

Early Autumn 2015



Tie Up Your Laces
And...Work!

Points to ponder:

- Should I use flossing string or tape to clean between my stepping stone molars?
- How can I work with the materials at hand to create harder, drier tread?
- I just hike. Why should I go to a trail management meeting?

Be Sure to Tell the FLTC Office about Landowner Changes

Please help keep our database and mailing list up-to-date. When property changes hands, please tell the office – be sure to include the old owner's name, the complete parcel number, the parcel address, the FLTC Map number, and the new owner's email and USPS mailing addresses, and phone number, if possible. Our new office administrator is Debbie Hunt, who has replaced Jennifer Hopper, who relocated to the South.

Cross-Cut Saws Now Available

Five, soon-to-be six, 2-person and one 1-person cross-cut saws have been donated to the FLTC. When fully cleaned of rust, these will be stored at the FLTC Office in Mt. Morris, probably hanging from rafters in the tool garage. The FLTC is looking for a good tooth/raker gauge, files, and additional handles, but all the saws will be in decent working order once they are placed in the tool shed. These may be checked out on a first come, first served basis. A big thanks to Kalista Lerner and Ed O'Shay!
Please see photo on page 3

TRAIL TENDERS' NEWS

A publication from the Trail Quality Training Team

Finger Lakes Trail Conference



Please Mark Your Calendars!



Maintainers and Friends Invited to Trail Management Meetings at Springville (10/24) and Bath (10/31)

Every fall, Trail Maintenance and Trail Quality hold two meetings for trail maintainers *and any other interested parties* in either the western or the eastern part of the state. If you can't make the drive this year, *next year's meetings* will be held near Virgil and Bainbridge, so plan on attending them!

The meetings this fall will be held at:

- **St. Paul's Episcopal Church**, 591 E Main St, the east side of **Springville, October 24th**, from 10-3 -- especially intended for those who hike or work on the main the main trail from Allegany SP east through to west Portageville (M 6) and the Conservation Trail
- **Bath Fire Hall**, 50 E. Morris St, **October 31st**, from 10-3. If you work or hike on the main trail from west Portageville (M 7) through Watkins Glen (M 14), the Letchworth, Bristol Hills, or Crystal Hills Branches, and the QCM/MFH, this is for you!

Each meeting will be informed by your specific questions and the problems you have encountered, but both will include the latest information about any trail management policies, practices, techniques or situations with which you need to be familiar, as well as featuring:

- **Marty Howden**, Western Regional Coordinator for the FLTC and Coordinator of our Chainsaw Training, who, with Lynda Rummel, FLTC VP for Trail Quality, will talk about the status of the NPS & USFS chainsaw and cross-cut saw certifications and the increased emphasis on working safely in the field. Some review/demonstration of kinds of hand saws and other tools.
- **OPRHP biologist Amy McGinnis**, at *Springville*, will discuss invasive flora and how to identify and deal with them *when they impact the trail*. Species to be reviewed include: Russian & Autumn Olive, Honeysuckle, Japanese Barberry, Buckthorn, Asiatic Bittersweet, Japanese Knotweed, Common Periwinkle, Garlic Mustard, *and the evil Multiflora Rose*. She will also discuss insects and resultant tree damage, and handling problem beavers! As this goes to press, the speaker for the Bath meeting has yet to be selected.

Who should attend? Section sponsors and maintainers, potential club and "alley cat" crew members, hiking club members, hike leaders and participants, casual hikers and friends, landowners, and land managers, *from anywhere across the state*, but especially if you live in the western or west/central part of the state! **Please invite your fellow hikers and trail workers.**

Why? The continued existence of the FLT System depends on all of us – those who build and maintain the trail and those who host it or hike it -- knowing more about who owns the lands the trail runs on and their expectations for maintenance and user etiquette, how and why the trail is laid out the way it is, safe trail building and maintenance practices, rules for hiking the trail, and much, much more. **Why?** So we can speak intelligently to other landowners and land managers, trail users, potential hikers, policy makers and potential supporters of hiking trails, whenever and wherever we encounter them, and so we can continue to build, maintain and safely hike a *system of sustainably-built foot trails* across the state.

10 a.m. sharp. BRING YOUR LUNCH, YOUR QUESTIONS, AND YOUR IDEAS.
Coffee, apple juice, and some breakfast goodies provided.

How to Build Stepping Stones

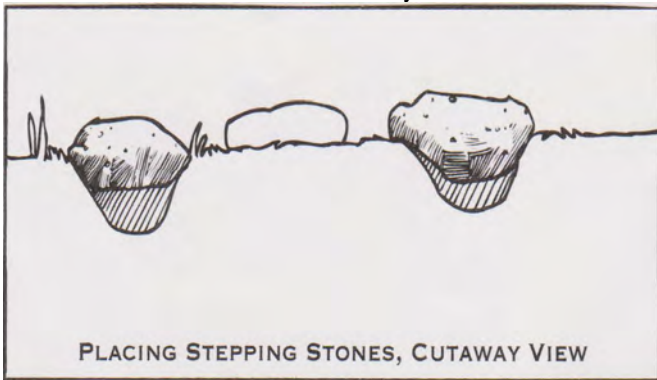
Sometimes the only available way to get the trail across a persistently wet area is to create stepping stones. Fortunately stones are often piled at the ends of old plowed fields or along an old fence line or spewed out from a gully-washer. If the stones are part of an dry stone wall, please leave them be; but if they are part of the accumulated result of years of hard labor or the forces of nature, just watch out for ground bees and move the rocks carefully so you don't pinch your fingers.

Identify the wet spots on your trail during the wettest part of the year but build your stepping stone pathway during the driest time. Look for big, thick flat stones; but big irregularly shaped stones can be used, too. According to the Student Conservation Association's trail building and maintenance manual, **the trick is to "embed stepping stones by using the same principle that allows a ball of ice cream to fit snugly into a cone."** A stepping stone won't wobble if it is set in [this way]." The manual continues:

"[Ideally,] choose a large rock of 100 pounds or [so] for each stepping stone, with [one] flat face that will assure good footing. Dig a cone-shaped hole with a rim about the size and shape of the rock's circumference.

"Flip the rock into the hole. If the cone is properly sized, the rock will drop until the edges seal tightly against the soil, leaving the walking surface of the stone several inches above the surrounding earth. There may be an air pocket beneath the rock, but the tapered walls of the cone will prevent the stone from sinking in too far."

Don't these ice cream cones look tasty?



-- p. 140, *Lightly on the Land*, the SCA Trail-Building and Maintenance Manual, Robert C. Birkley, The Mountaineers, Seattle WA, 1996.

The exposed tops of the rocks don't have to be perfectly flat; however, a flat surface of at least 12" across is recommended. With care, two can maneuver or lift a 100-pound rock. If working alone without access to rigging or a rock bar, and the terrain permits, consider squatting and lifting up one end, then tipping it over away from you, and repeating this till you reach the site in the trail. Tips for lifting a heavy object without hurting your back can be found at: <http://www.Atlantabrainandspine.com/subject.php?pn=correct-lifting-056>. Or simply use

Continued at right

Stepping Stones, continued

Early Autumn,
2015

smaller but still somewhat hefty rocks.

Using stones on the tread is called *hardening the trail*.

Stepping stones can also be used for crossing a shallow creek. It's unlikely you'll be able to handle large rocks like the quarried stones used at Taylor Valley by yourself, but if you have a DEC Forester who champions this idea and also have heavy equipment and skilled operators who can do the work, here's a stepping stone solution to a situation where a bridge was needed but simply could not be constructed:



The stepping stones above were procured by the FLTC and placed in September, 2009, by the NYS DEC. In the years since, the FLTC trail sponsor has flossed regularly to remove the debris that catches between the molar. Map M 21, Chenango Creek.

Stepping stones should be spaced so that a hiker carrying a pack can move easily from one stone to the next. If enough rocks are available so that you can widen the tread by putting a couple of rocks side by side and filling in gaps with other rocks, you can build a **rock treadway**. The same "ice cream cone principle" for setting the rocks still applies, but small drainage ditches may be built between rocks or under big rocks that are flat on top and bottom, to allow standing water to trickle off.

Rock Treadway



-- p. 146, *The Complete Guide to Trail Building and Maintenance*, 3rd ed., Carl Demrow & David Salisbury, The Appalachian Mountain Club, Boston, MA, 1998. **Note drainage ditching at lower right of drawing.**

Another way to harden the tread is to build a turnpike.

How to Build a Turnpike and Causeway

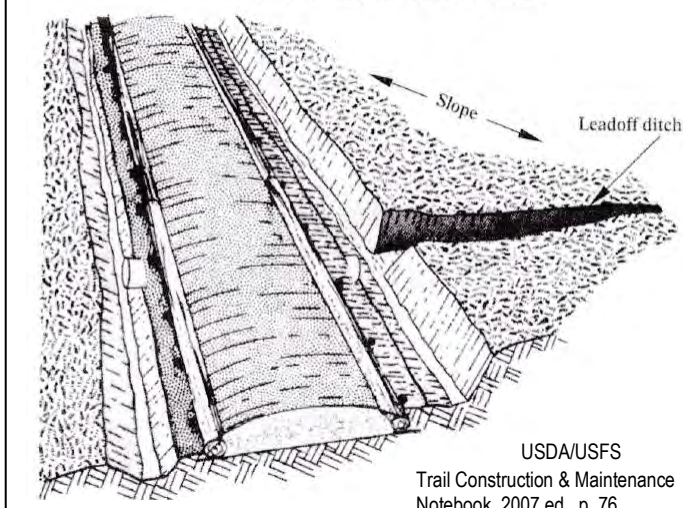
The word 'turnpike' originally meant a spiked barrier across a road, used in war; but although we might be tempted to, that's not what we're building. Instead, it's a slightly more modern meaning of the word -- a built up trail, particularly one with a raised center -- that we have in mind.

The simplest form of turnpike may be a **rock box**. A rock box is essentially a rock tread-way with a log frame around it. Partially embed the peeled logs in the ground and hold them in place with wooden stakes or rebar. Make sure the tops of the logs are more or less level with the trail entrance/exit and the stakes won't trip up hikers. Then fill the interior of the box with lots of smaller stones and then mineral soil before the flat-topped stones are put in. If using irregular shaped big stones on top, put them in like you'd put a scoop of ice cream into a cone. Tamp some mineral soil and very small stones in between the top stones. The rock box works best if the ground is damp but not wet or muddy.

To convert the rock box into a log turnpike, reverse the fill materials: Once the logs are secured, put in a bottom layer of big stones, then add smaller stones and top with mineral soil. Create a slight crown in the center and tamp down the mineral soil. This order of fill is particularly important if the ground is really wet and gravel easily sinks and disappears into it. If the ground is really muddy and you can afford geo-textile cloth, spread it out and pin it down before adding rocks; otherwise, try to make your bottom layer out of large, thick, flat rocks that are less likely to sink in.

Ideally, the peeled logs on the turnpike's sides should be 6" or so in diameter. The fresh tops of blowdowns or logged trees often fit the bill. But it's just as easy to use exterior pressure-treated 6x6's or even 2x4's or 4x4's staked together, and staked into the ground. Two persons can carry in the exterior pressure treated wood and hot-dipped galvanized rebar needed for one side of a 10' pike in two trips. (Contact Quinn Wright at wrightquinn@hotmail.com for hot-dipped galvanized rebar.) As the photo at right shows, wooden end pieces are often not necessary because the turnpike's ends are blended into higher, drier ground. If the surrounding earth is not lower than the turnpike's sides, dig drainage ditches along the sides the turnpike so water runs out and away from the turnpike, as shown below.

Turnpike With Leadoff Ditch



How to Build a Turnpike And Causeway, continued

According to the USDA/USFS *Trail Construction and Maintenance Notebook*, 2007 edition (available at our regional meetings), if the turnpike's outer edges are demarked by lines of big, **heavy rocks instead of logs**, the turnpike is called a **causeway**.



Above: This stone-edged **causeway** rises only a few inches above the persistently damp soil underneath, but that's all that's needed in dry California, once the stone dust and mineral soil on top have compacted. Both ends of this causeway simply blend into higher, drier ground. This causeway is part of a wide, accessible multiple use horse-and-hiker-only (no bikes) trail segment in Garland Ranch Regional Park, Carmel Valley.

Minimum tools needed include:

- work gloves
- shovel
- Pulaski
- 8 lb sledge hammer if you'll be pounding rebar into the ground to hold pre-drilled wood along the pike's edges, or
- a small wagon or wheel barrow to carry some of the rocks

If the project seems overwhelming, get your RTC and/or club trails chair to work with you to develop an estimate of materials and person-hours needed. Then talk to the VP of Crews and Construction and see if it can become an Alley Cat crew project.



If 79-year-old Kalista Lerner can handle one end of a cross

cut saw, so can you! In back, L to R: Ed O'Shay, Lynda Rummel, Roger Hopkins. Photo by Tony Rodriguez.

Preparing for Winter

- Walk your trail segment(s) from both directions
- Trim back leafy branches that obscure signage and blazing
- Using a 1" brush and (high) glossy exterior latex paint, square up edges of blazes so the blazes look crisp and different from natural marks on trees (try to do this in dry, ≥50° weather)
- See the FLTC's *Field Maintenance Manual* for local paints with appropriate colors for main, branch, and side trails
- Make sure turns in the trail that are greater than 45° are marked with two blazes, one atop the other, with the top one *off-set* in the direction of the turn
- Make sure each blaze can be seen from the previous blaze, so the trail corridor can be discerned even in heavy snow
- Sweep out any lean-to's on your segment(s) and make sure there's a notebook (register) and pencils in zip-lock bag
- Retrieve filled notebooks(registers) and replace with new
- If you're feeling energetic and extra helpful, make collapsible

Preparing for Winter, continued



SAWBUCK

saw-bucks for the lean-to's on your segment(s), cut-up and store some dry wood in the lean-to, and stash a saw, such as an inexpensive bowsaw, carpenter's hand saw, or tree pruning saw, inside the railing of the interior walls. Store the saw-buck under an eave. Find instructions for building collapsible saw-bucks on line.



tree pruning saw

carpenter's hand saw

bow saw

Make plans now to attend a trail management meeting Oct. 24 or Oct. 31. Details on page 1!

Please send questions, comments, complaints, corrections, suggestions, new information or tips about trail building or trail maintenance to: Editor/writer -- Lynda Rummel (ljrassoc@roadrunner.com); or the conscripted volunteer contributors -- Steve Catherman (stevec@roadrunner.com); Bill Coffin (wmscoffin@twcny.rr.com); Mary Coffin (mcoffin1@twcny.rr.com); Marty Howden (howser51@yahoo.com); and Irene Szabo (treeweenie@aol.com). Training (trail maintenance, design and construction) *on your section* available upon request. Want to join the "Travelin' Training Team" or contribute to the *Trail Tenders' News*? We need you! Please contact Lynda Rummel at ljrassoc@roadrunner.com.

Upcoming Area Meetings & How to Harden Wet Spots!

Finger Lakes Trail Conference
 FLTC Service Center
 6111 Visitor Center Rd.
 Mt. Morris, NY 14510