Sustainable Trailworks
PO Box 163
Morrisville, VT 05661
802.760.7972
www.sustainabletrailworks.com
traildesign.avery@gmail.com

Randolph Community Forest

Granite Backcountry Alliance - Recommendations for Ski Glade Development

Overview

The objective of this project is to identify viable zones and access routes for backcountry skiing in the Randolph Community Forest near Mount Crescent and Mount Randolph.

This plan incorporates a few existing resources: the Crescent Ridge Trail (a hiking trail that traverses the ridge), an existing ski line, and a large open hardwood glade. This hardwood glade will provide the bulk of the skiing in this area. The layout of the ski lines focuses on accessing this hardwood glade from the top.

Site Assessment and Recommendations

A site assessment was conducted on April 25th. There was still some snow cover in the lee aspects and shady areas. The view of King Ravine is stunning from this slope. Observations and recommendations for ski line development are included below.

Existing Ski Line

There is an existing ski line in the zone that is about 15-30 feet wide. It drops from near the Crescent Ridge trail, and is cut all the way through the hardwood glade. The rough alignment of this line is shown on the attached map. This trail could be cleaned up, widened slightly and cleared higher to be more open during mid-winter conditions.

Aspect, Elevation and Vegetative Cover

The predominant aspect of this zone is SE.

From 2,550’ to 2,900’ in elevation there is a natural hardwood glade. While this area is quite open now, it still needs thinning work, similar to what was done for the existing line. I recommend creating 4 or 5 additional lines of between 20-30 feet wide through this glade. At this width, the trees that remain after the line has been created will maintain a closed canopy.

When laying out ski lines here, I recommend identifying and following micro-topographical features such as slight lee aspects of ridges and roll-overs. These areas will hold snow better. Also, any softwoods that are left standing in this predominantly hardwood area will help provide shade and hold snow during wind events. Large islands of undisturbed forest should be left between the ski lines.

From 2,900’ to 3,100’ in elevation there is predominantly softwood cover. The Crescent Ridge Trail traverses just below the ridge at the top of the skiable slope. I have identified

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two ski zones here that start at Crescent Ridge Trail and continue down to the hardwoods below – these are shown on the attached map. I have selected these areas because the trees are naturally much thinner than in the surrounding areas, and thus it will be significantly easier to create ski lines in these areas. The lines could be opened up in a similar fashion as the existing ski line – between 20-30' wide.

It may be desirable to identify and clear one or two more similar routes from the Crescent Ridge trail.

Access

Carlton Notch Trail was being considered for an access route, but this trail is a little out of the way, and would not allow for skiers to do ski "laps".

There is another existing access via a trail blazed with blue plastic squares – this is the recommended access. Portions of this access route are slightly wet, but overall the alignment is desirable because once the trail is packed, the grade would allow skiers to exit downhill without having to reapply skins. There is the possibility of including the lower loop of blue blazed trail as an exit during fast snow conditions, although you would need to put skins on to get back to parking lot.

From the top of the blue trail at the wildlife clearing, the recommended access would head through the clearing and then up along the edge of the glade and proposed ski zone – to looker's left. By cutting and blazing a dedicated skin track near the ski line, users could do multiple laps. The exact location of the skin route needs to be determined.

Glading Considerations

Species selection

It is important to review the land management plan for the property to become familiar with the management goals. This will dictate which tree species managers prefer to leave versus remove, etc. Or, you could ask the local forester for recommendations. I recommend using a special flagging color for important "no cut" vegetation.

Flagging techniques

One technique is to just flag a centerline and go for it. I have seen this work OK, but careful volunteer management is needed ensure that folks don't get carried away and fan out 100' apart snipping away. We have had success flagging along each side of the line with a different color, and then flagging the no-cut or exclusion zones with a third color. This ensures that the desired line width is adhered to and that no extra trees are cut. I would also recommend flagging the access route/skin track with a separate color.

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Slash Management

I recommend cutting up slash and leaving it within the ski line wherever possible. This will help mitigate erosion and will also help maintain the natural soil cycle within the ski line. As needed, logs and brush can be piled to pad sharp rock features or fill deep hollows to even out the terrain a bit. Remove ALL flagging once the line has been cut.

Riparian Areas

Again, check the management plan regarding guidelines for cutting near streams and in riparian zones. Some land managers limit cutting within specified buffer zones.

Summer Use

Ski lines can be attractive for hikers, but since they are designed for winter use they can be very wet in the summer and vulnerable to damage from foot traffic. You may need to install signage or engage in some other type of education effort with respect to summer usage in the area.

Volunteer Management & Cutting Techniques

Volunteers are a great way to get this type of work completed. There are a few key considerations to keep in mind.

Communication and Safety

Communicate with volunteers ahead of time to make sure they are prepared with food, water and appropriate clothing. Communicate at the beginning of workday about what tasks they will be performing, tool safety, general safety in the woods (no swinging type of tools, and move slowly). Oddly enough, tripping and falling and twisted ankles are the most frequent injury in this type of work. Make sure everyone knows where the nearest medical facility is located.

Group Management & Glading Tasks

Designate crew leaders for the day. Each crew leader should manage 5-10 volunteers. The crew leader should have familiarity with the area (be able to navigate) and be familiar with the glading protocol.

Only a minimum number of people in a group should be felling trees (especially chainsaw work). I recommend that any chainsaw work be completed ahead of a volunteer workday, or if performed on the same day, **separately** from the rest of the volunteer group. Two sawyers can work together, with one felling the majority of the trees and the other limbing and bucking. These lead cutters should be very familiar with the plan and line layout.

Once the sawyers have come through, the rest of the volunteer group can complete further limbing and snipping of brush to lay it flat on the ground. These volunteer can also haul away any larger limbs that cannot remain in the corridor. This group will also

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be cutting the smaller saplings and brush that is left by the sawyers, being careful not to creep outward wider than the flagged route. Remove all flags.

Recommended Tools

Lead Cutters

- Chainsaws, in conjunction with personal protective equipment including chaps, helmet with ear and eye protection, sturdy boots
- Pole saw – motorized

Note: on Forest Service land, chainsaw operators are required to complete a 2-day certification course. If you have volunteers that are going to be running a saw often, this course is highly recommended, even if they are not working on USFS land.

Other Volunteers

- Long handled loppers (make sure they are sharp)
- Small handsaws, ideally pruning saws that cut on the pull stroke (Felco, Corona, Silky, etc.)
- No axes, hatchets, machetes or other swinging tools! Be very strict about this.

Cutting Techniques

When cutting ski lines, it is important to always be thinking about the ski-ability of the line, skier safety, and forest health.

When cutting, the lines will already be flagged so you will know generally where you are cutting. However, it is good to consider how deep the snow will be mid-winter, how much droop trees will have on them when snow covered, what the sight lines will be, and how a skier will navigate a given section. Make sure to remove enough trees to provide sufficient sight lines and height and width for turns.

As far as safety goes, it is important to cut all stumps flat and as low as possible to the ground. Limbs should be cut close to the tree stem so they will not injure skiers who come into contact with the tree. Cutting limbs about a quarter inch out from the trunk will be safe enough for skiers, and will also allow the tree to properly heal over. Limbs that are cut too close will not heal over well.

Time Tracking

It's a great idea to keep track of the volunteer hours that are spent on a project. This information can be useful for future grant proposals and also for showing land managers how much time has been invested.

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Summary of Recommendations & Next Steps

The area being considered for ski line development is fairly small. The existing ski line seems to be laid out quite well, and it seems adding additional lines will be straightforward.

In summary, I recommend the following next steps:

- Review "glade considerations" above and make notes about relevant information and decisions.
- Scout and flag at least two lines (20-30' wide) through the softwoods as indicated on the map. Consider identifying & flagging additional lines through the softwoods.
- Scout and flag 4-5 different lines (20-30' wide) through the hardwood glade.
- Scout and flag a skin track on looker's left of the ski zone. Possibly to connect with Crescent Ridge trail in the saddle below Mount Randolph.
- Utilize blue blazed access trail for easy in and out.
- Recruit and train volunteers to complete the glading.