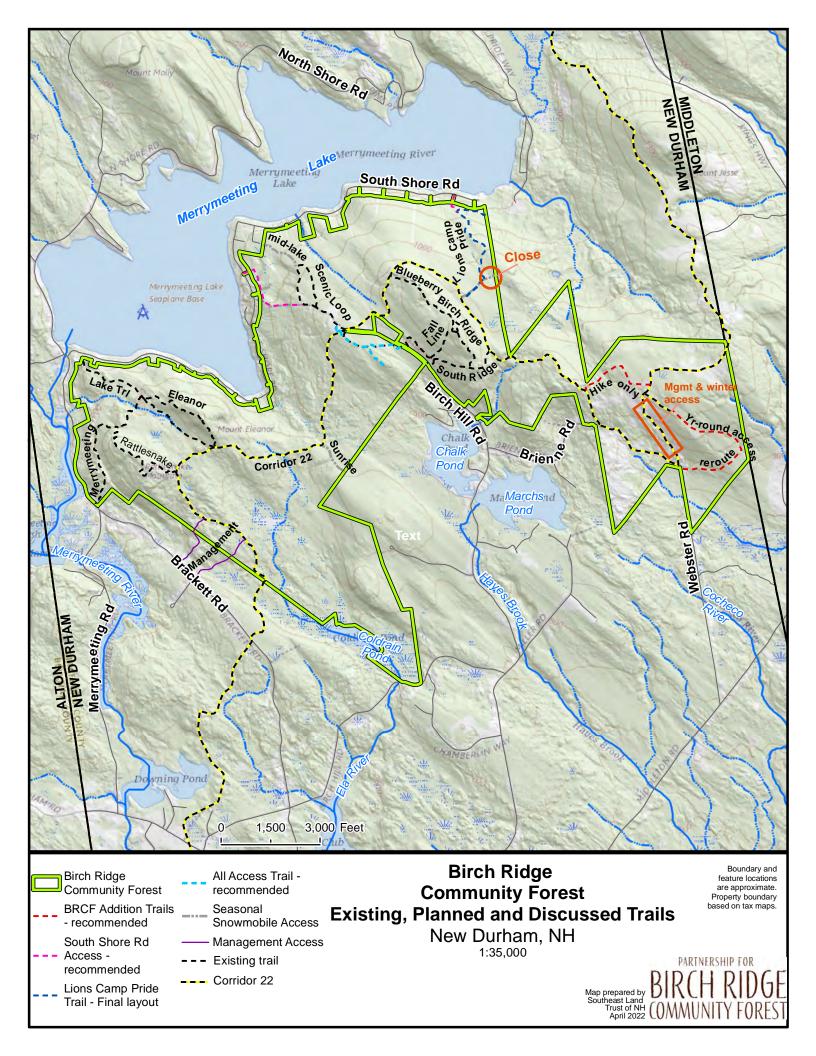
- Mid-lake
- Sunrise
- Alt 22 to be closed due to the addition of the Lions Camp Pride trail

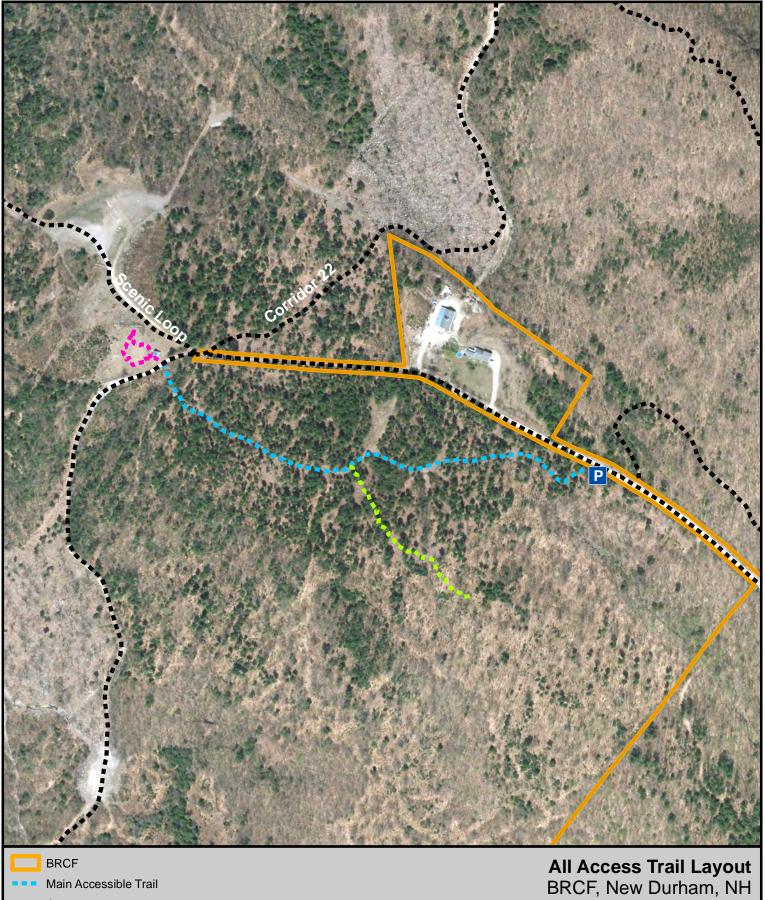
Trails already discussed and agreed to:

- Southshore access points
- Lions Camp Pride Trail
- All Access Trail
- X-country trail (likely co-located with All Access Trail)
- Snowmobile spur through blueberry area on Birch Ridge Trail

Recommended trails

- Hiking connector on BRCF addition
- New route on BRCF addition for year-round traffic (limit access on steep portion of corridor 22 for management & times of snow cover)





500



- --- Optional Spur
- Trails

Boundary and feature locations are approximate. Boundary based on tax maps. Map prepared by Southeast Land Trust of NH April, 2022

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1,000 Feet

Birch Ridge Community Forest-2; Management Unit 5 (MU-5); The Stell Lot

New Durham, NH

This management unit lies adjacent to the eastern most boundary of the BRCF-1; Unit 1, sharing over 1000 feet of common boundary. It is 172.27 acres (GIS acreage is 171) described as New Durham tax map 235, lot 016 and is enrolled in the Current Use taxation program. It is thought that the best approach to the inclusion of this lot in the BRCF-1 plan is as a separate Management Unit. Past management of this property has left a fully stocked and manageable forest which doesn't fit well into the descriptive template used for the first four BRCF MUs.

Access to the MU-5 is from both Birch Hill Road and Brienne Road. Previous activity on the lot has resulted in the construction of a complete road and trail network throughout. This network includes three main landing sites one off Birch Hill Road and two off Brienne Road (L5-1, L5-2, L5-3). Work will be needed to bring this transportation system up to a sustainable standard.

No invasive plants or insects were noted during the inventory. However, because of the current infestations of Hemlock woolly adelgid and Emerald ash borer in the area monitoring the stand annually is recommended. Possible Lymantria dispar (fka Gypsy moth) defoliation of oak was noted on MU-6 (Young lot) to the east so monitoring for an expansion of any infestation of that insect should also be conducted in 2022.

No reports of threatened or endangered species were logged by the NH Heritage Bureau for this property. Only one report was found within one mile of the property and that for the Common loon which is a species of Special Concern and Threatened in New Hampshire. With no specific location given for the report it is assumed to be associated with Merrymeeting Lake.

A snowmobile trail, which is the State Corridor 22 crosses the lot through Stands 1 and 2.

Soils in the lot only include types discussed in the Soils section of the BRCF Stewardship Plan. Nearly 80% of the lot is Gloucester extremely stony fine sandy loam, 8 to 25% slope. Nineteen percent is Hollis-Gloucester extremely rocky fine sandy loams 25 to 60% slopes, and the remaining percent is split between Acton fine sandy loam and Gloucester very stony fine sandy loam.

An inventory cruise consisting of 50 tally points was conducted on the lot in 2021. Analysis of the data from 44 points (6 points removed due to wetlands and severe slope) resulted in 4 Stands being delineated. All stand data was then processed using Multi-cruise software. The processed stand data is presented below.

Stand 1 – H, S 2-3 B

Description of Stand

Stand Area: 98.0 acres

Trees per Acre: 91.7

Mean Stand Diameter (DBH): 11.3 inches

Basal Area: 64.1 ft²

Species Composition by Percent of Basal Area: Red oak 41.49%, White pine 21.28%, Beech 13.83%, Hemlock and Red maple each 8.51%, Sweet birch 4.26%, Red pine and Sugar Maple each 1.06%.

Timber Volumes by Acre: 3.815 MBF, 7.4 Cords

Regeneration: The understory of the stand is predominantly Beech and Birch with Hemlock, White pine and Red oak scattered throughout.

Soils:

The predominant soil in Stand 1 is Gloucester Extremely stony, fine sandy loam 8-25% slopes, which underlays about 66% of the stand. The remaining area is Hollis-Gloucester. Several areas of large, scattered boulders were noted during the inventory. Additionally, there are forested wetlands and stream buffers which are poorly drained and should be avoided during management activities. Otherwise, the soils in Stand 1 are adequately drained and able to support good tree growth and properly timed management. Slopes are generally manageable, less than 25%, except for several small steep areas exceeding 35 to 40% slope.

There are small drainages within the stand which will need to be buffered to protect them from unintended consequences of any management activity nearby. One drainage in the north third of the stand will need further inventory to locate a potential crossing site for entering the northern portion of the stand. All crossings of drainages, perennial and intermittent, will meet or exceed standards described in NH Best Management Practices.

White pine and Red oak along with Hemlock, maples, and birches are species to be managed for on the soils of Stand 1. For more detailed soil type information see **Table 1** in the *Soils* section or attached documents in the *Appendix*.

Stand Description

Stand 1 covers a total of 98 acres which includes a 5-acre forested wetland, approximately two acres of boulder field and two of the three landings. The overstory of the stand is a mix of species and densities including areas devoid of overstory stems. The patchy appearance of the stand is due to the previous harvesting conducted over the past decades. The understory is stocked with an abundance of beech and hemlock, with some areas regenerating with birch, oak, and pine. This understory is also patchy.

There are two access points into Stand 1, Birch Hill Road, and Brienne Road. The Brienne Road entry provides access to two landing sites and is considered the best access for the treatments recommended in this plan.

Stand Prescription

Harvest type: Overstory Thinning, Patch Cuts/ Group Selection, Bronto Work in Beech U/S

Year to be treated: 2025-2029

Harvest season: Dry Summer/Fall or Winter

Method of harvest: Whole Tree Chipping or Cut-to-Length with Hot Saw, and Bronto Mowing

The partial cutting in the past has caused a proliferation of shade tolerant regeneration. This in turn will lead eventually to a low-quality Beech stand with pockets of more valuable species scattered throughout. Judicious use of patch cuts, areas of overstory thinnings and timber stand improvement thinnings on the mid-story can move the stand into a more desirable silvicultural condition over the next several decades. All this while protecting wildlife habitat and recreational opportunities. Roads, trails, and landings used in these operations will be more properly 'put to bed' and streams and wetlands areas will be consistently buffered. Creating a network of good roads and trails in the stand will also allow the other stands in the lot to be accessed as well.

The primary objective of silvicultural treatments in Stand 1 will be the improvement of stand conditions for more shade intolerant species like oak, pine, and northern hardwoods. This will require the removal of some overstory in patches or small groups and possible treatment of the understory using a brontosaurus to mow some areas in an effort to improve the regenerating species mix. The use of small patches, and new openings will enhance wildlife habitat, providing higher quality food sources, and better cover. Use of the brontosaurus to maintain openings in more brushy or grassy conditions increases the breadth of habitat opportunities for a wider variety of wildlife species. Areas of the stand supporting a better mix of desirable tree species can be thinned to create better conditions for improved growth on retained trees.

There are several small scattered wet areas within the stand as well as a small boulder field and two acres of very steep non-commercial ground. These areas will be avoided and in the case of the wet areas, buffered.

<u>Stand 2 – S, H 2-3 B</u>

Description of Stand

Stand Area: 46.5 acres

Trees per Acre: 165.3

Mean Stand Diameter (DBH): 11.6 inches

Basal Area: 122.3 ft²

Species Composition by Percent of Basal Area: White pine 36.79%, Red oak 33.96%, Red maple 12.26%, Hemlock 8.49%, Sweet birch 5.66%, Red pine, Yellow birch and Sugar maple each 0.94%.

Timber Volumes by Acre: 8.292 MBF, 15.5 Cords

Regeneration: The understory of the stand is predominantly Beech and Hemlock, with White pine and Red oak scattered throughout.

Soils:

Soils in Stand 2 are 65% Hollis-Gloucester, and about 34% Gloucester extremely stony. The remaining area includes all the typed areas of Acton and Gloucester very stony.

Stand Description

Stand 2 has two locations inside the lot (Stand 2A & 2B). Stand 2A, the largest portion of the stand (39.2 of 46.5 acres), lies along the southern property bound extending eastward from the Birch Hill Road frontage. Stand 2B in located on the western bound of the lot northeast of landing site L5-1. It is accessed by a bulldozed road from Birch Hill Road. The snowmobile trail, Corridor 22, enters MU-5 from MU-1 in Stand 2B.

The stand is a mixed species stand consisting, of Red oak, White pine, birches, maples and other softwoods. The timber operations of the past thinned the overstory, but left enough large trees to provide dense shade to the regenerating understory. While there are scattered areas of pine and oak regeneration is mostly beech and hemlock.

Stand Prescription

Harvest type: Overstory Removal, Thinning From Below, and Patch Cuts

Year to be treated: 2025-2029

Harvest season: Dry Summer/Fall or Winter

Method of harvest: Whole Tree Chipping or Cut-to-Length with Hot Saw

Several silvicultural treatments are recommended for Stand 2. These include areas of overstory removal to release white pine regeneration pockets, thinning from below to release potential crop trees from poor quality competition, and small to moderately sized patch cuts to provide more sunlight to areas where the overstory and regeneration are both of poor quality. Some areas within the stand will be untouched serving as buffers for small streams or where the soil is very shallow to ledge and harvesting would adversely impact site conditions.

Stand 3 – H 2-3 B

Description of Stand

Stand Area: 13.5 acres

Trees per Acre: 162.5

Mean Stand Diameter (DBH): 10.4 inches

Basal Area: 95 ft²

Species Composition by Percent of Basal Area: Red oak 63.16%, Beech 13.16%, Red maple 13.16%, White pine 7.89%, Hemlock 2.63%

Timber Volumes by Acre: 5.738 MBF, 9.4 Cords

Regeneration: The understory of the stand is predominantly Beech and Hemlock, with White pine and Red oak scattered throughout.

Soils:

Stand 3 is underlain entirely by Gloucester extremely stony, fine sandy loam, 8 to 25% slopes. Past harvesting trails and landing site L5-2 exist within the stand. Depending on the season, some of Stand 3 may be impacted by the water table associated with a large wetland located north of the stand.

Stand Description

Stand 3 is located in the center of the eastern boundary of the lot. Access is from a bulldozed road extending from Brienne Road to landing area L5-2, which is sited within the stand.

The stand overstory is generally mixed hardwoods that contains patches of pure beech and others of oak with some pine. Past harvesting has resulted in two age groups, an older, larger overstory of pine and oak and a younger cohort of pole-sized hardwoods and oak. These two groups are scattered and mixed within the stand.

Stand 3 is located on a north facing slope between 1100 and 1200 feet of elevation. Aspects are to the north. This location has been prime ice storm damage for the past several storms. Some stem damage was noted during the inventory particularly in White pines along the northern bound of the stand just south of the large wetland area.

Stand Prescription

Harvest type: Patch Cuts and Chainsaw TSI

Year to be treated: 2025-2029

Harvest season: Dry Summer/Fall or Winter

Method of harvest: Whole Tree Chipping or Cut-to-Length with Hot Saw, and Chainsaws

Patch cuts are recommended in areas where the larger stems have been damaged by ice storms or are in a general decline. In other areas where the pole sized cohort is predominantly red oak, some crop tree release thinning can be done with chainsaws to remove the competition of poorer quality hardwood stems.

<u>Stand 4 – Hm, H 2-3 A</u>

Description of Stand

Stand Area: 7.0 acres

Trees per Acre: 197.4

Mean Stand Diameter (DBH): 13.8 inches

Basal Area: 205.0 ft²

Species Composition by Percent of Basal Area: Hemlock 65.85%, Yellow birch 12.20%, White ash and White birch 4.88% each, Red oak, Beech, Red maple, Sugar maple, and Spruce 2.44% each.

Timber Volumes by Acre: 13.916 MBF, 28.3 Cords

Regeneration: The understory of the stand is predominantly scattered Hemlock, with an occasional beech

Soils: All soils in Stand 4 are Gloucester extremely stony fine sandy loams.

Stand 4 occupies the northern point of the lot. The rocky condition of the stand and the very limited access have allowed this area to mature without much, if any, intrusion by man. These conditions still hold and there are no recommendations for management of the timber resource in the stand.

Birch Ridge Community Forest-2; Management Unit 6 (MU-6); The Young Lot

New Durham, NH

MU-6 is comprised of three New Durham tax map lots; Map 235 lot 046 and Map 236 lots 001 and 002, totaling 464.18 acres. GIS acreage is 462.2 acres. The property extends from MU-5 (Stell lot) easterly to the New Durham-Middleton town line. All the property is enrolled in the NH Current Use land taxation program.

Access and Roads:

The best access to MU-6 is over an extension of Brienne Road that served as the main haul road for the most recent timber harvesting. Access can also be gained from the eastern bound of MU-5 by branching off the existing haul road to the east using Landing L-2. Both these entry routes utilize the snowmobile trail labeled as NH Corridor #22. Mountain Pasture Road, aka Webster Road, also provides access to the southern portion of the property, but a large, ponded wetland limits access at the property line. Interior access roads and main forest trails form a complete network that provide management access to all portions of the lot. Forestry activities will require a 25-foot buffer on either side of pedestrian recreations trails as designated by the landowner, and perpendicular crossings of those trails when crossing the trails is necessary. Continued use of many road and trail segments will require reconstruction with adequate erosion control structures including culverts and waterbars and brushing out the sides to keep them open. The local snowmobile club will likely be involved in other trail designation and maintenance outside the Trail Corridor #22 location.

Forest Conditions:

The existing forest condition is one of recovery from extensive harvesting operations that took place prior to 2015. This harvesting removed most of the sawtimber-sized overstory from operable areas of the lot. Eighty percent of the acres (365 of 462) are typed as dense sapling and pole-sized stands dominated by beech, with the remaining area adequately to under stocked pole and sawtimber sized stems over a shade tolerant understory of hemlock and/or beech. Due to the lack of cohesive measurable overstory no inventory of standing timber was made. Observations of type-size-density along with treatment recommendations were made during a systematic walk over of the property. Stands were delineated based on these observations with the help of LIDAR imagery taken in 2015 and available from the NH GRANIT system. The LIDAR image of stand conditions is available as an addendum located in the plan appendix.

Invasive Plants and Insects:

Several patches of bittersweet and multiflora rose were noted along the main haul road in Stand 7. These areas are small enough to be treated mechanically and care should be taken during any activity scheduled within the property to prevent further infestations or expansion of current locations. Emerald ash borer damage was noted in Stand 10 where an infestation of the insect has caused ash mortality. Continued monitoring of the property should be scheduled to check on the invasive plants, inspect other ash trees for the borer, and to check hemlock trees for the woolly adelgid, which is also present in the area.

Soils:

Soils in the lot only include types discussed in the Soils section of the BRCF Stewardship Plan. Over 92% of the lot is Gloucester extremely stony fine sandy loam, 8 to 25% slope (soil type # 112D). Seven percent is Gloucester very stony fine sandy loam, 8 to 15% slopes (soil type # 111C). The remaining 2% is split between Freetown and Swansea mucky peat (Mp) and Leicester-Ridgebury fine sandy loam, 3 to 8% slopes, very stony (soil type # 548B).

Threatened and Endangered Plants and Animals:

No reports of threatened or endangered species were logged by the NH Heritage Bureau for this property. See the MU-5 lot report for more information.

Water Resources and Wetlands:

There are several perennial streams within the property that flow to the southeast. These stream courses appear in the LIDAR imagery to have been fairly well buffered from impacts of the past harvesting. The north side of the ridge that extends east-west through the upper elevation of the lot drains toward Merrymeeting Lake. The only wetland noted on the property is a small (2 acre) area located northwest of Stand 9C, south of the snowmobile trail.

Timber related activities:

There are no commercial timber harvesting actions noted for this property during this planning period because of the intensity of the recent cutting that occurred prior to ownership by the Southeast Land Trust of NH. There are some non-commercial timber stand improvement (TSI) activities recommended. There may also be recommendations for other wildlife habitat improvement activities in the separate wildlife plan. Some of these activities could potentially produce a small amount of income depending on species to be removed, location, markets, and availability of operators. Review of these proposed actions will be done by the landowner, the BRCF Management Committee and SELT's Land Stewardship Committee as part of the annual work planning.

Stand Descriptions:

There are eight stands designated within the MU-6 tract. Numbering of the stands is sequential with those of MU-5 to avoid confusion, and so begin with Stand #5.

Stand 5A and 5B 142.0 acres

BE, H, S 1-2A, Mixed species, dominated by beech, overstocked with saplings and poles

Stand 5A is the larger portion of this stand and lies along the western bound of the tract. It is separated from 5B by a piece of Stand 8 and a peninsula of Stand 7. 5B lies along the northern bound of the tract between the two parts of Stand 8.

Soils in Stand 5 are entirely Gloucester extremely stony fine sandy loam (soil type 112D), except for a very small area of Leicester-Ridgebury fine sandy loam (soil type 548B) located in the southwestern most tip of the tract.

Goals for management in Stand 5 include reducing the area covered by dense beech saplings/poles and increasing the percentage of higher quality stems of both hardwoods and pine. Removal of dense pockets of beech can be accomplished using a brontosaurus. This operation will release small inclusions of pine and higher quality northern hardwoods located within the stand.

In areas of commercially viable pure beech, three to five acre patch cuts can be placed to allow the regeneration of more shade intolerant species like, maples, birches, and pine. Patch cut creation may be limited by the lack of an adequate chip market and the economics of the scale of the operation. NRCS cost share will likely be needed to offset the cost of this practice.

Access to the northern portion of Stand 5 can be gained through MU-5 off Brienne Road. The snowmobile corridor which was used as a haul road for the past harvesting is the only current access to Stand 5A although an interior web of skidder trails provides access to nearly the entire stand.

Stand 6, 15.7 acres

H 2-3 C, an understocked stand of mixed hardwood poles and small sawtimber sized stems.

The soils in Stand 6 are entirely Gloucester extremely stony fine sandy loam 8-25% slope (Soil Type #112D).

Stand 6 lies east of the Stand 5A and is bisected by the snowmobile corridor. Part of the stand is cut by a significant drainage that leaves the property and then reenters in Stand 11. This area of the stand should be considered a stream buffer and retained for that purpose. Previous harvesting in the stand left a partial overstory of pole sized stems some of which are now small sawtimber. This overstory is scattered and dominated by low quality maple, beech, and birch. It is recommended that in the next planning period this stand be reviewed for a possible over-story removal harvest to release the current midstory, or if conditions warrant, regenerate the stand.

Stand 7, 223.5 acres

Be 1-2 B, an adequately stocked seedling-sapling stand dominated by Beech.

Soils in Stand 7 are entirely Gloucester extremely stony fine sandy loam 8-25% slope (Soil Type #112D).

Stand 7 is the largest stand on the tract and occupies the central area of the property. It is very similar to Stand 5 except it is lacking a noticeable softwood component. It has excellent access for extracting timber resources and contains most of the tract's landing sites.

Access to and through Stand 7 is gained by the main truck road that is also the snowmobile trail (NH Cor #22) that extends eastward from Brienne Road. Several main forest roads branch from the trail corridor providing access into much of the stand. There is significant erosion control needed over large segments of the truck access road system that will need to be inspected in detail before developing a road and trail upgrade plan.

Stand 7 has three potential recreation attributes including a vista off an existing trail in the northwest near stand 8A, a possible view point off a skidder road near the south tip of Stand 9B, and a stonewall complex located in the southeast of the tract to the north of Stand 10. This last feature appears to be an old farmstead site with delineation walls, a stone wall bounded lane, and possible cellar holes.

Drainage from Stand 7 moves southeast in several intermittent and one perennial stream. LIDAR imagery reveals some older stems along these waterways showing that some buffering was retained during the past harvesting. It is likely that these buffers will need to be strengthened by delineating them, limiting crossings, and limiting tree removal from them in the future. There is a small, forested wetland within the stand located in the north of the stand along the boundary with Stand 9C. It has the appearance of a small area of perched water because of its location along the top of a broad ridge. The snowmobile trail is located close to the northern edge of this area but is distant enough not to be an impact.

Silvicultural recommendations in Stand 7 include reducing the beech component using a brontosaurus in areas of dense sapling and small pole sized beech and chainsaw TSI where there are other hardwoods that would benefit from release. The TSI would be of particular benefit to small areas containing high quality red oak stems and the occasional white pine. Other opportunities may include creating small patch cuts to regenerate species other than beech and bronto clearing to create vistas. Very little forestry-related work will be commercially viable although in the next planning period, but some of the patch cuts could generate income depending on product markets at the time of the cut. Specific areas to be treated will need to be located and delineated based on additional field review.

There are a few invasive plants located at several sites within the stand. Bittersweet and multiflora rose stems are located at two old landing sites, one in the center of the stand (landing #12) and the other in the north of the stand just to the south of Stand 5B (Landing site #7). Because of the small number and size of these plants mechanical treatment is recommended with annual monitoring after treatment.

Stand 8 A & B, 30.7 acres (15.6 & 15.1 acres)

S, H 2-3 B/C, Softwood hardwood mix adequately to inadequately stocked with poles and small sawtimber sized stems

Stand 8 is located in two areas along the northern bound of the tract separated by Stand 5B. Aspects are to the north. Most of the stand area is gently sloped. Soils in Stand 8 are entirely Gloucester extremely stony fine sandy loam 8-25% slope (Soil Type #112D).

Access to Stand 8 is provided by the snowmobile trail, a small branch of which accesses the western half of the stand. The eastern half of the stand borders the snowmobile trail in the northeast corner of the tract.

The western half of the stand (Stand 8A) is a clumpy mix of pine, hemlock and spruce surrounded by areas of beech and black cherry. It is recommended that the beech areas be mowed using a brontosaurus within this planning period while the stems are small. Waiting until the next planning period will allow these stems to become too large for efficient brontosaurus use and too small for commercial harvesting. The overall intent of management in this stand is to promote the enlargement of the softwood area for species diversity and wildlife reasons.

Stand 8B is an inadequately stocked softwood pole stand scattered over a dense beech understory. There are also patches of blueberries near skid trails that extend into the stand from the snowmobile trail. There are no recommendations for treatments for this portion of Stand 8 within this planning period.

Stand 9 A, B, C & D, 25.5 acres (2.1, 1.7, 7.7 & 14.0 acres)

H, S 2-3 B/C, Adequately to inadequately stocked Hardwood and Softwood poles and small sawtimber

The four units of Stand 9 are all small islands of mixed species within the larger, heavily cut area of Stand 7. Soils in all units of Stand 9 are Gloucester extremely stony fine sandy loam, 8 to 25% slopes (Soil Type #112D).

Access to all the units is good. While they may contain some commercially viable volumes of sawtimber in the next planning period, no treatments are recommended for this planning period. The areas should be left for their value as wildlife cover and for the species diversity they provide within the sea of beech that is Stand 7.

Stand 10, 14.2 acres

Hm, H 2-3 B, Adequately stocked Hemlock-hardwood mix of pole and small sawtimber sized stems.

Stand 10 is located south of the old farmstead stonewall complex and north of Stand 11. Access is from smaller forest trails that tie into a larger haul road branch from the snowmobile trail corridor.

Soils in Stand 10 are adequately drained and are entirely Gloucester very stony fine sandy loam 3 to 25% slopes (Soil Type #111C).

Silviculture is Stand 10 is recommended to include removal of overmature Hemlock and low-quality hardwood to release some higher quality stems of Hemlock and Red oak. Perpetuating the hemlock will provide some key habitat features and improve the overall quality of the Stand. However, no treatment is recommended for this planning period. The small size of the stand, the remoteness of the stand, the low volumes to be removed and the poor quality of product make an operation in Stand 10 impractical without combining it with other treatments in adjacent or near areas.

Stand 11, 2.9 acres

H 2-3 C, inadequately stocked hardwood poles and small sawtimber sized stems.

Usually, a stand of this size would be included with the surrounding stand delineation, but Stand 11 is the buffer area for a perennial stream that drains about half of MU-6. While the LIDAR imagery shows that some trees have been left in this area there is a need to specifically delineate the buffer and manage it for water quality protection beginning in this planning period.

There is an active infestation of Emerald ash borer in and near the stand with some ash trees already dying.

It is recommended that a specific assessment be made of the quality of the current stand to act as the buffer to the perennial stream. From that assessment actions can be developed that are needed to bring the buffer area back to an effective condition. This recommendation includes the portions of the same stream that cross Stands 5A and Stand 6.

Stand 12, 7.7 acres

WP, H 2-3 C, inadequately stocked White pine and hardwood mix of pole and small sawtimber sized stems.

Stand 12 is located in the far southeastern tip of the tract. It is likely that wood harvested in the stand was skidded onto an abutting piece that is still owned by the previous owner. Access is currently difficult as the stand lies south of the perennial stream with no good way over or around.

The stand is an inadequate overstory of white pine over a hardwood understory of saplings and poles. There is no need for any silvicultural activity in the stand within this planning period. The stand should be reassessed in 10 to 15 years to see if the overall stand condition has changed and if some TSI is warranted.

MANAGEMENT ACTIVITY TIME SCHEDULE

2022-2023 - Use plan to Update Current Use to Stewardship status if needed

- Evaluate Access Roads and Landing infrastructure to determine locations of close out work and erosion control work. Develop plan and map showing locations of roads and landings to be closed out with an estimate of cost for this work.

- Where needed, close out truck access roads by removing culverts and installing water bars to prevent erosion; Ditch and install broad based dips on actively used truck access roads to allow access with pickup trucks, equipment for road maintenance, and snowmobiles.

- Treat invasives along access road on BRCF 2 MU-6 Stand 7 2+/- acres.
- Enroll in NH Tree Farm.
- 2025-2030 Apply to NRCS EQIP for practices to enhance wildlife habitat, truck access for timber harvesting, Timber Stand Improvement (both big and chainsaw), and erosion control work to close out skid trails. Develop plan and map showing locations of practices.

- Harvest in Stands 1, 2, 3, & 5: Dry to Very Dry Summer; If possible, it would be best to harvest in May or June to reduce the beech component in these stands.

- Stands 3 & 7 Timber Stand Improvement (TSI) with Chainsaws, 5+/- acres in Stand 3 and 50+/- acres in Stand 7(re-asses at the time of NRCS Application). This can be accomplished any time of the year.

- Stands 1, 5, & 7 - 100 acres of Heavy Mechanical High Intensity Cutting, before June 1^{st} using a brontosaurus mower to remove pockets of sapling sized pure beech regeneration. The hope is to create early successional habitat and more species diversity over these stands.

2031-2032 - Boundary Maintenance – Brush and Paint.

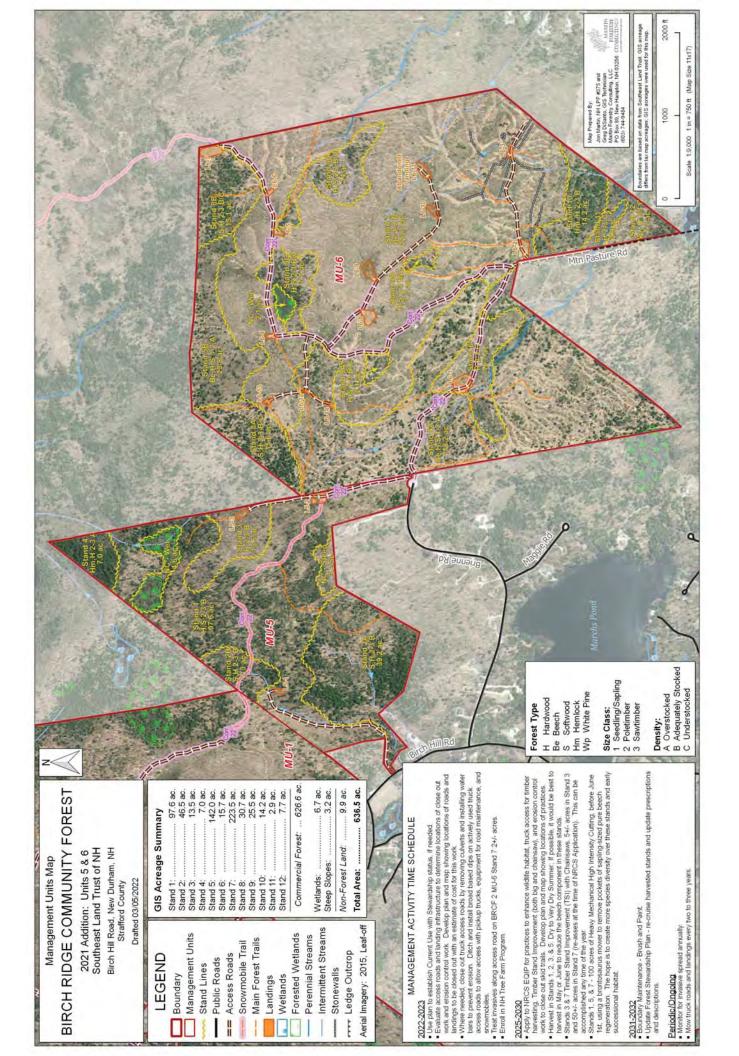
- Update Forest Stewardship Plan – re-cruise harvested stands and update prescriptions and descriptions.

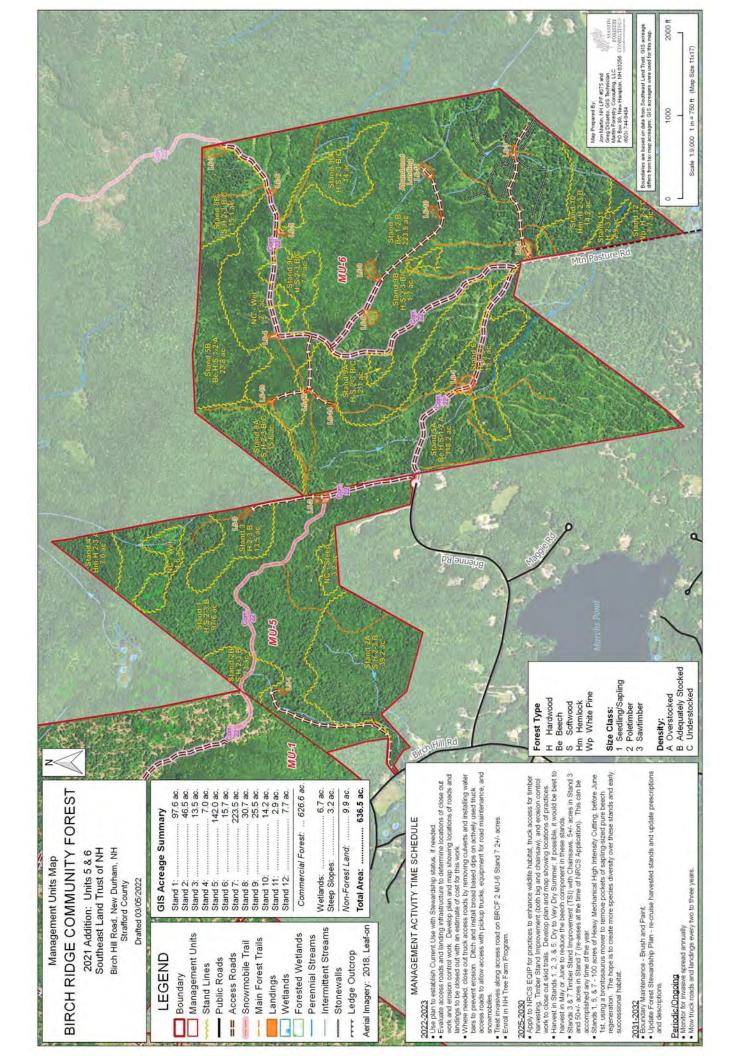
PERIODIC/ONGOING:

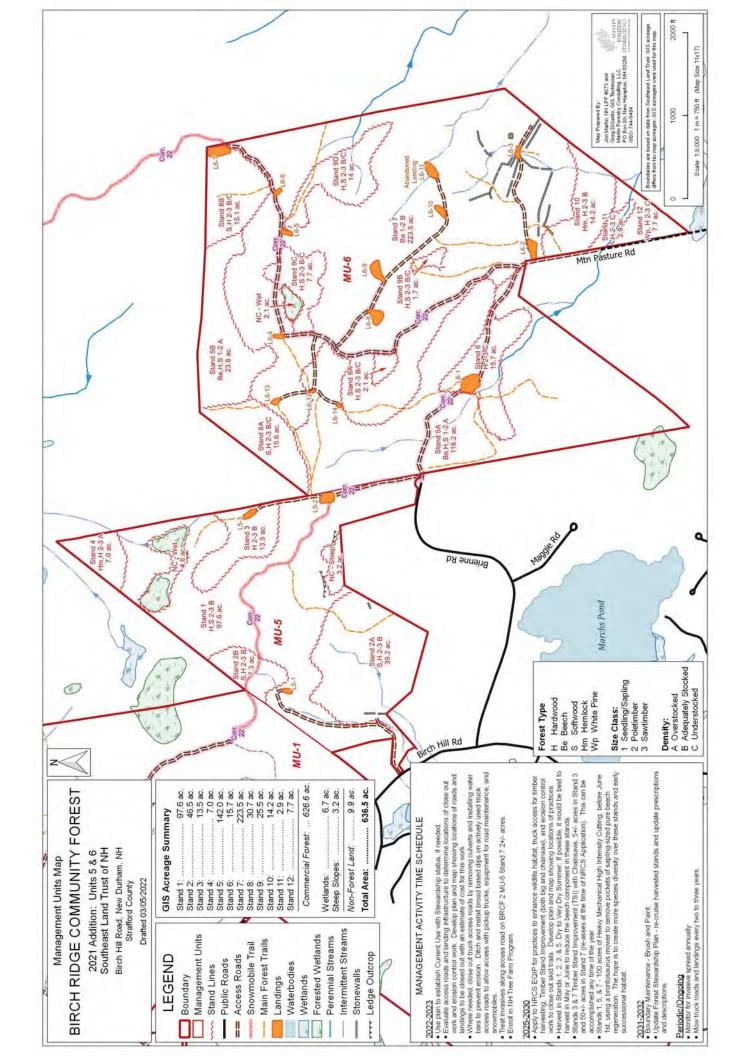
Monitor for invasive spread annually

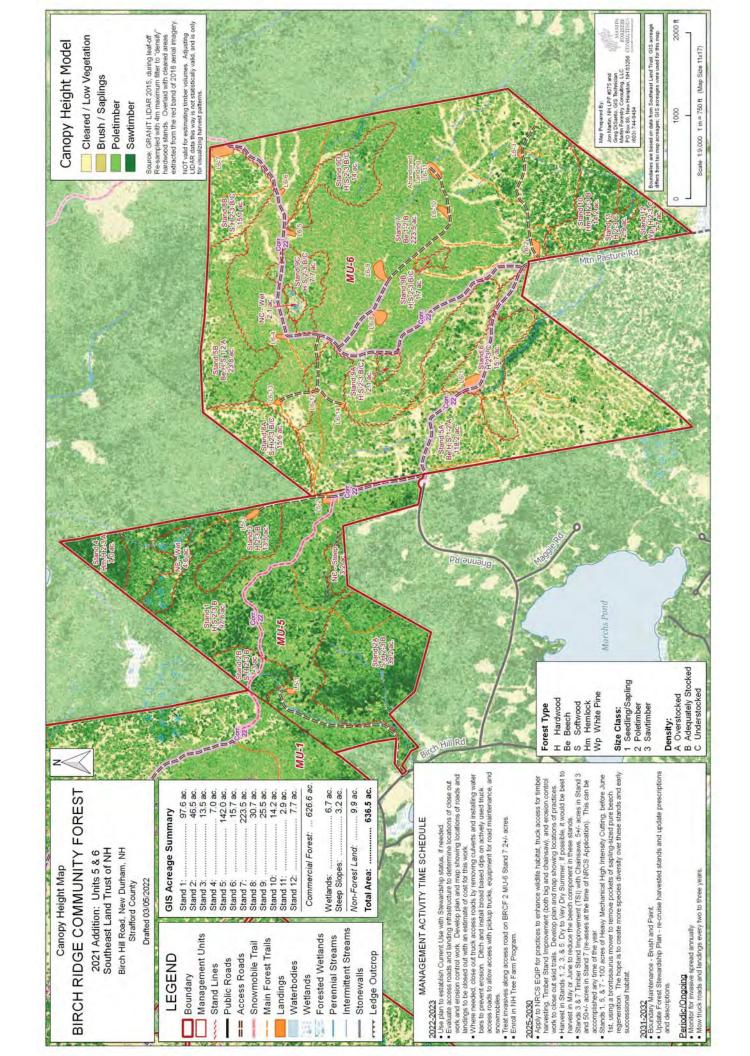
Mow truck roads and landings every two to three years

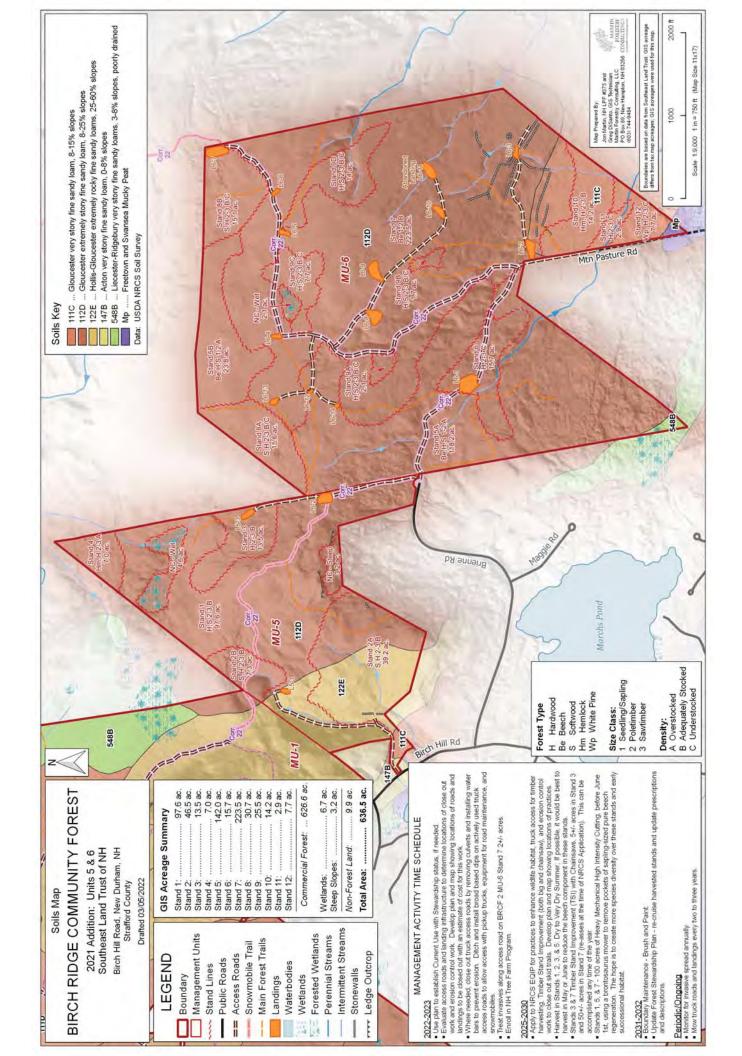
* The above are suggested recommendations.

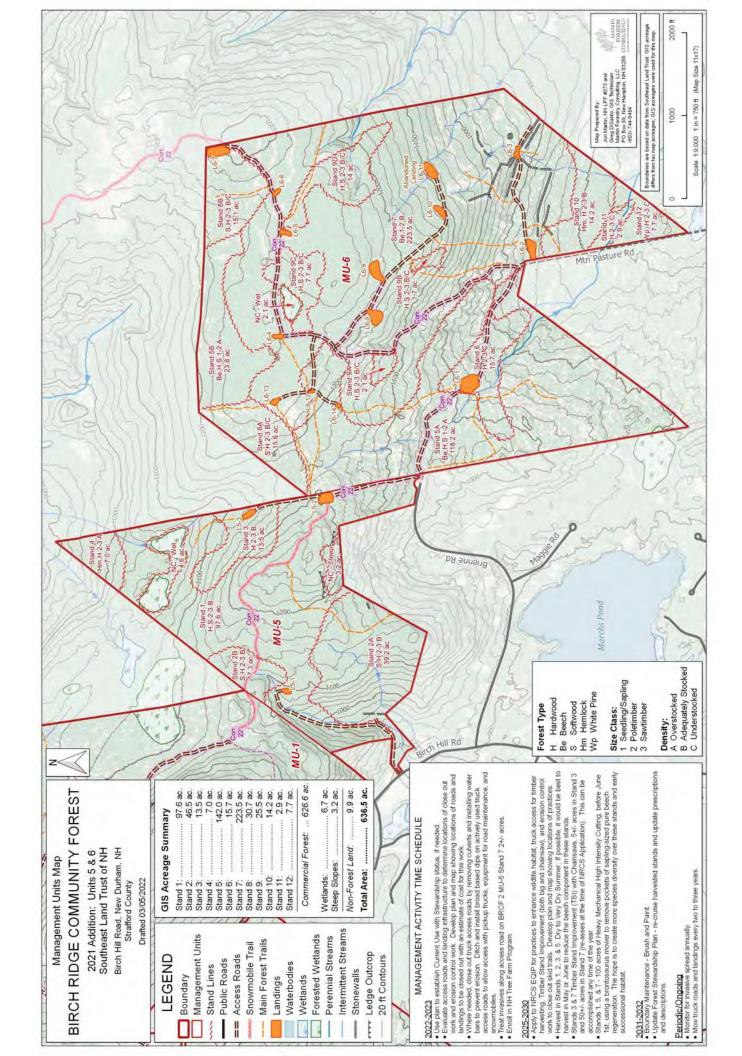


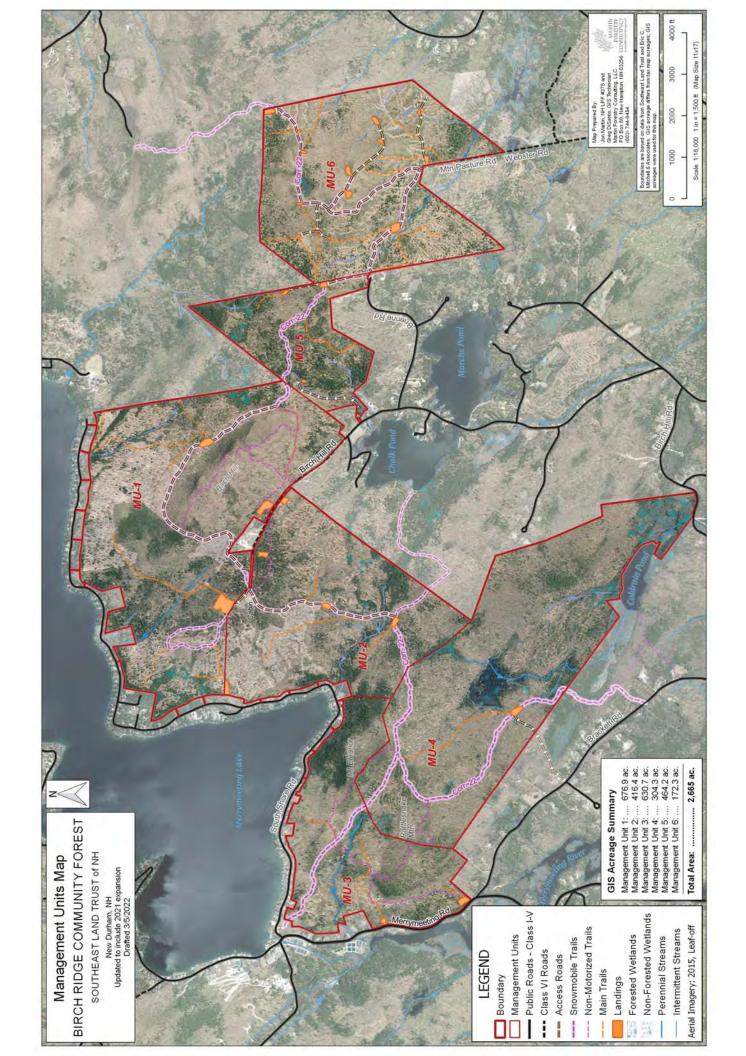


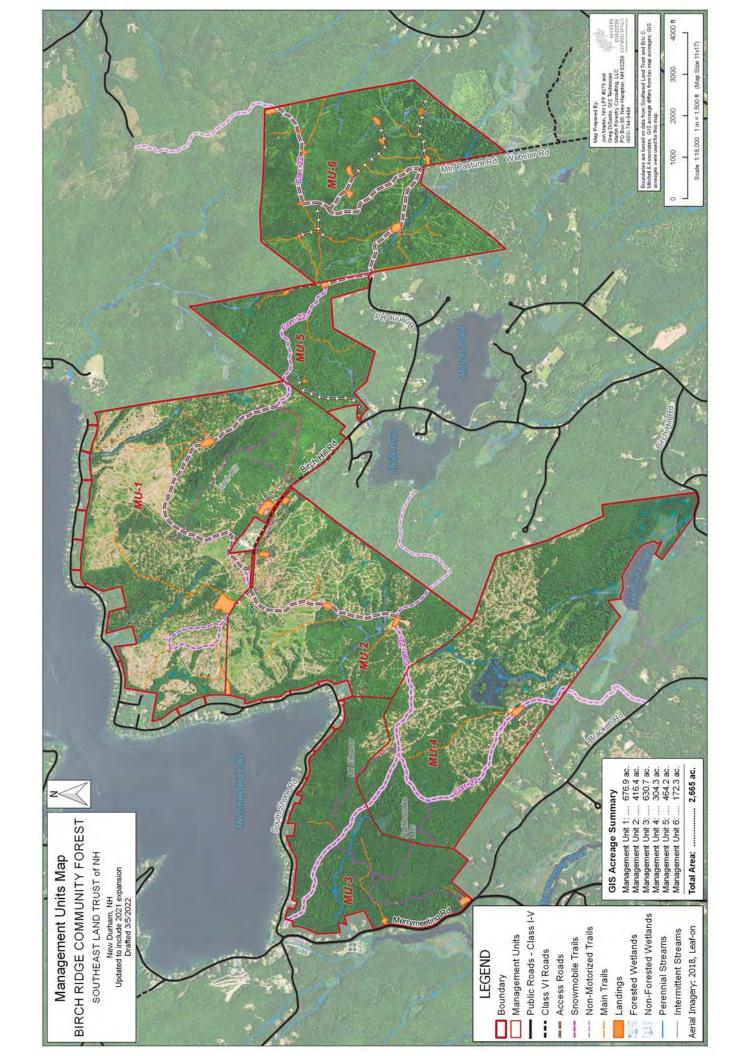


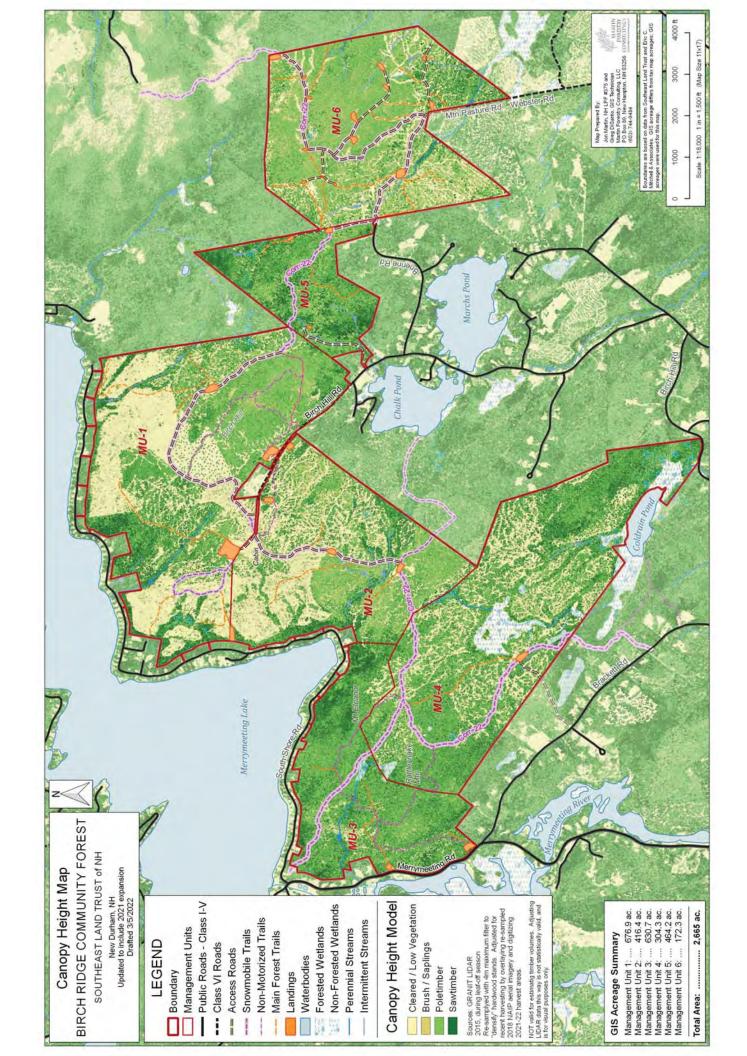


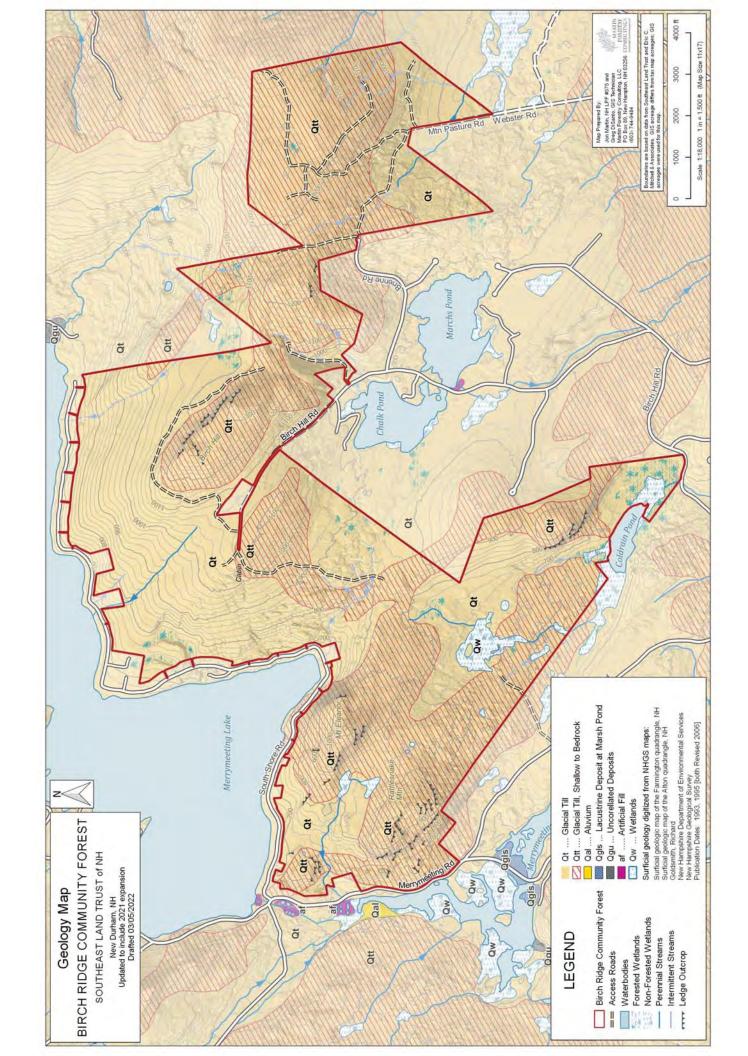


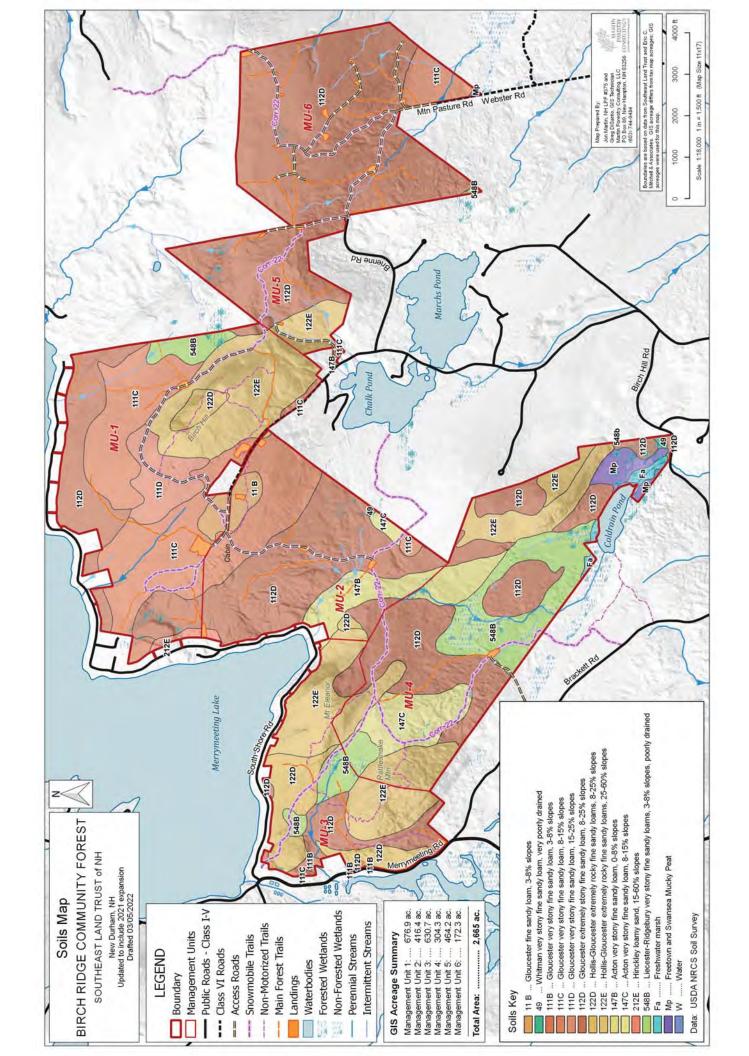


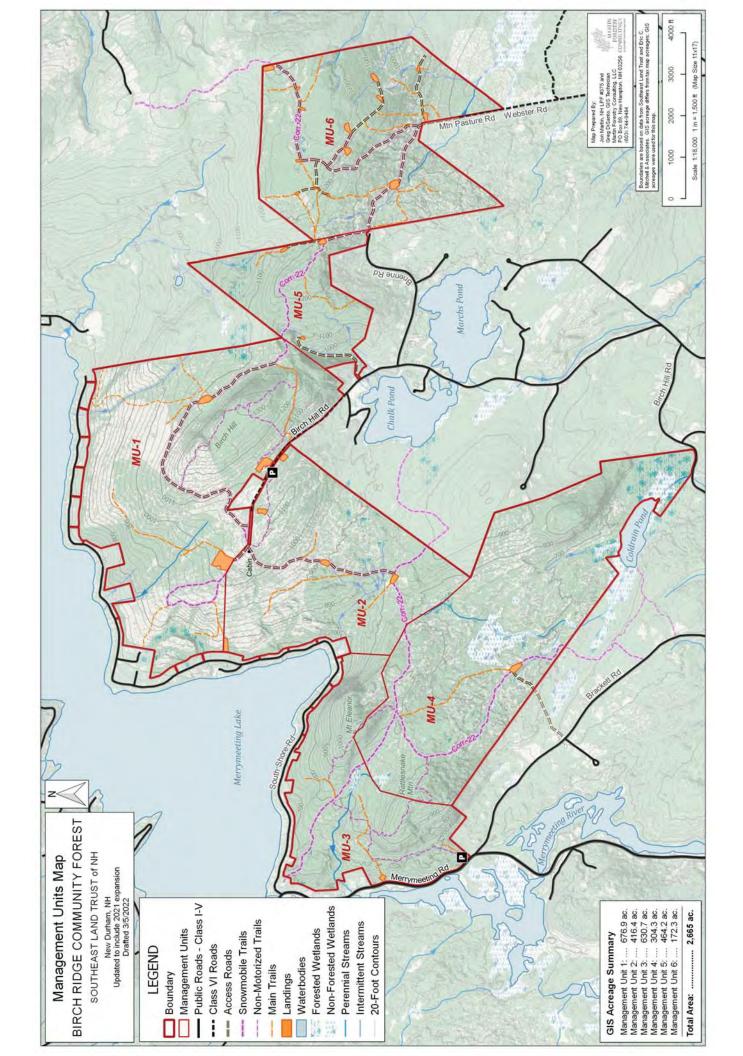












Wildlife Management Recommendations

for BRCF-2 (636.45 acres)

Introduction

25 January 2022

The overall wildlife habitat goal for BRCF-2 is the same as for BRCF-1. That is, to promote a diversity in both composition and age structure of vegetative communities to create and sustain habitats for a full range of naturally occurring wildlife populations. This includes species of greatest conservation concern identified in the New Hampshire Wildlife Action Plan, including those listed as threatened and endangered, as well as more commonly occurring wildlife with stable populations.

As with BRCF-1, BRCF-2 is a forested property with stands of varying age and composition that reflect many past entries for timber harvesting by former landowners. Even though the forest composition and structure of BRCF-2 is somewhat different from that of BRCF-1, many of the same habitat concerns apply across the entire BRCF. These include within stand features such as dead and down woody material, cavity trees, hard nut and soft fruit mast production, and browse availability. Between stand habitat considerations also are similar, such as the availability of both very old and very young stands and areas providing herbaceous grass and forb vegetative cover. More detailed information on within and between stand considerations were developed for BRCF-1, and need not be repeated here. This can be found in the wildlife habitat management recommendations for BRCF-1 in Appendix _____.

Managing and sustaining wildlife habitats in extensive forested landscapes such as BRCF-1 and BRCF-2 is largely focused on working with professional foresters to integrate habitat considerations into silvicultural operations. That is the approach taken on BRCF-1 and will be taken on BRCF-2, along with some site-specific activities designed principally to benefit to wildlife. The new ownership (BRCF-2) has been delineated into two management units, with the former Stell property identified as MU-5 and the former Young property as MU-6. These designations are additions to the four management units previously described for BRCF-1.

Forest Habitats

Overall, BRCF-2 can be described as a previously harvested mixed pine-oak-hemlock forest biome. Overall tree species composition and diversity are similar to that of BRCF-1. However, there are significant differences in terms of stand structure and age-class diversity. Due to the pattern and timing of previous timber harvesting activity, the forest habitats within MU-5 are more diverse than that for BRCF-1. In particular, the western portion of BRCF-2 (MU-5) has a higher percentage of mature white pine, hemlock, and red oak than anywhere else in the entire BRCF.

Heavy cutting on much of MU-5 and MU-6 ~20+ years ago has created dense pole size

stands dominated by beech, but also including birch, maple, and oak, ranging to 30+/feet in height. However, due to the presence of large boulders (e.g., glacial erratics) in the center of MU-5, many large white pines were not harvested. As result, there is a 5-10 acre forest stand that contains a supra-canopy of dispersed pines greater than 24" dbh and ranging to 100' in height. This provides a stand structure and species composition not found elsewhere on the BRCF.

Wildlife Observations/Signs

Extensive browsing by moose is evident on maple saplings on the upper elevation flat at the northern part of MU-6. Moose tend to go up to higher elevations during the winter months and this broad flat provides moose with excellent cover and browse. In addition to moose, evidence (e.g., tracks and scats) of other mammals using this broad upper elevation flat include deer, bobcat, fox, fisher, coyote, and small mammals.

Deer tracks were evident throughout all of MU-5 and MU-6. Although not directly observed, it is likely that the red maple swamp and adjacent white pine/hemlock stands are used as deer wintering sites (e.g., deer yards) during periods of deep snow.

Tracks of ruffed grouse, snowshoe hare, squirrels, mice and other small mammal were abundant, especially along Corridor 22 as it climbs up to the top of the ridge. Porcupine tracks were also observed. Tree cutting along Corridor 22 has created early successional habitat that supports a diversity of resident wildlife, as indicated by the abundance of tracks we observed during our recon. After acquisition, a forest management plan can be developed to sustain this productive wildlife cover.

To date breeding bird surveys have not been conducted at BRCF-2. However, given the tree species composition and age class diversity many of the migratory and resident birds that nest in woodlands in this part of New Hampshire would be present. The red maple swamp system at the north end of MU-5 and the perched wetland on the ridge top in MU-6 likely support more diverse bird communities (e.g., migratory warblers) than for other forested habitats within the BRCF.

Key Wildlife Habitats

A predominately <u>red maple swamp</u> (see Forest Type Map *NC Wet, 4.6ac*) occurs at the north end of MU-5. There are some spring seeps and stream flow, but no significant standing water or flowage. Drainage is northwest toward the **[did you mean Merrymeeting Lake]** Cocheco River watershed. White pine, hemlock, and spruce are associated tree species, with larger mast producing red oak in the drier areas on the perimeter of the wetland and upslope. There is no evidence of tree cutting in or around this wetland, or in the adjacent pine stand to the north. As such, this area is perhaps the least disturbed forest habitat within the BRCF and we recommend no active management in this area.

Dispersed supra-canopy conifer stand in the center of MU-5 (see Forest Type Map

Stand #1) is a forest habitat that is not currently present elsewhere in the BRCF. The presence of large diameter white pines and hemlocks, with heights extending well above the surrounding tree canopy, are likely used as high perches and potential nest sites by hawks, owls, ravens, crows and turkey vultures. Ideally, no timber harvesting will occur in this one-of-a-kind forest stand on the BRCF.

The forest cover on MU-6 is primarily stands of mixed hardwoods with scattered softwoods. During past years, MU-6 had more frequent cutting activity than MU-5. To facilitate harvesting, many <u>small log landings</u> were developed that now provide young forest and non-forest habitat (see Forest Type Map Stands 9A, 9B, and 9C). These areas will be evaluated to determine which should be expanded and managed as early successional cover and herbaceous non-forest clearings. Grass and forb clearings can be managed by annual brush-hog mowing, while early successional habitats can be maintained by periodic bronto-clearing. Where early successional habitat is the long-term objective, "patch cuts" of 3-5 acres should be performed every 10-15 years to sustain the desired stand structure.

An <u>old stone cellar hole</u> and network of stone walls identifies a former farmstead near the southeastern boundary of MU-6. Old home sites such as this often indicate productive soils and vegetative diversity that is conducive to good wildlife food and cover development. This site will be evaluated for its potential to be managed with a focus on wildlife. In addition, the site provides a cultural resource that may be attractive to visitors to BRCF-2. Access for both management and the public is good, with an old woods road that connects directly to Corridor 22.

<u>Beech saplings and poles</u> dominate heavily cut regenerating stands, with white birch, red oak, red maple as scattered associated species. In addition, aspen saplings occur in some sites. Mature beech trees are important hard mast producers, but where beech regeneration dominates as it does in MU-6, and to a somewhat lesser degree in MU-5, it is detrimental to the regeneration and growth of other desirable trees. A beneficial wildlife habitat management practice in MU-6 is to take actions to reduce the amount of beech in the understory to encourage red oak, aspen and birch.

A <u>"perched" red maple swamp</u> of dense highbush blueberry and other shrubs, surrounded by mature hemlock, spruce and white pine occurs on the broad upper elevation flat (see Forest Type Map *NC wet*). In terms of plant species composition and structural diversity, this is the only location for this type of forest habitat within the BRCF. An appropriate no cut buffer zone should be established around this wetland.

A long steep ridge traverses the middle of MU-6 (running roughly east-west) creating a long south facing slope. Flowing down to the base of the slope are several intermittent stream channels and a few perennial streams (see Forest Type Map Stand 6). Stream channels will be evaluated to determine appropriate buffer widths, ranging from 50 to 150 feet, that should be established to preclude or restrict tree cutting on either side of these flowages.

At the top of the ridge in MU-6 the topography is a <u>broad upper elevation tree covered</u> <u>flat</u> that covers approximately the northern 20-25% of the property. This flat area is some the highest elevation areas within BRCF, ranging from 1,280'-1,300'. Historically during the 1700-1800s, portions of this area were maintained as a "high-meadow" for grazing sheep/cattle. Potentially, a portion of this area could be converted back and maintained as an old-field, herbaceous habitat. An evaluation is needed to determine the most appropriate location and size. Many of the log landings on BRCF-2 are in this area

Recreational Benefits

<u>Hunting</u>: The addition of the 636 acres in BRCF-2 to the 2027 acres in BRCF-1 (total of 2,663 contiguous acres) ensures that this conservation area will remain open for public hunting. There is clear evidence (e.g., tracks and scats) of white-tailed deer, moose, ruffed grouse, and snowshoe hare. There also also signs of of black bear and coyote that further indicate that game animals are common. The presence of 3-4 deer hunting stands is evidence of past/present deer hunting activity.

<u>Fishing</u>: There are no ponds or streams on the property that provide fishing opportunities. However, since BRCF-2 is located at the top of the Cocheco River watershed, drainage from the property flows into March Pond to the south and Sunrise Lake to the southeast. Both of these water bodies are warm water fisheries.

Regional Conservation Plans

Most of BRCF-2 is located within the Cocheco Headwaters Core Focus Area of the Land Conservation Plan for New Hampshire's Coastal Watersheds (2006).

The Cocheco River begins its 35-mile flowage just south of MU-6. The Cocheco is one of only 19 NH rivers that have been designated as protected by the state legislature through the Rivers Management and Protection Program. Conservation of BRCF-2 now provides protection of the very headwaters of the Cocheco River. The long south facing slope that crosses both properties yields an abundance of water through numerous drainage channels feeding streams and ponds that ultimately flow into the Cocheco.

All of MU-5 and much of MU-6 are in Tier 1 or Tier 2 conservation focus areas of the Moose Mountains Regional Greenways Conservation Action Plan.

The NH Fish and Game Department's Wildlife Action Plan (WAP) ranks the land within BRCF-2 as mostly Tier 1 (highest ranking in the State) or Tier 2 (highest ranking in the bioregion) habitat.



Southeast Land Trust

Stell/Young Property - Trail Inventory and Assessment

SnowHawk LLC did an inventory and assessment of the existing trails on Southeast Land Trust's (SELT) recently acquired Stell and Young properties in the town of New Durham, NH. The total acreage of both parcels is about 636 acres. The initial assessment was in done in 2020 prior to SELT owning the two tracts and the second was done in 2021 with Debbie Goard of SELT after they took possession of the property. This brief summary will examine the condition of the existing trails as well as assess the potential for adding new trails in the future.

Both trips were done in the summer and were done on foot while using an ATV for following the larger roads used as trails. Weather conditions were typical for the summer and had not been not unusually dry or rainy.

Stell property

Access to parcel is best done from the cul-de-sac at the end of Brienne Rd. There is also a small amount of frontage on Birch Hill Rd. that may offer access but roadside space is very limited with no parking area. The maps included here show the property boundary in gray.

The main trail on the Stell property is Corridor 22 (shown in red on maps) and it passes by the end of Brienne Rd. Corridor 22 is the well-used snowmobile route that passes through the Birch Ridge Community Forest (BRCF) before making its way on to the adjacent Young property and continuing north. This trail receives a great deal of maintenance by the Powdermill Snowmobile Club and this was quite evident during the 2020 reconnaissance. At the time of the visit work was being done on the tread and ditching was being added to aid with drainage. Though it was a bit rougher compared to an earlier trip in 2019, it seemed that the goal was to improve the drainage and remove a few problem rocks. That said, work was still in progress at the time of the first assessment. The corridor had also been pruned a little wider in spots. All of these improvements showed good results when seen again in 2021. A year later the work was barely noticeable and the trail was smoother and the drainage appeared to be more effective.

Corridor 22 remains the main artery through this property as well as BRCF and the Young property. It is appropriate for a variety of uses. Currently these are hiking, biking, skiing/snowshoeing, and snowmobiling. It also has ATV/UTV use for maintenance and other work-related needs. It would be appropriate for these uses to be continued. Equestrian use could be considered for the future as the trail should be able to support it. Recreational use by ATV/UTV is not recommended at this time but that decision is ultimately up to SELT.

Another trail/road departs from Corridor 22 and follows the eastern boundary shared with the Young property (shown in lighter green on the maps). It goes north for a short distance before the trail starts to

become impassable and eventually dead ends. It doesn't appear to be worthwhile for much more than access into the triangular northern corner of the property. It may be possible to improve this area later but it seems unnecessary at this time. An important item found here is access to an old trail that could be reopened through the Young property. Just after departing Corridor 22, a gate can be found on the right. From behind the gate an old trail traverses across the Young parcel to eventually reconnect with Corridor 22 eliminating two steeper sections of that trail. This is addressed in the section on the Young parcel.

Young property

Access to parcel is also best done from the cul-de-sac at the end of Brienne Rd. The property boundary is shown on the maps in black.

The main trail is also Corridor 22 (shown in red on maps). Corridor 22 meanders southeast from the Stell section of the trail and begins a descent to where it intersects with the end of Mountain Pasture Rd. which at that point is a class six road. From that junction it climbs back to the north on a long steep section of road. This section may be one of the steepest sections of Corridor 22 on either property and possibly all of BRCF as well. It has seen new ditch work and the placement of water bars over the last few years. They have been maintained to address the heavy flow that results from the bigger storms that have impacted the road. During the most recent visit here this drainage work appears to be working. One area that could use work was near the bottom of the hill near the junction with Mountain Pasture Rd. as it appeared to have some runoff with gravel/sand deposits. This may have been worked on since this visit. This section will require ongoing monitoring and maintenance.

When traveling north and reaching the top of the steep section, the grade begins to ease and the road condition improves. It begins to swing to the east after passing another trail/road to the right (shown in blue on the maps and headed southeast) and then another old skid path to the left (shown in orange on the maps and headed west). Soon Corridor 22 reaches the northeast corner of the property before continuing off SELT's land. Other than the steep grade previously mentioned, this section is in good shape and should not present any problems for the same trail uses as mentioned for the Stell section. Consideration should be given to the long-term use of the steep grade area though it could work fine with regular maintenance. A possible bypass for this section exists and will be ground proofed in the spring of 2022.

One of the nicest trails that is in very good condition is what has been referred to as the view trail (shown in darker blue on the maps). It leaves Corridor 22 to the southeast on the high ground above the steep pitch. It passes by two excellent views before descending to a point where the trail is difficult to follow. There are some side routes that were likely skid paths but seem to dead end now. After reviewing Google Earth and learning of research done by BRCF Trail Committee members it appears that there is a good chance to connect this with the intersection of Corridor 22 and Mountain Pastures Rd.

The potential new trail (shown in light blue in the lower right-hand corner on the maps) could follow a section of old road departing from the junction with Mountain Pasture Rd. and going east. It could then follow relatively good grades and connect with the view trail by those familiar with the area. This new trail that could join the view trail and help to create a trail that bypasses the steep grade section of

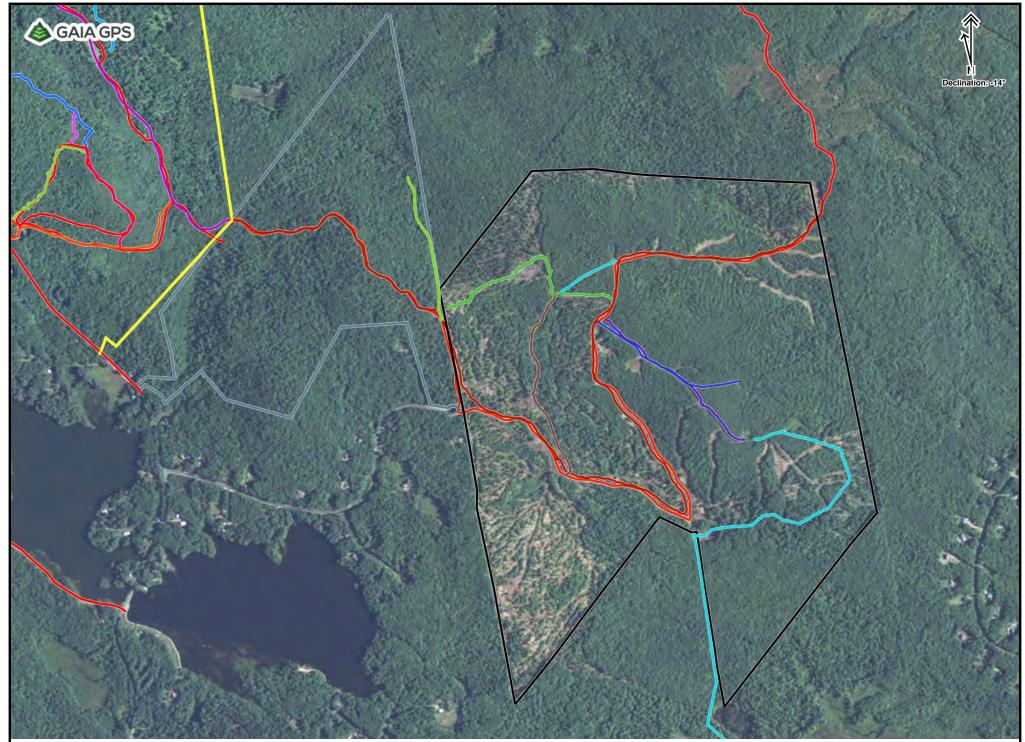
Corridor 22. If the steep section of Corridor 22 continues to be used this would also offer a loop through the heart of the Young parcel. It should be noted that this would bring trail access close to a developed residential area on Drew Drive just east of the boundary. There has been mention of some interest in connecting to trails in that area so consideration should be given to what may be planned there.

There is an excellent opportunity to connect the Stell parcel to the high point of the Young parcel by using an old trail that would eliminate hiking a big section of Corridor 22, including the steep grade. It appears in the darker shade of green on the map and begins at the gate also mentioned earlier in the information on the Stell trails. This trail connects the higher points on each property and shortens the distance to access the view trail on the east side of Corridor 22. This would be best suited for hiking and the tread is already in place. Since first being walked, the vegetation along the edge of the trail has made it increasingly difficult to follow. It is flagged now and with a bit of work with saws and loppers to clear back the brush and beech growth it is ready for use.

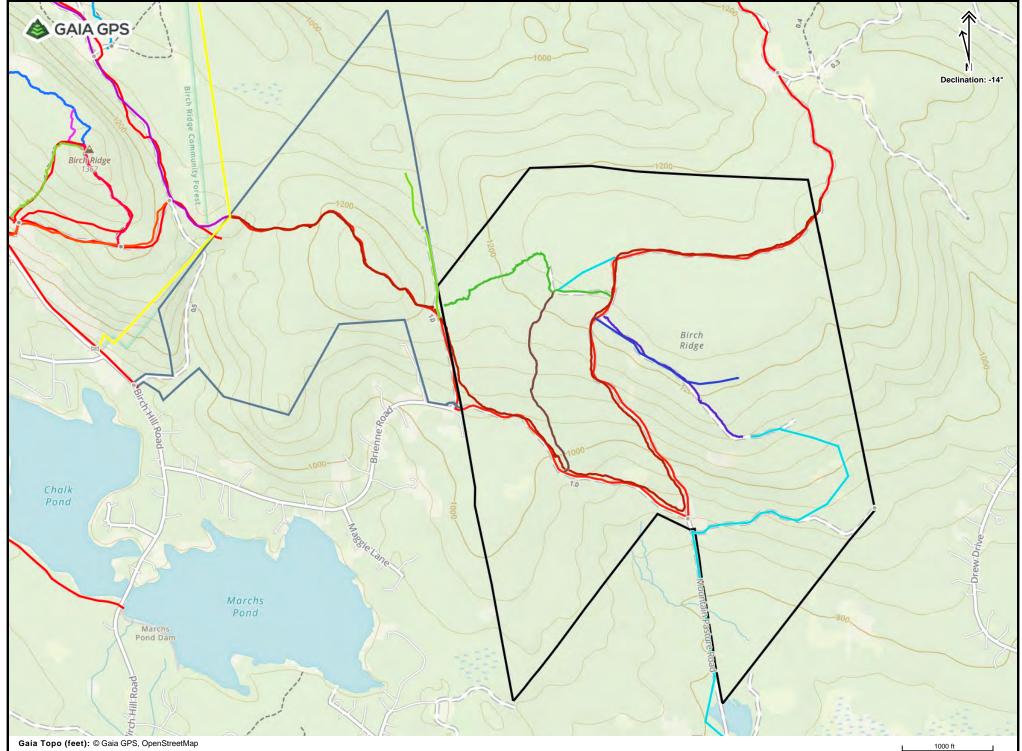
There are several other old skid paths that can still be found all over the property including another shortcut from the green trail to Corridor 22 where it turns east. It is shown in light blue. It's overgrown and isn't an important route to open but it was visible on Google Earth and worth pointing out as an option. Another old skid path that may have been part of this trail is shown as brown on the map. This was hiked during the first assessment but it is also becoming harder to follow. It's another option for traveling between the green trail and Corridor 22 just east of the Brienne Rd. cul-de-sac. It follows a slightly shallower grade than the steep grade on Corridor 22 but has some wet areas that would be a challenge to maintain. It's not recommended for regular use but as with many of the old skid paths it might be an alternative in the winter for snowshoeing or skiing if one is willing to deal with the increased growth.

Both of these properties are now easily accessed with the trails that are in place. Perhaps the most important addition to consider is the (green) trail to connect the two parcels. It will offer an excellent alternative for a hiking experience that is different than the larger Corridor 22, especially during the snowmobile season. In the spring of 2022 SnowHawk will look over the possibility of the additional trail from Mountain Pastures Rd. to the view trail. Given the amount of trail maintenance already needed on BRCF trails it seems that adding anything more at this time would not be in SELT's best interests. The recommendations made here will also have to be matched up with any other management plans for forestry and wildlife considerations.





Satellite: © MapQuest



U 1000 ft Web Mercator | EPSG: 3857



Birch Ridge Community Forest

Application for a Special Use Permit (SUP)

A special use permit is required for the following types of activities that are not sponsored by SELT, MMRG or organizations having a longer-term agreement.

Activities that require a SUP include, but are not limited to:

- Groups with more than 20 individuals
- Mountain biking groups larger than 20 bikes
- Equestrian groups with more than 5 horses
- Groups of any size proposing overnight use or campfires
- Trail creation, reroute or maintenance
- Placement of Geocaches
- Scientific and historical research including the use of metal detectors
- Any commercial activity (ex. educational or recreational activities or events)

Name of Sponsoring Organization: ______
Date of application: ______

Contact Person: _____

Phone number: ______ Email address: _____

Description of Event: _____

Location of Event on BRCF (a map may be attached): _____

Date of Event: ______ Time of day of Event (start time and duration): ______ Will the cabin be used; if so, how: _____

Signs, amenities, or facilities required for event: ______

Number of people expected at event:	
Number and type of vehicles expected: _	

Where will they park (a map may be attached):		
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Are parking provisions needed for disabled or mobility impaired persons: _____

Local/State/Federal permits needed: _____

Name of the person from the organization who will attend and is responsible for managing the event:

Cell phone number: _____

Email address: _____

Note that this application is not a SUP, nor does it guarantee that a SUP will be issued. This application must be submitted to SELT at a minimum of 45 days prior to the date of the proposed event to allow sufficient time for SELT review. SELT may request additional information from the sponsoring organization as part of its application review. Action on this application, either approval or denial, will be reported back to the contact person at least 14 days prior to the requested event date. SELT may add conditions to an approved SUP that, in its sole discretion, are required to protect property resources and those attending the event. Any issued SUP will be for non-exclusive use of the BRCF on the approved date of the event.

The SELT evaluation of this application may include the following considerations:

- Potential impacts on natural resources
- Potential impacts on property infrastructure
- The compatibility of the event with SELT public use guidelines for the BRCF
- The number of attendees
- Consistency with the BRCF conservation easement
- Adequacy of the sponsoring organization to manage and control the event

For additional information or to submit the SUP contact:

SELT Stewardship Director deborah@seltnh.org 603-778-6088 To: BRCF Management Committee

From: Deborah Goard, Stewardship & Land Engagement Director

Date: April 22, 2022

Re: Enrolling Birch Ridge Community Forest in the NH Tree Farm Program

Requested Action

The Committee endorse SELT's Land Stewardship Committee's vote to enroll the BRCF in the NH Tree Farm Program.

Background

At the April 2020 meeting for SELT's Land Stewardship Committee meeting, Jerry Langdon with the NH Tree Farm Program joined to explain what the Tree Farm Program is and discuss the possibility of SELT enrolling some of our properties into the program. The main takeaways from the discussion were:

- NH Tree Farm sees SELT's enrollment of some of our Reservations to be beneficial to their program
 - Having SELT as a good example of forest management involved in the program
 - Increased involvement of landowners in NH with the Tree Farm Program will help to maintain funding from Washington D.C. for forestry programs
- Enrollment comes at no cost to SELT as the Tree Farm Inspector is a volunteer
- The Tree Farm program and the Tree Farm Inspector would take care of the administrative work for SELT
- The assigned Tree Farm Inspector would most likely be Greg Jordon, the Rockingham County Forester with UNH Cooperative Extension
- Benefits to SELT would be
 - a good partner to establish a series of annual educational workshops on forest management for forest landowners of SELT's conservation easements – something we have had on our minds to do for several years
 - $\circ~$ A way to actively show and promote the good forest management that occurs on SELT's land

SELT staff believes enrolling some of our properties into the Tree Farm Program will benefit both SELT and the Tree Farm Program and result in greater promotion of good forest management in our region. We believe it makes sense to enroll properties where we have a stewardship plan for the property that involves active forest management for forest products and/or wildlife habitat.

At the May 2020 Land Stewardship Committee meeting the Committee voted to enroll the following properties into the Tree Farm Program:

- Stonehouse Forest
- Spruce Swamp Conservation Area
- Tucker & French Family Forests
- Piscassic Greenway

- Mast Road Natural Area
- Burley Farms
- Birch Ridge Community Forest

Recommendation

The BRCF has a lot to offer when it comes to learning what good forest and wildlife habitat management can do. It is the hope of SELT staff to use this property as a location for educational

workshops for natural resource professionals as well as forest landowners. A partnership with the NH Tree Farm Program through the enrollment of some of SELT's lands, including the BRCF, will help us accomplish that goal.

SELT staff has begun to work with Greg Jordan, the UNHCE Rockingham County Forester and Chair of the NH Tree Farm Committee, to enroll the above properties into the NH Tree Farm Program, with the exception of the BRCF, pending discussion with the BRCF Management Committee.

At this time, staff is asking for the BRCF Management Committee's endorsement for enrolling the BRCF into the Program.