



Trail Maintenance Manual

7th Edition, Revised
New York-New Jersey Trail Conference, Inc.

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INTRODUCTION

THE INDIVIDUAL MAINTAINER

The New York-New Jersey Trail Conference was formed in 1920 "to coordinate the efforts of walking organizations in the States of New York and New Jersey, and to build and maintain trails and shelters in these states"

The Conference is dedicated to keeping each trail in its charge easily passable, clearly and consistently marked, in a safe condition, and harmonious with its surroundings. As an individual trail maintainer, you have volunteered to assist the Conference in its most important mission, and you have become responsible for:

Patrolling your trail section a minimum of two times a year.

Reporting trail conditions, work accomplishments and problems a minimum of two times a year in writing.

Clearing your trail of natural obstructions and litter.

Blazing your trail according to Conference standards.

Protecting the trail from erosion and misuse.

Educating hikers about trail use and preservation.

Your only reward will be our thanks and knowing that a job well done allows others to share the pleasures of hiking.

TRAIL MAINTENANCE ASSIGNMENTS

Conference trails are assigned both to its member clubs, for sub-assigning to their individual qualified members, and to qualified individual Conference members. To be an individual trail maintainer, you must be either a member of the New York-New Jersey Trail Conference itself, or a member of a club that maintains Conference-assigned trails. Throughout this manual, individual maintainers, club-affiliated or unaffiliated, will be referred to as "maintainers."

If you are a maintainer affiliated with a member club, you will be supervised by and report to your club's Trails Chair, who, in turn, reports to the Conference-designated supervisor for the region encompassing your trail segment. If you are an unaffiliated Conference member, you will be supervised by and report to the Conference-designated regional supervisor. Throughout this manual, "supervisor" will refer to either of these positions.

Your supervisor is responsible for assigning your trail segment, teaching you the basic skills, and monitoring your performance. Any problems or requests should be addressed to your supervisor, who, in turn, will convey them, if necessary, to the appropriate Conference authorities. Under no conditions should an individual trail maintainer assume responsibility for any trail or part thereof that has not been explicitly authorized by a Conference supervisor. The performance of all maintainers and supervisors is monitored

and evaluated by the area Trails Chair. Trail sections that are not reliably maintained in accordance with the standards prescribed in this manual will be reassigned. Changes in maintainer assignments and supervisory responsibilities are also reviewed and approved by the area Trails Chair.

To handle trail projects that require more labor and experience, the Conference has regional Trail Crews, each with a crew chief. These Trail Crews work year-round on trail rehabilitation/construction projects identified and targeted by the Trails Committees through the input of the individual maintainers, supervisors, park employees and the public at large. Individual maintainers are also invited to contact their regional Trail Crew through their supervisor to request help for major problems. Please recognize that there may be a waiting list, with priorities set by the Trails Committees.

If for any reason you find that you cannot continue proper maintenance of your trail, please notify your supervisor. We appreciate your efforts and understand that continuing as a maintainer may not be possible. We must know, however, when a trail is not being maintained so that we may assign another maintainer.

PATROLLING

HOW MUCH

Individual trail maintainers are usually assigned only as much trail as can be comfortably cleared in a day. Depending on terrain and density of vegetation, this distance is anywhere from 2 to 5 miles. If the mileage you have been assigned is too much or too little, inform your supervisor.

WHEN

- 1. Patrol as soon as possible in the spring and after the leaves are down in the fall.
- 2. Patrol in midsummer if your trail has sections of high grass, brambles or heavy undergrowth. Trails open to the sky will require more maintenance than those in mature forests with high canopies. Paths through open meadows and swamps need late summer clearing. Check for blazes obscured by foliage.
- 3. Patrol more frequently if heavy use and litter are problems, or if the trail is on private land. Shelters attract litter.
- 4. Patrol as soon as possible after severe storms, fires, or periods of heavy use.

SPECIAL SITUATIONS

Private land: If a trail crosses private land, it is especially important to preserve the good will of the owner. It may be necessary for you to make more frequent trips to keep the trail open and litter-free. Any special requests from the owner (e.g., to close the trail during hunting season) should be referred to your supervisor.

Joint trails: Separate trails occasionally merge and follow the same route before dividing again. Through your supervisor, contact the other maintainer(s) of a joint trail to establish a mutually agreeable system for patrolling and maintaining such sections. The standards for blazing joint trails are set forth on page 22, item 10.

REPORTING

Even though you may find little or no clearing, blazing or litter pick-up to perform on your regular patrol, you are still performing an invaluable service: monitoring trail conditions. The Conference must have current and reliable information for hikers. Consequently, it is imperative that you complete the Conference Trail Maintenance Report Form and return it to your supervisor each spring and fall by the specified deadline. This is perhaps the least glamorous part of your volunteer commitment, but it is an integral and essential one. Reporting forms will be provided to you by your supervisor. You may also find them online at the Trail Conference's web site, www.nynjtc.org.

You should keep a trail maintenance diary or log in which you record dates, locations, conditions, work done, time spent and work pending. Such a document will help refresh your memory when it comes time to complete your trail reports. The number of hours spent on the trail is an important piece of information requested on the report form. Aggregate volunteer hours are used to document the extent of our activities. This information is particularly important for obtaining governmental support, private funding, and insurance coverage.

Registers: These log books are used to record trailuser comments and to compile trail-use figures. The installation and upkeep of authorized register boxes are the responsibility of the local trail maintainer. Register box replacement costs will be reimbursed. Log books are provided by the Trail Conference. Maintainers provide pencils. Forward completed register books to the Conference office, and replace register boxes that are missing or damaged.

Take a fresh, objective look at the trail each time you venture out. Use the standards given in this manual – as well as your common sense – to judge the physical condition and aesthetic appeal of your trail. Always be alert for ways to improve the trail.

Assess the trail for possible hiker safety issues, such as hazardous trees, confusing or missing blazes, loose or broken components of bridges or other structures, winter ice conditions, etc. If necessary, report these issues to your supervisor.

CLEARING

FQUIPMENT LIST

Select the equipment you will need for a specific outing from this list (see illustrations).

Pack: for carrying other gear.

Work gloves: Should have at least a leather palm for comfort and durability.

Long-handled lopping shears [1]: Pruning shears for limbs over '/2-inch diameter; 24-inch handles are lighter and suitable for most tasks; 30-inch handles provide more leverage and require less bending.

Bow saw [2]: For large branches and blowdowns; 24-and 36-inch blades will suffice for most tasks.

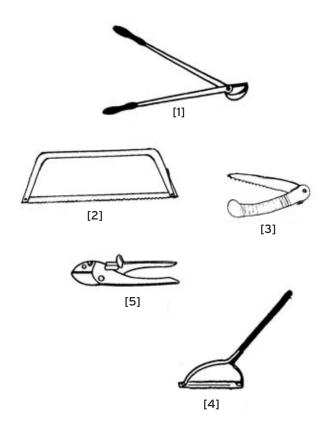
Pruning saw [3]: 10-inch for most pruning work. Folding style is very handy.

Weed whip [4]: Long-handled, scythe-like tool with 12-inch serrated blade, to be swung through vegetation at ground level; before using, replace nuts with lock-nuts, or use Loctite or a similar compound. Keep two hands on the handle at all times. Do not use near other people.

Hand pruning shears [5]: Keep handy for thin branches, stalks and vines.

Plastic bags: for litter; heavy duty is best.

Surveyor's tape: For temporary blazes.



Axes are not recommended for routine trail maintenance. Power tools fall within the province of the Trail Crews, NOT the individual trail maintainer. Edged and toothed tools are more effective, less tiring, and much safer if they are kept sharp.

STANDARDS AND METHODS

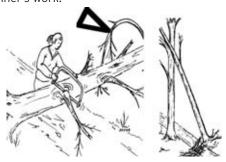
Ideally, hikers should find a path cleared to a width of 4 feet and a height of 8 feet. They should be able to walk with backpacks without touching surrounding growth. This width allows side growth of approximately 1 foot before needing re-cutting.

Where a trail receives little use by backpackers, these measurements may be adjusted downward, with your supervisor's prior approval.

If you are working alone, you will find that it is difficult to lop, clear blowdowns, blaze and pick up litter all on one trip. Gradually, you will develop a method that suits you. For a start, carry your loppers, saw and litter bag on every trip. Keep the loppers in hand for frequent use, and keep the other tools handy in your pack.

Vegetation: Cut all branches as close as possible to the trunk and all main stems or trunks as close as possible to the ground. If a small sapling is growing at the immediate edge of the trail, cut it off at ground level so that no stub protrudes. If a branch originates from a tree a step or two off the trail, step off the trail and cut the branch off next to the trunk.

Branches cut some distance from the trunk, and trunks cut some distance above the ground, are safety hazards to the hiker and tend to develop suckers or side branches, which eventually multiply the maintainer's work.





CINCORRECT

At first, it takes some steeling of the will to cut laurel, rhododendron, hemlock and other live growth, but if the trail is to exist, the clearing must be done. Throw all clippings and cuttings off the trail – with the cut ends away from the trail – and out of sight if possible.

Blowdowns: Remove all fallen trees. If they are acting as a waterbar or checkdam, use the fallen tree to construct one properly. Our trails are part of the fire defense system and act as firebreaks. Fallen trees can provide a path for fire to jump across the break. In some instances, blowdowns are left in place to deter illegal use by mountain bikes and off-road vehicles. Consult with your supervisor to determine what course is appropriate. If left in place, trim the branches and possibly notch the trunk to make foot passage easy and safe.



A 24-inch bow saw can handle most blowdowns. First, determine if the longest branch/trunk is under compression. You may have to prune smaller branches to relieve tension so that your saw will not bind. Second, check to see if the blowdown is resting on a smaller

tree, which could snap back dangerously when the larger one is cut. Finally, select your spot for the cut so that one cut will suffice. Roll the cut log aside. If there are many large obstructions or a massive blowdown that you cannot handle, ask your supervisor for help.

Fire Rings: Unauthorized circles of stone and ashes should be destroyed by heaving the stones into the woods in different directions and sweeping away the ashes. If possible, cover the area with leaves and sticks. Removing all traces of the fire ring discourages repeated use of the area. Make a special effort to discourage all fire rings in hemlock groves, where fire will travel quickly along the flammable surface and the underground roots.

Litter: Litter is the bane of the trail maintainer in some areas. The best time to do a thorough cleanup is in late summer, when litter is not yet obscured by fallen leaves. Pick up the litter, using heavy work gloves, and carry it out in heavy-gauge plastic bags. You can make the work easier by tying the bag to your pack frame or by carrying it out in a plastic garbage container fastened to a pack frame.

Do not leave litter at the trailhead. Place it where trash pickup will be made, or bring it home for neighborhood pickup. If you have an unusually large amount of litter that you cannot handle alone, contact your supervisor about organizing a cleanup day; there are many local groups that perform this kind of activity as a community service.

Shelters: If there is a shelter on your trail, keep it free of litter and be sure that any side trails to water and privies are well marked. Report any needed structural repairs to your supervisor. In some cases, shelters have a Conference-designated caretaker who assumes these and other responsibilities.

Waterbars: Waterbars are logs or rocks placed diagonally across a sloping trail to control erosion from water. Clear them of debris on each trip, especially after the leaves have fallen. When needed, you should scrape the uphill side to restore the original trench depth. The discharge end must also be kept clean to ensure free-flowing runoff. Right-angled checkdams are intended to hold back soil. Do not clear them out. Add additional ones if necessary.

Other construction: Check steps, bridges and other construction for signs of deterioration or damage. Repair what you can, and report major problems to your supervisor.

BLAZING

EQUIPMENT LIST: PAINTED BLAZES

Select the equipment you will need for blazing with paint from this list:

Pack to carry equipment

21/2-inch paint scraper for preparing trees for blazing

2-inch foam brush or 1-inch bristle brush for main blaze

1-inch foam brush or 1/4-inch bristle brush for smaller blazes within the main ones

1- or 2-inch brush for neutralizer

Stencils cut to blaze size and shape – particularly useful for small inner blazes

Small screwdriver to open cans and tighten screw on paint scraper

Square plastic food storage container with tight fitting top or small pail

Can(s) of appropriately colored paint

Rags

Small plastic bags for used equipment

EQUIPMENT: OTHER TYPES OF BLAZING

Metal or plastic tags

Hammer with claws for removing nails

11/2-inch galvanized steel nails

Staple supplies (under special conditions)

STANDARDS FOR PAINTED BLAZES

The standard Trail Conference blaze is a painted upright rectangle 2 inches wide by 3 inches high for all trails except the Long Path (2x4 inches), the Appalachian Trail (2x6 inches) and the Highlands Trail (3-inch diamond). Some trails may have a smaller design in a contrasting color within the main rectangle, which is usually white. Such special shapes must be approved by the Trails Council. Your supervisor will inform you if your trail has a special blaze.

OTHER TYPES OF BLAZING

Some trails have "tags" of a designated color and/or design rather than painted blazes. These are used when the local authority has specifically designated such a tag as the official blaze. In some cases, these are the preferred type of blazes. Use of such tags must be approved by the landowner and your supervisor. Following is an example of such a blaze:



(white type on red)

The tags may be either metal or plastic. Wherever the use of either paint or tag blazes is a viable option, the Trails Chair, in consultation with the area supervisor, will make the determination as to which method is most appropriate for each individual situation.

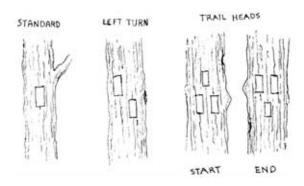
Your supervisor will tell you how to obtain or make such tags if they are authorized for your trail. Tag blazes are installed as if they were painted blazes, using $1^1/2$ -inch galvanized steel nails, one at the top and one at the bottom. Leave 1/2 inch of space between the tree and the tag to allow for growth.

Recently, plastic tags with reflective paint qualities have been used in some parklands to aid search and rescue teams following trails after dark with flashlights.

STANDARDS FOR ALL BLAZING

Alert Signals: Indicate abrupt changes of direction (45 degrees or more), or points where hikers should be especially alert. Use *two* standard blazes, one above the other and 2 inches apart; the *upper* blaze should be clearly offset 1 to 2 inches in the direction of the turn.

Trailheads: The trail termini are marked to indicate the start or finish of a trail. The symbol to indicate the start of a trail is two blazes side by side with a third blaze 2 inches above and midway between the first two. The end of a trail is indicated by locating the third blaze below the first two (see illustration).



Type of paint: Oil and latex-based paint used to be considered equally acceptable. However, latex exterior enamel (high gloss or semi-gloss) is now preferred. Besides the obvious advantages of easier handling and cleanup, latex-based paints can also be readily trimmed with a scraper and painted over. These characteristics are important because blazes do have to be repositioned, reshaped, eliminated or have their color changed.

Colors: Your supervisor will tell and show you what color paint to use when you assume responsibility for your trail. Do not change the color or blaze configura-

tion for any reason without permission. Avoid darker or lighter color variations. The Long Path (LP) and the Highlands Trail (HT) have distinct, specially formulated colors. See www.nynjtc.org/committees/trailscouncil/index.html for recommended paints.

In addition to the color of the main blaze, you will need neutralizing paint to eliminate some blazes and trim others. Select colors to match the tree bark. Almost all bark is a shade of gray or brown.

Spray paint can be used as an effective neutralizer, as it allows blending and feathering to give a mottled appearance that is less visible than the sharp edges achieved with a brush. One can of gray and one can of brown make a good combination.

Side trails: Check with your supervisor to see if you are responsible for blazing side trails to views, shelters, etc. Side trails along the Appalachian Trail are blazed with blue paint.

Details of Blazing:

- 1. Appearance is extremely important! Blazes should be the proper size with squared-off corners, without gaps or drips. A blaze that has expanded as the tree has grown should be trimmed back to size with neutralizing paint or scraper.
- 2. Blazes should be at or near eye level whenever possible. Remove obscuring foliage with pruners.

- 3. Blazes should contrast with the tree. Try to use darkbarked trees for lighter colors and light-barked trees for darker colors.
- 4. Don't overblaze. The hiker standing at or a few paces beyond a blaze should see the next blaze ahead, but not more than two. On straight trails, blazes every 100–250 feet are sufficient; on road sections, blaze every other utility pole.
- 5. Don't underblaze. You will be more familiar with your trail than will the first-time hiker. Don't assume others know the way!
 - a) Blaze more frequently in places where confusion may result if markers are absent.
 - b) Be sure blazes are clearly visible on both sides of road crossings.
 - c) Blaze trailheads clearly. Finding the beginning of a trail is often difficult for a hiker new to the area.
 - d) Blaze field crossings along an edge adjacent to woods, or at least be sure a blaze is visible from across the field. If necessary, use a post (see below).
 - e) Blaze clearly in all directions at a trail junction.
 - f) At turns, blaze before, not beyond, the turning point.
- 6. Whenever possible, avoid blazing on rock.

- 7. Avoid placing blazes on highway signs. If you must, blaze the post on the back of the sign, never the front.
- 8. Never blaze fences, walls or other construction on private property without the owner's permission.
- 9. Check the blazing past the point of your responsibility. For example, if your section ends at a roadway, cross the road and make sure the hiker can follow the continuation of the trail easily. Report any problems to your supervisor.
- 10. On joint trails, the blazes should be one above the other, in the same order, on the same tree. Do not alternate placement. The AT blaze has top priority, followed by the Long Path blaze, and then the others.

Don't simply keep repainting old blazes. Take a fresh, objective look at the trail each year; add or subtract blazes as the need arises.

Always think of the safety and informational needs of the hiker.

MFTHODS

Depending on your direction of travel, you will find that your trail looks very different. Plan to blaze in one direction. By doing so, you can concentrate on the optimal interval and positioning of the blazes.

Painting blazes is best accomplished on relatively dry, warm days. Do not paint when the temperature is below 50° or the humidity very high. If two-color blazes are required, be sure the base color is thoroughly dry before adding the inner design. This usually means coming back another day.

With your scraper, prepare the tree surface for blazing by smoothing an area just large enough for the blaze. The thicker and more ridged the bark, the more forceful your scraping needs to be. Be careful not to scrape too deeply. Do not scrape thin-skinned trees, like birch, because they will bleed and destroy the blaze. Once the surface is prepared, there are several painting methods that can be utilized.

Brush and Can: Use 1-inch-wide bristle or 2-inch-wide disposable foam brushes for painting the main blaze. Use smaller foam or bristle brushes for inner design. Always paint the last stroke in an upward direction to collect potential drips.

Squeeze Bottle: In place of open paint cans, you can use plastic squeeze bottles to apply paint to the brush in small amounts. This method is very neat, provided you squeeze carefully!

Stencil: A stencil can be used to ensure uniform blazes and for the inner design. Cut holes the exact dimensions of the blaze and/or design in pieces of the thin plastic side of a bottle such as Clorox bleach. Hold the stencil *firmly* against the tree and apply paint. Stiff, stubby brushes work best with this method. Use paint sparingly to avoid drips. This method may save time, but it is messy unless you devise a means of handling the wet stencil.

Foam Pad: Make the foam pad the exact size of the blaze, and dip it in a paint box constructed of wood or plastic. Smooth the paint on the pad by rubbing it on a small board or dowel attached to the inside of the paint box. Push (don't rub) the pad against the tree. Fill in any voids with the edge of the pad. Carry two or three extra pads, as the foam tends to lose its resiliency. This is a fast and sure method, with little cleanup needed.

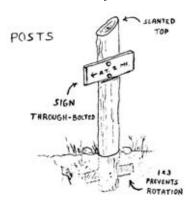
Keep rags or paper towels handy for drips and spills. Use plastic bags and twist-ties to pack out dirty rags, brushes and paint containers. You will need some handy method to convey and access your painting supplies as you are blazing. A sealable rectangular freezer container or a small pail with a handle are two good options.

SIGNS

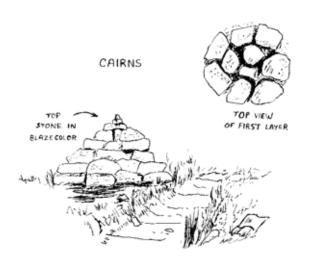
Special markings for trailheads, views, water, shelters and other purposes are desirable, but unfortunately subject to vandalism. Use all of them sparingly. Keep them neat and in character with their surroundings.

Signs: Keep signage to a minimum and in accordance with Trail Conference guidelines. Maintain existing permanent signs and remove unauthorized signs. Mount signs where they will be seen easily, but high enough on a tree to discourage vandalism. Use galvanized roofing nails for mounting.

Posts: Use a 4x4 or straight piece of blowdown. Coat the base with wood preservative, and cut the top at an angle to prevent rapid rotting. A length of 1x3 nailed to the post near the bottom will prevent rotation or easy removal once the post is buried. Use posts for blazing treeless areas and for barring vehicular access.



Cairns: Cairns are small rock piles used to mark trails in treeless areas. Place base rocks in a circle, fill in the center with smaller stones, and build to a point high enough to be seen above surrounding vegetation. Paint the top stone (6" or less) with blaze color.



PROTECTING THE TRAILS

TRFADWAY RFHABII ITATION

The principal problems that maintainers will face in keeping the treadway in good condition are: soil compaction from overuse, leading to cupping of the trail and consequent water erosion; deterioration of sidehill trails from natural sliding and wearing of the outer edges; and widening of routes through swampy areas and around obstacles, as hikers choose the path of least resistance.

Ideally, the treadway should be 24 to 30 inches wide, firm and dry. The techniques described below are the generally accepted methods for constructing or rehabilitating trails. However, these corrective measures may not be appropriate for the individual trail maintainer. Strength, time and skills that are not expected of the individual maintainer are required. If you have not worked on similar projects before, please contact your supervisor to request consultation and/or assistance. Even if you have the skills as well as the physical ability and time, you are still advised to consult your supervisor before proceeding. Make sure that whatever work you do looks as natural as possible and does not detract from a pleasant hiking experience.

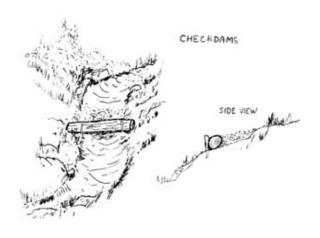
Waterbars: One choice for erosion control on steep, compacted slopes is a log with a minimum diameter of 6 to 8 inches, half of which is set below the surface, placed at a 45-degree angle across the trail. The downhill side of the log should extend completely off the treadway, so that water coursing down a cupped trail will flow off the route and not along it. The steeper the slope, the more waterbars are needed. An alternative to using a log is a tight line of stones embedded in the treadway at the proper angle. Waterbars require maintenance on each trip if they are to be effective (see illustration).



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Checkdams: In areas which show severe gullying, place rocks or stake logs across the trail at right angles. The dam will slowly catch earth washing down the trail and build the path up to its original height.

Waterbars and checkdams built with rock will last much longer than those built with timber, but they require specialized skills to construct. This work may be best suited for your local trail construction crew.



Drainage dips: On shallow slopes, a 1-foot-wide ditch, 6 to 8 inches deep, with soil mounded and compacted on the downhill side, will direct water off the trail. Angle the ditch across the trail.

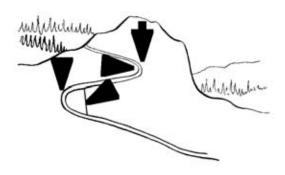
Sidehill restoration: If a sidehill trail gets compacted and cupped from overuse, erosion from water will accelerate, leaving an unsightly gully. Reshape the trail by pulling dirt from the outer edge back across the treadway. Rocks placed along the outer edges at intervals will direct hikers toward the center of the trail and discourage excessive wearing of the edge. The trail should be slightly outsloped so water runs off it and not along it (see illustration).



Log crib: In places where water runs downhill across the trail and threatens to cause a washout, stake a length of log across the watercourse just off the trail on the uphill side. Fill in behind it with rocks and earth. You may need trail crew assistance with repairing severe washouts

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Switchback erosion: Hikers walking downhill sometimes cut across switchbacks to shorten their route, which leads to severe erosion. Discourage shortcuts by blocking them with cuttings, logs or rocks. Do likewise anyplace where hikers are bypassing the trail and causing erosion, such as alongside steps.



Swampy areas: Hikers will naturally try to avoid mucky sections of trail by walking around them, resulting in ever-wider swamps. It may be possible to relieve wet conditions by digging a ditch 1 foot wide and 1 foot deep to direct water to another spot. If not, place flattopped stepping stones in the boggy area. Larger spots will require construction of log walkways; consult your supervisor. In case of severe overuse, a reroute may be necessary.

Bridges, stiles and steps: These are major construction jobs. Consult your supervisor if you feel they are necessary.

Relocations: Major reroutes must be approved by the area Trails Chair and the Trails Council. A major reroute is one which would be visible on the Trail Conference maps (e.g., more than 100 yards) or which requires the approval of additional property owners. Such major reroutes may require a trail crew or on-site supervision of a Trail Crew Chief. All minor relocations must be reviewed and approved by your supervisor after consultation with your area's Trails Chair. Insignificant relocations may be handled by the individual maintainer.

INCOMPATIBLE USES

Encroachment: Trails on private land are most subject to this danger, usually in the form of building construction. Trails may also be affected by power and gas line construction, horse trails, dumps, lumbering and other incompatible activities. Should you discover that the trail is in danger of being obliterated – the appearance of surveyor's stakes is an early clue – immediately notify your supervisor and the Trail Conference.

Vehicle use: Motorized off-road vehicles are not permitted on Trail Conference-maintained trails in New York or New Jersey. Motorized vehicles are illegal in all New York and New Jersey public parks and the Appalachian Trail corridor. Large rocks or posts at trailheads and an occasional large blowdown along the trail may discourage off-road vehicles. If you observe an off-road vehicle on the trail, do not confront the operator but try to get a license number or other

identifying feature and promptly report the incident to your supervisor and the land manager.

Poaching: Do not confront illegal wood-cutters, but try to get a license plate number and immediately report the incident to your supervisor and the local police.

Unauthorized trails: Should you discover a marked trail that you suspect has not been authorized by the Trail Conference, take no immediate action but report your findings to your supervisor as soon as possible.

EDUCATING HIKERS

Though your primary function is to maintain trails, you can further aid the Conference by encouraging hikers you meet to care for our natural environment. People will be naturally curious if they see you with your tools and gear. If they ask you questions, inform them in a friendly manner of the problems you encounter, and how hikers may be of help by staying on the trail in fragile areas, packing out what they pack in, and so on. Carry some Trail Conference brochures to hand out and wear clothing with the Trail Conference logo when you are working on the trail. You might even suggest to other hikers that they get involved in the work of the New York-New Jersey Trail Conference. Above all, teach by example – by keeping your trail in superb condition.

INSURANCE

Volunteers are responsible for maintaining their own health and liability insurance. In the event that a volunteer's personal policy coverage is insufficient, the Trail Conference, and/or certain public agencies on whose lands Trail Conference volunteers operate, may provide additional liability and accident coverage for the benefit of volunteers who may be injured or sued in the course of performing their assigned tasks on behalf of the Trail Conference.

Under the Trail Conference insurance policy, all volunteers working on behalf of the Trail Conference are provided indemnity against, and legal representation for, tort/liability claims (bodily and property injury to others) from third parties when volunteers are within the scope of their work (i.e., maintaining trails).

In order to be covered, you must be an officially appointed maintainer in good standing, be performing recognized trail maintenance work, and be reporting volunteer hours annually. Note that Trail Conference insurance coverage does not apply to family members or friends you may bring along – only the designated maintainer is covered.

The type of insurance coverage that you are provided with may vary depending upon the ownership and location of the land on which you maintain a trail (i.e., New York or New Jersey; federal lands; state or local land managing agency). You should have received a

Volunteer Accident Insurance Notification form when you were assigned a trail. If not, contact the Trail Conference office or your supervisor. In addition, volunteers in NY State Parks are required to submit a signed form each year in order to qualify for workers' compensation. These forms will be sent to you from the Trail Conference office.

ENVIRONMENTAL MONITORING

Maintainers need to be aware that maintenance activities can have positive and negative impacts on the environment and cultural sites. Well-designed and maintained trails avoid sensitive habitat, reduce erosion and limit any other user impacts to the treadway and immediate surroundings. Becoming informed about these issues will enhance your trail maintenance experience.

You may be able to reduce impact by:

- Taking every opportunity to provide a dry, stable treadway that prevents erosion and encourages users to stay on the trail
- Being extra sensitive to trail routing and maintenance in vulnerable areas, such as streams, wetlands and steep slopes
- Minimizing disturbance of wildlife (e.g., nesting birds, basking rattlesnakes, rare plants, etc.) and reporting all sightings of rare species to park personnel
- Avoiding removal of stones from foundations, walls and other historical structures
- Reporting all illegal use (motorized vehicles, poaching and collecting, etc.) to the land owner/manger (e.g., park agency) and requesting advice and assistance as necessary

 Becoming better informed through Trail Conference environmental programs. Check the *Trail Walker* and the Trail Conference's web site www.nynjtc.org for more information. 39 Notes

Edited by Thomas Casey, Daniel Chazin, Walt Daniels, Gary Haugland, Peter Heckler, Gail Neffinger, John Schoen, Ollie Simpson and Larry Wheelock.

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