

ESSENTIAL MAINTENANCE MODULE

KEEPING HIKERS ON THE CENTERLINE



LEARNING OUTCOMES

Understand types of user-created impacts.

Resetting the backslope of sidehill trail when it is "creeping" downhill.

Closing use-created trails.

Reporting braided trail or features suffering with "walk around"

Addressing user-created firerings.

The Appalachian Trail is a durable path intended for single-file foot travel. The width of the A.T. should be a minimum of 12" and a maximum of 18" in flat woodlands and 24" on side slopes. Trail maintainers help limit user-created impacts by monitoring for and addressing or reporting these items:

Trail Widening: When hikers walk outside of the treadway, they widen the area of impact by trampling trailside vegetation. Frequent trampling leads to soil compaction, and eventually a wider footpath. Trail widening is common in muddy areas.

Trail Braiding: When hikers walk outside of the footpath to navigate around trail features such as steps and waterbars to seek efficiency; this happens most often when the rise of the feature is too high and hikers are fatigued. Braiding also occurs when parallel paths are established in open areas when the original trail is too narrow or too difficult to see footing.

Trail Creep: This is the slow movement of the location of the trail to a slightly new alignment, generally on sidehill trail. It is most often seen where hikers avoid abundant vegetation growth on the uphill side of the trail and walk to the softer outside edge of the trail. Backslope that has sloughed into the treadway or excessive "root ladders" also pushes hikers toward the outside edge as they seek better footing. Trail creep can give sidehill trail an appearance of being convex.

Social Trails and Shortcuts: These paths, not planned by the A.T. club or the land manager, may offer more direct routes to vistas, campsites, or trailheads, and like shortcuts between the curve of a switchback, are almost always prone to swift erosion.

All of the use patterns above are driven by underlying causes that help inform appropriate solutions. These types of user created impacts tend to worsen when left unaddressed.

PREVENTION AND EARLY RESPONSE

Remove Debris:

Remove debris or obstacles from the footpath since blockages on the treadway or ill-suited footing sends hikers off on their own path.

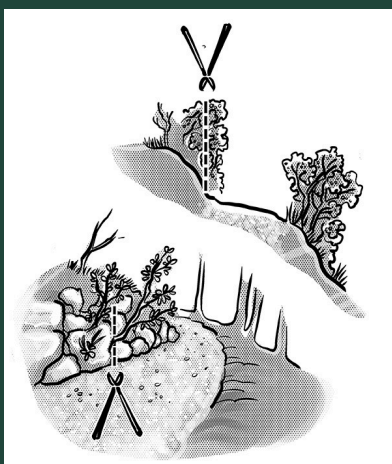
Cut out small roots before they become big roots.

Keeping tread clear of vegetation:

Brushing vegetation in growth seasons, especially uphill of the trail since it tends to push hikers to the outside edge.



Trail braiding is discouraged here with upturned rocks outside the feature and a low rise for steps.



PREVENTION AND EARLY RESPONSE

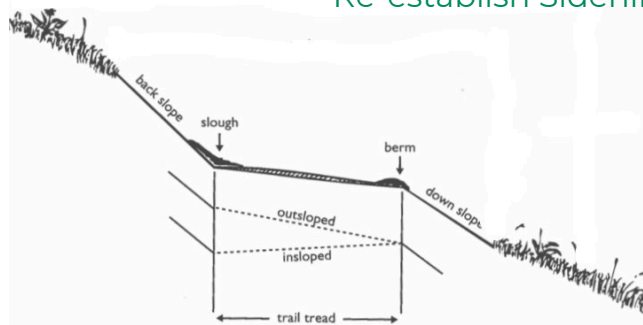
Block Shortcutting

Block any shortcutting of switchbacks, steps, waterbars, or other tread features with items that are difficult to move or walk around. Things like large rocks or downed trees work well. When selecting tree debris, select brushy and branchy material since it presents more difficulty to step over than a log.

Shortcutting can be tricky to resolve and requires persistence by the maintainer.

If social trails and switchbacks continue to be cut, report it to trail supervisor for consideration of other longer-term solutions, such as signage, fencing, or revegetation.

Re-establish Sidehill Trail



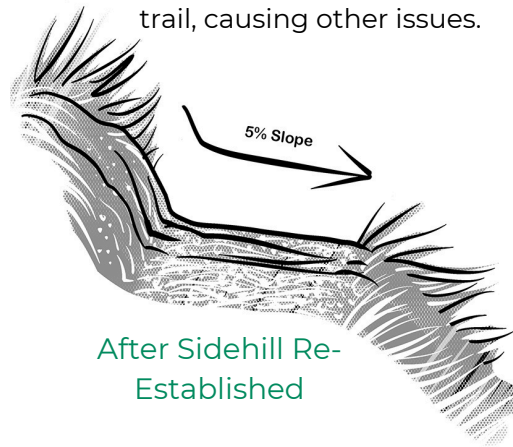
Sections of sidehill trail are subject to narrowing as gravity and water begin to release sediment from the backslope into the inside edge of the trail. Hikers, seeking more stable footing, begin walking the outside edge of the trail. By resetting the backslope at a 45 degree angle and redefining the tread width to 18-24" with a 3-5% outslope, maintainers can bring hikers back toward the centerline.

Avoid adding logs to the outside edge of the trail to prevent trail creep since these help trap water on the trail, causing other issues.

Before Sidehill Re-Established



After Sidehill Re-Established



Maintainers may encounter sections with large roots (thicker than a wrist) or large rocks that could prevent them from redefining the tread on their own. These areas should be reported so that they can be addressed with a larger crew.

ESSENTIAL MAINTENANCE MODULE

FIRE RING MANAGEMENT



A SUPPLEMENTAL RESOURCE TO MANAGE USER-CREATED IMPACTS

Campfires, for many, are an essential part of an overnight outdoors. The Leave No Trace Center for Outdoor Ethics principle on minimizing campfire impacts emphasizes using existing fire rings, using wood smaller than your wrist that is already on the ground, dead, and found a good distance from the campsite.

Definitions

Formal fire ring: Located at a designated overnight site, and made of either steel or large rocks. The established location of this primary fire ring to an overnight area is determined by the A.T. club and land manager. Depending on the overnight site and/or rules/regulations of the management area, this may be the only permissible fire ring.

User-created fire ring: These crop up when a visitor takes it upon themselves to collect rocks to build a fire ring. These may be referred to as "illegal fire rings" in some locations where dispersed camping is not allowed. Even if their existence may be permitted when dispersed camping is possible, it may not be preferable to leave the fire ring because it creates an attractive nuisance for continued use of a campsite that may not be preferable from a resource management perspective.

Designated overnight site: A shelter or campsite that is sanctioned by A.T. Cooperative Managers and included in A.T. maps and guidebooks as an approved location to stay overnight.

Dispersed camping: When the land manager allows visitors to camp at locations other than at designated overnight sites (shelters and established campsites). The expectation is that visitors are following Leave No Trace practices for selecting and managing their campsite.

Campsite: Either formal or informal, a location where a visitor camps.

Leave No Trace Principles Applied for Campsite Selection: More than 200 feet from water or the Trail, on a durable surface.

Assessing Fire Rings

Because even well-intentioned and Leave No Trace-minded hikers may decide to have a fire, it's important for trail maintainers to not only clean formal fire rings at designated overnight sites, but managing fire rings for appropriate location and size elsewhere. By leaving a user-created fire ring in a location, maintainers signal to other visitors that this is a place to camp and have a fire. The decision to leave or dismantle a fire ring should be made based on the desired experience for the section of Trail as described in the area's local management plan, the impact to the resource from current/future use of the area, Leave No Trace principles, occurrences of rare, threatened, endangered plant and/or animal species, and proximity to other available/preferred campsites.

Each section maintainer should be aware of designated overnight site location(s), familiar rules/regulations of land management entity and the ANST Compendium, and be aware of Leave No Trace practices for campsite selection. Check with your ATC regional office to find out if a campsite impact survey has been done for your section of Trail; it may be a helpful resource in your continued management of the area.

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FIRE RING MANAGEMENT



Assessing Fire Ring(s)

- Determine which are formal fire rings in need of cleaning.
- Determine user-created fire rings that would be acceptable to clean and leave in place, if any.
- Determine any user-created fire rings that need to be removed.

Clean Fire Rings

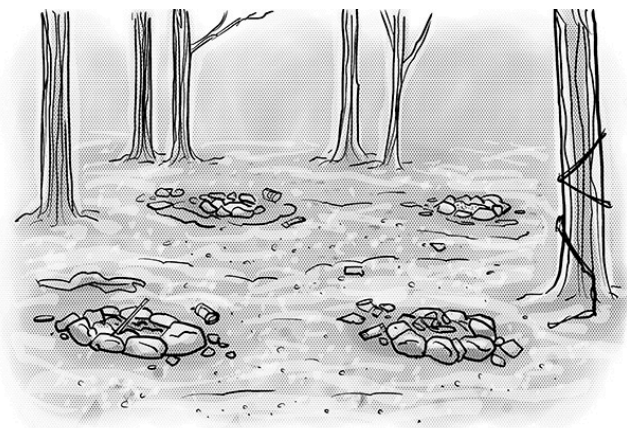
- Make sure it's cool to the touch before starting.
- Remove any unburned wood. Any long limbs that do not fit the size of the existing fire ring or that are partially burned should be moved several hundred feet away to discourage their use.
- Sort through the ash for any burned trash, and pack out (reference trash Job Hazard Analysis)
- Using a shovel or trowel, dig out and flatten the ash heap. Dispose of the ash in a distributed fashion far from the camping area.
 - Pro tip: Using a plastic grocery bag to convey ash materials to the location where they'll be scattered.

Eliminating Fire Rings

- Throw/toss/carry the rocks for the fire ring a considerable distance from the camping area, preferably far downhill where they are out of sight.
- Sort through the ash for any burned trash, and pack out (reference trash JHA)
- Using a shovel or trowel, dig out and flatten the ash heap so it is flush with the ground. Dispose of the ash in a distributed fashion far from the camping area.
- Using leaf litter from surrounding forest, obscure the burned ground by scattering leaves over the area.
- Move any large logs or other items that people may have been sitting on that could invite future re-creation of the fire ring.

Resizing Fire Rings

Rocks around fire rings can get built up if the ash heap has been unattended to for a long time. In other cases, user-created fire rings can be built too large which encourage fires that are too large. In these instances, resizing the fire ring that is in an acceptable location is one approach to help visitors meet Leave No Trace best practices with fire.



An obvious need to eliminate fire rings