

# GATC TRAIL MAINTAINER GUIDE



**GEORGIA  
APPALACHIAN  
TRAIL CLUB, INC.**

# GATC Trail Maintainer Guide

Developed by Tom Lamb, Trails Supervisor 2017-2020

This guide will help maintainers and other volunteers know the latest best practices for use in maintaining the trails tasked to the Georgia Appalachian Trail Club (GATC) for upkeep. Trail maintenance is constantly evolving and it is important for everyone to be up on the latest practices developed by professional and experienced maintenance leadership. Remember that the club has resources to help you maintain your section that includes your District Leader, the Trails Supervisor, Rock Crew, Structures committee, Sign committee, and other experienced maintainers.

The 78.1 miles of the AT and 49.9 miles of side trails are divided into 133 sections contained within 11 districts. A district leader manages the section maintainers within the district. There are 113 sections (of trail maintained by GATC) which are approximately one mile in length. We are currently attempting to have AT LEAST two maintainers for every section. Many new maintainers have little or no experience, and this guide is for them, but is also intended to keep current maintainers up to speed on current best practices.

Whether experienced or not, please read through this document and be sure you are using the latest methods approved by the Appalachian Trail Conservancy, United States Forest Service, and GATC.

- Safety
- Tools
- Outslope
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- Check dams or Check steps
- Switchbacks
- Social Trails
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- Campsites, Shelters, and Privies

See the GATC Trail Section Maintainer Job Description at the end of this document.

## **SAFETY**

All maintainers are covered by Government Workman's Comp which covers you in case of an accident for all medical costs. You must have a current AT Injury Packet with you when you work. If you don't have one, contact the GATC Trails Supervisor ([trails\\_supervisor@georgia-atclub.org](mailto:trails_supervisor@georgia-atclub.org)) and have one sent to you. We operate under a Volunteer Service Agreement and a Job Hazard Analysis with the land manager, which is the United States Forest Service for the most part, and Amicalola Falls State Park for a short section. These agreements lay out the procedures all maintainers MUST follow. This includes Personal Protective Equipment or PPE. If you have an accident while walking in or in your work area, lack of proper PPE will result in rejection of the claim.

If working with another person(s) on a worktrip, you **MUST** have a Safety Talk before beginning work. This is part of the GATC Volunteer Service Agreement and is required. Do this even if others have been on multiple worktrips. Safety is the primary concern on any worktrip. Keep these points in mind even if working alone (it is always safer and more fun to work with others) and cover them in the **Safety Talk**:

- Introduce yourself to the others
- Safe use of the tools of the day
- “Circle of Death”
- Use and carrying of tools
- Lifting techniques
- Proper clothing
- Natural hazards
- Medical (first aid kit, location of hospital)
- Use common sense
- Situational awareness
- Pace self for weather and physical condition
- Thank you

### **PPE REQUIRED**

- Hard hat
- Gloves
- Long Pants
- Eye Protection if doing work that results in flying debris such as weedeating, sawing, or chipping rock
- Boots or Sturdy Shoes (no open toed shoes or soft shoes)
- AT Injury Packet

### **TOOL HANDLING**

Carry all tools with the working end in front. No tools carried on shoulder except for crosscut saw. Carry tools on the downhill side of the trail so if you fall, they fall away downhill. Keep sharp tools away from legs when carrying.

When working with tools around others, be situationally aware. Stay alert to the area within your tool’s reach, called the Circle of Death. Do not work closer to another person than the combined reach of your tools. When passing another worker, announce your intention, then WAIT until they stop working to pass by. If encountering hikers while working, announce their presence to other workers and STOP all work until they pass.

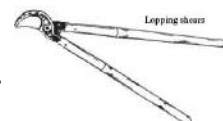
Check for dangerous “widowmakers” overhead, dead branches that may be ready to fall. Stay alert for problem plants and animals such as poison ivy and rattlesnakes or copperheads. Poison ivy is quite prolific on the AT in Georgia. Do not wear shorts. Wear long sleeves when weeding. Handle vines with gloves. Wash clothes immediately when returning home. Rattlesnakes are common on the trail and copperheads have been seen. Keep your eyes on where you place your feet and hands. Never reach under a log or rock, use a tool to turn them over or move them. Do not sit on an undercut rock or log unless you have checked under it thoroughly. Be careful working on uneven ground.

When putting tools down, lay them flat on the ground, not leaning against a tree or rocks. Lay them with the working head uphill and away from the trail and the sharp part toward the ground. Be particularly careful of very sharp tools such as Rogue hoes and razor saws.

### **TOOLS**

- Loppers and Hand clippers
- Razor saw
- Swing blade or weedeater
- Fire rake, MacLeod, Rogue hoe
- Pulaski, Pickmattock
- Strap
- Insect spray

**Loppers and Hand clippers:** Used to cut encroaching and overhanging branches and woody vegetation. Hand clippers are handy for cutting smaller branches, but larger ones are often necessary for the larger. Cut branches off at the trunk, NOT away from the trunk to leave a stake that may injure a hiker.



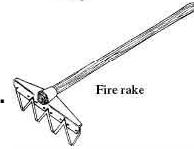
**Razor saw:** Razor saw, either fixed handle or folding, is used to cut branches that are too large for loppers. Be sure to cut at the trunk. Razor saws can cut quite large blowdowns. When the blade begins to dull, replacement is easy.



**Swing blade:** Used to cut weeds on the sides of the trail. Blades dull easily from hitting rocks and trees, but are easily changed. Required in wilderness; a powered weedeater can be used in non-wilderness.



**Fire rake:** Cheapest and lightest tool used to scrape the tread, clean drains, and chop weeds and roots. Has no straight edge so leaves a furrowed surface. Keep tines sharp with a file. Tines can be replaced.



**MacLeod:** Heavier duty tool has rake tines on one side and a straight sharp edge on the other. Heavier to carry, but added weight works better for digging and scraping. Can cut roots, be used to move dirt, and used as a tread slope check device. Excellent tool for trail building.



**Rogue hoe:** Heavier tool excellent for digging and chopping. Has a very sharp blade and sharp tines. Good for cleaning drains and building new trail.



**Pulaski:** Used for serious digging and cutting of roots. Has an axe blade on one side and a digging blade on the other. Fairly light in weight. More of a building tool than a maintenance tool.



**Pickmattock:** Also called a pickaxe, used for heavy duty digging. More of a building tool than a maintenance tool.

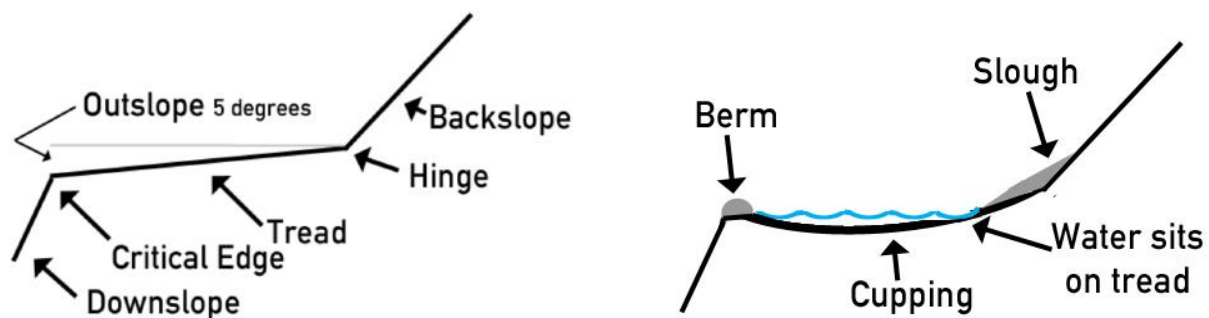


**Strap:** A strap can be used to drag blowdowns off the trail or rocks into place. Straps are also handy to make a carrying sling for tools.

**Insect spray:** Use the kind that sprays 20 feet in a stream. Needed for yellowjacket, hornet, and wasp nests encountered on the trail.

## TREAD MAINTENANCE

The tread wears and erodes over time due mostly to water, freezing and thawing, and foot traffic. If the trail is built to modern specifications, it is fairly easy to maintain. Over time, the original tread deteriorates and moves so that in addition to cleaning drains and removing blowdowns, the trail needs rehabilitation. The sooner this is done when needed, the easier it is to accomplish. The trail tread should be 2 feet wide in wilderness and 3 feet wide in non-wilderness.



**Backslope:** The backslope should be at an approximately 45° angle. Over time, erosion and vegetation can change this angle. When this happens, rework the section to reestablish a proper 45° backslope.

**Hinge:** The hinge is the junction of the backslope and the tread. Over time, slough from up the backslope will collect in the hinge and begin to make an ill-defined collection of dirt, rocks, sticks, and leaves. This builds up and hikers will start to walk to the outside, widening the trail. Keep the hinge well defined and cleaned of debris.

**Tread:** The tread is the walking surface. It should be sloped slightly, around 5°-8° toward the low side of the trail to take water across and off the trail. This slope on the tread is very important to control water damage to the tread. As water sits on the tread, it slowly moves to the outside. It drops sediment, leaf litter, and sticks on the outside where it builds up into a berm or dam. As the berm builds up, it will hold the water on the tread and prevent draining. Over time, sediment will fill in and build up on the tread. The slope will flatten and mushy segments will appear on the tread. Additionally, foot traffic and the soft tread surface caused by poor drainage will cause the tread to cup, further holding water on the trail. Regularly clean the berm away and reestablish the flat, sloped angle of the tread.

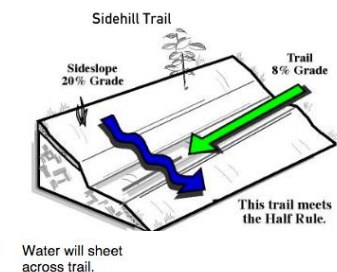
**Critical Edge:** The critical edge is where the tread drops away on the low side. If it is poorly defined or on very flat terrain, hikers may start walking outside the tread and widening the trail or creating trail creep. The trail can easily get too wide in these areas and be difficult to repair. Once the trail starts creeping downhill, reestablish the downslope, the critical edge, and block further walking off the tread with logs and/or rocks. The earlier this is taken care of, the easier it is to control.

**Downslope:** The downslope angle is determined by the terrain slope. It is important to keep the critical edge and the downslope in proper shape to discourage hikers from walking there and to encourage proper drainage. When pulling dirt off the trail, rake it well downhill so it doesn't pile up and become a place for hikers to walk.

**Trail Slope:** The purpose of this guide is for maintenance, not trail building, but it is important for any maintainer to understand trail slope and the associated challenges. There are two types of sloped trail that we deal with on the Georgia AT, Fall Line and Sidehill.

**Fall line trail**, which was very common in the past when building trail, is where the trail runs on and parallel to the ridgeline. It basically goes straight up and over and back down the ridge. While very easy to build, it is a maintenance nightmare if not built on stone. Because the water runs directly down the ridgeline with no obvious downhill to the side of the trail to drain water off, the trail itself become the drainage and erodes into a ditch. Mitigation usually comes down to building check dams or check steps to slow down the speed of the water, but not get it off the trail.

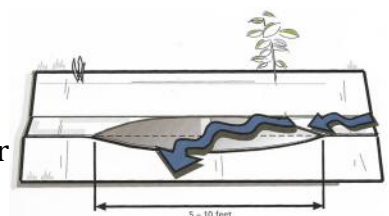
**Sidehill trail** is built on the side of a slope, angling up or down at a controlled angle which is never steep. Because it is built on the side of a slope, the water running down the hillside in a sheet will continue to sheet across the trail and off the downhill side. It is much easier to control water in this way. Mitigation here is with dips and water bars.



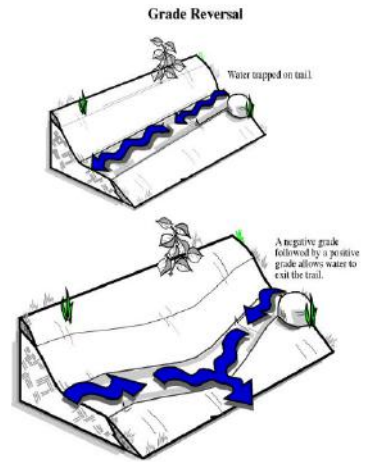
## WATER CONTROL

A properly built trail will handle water flow by taking it across the trail instead of the tread acting like a ditch. When water is not draining properly, a water control device may be necessary. In the past, structures were routinely built to do this. Built structures must be maintained regularly to work efficiently. Trail workers have discovered that it is better to install a control feature without wood or stone. Built correctly, they almost self maintain.

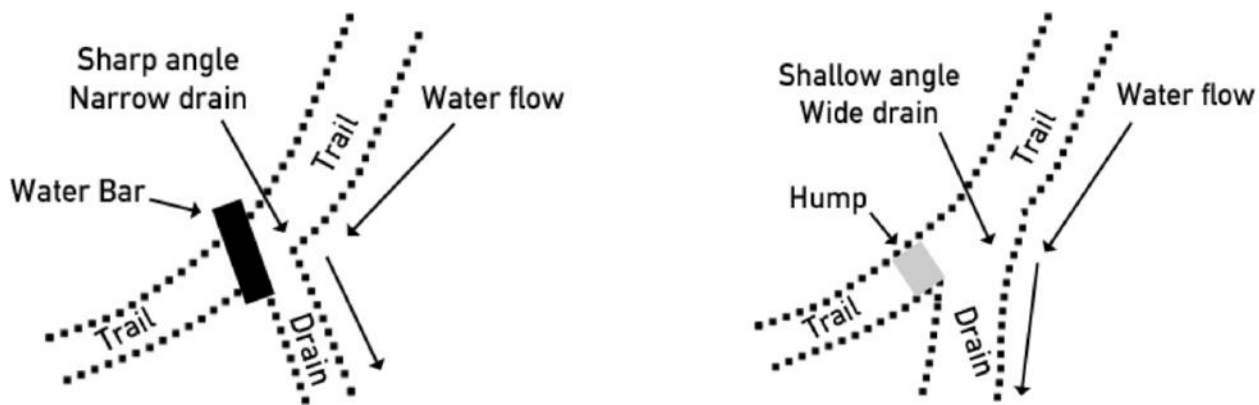
**Nick:** Smaller than a dip or grade dip, a nick is a shallow depression in the tread sloped toward the outside to drain water off the trail. A nick removes small amounts of water in a more limited space. For larger volumes of water use a grade dip or dip.



**Grade Dip:** A grade dip, also called a **grade reversal**, is the simplest and easiest to maintain feature to get water off the trail. Its advantages are that it does not involve extensive digging or installation of a wood or stone structure and is easy to keep open and functional. Grade dips should be part of sidehill trail and are not easily adapted to fall line trail. A grade dip is a gradual and short down and back up that hikers will not readily notice and afford an excellent way for water to exit the tread in short sections to keep water from speeding up or gaining much volume. They are easy to maintain by keeping any berm from forming on the downhill side.



**Dip:** A dip is a way to remove water from the trail without a stone or wood structure. A dip is built to keep water in a sheet and not concentrated into a single channel which erodes more quickly. Traditional methods use rock or logs, called water bars, to block water and drain it off the trail. These were traditionally sharp angles to the trail with a narrow drain.



Modern methods prefer to not install a structure of stone or wood, but modify the tread to accomplish the same task. A dip, unlike a water bar, is dug into the tread to provide a low spot in which to remove water. Think about the grade dip example above and instead of using the contour of the hillside, you will build the dip in the low spot. Dirt removed from the tread to lower it to the drain level is used to create a hump on the downside of the low spot. This feature should be large enough that a hiker will not notice going over the hump and back down into the drain.

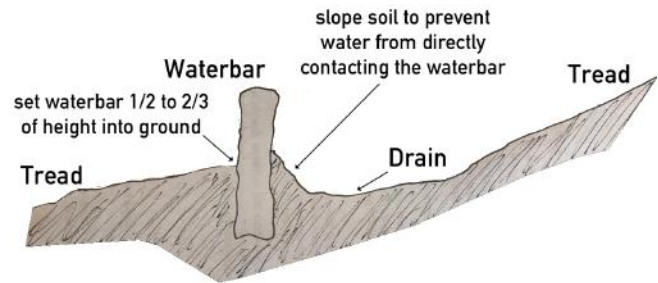
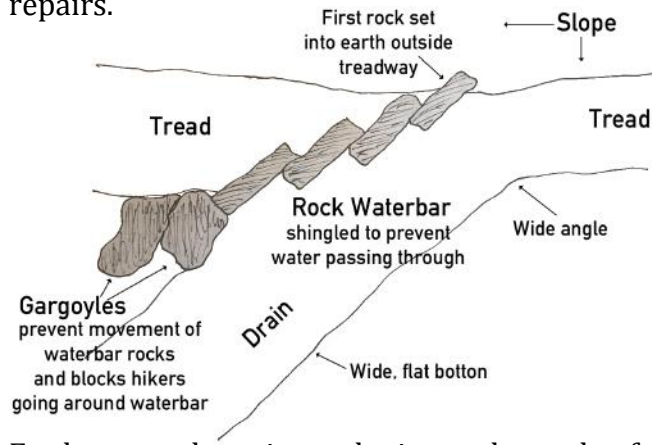


Keep the dip wide and flat from one side of the tread to the other to keep water in a shallow sheet instead of a channel. If the drain leaves the trail at a shallow angle, the water can maintain the sheet and leave the trail across the whole drain instead of an easily eroded channel. If properly constructed, dips are essentially self-cleaning and need much less maintenance than water bars. There are also no logs to rot or stones to move or get eroded around. When possible, replace water bars with dips. When piling dirt for the hump, be sure to use mineral soil and not the topsoil removed from the excavation of the tread. Put a couple of inches of soil on the hump area and tamp down firmly before adding more dirt. This is important to prevent it washing away.

**Water Bar:** When the tread is too steep or in rocky areas, a dip may not be possible. In that case, we still use water bars. Water bars are constructed of LOCUST logs or stones. Farmers said that a locust fence post would last for 60 years. They are rot resistant and last for many years in the trail. The leaves and bark are very distinctive. Contact the club sawyers if you need locust logs cut to build or repair water bars. Stones may be used. However, a common mistake when using stones for water bars is using ones that are too small or light. Proper setting of water bar stones is for them to be in the ground about 2/3 of their height. But they also need to be bulky and large enough so that foot traffic or weather factors do not loosen them. Set log or stone water bars into the high side of the backslope of the trail. Dig out a slot to anchor them. The low side across the trail may need to be staked or anchored with stone gargoyles. Also, use stone gargoyles on the upper end if needed to prevent walkarounds. If using stones for the water bar, overlap them so that on the uphill side of the bar, water will run from one onto the next like shingles, and not into the cracks between them. If rebuilding or installing a new water bar, keep these guidelines in mind.

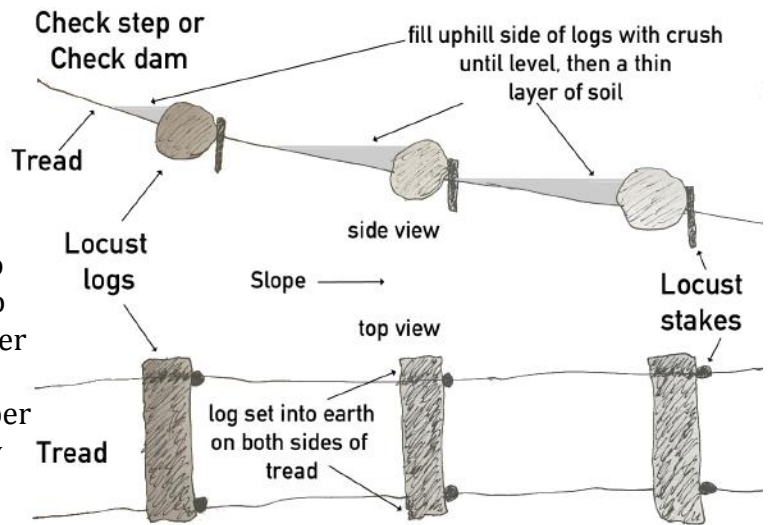


To clean water bars, dig out the sediment and vegetation that has accumulated in the drain and around the water bar. Be sure to dig down below the sediment to the mineral soil or it will fill back in quickly. Clean the drain well downhill so that it does not fill back up quickly. Check the structure for repairs.



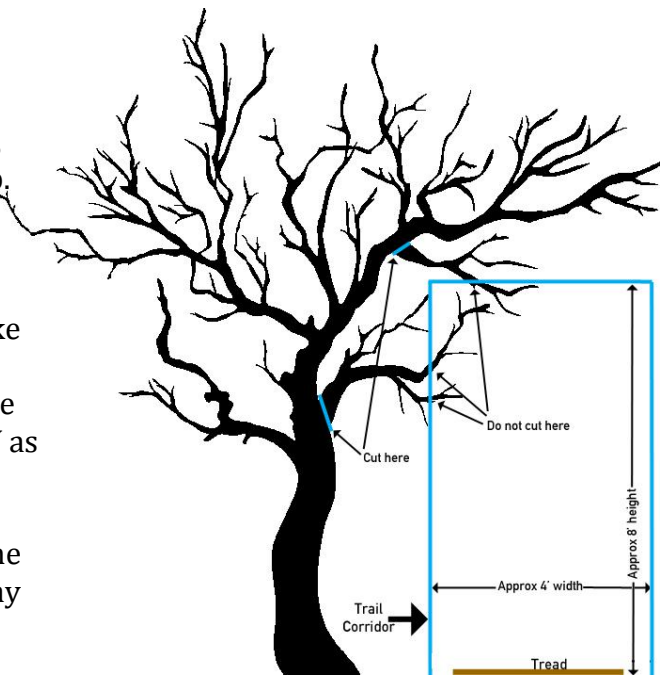
For log waterbars, just substitute a locust log for the rocks in the illustrations. Still use rock gargoyles on the outside end (and on the inside end if needed to prevent walkarounds).

**Check dam or check step:** When the trail is built on the fall line and there is no way to get water off the trail, the trail often becomes a drainage ditch. The erosion can be controlled by building structures at right angles to the tread called check dams or check steps. The purpose of a check dam is to slow the water so that it loses energy causing less erosion and so that it drops its sediment on the tread to further prevent erosion. The spacing of check dams is determined by the steepness of the trail. Steeper trail needs more dams to slow the water. They will eventually fill in completely on the uphill side and water will begin running over the top.



This can erode the downhill side under the log or stones. When this happens, you may need to install another dam below. When making maintenance trips, check any check dams for problems such as rotting, erosion on the downhill side, water problems on the sides of the structure.

**Lopping and Sawing:** The trail corridor must be kept clear of new growth and blowdowns. When cutting back limbs encroaching on the trail corridor, cut the limb back to the trunk or another major limb. Never leave a stub sticking out. If the limb is too big for the loppers, use a razor saw. If sawing, make a shallow undercut first so that when the limb breaks away, it does not strip the bark down the trunk. Make the undercut, then move to the top to finish cutting. When cutting **blowdowns**, if leaving parts of the tree on both sides of the trail, make the cut section **ONLY** as wide as the tread, either 2' in wilderness, or 3' in non-wilderness. This will help to keep hikers on the tread and discourage trail creep. If cutting so that one side of the blowdown will be completely moved away from the trail, cut so that the other side is even with the tread line. Note that **ONLY** certified sawyers



approved by the GATC Sawyer Program are allowed to use chainsaws or crosscut saws on the trail. If you are not a certified sawyer AND on the GATC sawyer list and you have a blowdown on your section, report the blowdown to the Sawyer chair found in your Yearbook. The best way to report a blowdown is to use the GATC Blowdown Reporting system:

- Be sure LOCATION is ENABLED on phone.
- Phone camera access to GPS Location is ENABLED.
- Be sure your phone is NOT in AIRPLANE MODE while taking picture.
- Make sure GPS has good fix by having it out of pack or pocket for a few minutes before taking pictures.
- Send images from phone **as attachments** to email, **not inserted** in email to [GATCBlowdown@gmail.com](mailto:GATCBlowdown@gmail.com).

**Switchbacks:** A switchback is a feature used on steep hillsides to get water off the trail and help to maintain a sustainable slope to the trail as it ascends/descends. Hikers will frequently create shortcuts across the bend of the trail, resulting in a too steep slope and severe erosion. Maintainers should constantly monitor any switchbacks on the section and immediately stop the shortcutting by blocking the new path with LARGE pieces of trees and shrubs and/or rocks. Small branches that appear to block the path at first will quickly degrade and open the path back up.

**Social trails:** Social trails are trails that hikers have created that are not the official tread. Some lead to water or campsites and some are created when hikers decide to go around a tree in a different way than the official tread. Sometimes these trails are created when there is a boggy spot in the treadway and hikers move one side or the other to avoid it. In the case of multiple trails to a point source such as water or a campsite, choose the best one or the one that was originally built for access and trash the rest of them with brush, large branches, or tree trunks. Weeding the official access trail well and not weeding the others will also encourage proper access. Keeping boggy spots drained will encourage hikers to stay on the official treadway and off alternate routes. When encountering alternate routes around trees, block these with large pieces of wood or large rocks stacked to block the route. As with trashing switchbacks, do not use small branches, as these will deteriorate quickly and open the path you are blocking. Block the middle as well as each end to make it difficult to discern the cutoff trail.



**Weeding:** Weeds must be cut at least once each year. Some sections that are in sunny places or open gaps, or in particularly rainy years, may need more than one weeding. Weeds overhanging the trail make it difficult to see the trail and can hide snakes and other creatures. The purpose of weeding is to make the tread easy to see and to keep vegetation out of the trail corridor. Weedeaters can be used in non-wilderness, but only non-motorized tools are allowed in wilderness. A slingblade is a good weeder. We can use weed trimming to discourage walking on the lower side of the trail to prevent trail creep. Cut the weeds on the outside edge very close to the trail, only enough to keep them from overhanging the tread, a few inches is good. On the upper side, cut the weeds back enough to keep any from overhanging the corridor. On the lower side, weeds typically only affect the legs, but on the upper side, especially on a steep slope, they may overhang onto the arms or head. Upper side weeding should keep the trail corridor width completely clear. Remember overhead too. The corridor is typically 8 feet high.

**Blazing:** Blazes should be repainted at least every three years. The white AT blaze and blue blazes are 2" wide and 6" high. Use latex or oil based EXTERIOR paint. Latex is much easier to work with. Unless working on a brand new section of trail that is unmarked, only repaint the existing blazes. Do not add more blazes to a section without conferring with the District Leader or Trails Supervisor. Over marking can be an eyesore and is rarely necessary. When repainting, scrape or rub the dirt, lichen, and loose bark. Paint only absolutely dry wood. Blazes should be on trees whenever possible, and painting on rocks should only be done when absolutely necessary. A 2x6 template of a thin material such as hard plastic can be used a guide to keep the blaze within acceptable tolerance.

**Signs:** If your section has signs, check them and the post regularly for needed repair or replacement. If a sign or post needs replacing or repairing, contact the Sign Subcommittee chair to determine needs or to get a new sign made. You can find the Sign manager in the GATC Yearbook.

**Water sources:** Water sources, whether along the trail or at campsites and shelters should be maintained to minimize contamination. Some water sources are identified with signs and blue blazed trails, and some are where the trail crosses a stream. If the water source has a pipe for collection, keep the pipe clear and well anchored. Provide a good place for a hiker to collect water that minimizes muddying the water. Clean trash and food out of the water.

## **CAMPsites, TENT PADS, SHELTERS, and PRIVIES**

If your section has campsites or shelters, these must be regularly maintained. Basic maintenance of campsites and tent pads include trash pickup, fire ring maintenance, social trail control, weeding, and site footprint control. If your section has a shelter, maintenance includes sweeping, trash pickup (often includes abandoned gear and food items) and inspection of the shelter, bear cables, and food storage box to submit repairs to the Structures subcommittee (see chairman contact information in the Yearbook). All shelters and the Hawk Mountain Tent Pads have privies. Privies should be swept, inspected for needed repairs, and the cone knocked down when needed.

### **Campsite**

A campsite is a consolidated area where camping is done and may include several or even many tentsites. Tentsites may adjoin one another, but campsites are separated by distance or by vegetation boundaries or the main trail.

- Pick up and remove trash. Anything not natural is considered trash.
- If a site's footprint begins to creep to an unacceptable size, use downed trees, brush, and rocks to restrict the expansion or to reduce the size of the site.

- Popular campsites will have many social trails leading into the forest, mostly for bathroom use. If users are not digging a hole and burying waste and toilet paper, you can scratch a hole with a trail tool and push waste and paper into the hole with a stick. If there seem to be too many social trails around a campsite, attempt to close some with brush and downed trees.
- There should only be one fire ring per camping area. Tent sites should not have individual fire rings. Identify one existing fire ring as the one to use for the site and break down and disperse the rest. When dispersing rocks, throw them into the forest as far as possible, preferably downhill to discourage the ring reappearing. A fire ring should ONLY be one level of rocks. If you find a fire ring that is built up with more than one layer, take down the top layers until there is only one left, then disperse the rocks. Leave sizable rocks for the ring. A fire ring should only be 18"-24" in diameter. Consolidate larger ones into a smaller ring. Clean out the trash and old ashes from the ring and disperse the ashes into the forest. Filling up with ashes is a major reason hikers build the rings up into multiple layers.
- Cut the weeds in the campsite when needed, but leave weeds on the periphery to discourage expansion of sites.

## **Tent Pads**

- Tent pads are installed on hillsides to help control the size and spread of tentsites. Tent pads are installed at Hawk Mountain Tent Pad site, Justus Creek, and on the hillsides around several shelters.
- Use the campsite section above for general maintenance.
- Inspect timbers or logs used to hold tent pad material for needed repair.
- If the pads have food storage boxes or privies, see the section below for them.

## **Shelters**

- Sweep out the shelter. Keep a broom or wisk broom in the shelter for hikers to use.
- Remove trash and abandoned gear and food.
- Check the register. When full, bring it out and turn over to the District leader, and replace with another register. Keep a pen with the register.
- Check the shelter (including the roof) and picnic table for needed repairs. Notify the Structures Committee chair of any repair issues.
- Block off social trails where needed.
- Check bear cables if present for needed repairs. Remove items left hanging on cables.
- Check the food storage box and remove any trash or abandoned food. Check hinges and closures for needed repairs. Notify the Structures Committee chair of any repair issues.
- If there are too many campsites around a shelter or too near the water source, use twine and signs (from Trails Supervisor) to cordon these off. Consult the Trails Supervisor or District leader before blocking these areas.

## **Privies**

The District leader will train new maintainers on proper privy maintenance.

- Sweep floor. Leave a broom for hikers to sweep with.
- Check privy building for needed repairs. Notify the Structures Committee chair of any repair issues.
- Rake the cone if needed. The cone builds up under the seat and will need to be spread out regularly.

- When the bin under the seat gets full, notify the Structures chair and a bin swap will be planned, approximately every three years.

## **Resources**

GATC Trails Supervisor: [trails\\_supervisor@georgia-atclub.org](mailto:trails_supervisor@georgia-atclub.org)

GATC Trails Skills Workshop: normally held in the fall over a weekend. Several one or two day workshops on various trail building and maintenance skills. Contact Trails Supervisor.

Southern Appalachian Wilderness Skills Institute: in depth week long workshop covering various building and maintenance skills. <https://wildernessskillsinstitute.org>

*Appalachian Trail Fieldbook, Maintenance and Rehabilitation Guidelines for Volunteers.* Excellent guide written specifically for the AT. Order from Mountaineers Books- <https://www.mountaineers.org>

*Appalachian Trail Design, Construction, and Maintenance.* In depth, detailed guide for everything from design and construction of new trail to all maintenance issues. Order from Mountaineers Books- <https://www.mountaineers.org>

*USDA Trail Construction and Maintenance Notebook.* Excellent guide for construction and maintenance of trails, but includes techniques particular to western trails. Can be downloaded online for free at <https://www.fs.fed.us/t-d/pubs/pdfpubs/pdf07232806/pdf07232806dpi72.pdf>

## **JOB DESCRIPTION: GATC Trail Section Overseer**

The section maintainer is one of the most important jobs in the Georgia Appalachian Trail Club. What the maintainer does, or does not do, has both immediate and lasting impact on the hiking experience of all visitors to the AT and connecting trails. The maintainer should have first-hand knowledge of the condition of the trail in her/his section. No one else is as uniquely positioned to observe the long-term effectiveness of stewardship techniques applied to his/her treadway.

The Section Maintainer is responsible to the District Leader for the recurring maintenance along his/her assigned section of trail. He/she shall be a member of the GATC. The Maintainer is expected to accomplish these specific tasks:

1. Weeding and lopping. The maintainer should do this as often as required. Usually once or twice in the spring and summer months will suffice.
2. Removing blowdowns. Bowsaws, handsaws, and axes may be used without restriction other than the use of proper safety techniques. The use of chain saws and crosscut saws in the Chattahoochee National Forest requires Forest Service certification. This certification requires the completion of a first aid/CPR course and either a chain saw and/or crosscut saw courses.
3. Painting or renewing blazes, in accordance with GATC blazing policy.
4. Cleaning dips, waterbars, and drainage structures (recommended twice a year in late fall and early spring).
5. Enhance/repair treadway. This includes removing loose rocks, removing roots that may cause hikers to walk around and widen the treadway, repairing slipped and/or braided trail, etc.
6. Monitoring the trail to ascertain maintenance needs and also for evidence of incompatible use, i.e. ATV, mountain bikes, horses, fire rings in unauthorized locations, or illegal activity. Report such incidents to the District Leader.
7. Picking up trash and discarded or abandoned items. Practicing Leave No Trace.
8. Reporting to the District Leader any damage to signage on the section.

After appropriate training and instruction from the District Leader, the Section Maintainer may build log and/or rock steps and drainage structures, i.e. dips and waterbars.

The Section Maintainer should report needed maintenance tasks that are beyond his/her capability (i.e. large blowdowns, heavily eroded or slipped trail) to the District Leader.

Maintainer should file their individual work trip reports online via the GATC website. Group work trips are reported by the crew leader. **Maintainer should perform a minimum of four work trips a year on their assigned section.**

Maintainer who are responsible for a shelter site should regularly inspect the shelter, bear cables, moldering privies, and water sources for any needed repairs and insure structures are in good working order. Maintainer should re-supply wood chips or duff to the privy as usage demands. If the problem is beyond the Maintainer's capability to fix, he/she should report it to the District Leader.

Attending regularly scheduled club maintenance functions when possible to keep abreast of accepted maintenance practices and techniques, and to share "what works" with the District Leader and other overseers.

Greeting and assisting hikers met while working on section. Where necessary advise hikers on Leave No Trace principles and backcountry etiquette. Promote the GATC to hikers encountered who are interested in the maintenance of the trail.

**Remember:** The section Maintainer is "the face" of the Georgia Appalachian Trail Club.