

# **TIDEWATER APPALACHIAN TRAIL CLUB**

## **Trail Supervisor's Manual**

**January, 2017**



## **TABLE OF CONTENTS**

<b>TABLE OF CONTENTS .....</b>	<b>2</b>
<b>I. ADMINISTRATIVE TASKS.....</b>	<b>4</b>
PURPOSE OF THE TIDEWATER APPALACHIAN TRAIL CLUB .....	4
DUTIES .....	4
<i>Trails Supervisor</i> .....	4
<i>Assistant Trails Supervisor</i> .....	4
<i>Tool Boss</i> .....	4
<i>Local Trails Coordinator</i> .....	5
<i>Previous Trail Supervisors</i> .....	5
<i>Section Leaders</i> .....	5
CLUB BUSINESS .....	6
<i>Meetings</i> .....	6
<i>Maintenance Budget</i> .....	6
<i>Maintenance Awards</i> .....	6
<i>Publicity</i> .....	7
<i>Annual Report</i> .....	7
<i>Replacement of Section Leaders</i> .....	7
WORKING WITH OTHER AGENCIES .....	8
<i>Appalachian Trail Conference</i> .....	8
<i>National Park Service and U.S. Forest Service</i> .....	8
<i>NPS and USFS Requirements</i> .....	8
<i>Worker's Compensation and Accident Reporting</i> .....	8
<i>Chain Saw/CrossCut Saw Training</i> .....	9
<i>Reporting Trail Maintenance Hours</i> .....	9
<i>Maintenance Trips and Travel Hours</i> .....	10
<i>Use of the Fire Road at Love Gap to Maupin Field</i> .....	10
SPECIAL LAND CONSIDERATIONS .....	11
<i>Wilderness Designation</i> .....	11
<i>The Mau-Har Trail Waterfall</i> .....	11
OTHER.....	12
<i>First aid Kits</i> .....	12
<i>Safety and Risk Management</i> .....	12
<i>The Trail Supervisor's Walking Stick</i> .....	12
<i>Photos</i> .....	12
<i>Lectures and Training to Other Organizations</i> .....	12
<i>Web Page Information</i> .....	12
<i>Literature</i> .....	12
<i>Maps</i> .....	12
<i>Grip Hoist Operations</i> .....	13
<i>Rusty's Hard Time Hollow</i> .....	13
<b>II. MAINTENANCE .....</b>	<b>14</b>
GENERAL MAINTENANCE.....	14
<i>General Guidelines</i> .....	14
<i>Clearing Blowdowns</i> .....	14
<i>Clearing Brush and Cutting Weeds</i> .....	14
<i>Non AT Trails Maintenance</i> .....	14
<i>Trail Signs</i> .....	14
<i>Flagging Trails</i> .....	15
<i>Shelters</i> .....	15

<i>Tye River Campsites</i> .....	15
<i>Fire Roads</i> .....	15
<i>Tye River Bridge</i> .....	16
<b>MAINTENANCE TRIPS</b> .....	16
<i>Regularly Scheduled Trips</i> .....	16
<i>Emergency Maintenance Trips and Special Events</i> .....	16
<i>Maintenance Trips Scheduled by Members</i> .....	16
<i>Annual TATC Trail Maintenance Crew</i> .....	16
<i>Konnorock Crews</i> .....	17
<b>ORGANIZING THE SPRING AND FALL TRIPS</b> .....	18
<i>Scheduling Work Crews</i> .....	18
<i>Selection of Maintenance Trip Crew Leaders</i> .....	18
<i>Sign-Ups</i> .....	18
<i>Things to Do Before You Go to Sherando</i> .....	18
<i>Things to Bring to Sherando</i> .....	19
<i>Things to Do While at Sherando</i> .....	19
<i>Briefing Maintenance Crew Leaders</i> .....	19
<i>After the Trip</i> .....	20
<b>III. APPENDICES</b> .....	21
<b>IMPORTANT POINTS OF CONTACT</b> .....	21
<b>SECTION LEADERS</b> .....	22
<b>SAMPLE MAINTENANCE TRIP ARTICLE FOR NEWSLETTER</b> .....	24
<b>MAINTENANCE HOURS SPREADSHEET</b> .....	24
<b>JOB HAZARD ANALYSIS</b> .....	25
<b>LETTER TO SECTION LEADERS</b> .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>PLACARD FOR VEHICLES</b> .....	25
<b>MAPS TO SHERANDO</b> .....	33

## **I. ADMINISTRATIVE TASKS**

### **PURPOSE OF THE TIDEWATER APPALACHIAN TRAIL CLUB**

The purpose of the Tidewater Appalachian Trail Club is to maintain a 10.75 mile section of the Appalachian Trail and two shelters in accordance with Appalachian Trail Conference (ATC) standards. We built and maintain the 3 mile Mau-Har trail and the 2.5 mile White Rock Falls Trail. We also maintain several local trails for which the Local Trails Supervisor is responsible. This manual outlines specific duties, responsibilities and procedures.

### **DUTIES**

#### **Trails Supervisor**

The primary duty of the elected Trails Supervisor (TS) is to insure that TATC's section of the AT is clear and maintained to AT standards. This includes:

- Appointing section leaders
- Planning four scheduled maintenance trips per year
- Organizing emergency or special maintenance trips as needed
- Keeping a log of hours worked by individual volunteers and making annual report
- Submitting grant proposals
- Writing the "Minute for Maintenance" article for TATC newsletter
- Attending monthly TATC Board Meetings and General Meetings
- Coordinating maintenance projects with the appropriate agencies and/or other volunteer clubs.
- Developing training materials

#### **Assistant Trails Supervisor**

An elected officer who assists the Trails Supervisor in organizing work trips and attending meetings. Specific duties include:

- Helping to plan the normally scheduled maintenance trips
- Assisting in the development of trail maintenance training material
- Covering for the TS at any meetings as necessary
- Writing Letters of Understanding for the Section Leaders
- Coordinating Workshops
- Organizing special maintenance trips
- Helping the TS solicit members for special maintenance trips
- Writing articles for the TATC Newsletter

#### **Tool Boss**

An appointed position in support of the maintenance effort.

- Maintains the TATC-owned maintenance tools in storage
- Arranges transport of tools to Sherando for major Maintenance weekends
- Cleans and sharpens tools prior to and/or after use.
- Within budget constraints, buys or repairs tools needed.

### **Local Trails Committee Coordinator**

Inasmuch as a separate committee chairman is appointed to Local Trails, only limited coordination with Trail Supervisor is required. He/She coordinates trips and tracks hours for all maintenance trips for local trails and other service trips which include, but not limited to:

First Landing State Park  
Sandy Bottom  
York River State Park  
False Cape State Park  
Newport News City Park  
New Quarter Park  
Merchants Mill Pond

### **Previous Trail Supervisors**

Previous Trail Supervisors and Assistant Trail Supervisors are available to answer questions and help out as needed. Never hesitate to ask for their help.

### **Section Leaders**

Section Leaders are volunteers who accept on-going responsibility for routine maintenance of a certain sub-part of the TATC mileage on the A.T./Mau-Har Trail and some parts of St. Mary's Wilderness Area, aside from the major TATC Spring & Fall Maintenance events and any mid-season Swingblade-Lopper event. The expectation is that Section Leaders will make ~four work trips to their section each year. This includes:

- Swingblading
- Pruning
- Clearing waterbars
- Removing small blowdowns
- Submitting a quarterly report to the trails supervisor, documenting the hours worked and condition of the trail.

Section leaders are not responsible for heavy maintenance such as installing waterbars, clearing large blowdowns, or sidehilling. Section Leaders would report these problems to the Trail Supervisor, who'd take that info into account for a team to handle at a Spring or Fall Maintenance Weekend.

## CLUB BUSINESS

### Meetings

The Trail Supervisor should try to attend all of the scheduled TATC board meetings and general membership meetings. If she/he cannot, then the Assistant TS should cover for the TS at those meetings. Time is allotted at the general membership meetings for "Minute for Maintenance". This time is used to advertise upcoming maintenance events, recognize a volunteer, or inform members of other important trail matters.

There are also ATC events throughout the year that might be worth attending. These include the **Blue Ridge Partnership Meeting** (a meeting of ODATC and NBATC representatives, usually a team from the Virginia Regional Office (VARO) of ATC, and our local LNPS and USFS representatives), the **Southern Partnership Meeting** (with all clubs south of Rockfish Gap, and NPS/USFS reps), and the **biennial ATC Conference** that's held on odd-number years.

Plan to attend the TATC budget preparation meeting which is usually held in January/February.

### Trail Maintenance Budget

The Trail Maintenance Budget usually consists of three line items, the maintenance dinners, tool expenses, and general maintenance:

- We provide Saturday night dinner to all the volunteers who attend the Spring and Fall Maintenance Weekends. A team should be assembled for each dinner.
- The cross-cut saws need to be sharpened occasionally, new tools or paint ordered, and tool storage shed paid for. We pay for transport of tools to Sherando and back. If there are special tools or other expenses, they should be submitted in December or January for the annual budget preparation.
- The general maintenance budget money is to be used for maintenance expenditures such as patches, T-shirts, and any other expenses related to trail awards.

The Tool Boss should inventory the tools each year and decide on what tools we need to retire and replace. Old tools may be given away or sold for a small fee. The ATC also coordinates matching grants for special projects or tools. The deadline for submittal should be noted.

The TATC Cabin and the Trail Maintenance tools come out of separate budgets. Try not to get them mixed up. The Cabin Coordinator has control over cabin tools. If she/he wishes to borrow Trail Maintenance tools, or vice versa, these loans should only be temporary and closely tracked.

### Maintenance Awards

Trail maintenance awards are usually given out at the November general membership meetings. The awards for AT maintenance and ancillary trails are based on hours worked between Reids Gap and the Tye River/Route 56 and associated trails. The awards are as follows:

- 20 hours - the green "Trail Crew" rocker, for the TATC patch. (These patches are ordered out of the trail maintenance budget)
- 50 hours - the "USFS Volunteer" patch, plus the coveted TATC Trail Maintainer T-shirt. (The T-shirt is ordered out of the trail maintenance budget)
- 100 hours - a "100-hour" rocker for the USFS patch

- The USFS has rockers for each 100 hours. If there is not a patch, check with them.
- For 1000 hours, there is a 1000 hour USFS rocker. We also have their name and date engraved on the 1000-hour plaque, provide a new T-shirt, and try to make up a special award. For example, we've painted a Pulaski with gold paint, and attached a nameplate with the recipient's name engraved on it.
- Replacement maintainer T-shirts may be purchased for \$8.00 by qualified members.

There are also awards for Local Trail volunteers. These awards are based on hours worked also, but should be awarded by the Local Trails Committee.

See the appendices for more information on maintaining the Maintenance Hours spreadsheet.

### **Publicity**

At every general membership meeting there is time allotted for a “Minute for Maintenance”. This is where the TS presents to the members what maintenance trips are scheduled, along with any pertinent maintenance information they should know. Write down what should be discussed prior to the meeting. Also, bring the 1000-Hour plaque to display on the membership table. It's good PR for maintenance and a way to publicly honor those members who have donated so much of their time.

The TS should write articles on trail maintenance for the newsletter, or for placement in the web site's articles section. The articles can either announce upcoming maintenance trips or report what was done on these maintenance trips. It has been suggested that we publish the hunting seasons in one of the fall newsletters. See a sample trip announcement in the appendices.

In October or November, prepare a list of all maintenance trips planned for the next calendar year. This will be used for input to the TATC Calendar, as well as for submission to Sherando for reservation of spaces for our club for Fall/Spring Maintenance, etc., for posting to the TATC web site, for inclusion in the newsletter or in handouts at the membership meetings. It helps people to mark these events on their calendars well ahead of schedule.

### **Annual Report**

An annual report should be turned into to the club historian by March 1st. This is the record of the volunteer work hours as reported to the ATC, and any other special considerations such as grants received or special conditions or happenings relating to trail maintenance. It should be limited to one page, or consist of the report form made to ATC.

### **Replacement of Section Leaders**

A sample form letter is available in the appendixes, which should be sent to all section leaders whenever a new Trails Supervisor is elected. It requests the following information:

1. Desire to remain assigned to the section of trail to which they were already assigned
2. Desire for some help with their section of the trail (a co-section leader assigned)
3. Interest in exchanging their section of the trail with someone else who wishes to exchange theirs.
4. Desire to relinquish their section of the trail.

If a section leader does not meet minimum requirements as outlined in the Letter of Understanding, then the TS should remind them, and ask about their maintenance trips and reports for their section of trail. So far this strategy has always worked. However, if the TS determines that a section leader is not meeting their commitments, then he/she will need to replace them, usually via a letter notifying them that they are no longer a section leader.

## **WORKING WITH OTHER AGENCIES**

### **Appalachian Trail Conservancy**

As a maintaining club of the Appalachian Trail Conservancy, we are obligated to follow all ATC directives and guidelines. Be sure to contact the staff of the Virginia Regional Office (VARO) of ATC shortly after taking office and introduce yourself. The Blue Ridge Partnership meeting is a good first opportunity. These people should also be invited to our maintenance trips. They are a source of information and wisdom. They will offer workshops, classes and one of the staff should come out every two or three years during the Spring Walk-thru to help evaluate our section of the trail.

### **National Park Service and U.S. Forest Service**

Our section of the AT passes through National Park Service (Blue Ridge Pkwy) and U.S. Forest Service lands (Glenwood/Pedlar Forest District). It is important that we keep these partners informed of our activities. At a minimum they should be notified of all of our maintenance trips so that they are aware that we may be driving down the forest service road and will be in the area. The appropriate agency needs to be notified of any major trail maintenance work we will be undertaking. Usually an environmental impact statement will need to be performed, so allow six months to a year for this to happen. Contact our USFS or NPS representative with questions or problems. It is highly recommended that you try to meet with each of these persons soon after taking office. Their names, phone numbers, addresses and e-mail are included in the appendices.

### **NPS and USFS Requirements for Worker's Compensation and Accident Reporting**

Any person working on the Appalachian Trail with the TATC is covered by the USFS and NPS worker's compensation for any injuries, providing the following conditions have been met:

- The person must have signed up as a volunteer who had been briefed on the safety conditions that they might encounter generally, and specifically with tools.
- Use of a saw was only done by USFS-Certified individuals.
- Appropriate safety gear was used.
- All injuries should be treated on the day of injury.
- Report the injury to the USFS (Glenwood/Pedlar), even if treatment is not sought.
- Complete Form CA-1 (injury/casualty) within two days of the injury.

Transportation to the work site is not covered. Each team leader on a maintenance weekend should have a packet with the CA-1 Form, the Contacts to use in an Emergency, and the Job Hazard Analysis briefing forms. A packet should be given to each crew leader. Replace contents as needed.

## **Crosscut and Chain Saw Training**

Certification is required by the USFS and NPS for anyone using either of these tools. Crosscut saws are used in the Wilderness, rather than Chainsaws. This requirement affects coverage by their worker's compensation. An appendix or separate listing to this manual has the names, phone number, E-mail address, and expiration dates for those certified, as well as the First Aid/CPR certification expirations which are required as a prerequisite for the saw certification. The sawyer certification is for three years, and, generally, the First Aid/CPR is valid for only two, so there is a constant effort to maintain proper certification of a significant number of TATC members to work the saws.

## **Reporting Trail Maintenance Hours**

Every year the TS will need to report TATC's Volunteer Maintenance Hours for the previous Fiscal Year to the ATC, the USFS and NPS. The reporting period is from October 1<sup>st</sup> to September 30th. Since we work with three agencies (including ATC), their hours are reported separately as follow:

- Volunteer in Parks (VIP) trail maintenance hours. These are hours that we work on the AT from Reed's Gap to Maupin Field, because a good part of this section is in or bordering the Blue Ridge Parkway, which is a National Park Service asset. We report these hours to the ATC and the National Park Service (NPS).
- Volunteer in Forests (VIF) trail maintenance hours. These are hours that we work on the AT from Maupin Field to the Tye River. We report these hours to the ATC and the U.S. Forest Service (USFS).
- Hours that we work on the Mau-Har, St. Mary's and Mine Bank Trails. These are not counted in with the AT totals, but are counted toward VIF hours. (This may change based on the form supplied by ATC).
- Hours that we work on the White Rock Falls Trail, which is in the Blue Ridge Pkwy corridor. These hours are counted as VIP hours.

Additionally we report hours for board members or other members that could be directly attributed to AT support such as attending board and general meetings, planning activities, or attending ATC meetings. We also keep track of hours that members attend training activities. The volunteer hours Excel Spreadsheet has columns to account for the separation of these categories of hours, but a word of caution: The ATC seems to subtly change the rules occasionally. As you might imagine, this is sometimes not as much a science as an art. Good luck! Just remember, if you keep accurate records of hours by person and by trip, you can always figure out how to report them later on. For the regularly-scheduled maintenance trips; use the team sign-up sheets to figure out where crew members worked, who they were, and when and for how long they worked. Remember to collect these sheets from the trip leaders at the end of their trips, along with the Job Hazard Analysis forms, and the packets with the emergency contacts and forms.

## **Maintenance Trips and Travel Hours**

Since our trail club members travel an average of 200 miles to the AT to perform trail maintenance, we count a portion (but not all) of their travel time on a separate line, but count it towards awards. This methodology has been approved by our partner agencies (ATC, USFS, and NPS). Travel hours are counted as no more than half of the hours actually worked, up to four hours. For example:

- If the person worked for 8 hours on the trail you should allocate 4 hours of travel time and the person would be credited with 12 maintenance hours (8+4).
- If the person traveled up to the trail and worked on a Saturday for 8 hours and on Sunday for 8 hours, without returning home, you should still allocate 4 hours of travel time and the person would be credited with 20 maintenance hours (8+8+4).
- If the person worked for 6 hours on the trail you should allocate 3 hours for travel time and the person would be credited with a total of 9 maintenance hours for that trip.

And of course there are always some exceptions to the rule. For instance, when a person shows up for maintenance, but misses meeting with the maintenance crew at the shelter before it leaves because of some circumstance beyond their control, like traffic. When this happens give them a few hours for effort. Another exception (more on the negative side) is when a person shows up for maintenance for less than an hour, doesn't do anything and leaves, but expects to be awarded several maintenance hours (Hey, it's happened!). A good judgment in this case would be to forget they were ever there, and don't worry about awarding them any hours for that trip. If at a later date they ask about their maintenance time; then let them explain where they were and what they did on the trail. If they go through this much trouble, say "OK".

## **Use of the Fire Road at Love Gap to Maupin Field**

The presence of vehicles parked at Maupin Field may raise questions on the part of hikers. The TATC is proposing restrictions on the use of the fire road at Love Gap for the following reasons:

- The U.S. Forest Service has asked the TATC to limit our use of the fire road, especially during the hunting season (mid-September through December) because hunters and other local residents feel they should also be entitled to use the road.
- We would also like to minimize the impact on the road and at Maupin Field.
- Driving into Maupin Field and camping may be construed by others as a recreational use of the fire road. For many of our members, trail maintenance is also a recreational activity in addition to volunteer work.
- Hikers who believe they are entering a wilderness area may have that experience diminished by encountering vehicles and tents set up next to the trail.

Due to these reasons, we are proposing the following guidelines for using the fire road:

- Camping for all scheduled maintenance trips will be at Sherando Lake. More people may be able to attend the off-season maintenance trips if they don't have to drive down the fire road to camp. The Trails Supervisor will be responsible for making reservations at Sherando Lake for all scheduled maintenance trips.
- It is highly recommended that people car pool or walk into Maupin Field for all trips throughout the year. The Trails Supervisor will prearrange carpooling for driving into Maupin Field during scheduled trips to minimize vehicles and provide the gate key.

- Avoid driving into Maupin Field during the Fall hunting season, except for carpooling at the Fall Maintenance Trip.
- The trails supervisor will provide placards to be placed in all vehicles parked at Maupin Field stating that we are **Trail Crew**.

## **SPECIAL LAND CONSIDERATIONS**

If you have any questions about the following, ask the TATC Land Management representative.

### **Wilderness Designation**

The Three Ridges Wilderness area was passed into law in 2000 and encompasses the area from Maupin Field to the Tye River (excluding the Maupin Field Shelter, and the fireroad area). A wilderness designation mandates the least modification by human beings. Basically, this means that the use of power tools is prohibited, and structures such as shelters or bridges should be of a primitive nature (Our shelters are grandfathered in). Chainsaws may still be used on the fire road, from Reed's Gap to Maupin Field, and on the White Rock Falls trail.

### **The Mau-Har Trail Waterfall**

The large waterfall on Campbell's Creek just off of the Mau-Har Trail, with the smaller "yellow" blazed trail to it, is actually on private lands. Only a corner of land above this waterfall is on USFS lands.

## OTHER

### First aid Kits

We currently have over a dozen first aid kits that were built by volunteers to meet the OSHA standards for deep-woods operations. They need to be maintained as such! Only someone who has had first aid training should carry these kits. During our larger maintenance weekends, as a minimum, one of these kits should be assigned to any crews working with saws.

### Safety and Risk Management

The motto is Safety First. Always think, talk, and demonstrate safety during any maintenance activity. See the appendix for a Job Hazard Analysis chart of maintenance tasks, their hazards and safety gear compiled by the ATC.

### The Trail Supervisor's Walking Stick

Remember to pass down the Trail Supervisor's walking stick to the next trail supervisor that takes your place. Do so with all the required pomp and ceremony.

### Photos

Take photos of volunteers while they perform maintenance. These can be used in our publications, web site, and for the historian.

### Lectures and Training to Other Organizations

Whenever another organization requests that TATC provide maintenance training to their group, we generally oblige them unless there is some question dealing with TATC's liability. If you receive such a request, bring it up before the board.

### Web Page Information

The dates for regularly scheduled AT, Local Trails, and Cabin Maintenance are on a special page on our web site. You may also wish to contribute special articles for inclusion on the web site. Contact the webmaster.

### Literature

Read the books on trail and shelter maintenance and construction. They are a wealth of information on tools, tool up-keep, trail maintenance and trail construction. Also read ATC's trail and land use policies, as well as our club's trail maintenance Memorandum of Understanding agreement with the ATC, USFS and NPS. If these items are not available with the supervisor's stuff, you can get a copy from the club president.

### Maps

The trails supervisor keeps the large map of our area. A map to Sherando is available as a dropdown on the TATC website under "Trail Maintenance" button.

## **Grip Hoist Operations**

Bill Rogers has custody of the Grip Hoist equipment and some other related equipment.

Volunteers who operate the grip hoist need “specialized training” for its safe operation. This training is available periodically from the ATC. The grip hoist is by far the most dangerous piece of equipment that our club members will operate. Only people specifically trained or being trained in its use should be on the grip hoist crew. This is why Bill has custody of this equipment. Currently, only Bill Rogers, Ellis Malabad, and Jim Sexton from TATC have received grip hoist training.

## **Rusty's Hard Time Hollow**

Our section of the trail provides the nearest egress off of the AT to Rusty's Hard Time Hollow, one of the Thru-Hiker's places to visit. TATC policy on Rusty's Hard Time Hollow has been to remove any of Rusty's business cards or leaflets left in any of our shelters. Rusty's is currently closed-but may reappear at any time.

Rusty has, on at least a couple of occasions, put a sign-post off of the trail at Maupin Field directing hikers down the fire road and along the Parkway to his place. On both of these occasions the USFS/NPS has promptly removed these signs, once using a back-hoe when Rusty had set one of them on a metal pole in concrete (Don't laugh too hard). The USFS has since put up a sign at the top of the fire road that reads simply; “← Love Gap 1.5 Miles”.

## **II. MAINTENANCE**

### **GENERAL MAINTENANCE**

#### **General Guidelines**

The ATC has certain standards for maintenance of the trail corridor. It should be 4 feet wide and 8 feet tall to allow packs to easily pass through. All blowdowns that cannot be easily stepped over or ducked under should be cleared. The trail should be marked in a standard manner, with 2 x 6 inch white rectangular blazes. These are the basics. Please read the "Appalachian Trail Fieldbook" for complete guidelines. In order to comply with these guidelines, we perform a variety of maintenance tasks including clearing blowdowns, swingblading, performing special projects to prevent wear and erosion, and working with our agency partners to complete any major projects such as trail reroutes or building of structures.

#### **Clearing Blowdowns**

It is our job to clear blowdowns on the trails or snags (also called widow-makers) above them. We are not supposed to cut standing timber. There are exceptions to every rule, but keep exceptions to this rule few. Only those certified by the U.S. Forest Service as either Crosscut or Chainsaw Sawyers can handle a saw on our section. Cutting trees (lumberjacking/felling) is the most dangerous occupation covered by insurance companies. Only cut standing timber when you need to, to prevent an unsafe condition, not make one.

A trip during late winter or early spring is usually a good idea in order to identify blowdowns from winter storms. This is good info for Section Leaders to take to the Trail Supervisor. If there are many blowdowns, leave the ones that can be stepped over for a later trip, and clear the larger ones at the Spring Maintenance Weekend. The Mau-Har trail seems to be the hardest hit, because of the channeling of the wind through the narrow valley of Campbell Creek.

#### **Clearing Brush and Cutting Weeds**

We usually start aggressively clearing brush and cutting weeds from the trail starting in June when they have grown high enough to be a hindrance to hikers. We then continue to cut weeds as often as warranted until the fall. This should be one of the section leaders' routine jobs (light trail maintenance), although the summer maintenance trip should be reserved for swing blading, as the top of Three Ridges down to Flat Rock overlook gets heavily overgrown and requires a tremendous amount of work to keep it clear.

#### **Non-AT Trails Maintenance**

In general the Mau-Har, the Mine Bank in St. Mary's and White Rock Falls Trails are not maintained to the same rigorous standards by which we maintain the AT. Sometimes these trails are a bit narrower than the AT. But in all other respects, such as clearing out blow-downs, brush, and weeds; we maintain these other trails to the same standards that we maintain the AT. Since the Mau-Har and Mine Bank Trails are in wilderness areas, the USFS actually encourages some blowdowns be left for a more wilderness feel.

## **Trail Signs**

The USFS will replace any trail signs from Maupin Field to the Tye River. The NPS should also replace signs at Reed's Gap.

## **Flagging Trails**

Colored plastic or cloth flagging tape can be used on trails to identify “hot spots” requiring future work. It’s great for setting up work crew trips for the larger Spring and Fall trips. You can write on this tape with an indelible marker, but it wears out quickly anyway. Use this tape sparingly, it is also an eyesore. If you see a piece of tape and you can’t remember why you or someone else placed it there, remove it. It is best to write down in a notebook, where and why you placed flagging tape at a particular location.

## **Shelters**

The shelters should be cleaned whenever we have a scheduled maintenance trip. This includes sweeping the shelters and toilets, picking up trash in the surrounding areas, and cutting down brush near the shelter. There should be no brush within 8 feet of the shelter as it promotes rodents, insects, mildew, fungus, and rot. Every year inspect the condition of the shelters and SST’s, particularly the roofs. Bring a stepladder to both of the SST’s and clean off their plexiglass roofs. Periodically clean out from under the shelter, using a rake to drag out debris. Try to periodically retrieve and replace the shelter log books and turn them over to the club historian. Unfortunately, unauthorized people have a tendency to carry them off, so replace them at every opportunity, even if they are still not full. Replace them with notebooks with plastic or waterproof covers if you can. Place them in large plastic zip-lock bags to prevent rodents chewing on them.

Currently, there are no Section Leaders assigned to maintain the shelters. There is usually a work crew scheduled to clean the shelters for the two big maintenance trips.

## **Tye River Campsites**

We pick up litter at the campsites near the AT on the Tye River, which are generally used by scout troops and maybe local partyers, as it makes a nice and easy team assignment for families at the Spring & Fall Maintenance Weekends.

## **Fire Roads**

There are two fire roads that provide us with access to our section of the trail; the Love Gap/Maupin Field and Harpers Creek fire roads. We always clear trees and brush from the Maupin Field fire road since it provides us with our primary access. We are allowed to use chainsaws to clear the road. Also, the USFS periodically grades this road. We have stopped actively maintaining the Harpers Creek fire road, due to present conditions (with large gullies) but it does facilitate getting from the top of the cow pasture at Harpers Creek Road (Route 682) to the Harpers Creek Shelter area.

There are several sets of keys to the Love Gap/Maupin Field fire road gate. The Trail Supervisor, Assistant Trail Supervisor, and Bill Rogers each have one. Don’t leave them at home. These keys are to be used only for official trail maintenance team business, not for hiking trips or day hikes.

**Tye River Bridge** The Tye River Bridge is a suspension bridge that spans the Tye River. It is at the southern terminus of our section. The USFS is responsible for all problems and liabilities. The bridge belongs to the USFS, although we are partners in maintenance. A USFS engineer conducts quadrennial inspections and writes a report. It is recommended that TATC inspect the bridge at each of our maintenance trips (as well as the Section Leader's Walk-Through) and report any problems to the USFS (Glenwood/Pedlar Forest District).

## MAINTENANCE TRIPS

### Regularly Scheduled Trips

There are four regularly scheduled maintenance trips during the year. The section leader's Spring Walk-thru is scheduled in ~April, the Spring Maintenance Weekend trip in May, a mid-season Swingblade & Lopper trip in June or July and a Fall Maintenance Weekend trip in October. The spring and fall trips should try to be scheduled for the weekend after the general meeting, providing there are no holidays or other conflicts. More members will remember to attend. These scheduled maintenance trip dates need to be placed in the yearly planning calendar and on the web page. Provide these dates to the member coordinating the yearly TATC calendar sometime in October of the preceding year. The dates should be advised to Glenwood/Pedlar Forest District, so that we can reserve the Williams Branch Picnic Area of Sherando for the Spring and Fall Maintenance Weekends, and we can get the CCC Kitchen for the smaller events, like Walk-thru and Swingblade & Lopper Festival in mid-summer.

Also make sure that the dates and descriptions for each of these scheduled maintenance trips makes it into the newsletter and trip schedules at least two months in advance of the scheduled dates. Put out sign-up sheets for these scheduled maintenance trips at least two general membership meetings (2 months) prior to their scheduled dates.

### Emergency Maintenance Trips and Special Events

Sometimes there are bad storms and emergency maintenance trips should be scheduled as soon as safety permits. For these types of emergencies, contact the USFS in an attempt to get permission to use chainsaws in the wilderness area. If the trail conditions are unsafe, i.e., ice or snow on the trail, forest fire warnings, falling trees, lightning, flood, oppressive cold, etc., do not hold emergency maintenance trips or call them off after they have started. There are also other special events, like re-shingling shelters, etc. Try to publish these dates in the monthly schedule, newsletter, or on the web site. If necessary, use the maintenance sign-up sheets and start calling or e-mailing members. Try to spread this task among other board members.

### Maintenance Trips Scheduled by Members

Some members, particularly section leaders, will schedule their own maintenance trips. By all means encourage this, but be sure to get a sign-up sheet listing participants and hours!

### Annual TATC Trail Maintenance Crew

An idea that has been discussed, but never acted on is that TATC could sponsor an annual week-long trail maintenance crew. This 5 day week could run from Thursday to the next Monday (similar to how ATC runs their Konnarock crews). This same concept has been done with success by other AT clubs. It would give us an opportunity to more extensively train individuals and to tackle larger trail maintenance jobs that we find hard to fit into our normal schedule.

A base camp at Sherando Lake or Maupin Field could be set up and group meals could be prepared for the trail crew. Special T-shirts could be given out for this type event. Volunteers could donate money to participate in these events (like ATC does now), but the event probably would still need to be subsidized by the club to some extent.

### **Konnarock Crews**

The Virginia Regional Office (VARO) of the ATC sponsors work crews known as Konnarock, out of their base at Sugar Grove, VA. These crews work a week, similar to that described above. They perform heavy work such as trail reroutes, erosion control, etc. However, they must be proposed five years in advance, and the club must submit a request form, usually by the time of the Blue Ridge Partnership meeting, early in the year, and defend the proposal at the Southern Partnership Meeting a couple months later during the Konnarock session. In the next years prior to the proposed year of work, any NEPA, endangered species, or other work for clearance must be arranged for the job to be approved and funded jointly by the USFS and ATC.

## ORGANIZING THE SPRING AND FALL TRIPS

### Scheduling Work Crews

About 8 weeks before the scheduled spring and fall trips, begin to schedule work crews. Work Crews should be divided equally between easy work, moderate work, and difficult work. Look through the notes from the section leader walk-thru, as well as section leader reports when determining what work needs to be done. There are several crews that are assigned every trip: Cooking crew, trailhead litter pick-up (Tye River), routine maintenance from Reid's Gap to Maupin Field, and shelter clean-up at Maupin Field. Generally, allow space for six people per crew. A sample form is in the appendices for scheduling crews. Pencil in leader's names, reminding them that an official signature is required once they are at Sherando Lake.

### Selection of Maintenance Trip Crew Leaders

Contact Section Leaders first to determine if they would be able to lead a crew. Always give them the option of leading a trip on their section, doing what they deem is most important. **Also consider who has been crosscut certified.** Once all section leaders have been contacted, start calling other active maintainers members. Use good judgment when selecting maintenance trip crew leaders. One factor to use is the number of maintenance hours that they have worked. Two other factors that are important are the level-headedness of the leader (organizing transport, safety & weather precautions, etc.) and their own desire to do the work. Describe the trips that have been tentatively assigned for them to lead, and ask them if they would be willing to lead that trip; or if not, one of the other trips. Leave a few co-leader spots unassigned so that if some of the experienced trip leaders show up at Sherando who didn't volunteer earlier, they can still sign-up to co-lead a trip.

It is not usually necessary to organize the other two scheduled maintenance trips, the Section Leaders Spring Walk-Thru and mid-summer trips, as formally as the Spring and Fall Trips. One chief reason for this is that usually only a dozen of the most skilled people show up for these trips. Work crews can be arranged at the work site.

### Sign-Ups

Sign-up sheets should be put out at the general membership meetings at least two months before the trip. In all the announcements and articles, strongly urge people to sign-up so that enough work crews can be scheduled, enough tools brought, and enough food purchased. Plan on bringing all tools, and have extra work crews prepared.

Contact every member who signs up for any other scheduled or emergency maintenance trips. This is usually a much smaller list of people, and you want to make sure that everyone meets at the right place, at the right time, and that they all have a ride.

### Things to Do Before You Go to Sherando

- Check reservations a few weeks before the trip. Make sure they know we are coming
- Contact our USFS & NPS representatives and the ATC staff from the Virginia Regional Office (VARO) a couple of weeks before the trip and invite them again.
- Arrange for one or two vehicles to act as shuttles down the Love Gap fire road as per our usage guidelines.

- Ask members to bring desserts for Saturday Night.
- Provide maps with directions to Sherando at the general membership meetings.
- Tell everyone that the Sherando Lake gates close nightly at 10 PM.
- For those that indicate they will be arriving at the campsite on Saturday morning, tell them that the safety briefing starts at 7:30 AM and the teams are scheduled to leave at 8 AM.
- Encourage everyone to bring their own utensils for dinner to minimize trash.

### **Things to Take to Sherando**

- All tools, equipment and supplies (paint, garbage bags, etc.) coordinate with Tool Boss.
- Keys to Love Gap/Maupin Field fire road
- First aid kits
- USFS Accident reporting packets
- Bucket and scrub brush for washing tools
- Clipboards
- Sherando Lake information and regulations
- Placards for vehicles parking at Maupin Field (see appendices)
- "Trail Maintenance Tips" sheet for crew leaders and members who are interested.
- Check-list for briefing Crew Leaders
- TATC signs

### **Things to Do While at Sherando**

- Either the TS or the Assistant TS should arrive at the campsite before the bulk of the people arrive, around 3:00 PM, to put up signs directing our members to this site.
- Lay the sign-up sheets on a picnic table (clip boards work great) so that as people arrive, they can sign-up for a crew. Be sure to move them once the dew starts. Put them out Saturday morning also, for those people that arrived really late Friday, or really early Saturday.
- Let every one know when the trip is scheduled to start on Saturday (generally 8 AM), when you expect them back at the campsite (generally 5 PM), and when the Dinner will start (usually around 6 PM).
- Encourage everyone to bring their own utensils for dinner to minimize trash.
- Children are allowed on the trail maintenance trips if accompanied by a responsible adult. Dogs are not. Dogs should be left in the campsite under appropriate care.
- If you do not get the sign-up sheets and leader packets back by about 6:30 PM, track down the leaders and retrieve those items.
- Tell every one that quiet hours start at 10 PM.
- On Sunday, enlist some help and canvas the campsites for litter. We like to leave the campsite in better condition than when we arrived.

### **Briefing Maintenance Crew Leaders**

At 7:45, the crew leaders should gather. Based upon the weather and the trail conditions, give them their final instructions. Each crew leader should be briefed on the following:

- Each person on their crew should sign the sign-up sheet with a printed name and legible signature above it, being sure to read the liability waiver.

- Know who in what group will be carrying the club's First Aid kits. Each leader should have a small first aid kit.
- If any leaders did not receive the leader's USFS Accident Reporting Packet, pass them out. Important Points of Contact (POC) along the trail (sheriff, hospitals, rangers, etc.) are also included with the leader's packet.
- Emphasize safety, especially using hard hats when sawing, as the worker's comp is contingent upon using safe practices.
- They need to give a Job Hazard Analysis safety talk to their crew members, before the trip begins. Emphasize carrying tools safely, and allowing enough space between workers.
- They need to adequately organize transport for their crews.
- They should account for all members during and at the end of each work trip.
- They should make sure that everyone carries enough water.
- They should ensure that everyone works at their own pace.
- They should let their crews know that if for any reason they need to leave the trail, then someone should know where they are.
- They should invite any through-hikers for Saturday dinner and arrange transportation for them.
- Ask them to wash their tools with scrub brush when they return.
- Be sure to return the team sign-up sheet, signed Job Hazard Analysis form, and leader packet to the Trails Supervisor, so that everyone gets credit for their work.
- But most important of all, ensure that every one carries adequate water.

### **After the Trip**

- Clean, sharpen and repair tools (Tool Boss)
- Enter hours in the Excel spreadsheet. (Note that on these trips, everyone gets credited with 12 hours, unless people put in additional hours before or after Saturday. They should let you know how many extra hours they worked.)
- Take a breather before beginning to organize the next trip.

### III. APPENDICES

#### IMPORTANT POINTS OF CONTACT

<b>Organization:</b>	<b>Name:</b>	<b>Phone #/e-mail:</b>	<b>Job Description:</b>
U.S.F.S. George Washington & Jefferson National Forest:	David Whitmore	540-291-2188 davidwhitmore@fs.fed.us	our main POC with the USFS
Glenwood/Pedlar District	Lauren Stull	540-291-2189 lstull@fs.fed.us	Forest District Ranger
	Kathy Hall	540-291-2189 <a href="mailto:khall@fs.fed.us">khall@fs.fed.us</a>	Handles Sherando USFS campground reservations
	Kelley Sims	540-942-5509	Ranger at Sherando
ATC Headquarters, Harpers Ferry, WV:	Laurie Potteiger	304-535-6331 <a href="mailto:lpotteiger@appalachiantrail.org">lpotteiger@appalachiantrail.org</a>	ATC Info Services Coordinator (keep informed of special trail conditions)
	Susan Daniels	<a href="tel:304-885-0482">304-885-0482</a> <a href="mailto:sdaniels@appalachiantrail.org">sdaniels@appalachiantrail.org</a>	ATC Trail Mgmt. Asst.
ATC Virginia Regional Office (VARO):	Andrew Downs	919-389-4627 <a href="mailto:adowns@appalachiantrail.org">adowns@appalachiantrail.org</a>	Regional Director
	Kathryn Herndon	540-904-4316 <a href="mailto:kherndon@appalachiantrail.org">kherndon@appalachiantrail.org</a>	Education & Outreach Coordinator
	Josh Kloehn	540-904-4391 <a href="mailto:jkloehn@appalachiantrail.org">jkloehn@appalachiantrail.org</a>	Resource Manager
Natural Bridge ATC:	Bill Bishop Jason Hammer	swilliambishop@gmail.com hammerhike@yahoo.com	NBATC President NBATC Supervisor of Trails
Old Dominion ATC:	Mark Heede David Grimes	804-364-1658 <a href="mailto:odatc.trailmaint@gmail.com">odatc.trailmaint@gmail.com</a> 804-833-8974 <a href="mailto:odatc.president@gmail.com">odatc.president@gmail.com</a>	ODATC Trail Maintenance Supervisor ODATC President
Blue Ridge Parkway NPS	Kurt Speers	540-784-0301 <a href="mailto:kurt_speers@nps.gov">kurt_speers@nps.gov</a>	Park Ranger for our area

## SECTION LEADERS

<b>Appalachian Trail</b>			
<b>Reeds Gap to Maupin Field (1.7)</b>	<b>Jerry &amp; Etta Burch</b>	<b>757-488-9228</b>	<b>jerryoretta@msn.com</b>
	<b>Bruce Julian</b>	<b>757-484-0975</b>	<b>julianbm@verizon.net</b>
<b>Maupin Field to Gid's Spring (1.3)</b>	<b>Bill Rogers</b>	<b>757-484-6001</b>	<b>pulaskiteer@netzero.net</b>
<b>Gid's Spring to Three Ridges Peak (1.3)</b>	<b>John Davis</b>	<b>757-641-0287</b>	<b>jdavis@armadahoffler.com</b>
<b>Three Ridges Peak to Chimney Rock (1.7)</b>	<b>Scott Hilton</b>	<b>757-625-6025</b>	<b>sdhilton@hotmail.com</b>
<b>Chimney Rock to Flat Rock Overlook (0.5)</b>	<b>Jim Newman</b>	<b>757-867-6688</b>	<b>Jimnewman55@cox.net</b>
<b>Flat Rock Overlook to Harper's Creek (1.6)</b>	<b>Ken Lancaster</b>	<b>757-589-1402</b>	<b>klancaster@mzb-usa.com</b>
<b>Harper's Creek to Mau-Har Trail (0.9)</b>	<b>Bill Buck</b>	<b>757-846-1125</b>	<b>bbuck_tatc@cox.net</b>
<b>Mau-Har Trail to Tye River (1.7)</b>	<b>Jim Sexton</b>	<b>757-484-2827</b>	<b>jts007@cox.net</b>
<b>Mau-Har Trail</b>			
<b>Maupin Field to Bottom Falls (1.5)</b>	<b>Ned Kuhns</b>	<b>757-552-0292</b>	<b>nedkuhns@cox.net</b>
<b>Bottom Falls to Junction A.T.(1.5)</b>	<b>Phyllis Neumann</b>	<b>757-566-4584</b>	<b>phyllisneumann@hughes.net</b>
<b>Fire Road</b>			
<b>Love Gap to Maupin Field</b>	<b>Bill Rogers</b>	<b>757-484-6001</b>	<b>pulaskiteer@netzero.net</b>
<b>St. Mary's Wilderness</b>			
<b>Cellar Mountain Trail</b>	<b>Paul Dickens</b>	<b>828-279-4304</b>	<b>psdicken@gmail.com</b>
	<b>Mark Wenger</b>	<b>757-253-0056</b>	<b>swfl1951@gmail.com</b>
<b>Mine Bank to Stream Crossing</b>			
<b>Mine Bank Trail (2.5)</b>			
<b>Bald Mountain Trail (2.4)</b>	<b>Mark Ferguson</b>	<b>757-564-0807</b>	<b>jmarkferguson@gmail.com</b>
<b>White Rocks Falls Trail</b>			

	<b>Bob Adkisson</b>	<b>757-627-5514</b>	<b>xingu29mysterian@hotmail.com</b>
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## **SAMPLE MAINTENANCE TRIP ARTICLE FOR NEWSLETTER**

The Fall Maintenance Trip and Family Campout is scheduled for October 13th-15th. This is the primary reason for the existence of our club, so we encourage all members to come out and work. There is something for everyone, from litter pick-up to installing waterbars. We will be camping in the group area at Sherando Lake. Please remember that the gate is locked at 10:00 p.m., so plan to arrive before then. We will get an early 8:00 a.m. start on Saturday. Be sure to bring lunch, work gloves and plenty of water. Chili dinner will be provided Saturday evening, but please bring a desert to share. Also, this year we would like to cut down on the amount of trash we generate. Please bring your own tableware. Finally, please SIGN-UP for this trip so that I can estimate how many crews to schedule, what tools to bring, and the amount of food to purchase. We want everyone to feel a sense of accomplishment and to go home well fed.

## **MAINTENANCE HOURS SPREADSHEET**

The maintenance hours are tracked on an Excel Spreadsheet. Hours are entered at least twice a year immediately after the main work trips. There are columns to track hours for AT-USFS, AT-NPS, Other USFS and Other-NPS. Separate columns are kept for driving time, education time and administrative time. When going through the sign-up sheets for each work trip, enter hours for the person according to where they worked on the trail. Add a row for new people who participate. To determine awards, copy the column from the total for the current year and "Paste special -Values" into the Totals at the beginning columns of the work sheet. This should recalculate total hours worked over the years. Note any people who are due new awards. Also, in order to keep the spreadsheet manageable, at the end of the year, delete anyone who has not worked in five years. Should they become active again, their hours may be retrieved from the old files.

# TRAIL MAINTENANCE AND CONSTRUCTION TASK HAZARDS AND RECOMMENDED SAFETY GEAR

Revised March 5, 2013

**Basic Safety equipment for all Trail work: Sturdy Boots, Work Gloves, Long Pants, and Appropriate Dress for the weather.**

**Maintain tools in good working condition; inspect tools and handles before leaving base camp; know your abilities and limits, take breaks before you are tired, and drink before you are thirsty.**

**Determine who in the crew has First Aid and CPR skills before leaving base camp. Communicate to the crew the individual responsible for transporting the First Aid kit.**

**Determine who in the crew has any special needs that could affect their safety: medicines, medical conditions, allergies, etc.**

✓	Trail Tasks	Likely Job Hazards	Recommended Safety Gear	Additional Comments
	Seasonal Hazards	Nettles, rattlesnakes, copperhead snakes, bee-wasp-hornet-yellow jacket stings, ticks, biting insects, chiggers, thunderstorms & lightning, sun exposure, heat stroke, heat exhaustion, hypothermia, dehydration and/or lack of adequate water, the many & varied hunting seasons	Gloves, boots, head covering, long sleeves. If desired: sun tan lotion, insect repellent (follow directions implicitly) Hydration	Poison ivy ALL year. Know who is allergic to bee stings and poison ivy. Stinging nettles. If you are subject to anaphylactic shock know that there is little to nothing that can be done for you in the field by a work crew. Leave ridge crests before a thunderstorm arrives. If you can hear Thunder you are close enough to be struck by lightning.
	Balds Clearing	Sharp Tools, back and arm strain, dehydration, loud noise (if using power equipment), lightening, overexposure to sun, rain, or wind	Gloves, boots, sun hat, sunscreen, wrap around eye protection, weed eater harness, and hearing protection (if using power equipment)	Drink at least two quarts of water per day, keep proper spacing between workers, and leave Ridgecrest during lightening storms.

✓	Trail Tasks	Likely Job Hazards	Recommended Safety Gear	Additional Comments
	Blowdown Removal and Brush Cutting (Trail & Fire Road Trimming) with Pruning Saw, Bow Saw, Loppers, other Hand Tools.	Sharp tools, loose footing, flying brush, poison ivy, nettles, bee stings, snakebites, nettles, limbs under tension, uneven ground, tripping on cut items. Also see 'Spring Poles.'	Gloves, boots, wrap around eye protection, shin guards (optional)	
	Carpentry	Sharp tools, splinters, flying nail, chips or sawdust, smashed fingers or thumbs	Gloves, wrap around eye protection	
	Chainsaw Use (Blowdown Removal, Tree Felling, etc.)	Severe, ragged cuts from the chainsaw, kickback, fire, back or muscle strains, falling trees or limbs, loud noise, gasoline fumes-oil and associated dangers, falling or rolling log pieces, wind blown sawdust, poison ivy, nettles. Also see: 'Log Work,' 'Spring Poles,' and 'Tree Felling,'	Gloves, boots, chainsaw chaps, hard hat with wrap around face protection and hearing protection, wrap around eye protection, maul, wedges, extra chain, long-sleeved shirt, long trousers, Sawyer's F/A kit, shin guards when using axe.	Take agency certification course, minimum two person crew, (one as a spotter), cool saw before fueling, keep saw tuned and chain sharp and tight. Recertify as required. Current CPR and F/A certificate required. Ensure clearance before using tools. Constant communication.
	Crosscut Saw Use (Blowdown Removal, Tree Felling, etc.)	Severe, ragged cuts from the saw teeth, back or muscle strains, falling trees or limbs, loose handles, falling or rolling log pieces, back or muscle strain, wind blown sawdust, chips from wedges, poison ivy, nettles. Also see 'Log Work,' 'Tree Felling,' and 'Spring Poles.'	Gloves, boots, hard hat, wrap around eye protection, maul, wedges, long-sleeved shirt optional, long trousers, chaps optional, Sawyer's F/A kit, shin guards when using axe.	Take agency certification course, minimum two person crew. Recertify as required. Current CPR and F/A certificate required. Ensure clearance before using tools. Keep handles tight. Constant communication.

✓	Trail Tasks	Likely Job Hazards	Recommended Safety Gear	Additional Comments
	Crush and Fill (Gravel making)	Rock shrapnel, splinters or broken tool handles, carpal-tunnel syndrome, working too close to other workers	Gloves, boots, shin guards, hard hats, long pants and sleeves, wrap around eye protection	Keep wrists rigid when swinging sledgehammer; keep proper spacing between workers. Ensure clearance before using tools
	Llimbing Blowdowns	Sharp tools, axe, saw, loppers. Flying chips/sawdust, uneven ground. Also see 'Spring Poles.'	Gloves, boots, hard hat, wrap around eye protection, shin guards when using axe.	Ensure clearance before using tools. If using an ax chop from opposite side of trunk; chop a limb from the outside of the notch with the trunk, never on the inside of the notch.
	Log Work (peeling, rolling, setting)	Sharp tools, slippery logs, rolling logs, back or muscle strain	Gloves, boots, shin guards (optional)	Keep back straight, lift with legs or mechanical advantage, and work in unison. Constant communication.
	Overhead and Uphill Forest Hazards	"Widow Makers" – live or dead broken or semi-broken limbs and other leaning, uphill, overhead, or above-shoulder-height hazard trees, limbs, tree tops, and also see 'Rigging (winch [grip hoist] or ratchet winch work).'	Gloves, boots, hard hat, wrap around eye protection, long-sleeved shirt, long pants, and rope or ratchet winch.	While hiking keep a sharp lookout for overhead and uphill hazards. Check for overhead and uphill hazards before settling down to take a break. <b>AVOID DANGER AREAS!</b> Widow makers may haphazardly and dangerously twist, turn, and bounce in almost any direction when cut or pulled. Use extreme caution. If in doubt, flag the hazard and walk away, leaving the work for a more experienced crew. Take photographs, if possible, and report such hazards and their locations to the Trails Supervisor.

✓	Trail Tasks	Likely Job Hazards	Recommended Safety Gear	Additional Comments
	Power Mowing and Power Weed Whacking	Loud noise, thrown debris, gas fumes-oil and associated dangers, roll over	Gloves, boots, wrap around eye protection, hearing protection, long pants, sun protection, use hard hat when power weed whacking.	Do not operate near other people, cool engine before fueling. Stop work when hikers approach.
	Rigging (winch [grip hoist] or ratchet winch work)	Frayed cable, improper attachment of load or anchors, standing in the “bite,” use of inadequate equipment (climbing hardware), heavy unwieldy overhead loads, cable hard to see, uneven-unstable ground, steep hillside work, bystanders	Gloves, boots, hard hats, wrap around eye protection, shin guards	Station lookouts, inspect equipment frequently, protect trees from damage, avoid improper use of winch (do not be seduced by the power of the winch). Ensure anchor trees or boulders are solid. Constant communication.
	Rock Work	Crushed extremities, slippery footing, back or muscle strain. Uneven ground, hillside work.	Gloves, boots (steel-toes optional), shin guards, hard hat	Keep back straight, lift with legs or mechanical advantage, and work in unison. Constant communication.
	Sharpening	Sharp tools, flying filings	Gloves, file handle, knuckle guard, wrap around eye protection.	
	Shelter Cleaning	Dried rodent urine and feces that may become airborne as you sweep. Spiders.	Gloves, masks	Do not raise dust when sweeping. Disinfect hands after removing any garbage and sweeping shelter. Be careful handling garbage. When emptying fire ring be careful of sharp tin cans and broken glass.

✓	Trail Tasks	Likely Job Hazards	Recommended Safety Gear	Additional Comments
	Side-hill Trail Construction	Back or muscle strain, blisters, carpal-tunnel syndrome, sharp tools, slippery footing, steep slopes, working too close to or walking by others,	Gloves (optional), boots, shin guards, wrap around eye protection.	Keep wrists rigid, place on foot in front of the other and keep back straight when swinging or pulling digging tools. Keep proper spacing between workers. Be aware of approaching hikers.
	Spring Poles	Sharp tools, loose footing, flying brush, poison ivy, bee stings, snakebites, nettles, limbs under tension, uneven ground, tripping on cut items	Gloves, boots, wrap around eye protection, shin guards (optional)	Work under supervision of those experienced with spring poles. Make slow, shallow cuts on the inside of the bent spring pole. Be very careful of bent branches (Spring Poles) under stress. Have soap and wash water available; know who is allergic to bee stings and poison ivy.
	SST (privy) Cleaning	Fumes from pit and cleaning agents, bacteria, protozoa. Dried rodent urine and feces that may become airborne as you sweep. Spiders.	Rubber or latex gloves, mask	Air SST well before cleaning; prop door open while cleaning. Wash-disinfect gloves before removing and hands after removing gloves. Use extreme caution when cleaning SST.
	Swing Blading (Weed Whacking)	Sharp tool may bounce off hidden rocks and limbs. Airborne particles. Also see 'Seasonal Hazards.'	Boots, gloves, wrap around eye protection. Hardhat (optional)	Maintain safe distance between workers. Be aware of approaching hikers. Have soap and wash water available; know who is allergic to bee stings and poison ivy.

✓	Trail Tasks	Likely Job Hazards	Recommended Safety Gear	Additional Comments
	Tool Carrying	Sharp tools, ragged cuts or punctures, serious injuries if carrier stumbles, lost blade covers	Boots, gloves	Carry tools on the downhill side of the trail. To prevent injury avoid overextending the elbow. Keep protective covers on tools. Any tool carried on a pack must be secured against movement if the maintainer stumbles. Maintain safe hiking distance between maintainers. Be especially careful of wet-slippery rocks and leaves, at stream crossings, and on rock staircases. Sawyers follow certification training and monitor helpers so they follow the same guidelines.
	Tree Felling (non-motorized)	Falling trees and limbs, hollow trees, bee stings. Also see Rigging (winch [grip hoist] or ratchet winch work)	Gloves, boots, hard hat, wrap around eye protection, ropes or winches, wedges, maul, shin guards if using winch.	Two-person crew, minimum (one as spotter). Know who is allergic to bee stings and poison ivy. Constant communication.
	Water Bar Construction – Log	Also see: 'Log Work' and 'Tree Felling,' 'Chain Saw,' 'Crosscut Saw.' Heavy, slippery log moving, dragging, carrying. Uneven ground. Digging out rocks. Making gravel. Peeling bark with sharp tool. Poison ivy, nettles, infringing brush, hikers, airborne particles, back or muscle strain	Gloves, boots, hard hat, wrap-around eye protection, shin guards. Long-sleeved shirt optional.	Slow, careful, methodical work. Constant communication. Have soap and wash water available; know who is allergic to bee stings and poison ivy.

✓	Trail Tasks	Likely Job Hazards	Recommended Safety Gear	Additional Comments
	Water Bar Construction – Rock	Heavy, shifting rocks, pinched hands-fingers-feet, out of control rocks, uneven ground, moving rocks on hillsides. Digging out rocks, emplacing rocks. Making gravel. Poison ivy, nettles, infringing brush, hikers, airborne particles, back or muscle strain	Gloves, boots, hard hat, wrap-around eye protection, shin guards. Long-sleeved shirt optional.	Slow, careful, methodical work. Constant communication. Have soap and wash water available; know who is allergic to bee stings and poison ivy.
	Water Bar Maintenance	Poison ivy, nettles, infringing brush, hikers, airborne particles,	Gloves, boots, hard hat, wrap-around eye protection	Be cautious of encroaching brush on trail edges and in drainage channel.

**This date I have given a safety talk including those items marked above as they pertain to today's work trip.**

## Printed Name and Signature

Date

**This date we, the undersigned, have attended a safety talk including those items checked above as they pertain to today's work trip.**

**Printed Name:**

**Signature:**

Handwriting practice lines for the word 'apple'.

apple

## PLACARD FOR VEHICLES

# TRAIL CREW

# TRAIL CREW

### Directions to Sherando Lake Campground:

Head West on Interstate 64.  
Take Exit 96, Route 624 South.  
At Lyndhurst, take Route 664 South.  
The entrance to the campground is about  
12 miles down Route 664 South on your right.  
Go to the group camping area at the back  
of the campground.

Remember the gate to the campsite closes  
every night at 10 PM and reopens at 6 AM  
the next day.

If traffic is heavy, take the Interstate 295 bypass  
around Richmond.



