

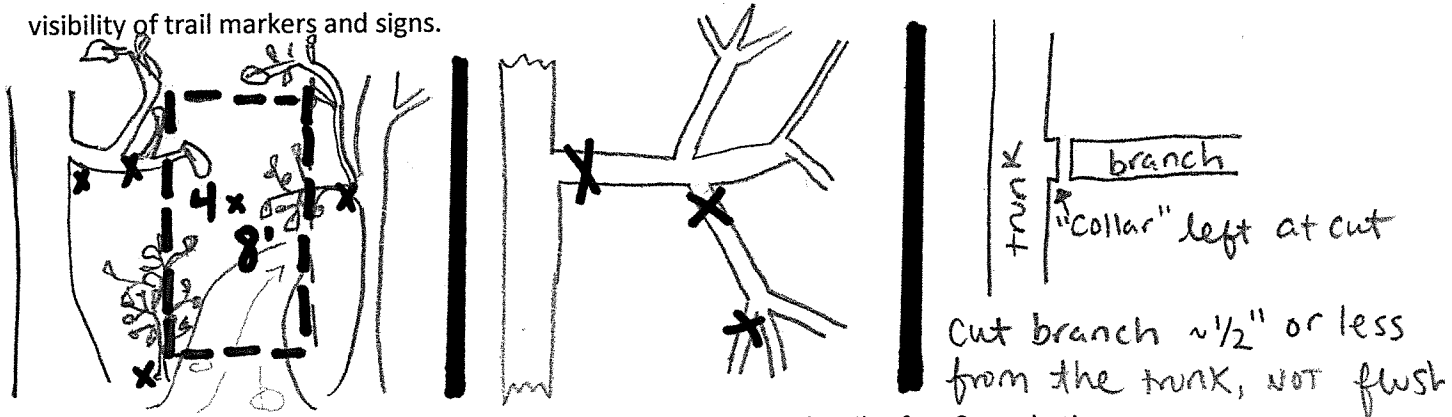
BASIC TRAIL MAINTENANCE CONCEPTS – 6/11/2013

The goal of basic trail maintenance is to maintain a clear and dry path so that hikers stay on the trail, concentrating visitor impact. A basic trail maintenance visit is like an "oil change" for the trails and acts as an early warning system for more significant problems.

1. BRUSHING OUT TRAIL CORRIDOR

Goal: keep the trail corridor free of obstructions

How-To: Imagine a tunnel, ~4 feet wide by 8 feet tall for a hiking trail, or wider and taller for horse trail and XC-Ski trails. Any branches extending into this tunnel should be lopped back. You could pretend you are carrying a door in front of you, and any branch the door hits should be removed. Also, remove branches obstructing visibility of trail markers and signs.



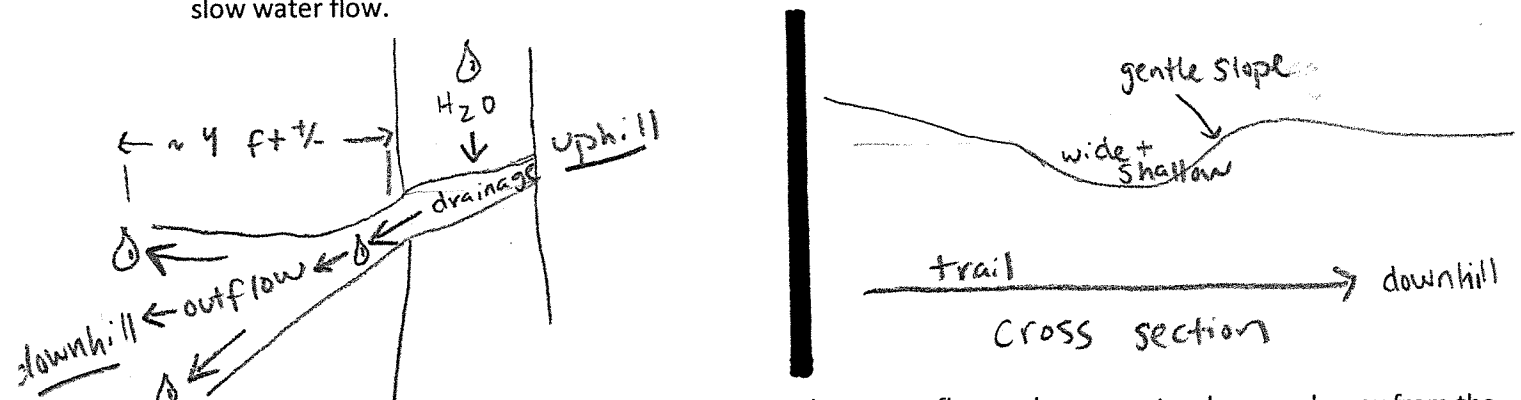
Concept: Prevent stubs or stumps! This is better for the plant and trail safety & aesthetics.

- Always lop/saw branches at the tree trunk OR a junction with another branch
- If you would lop every/most branches on a small tree, instead lop/saw the whole tree flush with the ground.
- Focus on woody growth, unless you have a specific tool to cut back overwhelming vegetative growth, like grasses/ferns.

2. CLEANING DRAINAGES

Goal: Remove organic matter blocking water flow in the drainage or outflow ditch. Reshape soil if necessary.

How-to: Using a hoe, mattock, rake or similar tool, scrape away leaves/branches sitting in the drainage or outflow, at least 4 feet downhill of the trail—less if terrain is steep, farther if relatively flat. Drainage should be angled ~30-50 degrees across the trail in the downhill direction, WIDE (~12-18") and SHALLOW (~6" deep) to slow water flow.



Concept: Clean only existing drainages. Drainages slow water flow and move water down and away from the trail to prevent erosion and muddy tread.

3. BLOWDOWNS

Goal: Assess a blowdown and clear the obstruction if safe and manageable.

How-to:

- Look and assess. Blowdowns can be unpredictable and potentially dangerous. Ask yourself: **1)** Is the blowdown in the trail corridor and blocking the path? **2)** Are there dangerous leaning or hanging branches/trunks above me? **3)** Are there spring poles (branches bent under tension and trapped by a blowdown that will spring back when tension is released)?

- **If safe and manageable**, saw limbs away to allow for passage. Scatter pieces well off the trail. **If you are unsure, or the obstruction is too big or unsafe, contact Dan at SVT.** We have approved chainsaw operators who can take care of this problem!

4. SIGNING

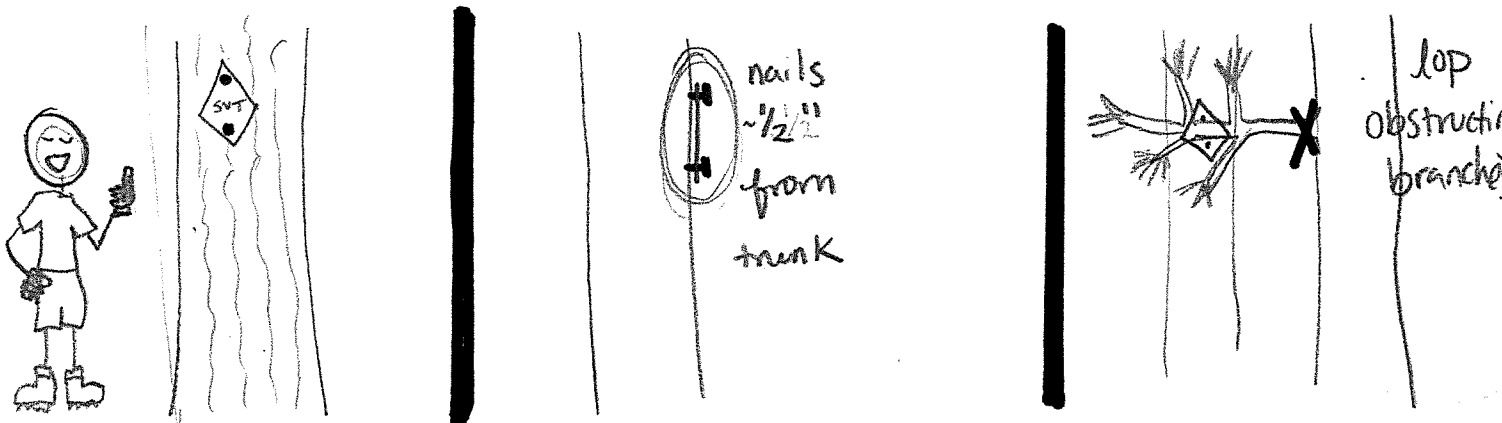
Goal: Maintain appropriate and clear signs at trailheads, trail junctions and/or property boundaries.

How-to: Keep an eye out for trail signs—are they visible as you approach on the trail? Are they clear and in good condition? Are the nails close to the tree trunk and should be replaced?

- When you need to replace or add a sign, contact Dan for the necessary materials—the signs, aluminum nails (they won't impede a chainsaw), a hammer, and eye protection.

- Place signs facing the directing of oncoming hikers, at above-head height on live trees.

- Nailing—for the normal, square SVT signs, you will use 2 nails placed vertically. Leave about 1 inch of space between the head of the nail and the tree trunk to allow for tree growth and expansion. Nail straight in to allow for easy removal. Carry out and dispose of old nails and return old signs to SVT.



CONTACT INFO: Dan Stimson, Assistant Director of Stewardship. 978-443-5588 ext. 136

Field Prep: Define your objectives and plan a route for your trail work visit, and stick to it—remember ONE VISIT, ONE PURPOSE. Trail need to be maintained regularly. Always, BE PREPARED, AND SAFETY FIRST! Bring...

-Water & snack

-Lopping tool, saw, and possibly drainage tool

-Work gloves/eye protection, long pants, boots

-Trail map & emergency contact info, paper and pencil cleaning to take notes.

****SOME OF THE JARGON****

Blowdown: A branch or tree trunk that has fallen down across the trail.

Brushing in: Placing downed branches and leaves over an impacted area, usually next to the trail, to encourage hikers to stay on the trail and prevent trail widening. You can "brush in" a user-created side trail to close the trail or any widened, impacted area. Try to place branches at angles and irregularly, to mimic the natural forest floor.

Brushing out: Clearing obstructions from the trail corridor.

Corridor (trail): The area of space that hikers/bikers/riders etc. move through on a trail, including the tread. For a hiking trail, the corridor is usually ~4 feet wide by ~8 feet high.

Outflow ditch: The channel downhill of a drainage where water disperses after being channeled off the tread. The outflow should be shallow, wide, and several feet long, depending on the steepness of the terrain.

Tread: The ground surface of a trail. Can be about half as wide as the trail corridor.

Waterbar: A common style of drainage that diverts water down and away from the trail to maintain a raised, dry tread. Can be raised, earthen hump created at an angle across the tread or be composed of a wood or rock barrier that helps retain soil and direct flow.