



Guide for Trail Maintenance

INTRODUCTION

Volunteer maintainers are the backbone of the Long Island Greenbelt Trail Conference. Our paths would not exist without your efforts. Trail maintenance can be fun and satisfying, and we encourage you to enlist friends and family, so that many hands make light work. Thank you for caring and for helping us!

Our goals are to make all of our Greenbelt Trails:

- Environmentally sustainable
- Easy to use and inviting
- Clearly and consistently marked
- Safe and free of impediments

Don't be daunted by the detail and seeming complexity of this manual. Most of the tasks the average maintainer performs are straightforward, common-sense work. We have tried to make the instructions as complete as possible so that you have a reference for every question or contingency. Rather than trying to complicate your lives, we hope the techniques and procedures outlined here will assist you, lead to more accurate reporting, and help us respond more efficiently to problems.

Much of the material in this booklet is adapted from the New York-New Jersey Trail Conference's Trail Maintenance Manual.

RESPONSIBILITY FOR MAINTENANCE

Conference Coordinator: The overall coordinator is responsible for:

- Keeping a master contact list of maintainers and distributing it to all maintainers
- Keeping a central record of all work accomplished
- Maintaining and updating adopt-a-trail agreements with land-managing agencies
- Ensuring coverage for all of our trail segments
- Notifying Trail Coordinators of problems reported to the Conference.

Trail Coordinators: Coordinators of each trail are responsible for:

- Ensuring coverage of each segment of the trail
- Organizing work crews, as necessary, for projects too large for individuals
- Reporting activity and problems to the Conference Coordinator

Maintainers: Our individual maintainers are responsible for:

- Clearing a trail of natural obstructions and litter
- Helping to protect a trail from erosion
- Observing and reporting on conditions and problems
- Blazing trails according to Conference standards (Note: Blazing may be assigned to special crews for each trail. See section on Blazing.)

For ease of maintenance, we have broken our trails into sections of varying lengths, depending on logical boundaries, such as crossroads; terrain; and the density of vegetation. Individual maintainers should take on only as much trail as they can comfortably clear in a day's work, usually one of these sections.

Ideally, we try to have more than one maintainer assigned to each section to ensure more frequent coverage and to lighten the load for each volunteer. You may choose to maintain on your own or to work in pairs or groups.

In no circumstance should a volunteer assume responsibility for maintaining a trail without the approval of the LIGTC. For purposes of liability and coordination with land-managing agencies, we need to know who's out there and what they're doing.

THE BASICS

WHEN SHOULD I MAINTAIN?

1. Get out in the early spring as soon as possible, weather permitting.
2. Go in midsummer if your trail has sections of high grass, catbriar or rose bushes, or heavy undergrowth. Trails open to the sky will require more maintenance than those in mature forests with a high upper story. Paths through open meadows and swamps need late summer clearing.
3. Check more frequently if heavy use and litter are problems.
4. Check as soon as possible after severe storms, fires, lumbering activities, or periods of heavy use.
5. Try to deal with problems reported to you by the LIGTC as soon as possible.

WHAT IF I CAN NO LONGER VOLUNTEER?

If for any reason you find that you cannot continue proper maintenance of your trail, please notify your Trail Coordinator or the Greenbelt Office. We appreciate your efforts and understand the many reasons why continuing as a maintainer may not be possible. We must know, however, when a trail is not being patrolled so that we may assign another volunteer.

WHAT EQUIPMENT SHOULD I BRING?

Select from this list the equipment you might want or need for a specific outing.

- Pack or pack frame for holding gear
- Work gloves
- Loppers—long-handled pruners for limbs over 1" diameter; 24-inch loppers are lighter and suitable for most tasks, while 30-inchers offer more leverage and require less bending
- Some maintainers report that hedge trimmers work well on certain kinds of vegetation
- Bow saw for large branches and blowdowns; 24-36" will suffice for most tasks
- Pruning saw—a folding model is handy for larger limbs
- Hand pruners for branches, stalks and vines; bypass pruners are recommended over anvil types.
- Heavy duty plastic bags for litter
- Litter pickup stick with rubber grabbers or spikes

You will find, if you are working alone, 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 loppers, pruners and a litter bag on every trip. Keep the loppers in hand for frequent use and keep other tools handy in your pack.

Note that axes and chain saws are not recommended for maintenance work unless experts are handling these tools.

WHAT ELSE?

- Wear sturdy boots and clothing appropriate for the season.
- Use sunscreen.
- Bring a cell phone, if possible.

AND THE BIG QUESTION IS ...

... What about ticks? Yes, they can be an issue any time of year on Long Island.

Please read the separate section at the end of this manual carefully for more information and recommendations.

OBSERVING AND REPORTING

The Conference must have current information on trail conditions if it is to continue providing accurate information to hikers and prevent the deterioration of its network of routes. It is extremely important that you report on the condition of your trail at least twice a year, in the spring and fall, and more frequently if the need arises.

It is not a bad idea to keep a trail diary, a notebook in which you record dates, trail conditions, work done and work that needs doing. This will help you establish a pattern of work and refresh your memory when it comes time for you to report.

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 of improving the trail.

The most efficient way to report your work is through an **e-mail** to your Trail Coordinator, with a copy to the Conference Coordinator. Include:

- The date of your work
- The segment of trail you covered
- The amount of time you put in (We track volunteer hours for reporting to park agencies.)
- The nature of the work you performed
- Any problems you encountered or work that needs a crew

CLEARING STANDARDS AND METHODS

Ideally, hikers should be able to walk with packs without touching surrounding growth. A 4-foot width allows side growth of approximately 1 foot or more before the next clearing. Likewise, trim vegetation vertically to a clearance of about eight feet.

VEGETATION

1. Cut all branches as close as possible to the trunk and all main stems or trunks as close as possible to the ground.
2. If a small sapling is growing at the immediate edge of the trail, cut it off at the ground.
3. If a branch encroaching on the trail comes from a tree a step or two off the trail, step off the trail and cut the branch next to the tree trunk. Branches cut some distance from the trunk, and trunks cut some distance above the ground, are not only safety hazards to the hiker but tend to develop suckers or side branches and eventually multiply the maintainer's work.
4. Throw all clippings and cuttings off the trail, out of sight if possible.
5. Check for blazes obscured by foliage, and trim if necessary.
6. When clearing trail tread, don't simply cut woody plants at ground level, as later compaction on the path might create tripping hazards. Remove roots and stumps; when cutting, leave some stem or trunk for leverage. A sharpened pick mattock or Pulaski tool helps to chop away at roots, but use carefully.

SLOWDOWNS AND BLOWDOWNS

When large trees fall across trails used solely for hiking, trim them down so that their trunks rest directly on the trail. On slopes, position them so they will aid in dropping water off of the trail and also act as an impediment to illegal ATV access. If the diameter of the tree is large enough to impede the progress of a hiker, then notch a 9 inch-wide step into the trunk. A trail designated for use by the physically challenged or shared with wheeled vehicles must be totally cleared.

A 24" bow saw will enable you to handle most blowdowns. Before cutting:

1. Check to see if the blowdown is resting on a smaller tree, which could snap back dangerously when the larger is cut.
2. Check which side of the branch is under tension, so that your saw will not bind. You will have to saw some branches from above and some from below.

3. Judge the best point on the log to make the cut. Usually, one cut will suffice, after which you can roll or lever the blockage from the trail.
4. If there are many large obstructions or a massive blowdown that you cannot handle, ask us for help.

FIRE RINGS

Circles of stone left by campers and picnickers in unauthorized areas should be destroyed by heaving the stones into the woods in different directions and sweeping away the cold ashes. If possible, cover the area with leaves and sticks. Removing all traces of the fire ring often discourages repeated use of the area.

LITTER

Litter is the bane of the trail maintainer in some areas. The best time to do a thorough clean-up is when litter is not yet obscured by foliage. Pick up the litter, using heavy work gloves or a trash stick, 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 a trash pickup will be made, or if necessary bring it home for neighborhood pickup. If you have an unusually large amount of litter that you cannot handle, contact your supervisor and ask to have your trail placed on the list for the next Conference Litter Day.

SHELTERS

Occasionally, you may encounter a makeshift shelter or clubhouse created by homeless people or kids hanging out. Report these to the LIGTC, which in turn will notify the relevant land-managing agency.

WATERBARS

Waterbars (see next section for a description) require maintenance on each trip if they are to be effective. Clean the outflow ditch of debris and sediment, especially after leaves have fallen.

OTHER CONSTRUCTION

Check steps, bridges and other construction for signs of deterioration or damage. Repair what you can, and report major tasks to the LIGTC.

PROTECTION AND REHABILITATION OF TRAILS

The most effective means of controlling erosion, a natural, constant process, is a well designed trail. When creating a trail, grades should always be kept as shallow as possible. Trails with steep grades are difficult to maintain. A well-designed trail takes advantage of natural drainage features, winds around and between trees and rocks, and follows natural benches. A slight downward slope of the trail tread allows water to flow across the tread.

When the water doesn't flow off the trail tread, and begins to cause a lot of damage, the LIGTC may get permission from the land manager to reroute the trail properly and restore the land damaged by the eroding trail. Otherwise, devices must be constructed on the trail to drop the water off the tread before it causes more damage.

The principal problems a maintainer 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 side-hill 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" wide, firm and dry. The techniques described below are the generally accepted methods for constructing or rehabilitating trails. Make sure that whatever work you do looks as natural as possible and does not detract from a pleasant hiking experience.

Waterbars: The first choice for erosion control on steep, compacted slopes is a log with a minimum diameter of 6 to 8", half of which is set below the surface, placed at a 45° angle across the trail. The downhill side of the log should extend completely off the treadway, so that water coursing down a trail will flow off the route and not along it. Use your judgment in determining how many waterbars you will need; the greater the slope, the more they are

needed. An alternative to using a log is a tight line of stones embedded in the treadway at the proper angle.

The downhill end should have a broad, flat-bottomed outflow ditch free of obstructions. Fan out the end of the outflow ditch to allow water to disperse and help keep it from clogging. If water falls or drops steeply off the edge of the trail, line the outflow ditch with rocks to slow the water and protect trailside soils from eroding.

Checkdams: In areas which show severe gullying, stake logs or place rocks 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.

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

Sidehill trail work: Sidehill trails are constructed by cutting, digging and pulling earth from the high side of the slope to the low side. The steeper the slope, the more excavation is needed. The trail should be slightly outsloping so water runs off it and not along it.

If the 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 outside edge at intervals will direct hikers toward the center of the trail and discourage excessive wearing of the edge. (Of course, rocks are in short supply on many of our trails!)

Log crib: In places where water running downhill across the trail threatens to cause a washout, stake a length of log across the affected spot just off the trail on the uphill side, and fill in the gaps with rocks and earth. Seek assistance for repairing severe washouts.

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

Swampy areas: Hikers will naturally try to avoid mucky sections of trail by walking around them. This leads to ever-wider morasses. In some cases, you may find it possible to relieve wet conditions by digging a ditch 1' wide and 1' deep to direct water to another spot. If not, place flat-topped stepping stones in the boggy area. Larger spots will require construction of a boardwalk; see your supervisor. In cases of severe overuse, a reroute may be necessary.

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

OTHER PROBLEMS

Encroachment: Trails near private land are most subject to this danger, usually in the form of yard waste thrown over fences. Also, utility or road work can occasionally disrupt a trail route. Should you discover that the trail is in danger of being obliterated—the appearance of surveyor's stakes is an early clue—immediately notify the Trail Conference.

Illegal activity: ATVs and off-road motorcycles are illegal on public lands and pose a constant threat to our trails. If you discover recent evidence of their presence, notify the LIGTC as soon as possible. Should you encounter illegal riders, DO NOT confront them. If you have a cell phone, call 911 and say you are reporting the ongoing activity to the county Park Police, giving your location as specifically as you can. Chances are that nothing will happen immediately, as these intruders are difficult to catch in the act, but reporting them creates a record of where the “hot spots” are.

Likewise, if you encounter dumping or illegal woodcutting in the act, note a license plate number if possible, and call 911 when it is safe to do so.

Posts: Posts are sometimes used when there are no trees to blaze. Unfortunately, they are subject to vandalism. If you need to replace one, use a 4x4 or straight piece of blowdown material. 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.

NEW TRAILS, RELOCATIONS AND ABANDONMENT

Proposed new trails and major reroutes must be approved by the Long Island Greenbelt Trail Conference and require permission from the relevant land-managing agencies.

Minor reroutes that extend more than a few feet from the original trail should also be reported to the Conference for approval.

After rerouting of a trail is completed or a trail is officially abandoned, the affected trail maintainer or blazer should obliterate all old blazes with neutralizing paint. Do not let them just fade away.

PLANNING AND CONSTRUCTING A TRAIL

New trail construction requires approval from land-managing agencies and the Trail conference and is best undertaken, at least in the initial stages, by several people, one of whom ideally should be a Greenbelt Board Member or Trail Coordinator. Do not cut new trails in any other circumstance!

1. The route should touch as many scenic views and points of interest as possible.
2. Ideally, it should pass through undeveloped land out of sight of buildings. If possible, avoid corridors of land less than 200' wide.
3. Choose the most erosion-resistant route. Avoid areas which will require heavy maintenance, such as bogs, thick underbrush and unstable slopes.
4. Avoid repeated stream crossings and other potential hazards when possible.
5. Flag the proposed route with surveyor's tape as you walk, then return to double-check the route. Obtain written permission as described above before proceeding further.
6. Cut the trail and do any necessary construction.
7. Blaze the trail, removing tape as you go.

CREW ORGANIZATION

Trail Coordinators and leaders of work crews should organize these groups for an efficient division of labor. Above all, do what's comfortable and equitable for all.

- Brief the crew on trail standards and maintenance techniques, if necessary.
- Assign each member a specific task. Rotate the work occasionally so no one person is overburdened.
- Decide on a logical order for completing tasks. For example:
 - Sawyers to clear blowdowns and large limbs.
 - Clippers to clear branches, saplings, and shrubs.
 - Dispersers to remove clippings and debris from the trail.
 - Painters to blaze as needed.
 - Litter crew.

EDUCATING HIKERS

Though your primary function is to maintain trails, you can further aid the Conference by helping the hikers you meet in the field to care more for our natural heritage. People will be naturally curious if they see you with your

maintainer's 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. Suggest that they, too, get involved in the work of the Long Island Greenbelt Trail Conference. Above all, teach by example—by keeping your trail in superb condition.

BLAZING

Clear, consistent marking is essential if our trails are to be safe and enjoyable for the general public. Currently, individual maintainers perform this function. However, the Trail Conference may choose to delegate this task to specific individuals or crews in the future.

TYPES OF BLAZES

The standard blaze:

The color, size and shape of blazes must be approved by the Long Island Greenbelt Trail Conference. The NY-NJ Trail Conference standard for blazes is a rectangle 2 inches wide by 3 inches high; we suggest a minimum of 3 inches high but prefer 4 inches.

In a few cases where trails run concurrently, such as at the Trails Information Center, a single blaze may employ two colors, one half over the other. This is not an ideal method. Also, some trails may have a smaller blaze within the main rectangle, though for the sake of simplicity we have not used such symbols in years.

Directional indicators:

Indicate abrupt changes of direction (45° or more), or points where hikers should be especially alert, with two standard blazes, one above the other and two inches apart. The upper blaze should be clearly offset 1" to 2" in the direction of a sharp turn. Blaze before the turn, not beyond it. Where there are no other intersecting trails and the direction of the trail is obvious, instead of using a turn blaze, paint a second reassuring blaze after the turn.

Trailheads:

Trailheads are marked to indicate the start and finish of a trail. The symbol to indicate the start of a trail is two standard blazes side by side with a third blaze 2" above and midway between the first two. The end of a trail is indicated by locating the third blaze below the first two. (This makes logical sense in the case of spur trails off main ones. For end-to-end routes or half-loops off main trails, "start" and "end" really depend on which way you're walking! Still, it's probably wise to distinguish one end from the other.)

SUGGESTED EQUIPMENT

Select from this list the equipment you will need for a specific outing:

- Backpack, canvas bag or tool belt to hold equipment
- Paint scraper, about 2-1/2", for preparing trees for blazing
- 1-2" brush for blazing (or paint box and foam stamp); brushes with bristles cut short and stiff give better control and sharper lines
- Open container or squeeze bottle of blaze paint
- Reserve container of blaze paint
- 1" brush for neutral paint
- Open container or spray can of neutral paint
- Reserve container of neutral paint, if using a brush
- Rags or paper towels and water
- Plastic bags and twist ties (or zipper-style bags) for used equipment and for saving paintbrushes
- Pruning shears
- Stencil cut to blaze size (optional)
- (When blazing the Paumanok Path) Paumanok Path logo markers, 2" aluminum nails and a hammer.

TYPE OF PAINT

Use gloss, or at least semi-gloss, exterior paint for durable blazes. Modern latex paints now are generally as good as oil-based, are much easier to handle, and clean up with plain water. They may, however, deteriorate more rapidly if used over oil paint or on creosoted poles, but the benefits of latex outweigh these few considerations.

For white blazes, use any true white, as opposed to off-whites such as “ivory” or “oyster.” For colored blazes, use bright shades, not pastels or dark tints.

Do not change blaze colors for any reason without permission.

In addition to the color of the main blaze, you will need a supply of neutralizing paint to eliminate old blazes and trim new ones in certain instances. Blend colors to the color of the tree bark so that the old blazes don't show in any way. Almost all bark is a shade of gray or brown.

BLAZING PROCEDURE

1. Blaze in one direction at a time. You'll focus better on the rhythm of the blazes and actually simplify your work.
2. Always blaze on the right side of the trail whenever possible.
3. After painting each blaze, look beyond to the next logical spot for a blaze, and walk directly to it. Again, keep in mind that one should see the next blaze ahead, but not more than two. (It can be helpful to have two people working together on blazing; a person walking ahead can easily discern whether a tree is appropriately close to the trail, and the person behind can direct the lead person to the optimal placement of the blaze.)
4. Prepare the surface to be blazed by smoothing the bark and removing loose material. For thin bark, use a paint scraper to smooth the surface. For rough bark, a small hatchet or heavy-bladed tool may help. Use the sharp blade of a lopping tool if nothing else is available. Be careful not to scrape through the bark and damage the tree! Then use one of the methods mentioned later in this section for blazing.
5. Whenever possible, avoid placing blazes on pitch pines. As their bark exfoliates, blazes can be quickly degraded or completely lost. In places where pitch pines are the only choice, consider checking the trail more frequently.
6. Blaze *live* trees. Dead ones may not be there the next time you visit. Also, large trees are preferable to small.

DETAILS OF BLAZING

1. Appearance matters! Blazes should be the proper dimension, with no gaps and no drips. Corners should be squared off. This is especially important in the pine barrens, where sloppy blazes can easily be mistaken for shield lichen at certain times of day.
2. Blazes that have expanded as trees have grown should be trimmed back by scraping or painting with a dark, neutral color.
3. Blazes generally should be at eye level or slightly above (figure six feet or so). On ascending or descending slopes, look ahead to the next logical spot for a blaze, and think where the eye falls first. That next blaze might be higher or lower.
4. Remove obscuring foliage with pruners. Avoid blazing low rocks or movable objects.
5. Blaze dark-barked trees whenever possible.
6. Don't overblaze. The hiker standing at or a few steps beyond a blaze should see the next blaze ahead, but not more than two. On straight trails with no side paths, blazes every 100-250 feet are sufficient; on road sections, blaze every other utility pole.
7. Don't underblaze. You are more familiar with your trail than a first-time hiker will be. Don't assume others know the way!
 - A. Blaze more frequently in places where confusion may result if markings are absent.
 - B. Be sure blazes are clearly visible on both sides of road crossings.
 - C. Blaze trail heads clearly. This is often the most difficult point for a hiker new to the area.
 - D. Try to route field crossings near the edge of woods to facilitate blazing, or at least be sure a blaze is

visible from across the field. If necessary, use a post.

E. Blaze clearly in all directions at a trail junction.

F. Always place a reassuring blaze a short distance after an ambiguous turn or after crossing another path. Think ahead.

8. Avoid placing blazes on highway signs. If you must, blaze the post on the back of the sign—never the front.
9. Never blaze fences, walls or other constructions on private property without the owner's permission. Be sure to remove old blazes if you are relocating a section of trail. *Gently* use a paint scraper and wire brush. If the blaze persists, a blending of different shades of brown and gray paint can be used to cover it.
10. **If blazing the Paumanok Path:** On the Paumanok Path, place logo markers at road crossings. As you approach a crossing or convergence of paths, a Paumanok Path marker and/or blaze should be distinctly visible and draw the hiker in the direction of the path. Markers should be installed with two 2" aluminum nails, top and bottom. Leave an inch between the head of the nail and the tree, to allow for the plant's growth. If there are blazes indicating that other trails use the Path, they should be distinct, separate, and below the Paumanok Path's white 2"X4" rectangles.
11. 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 trail easily. Report any problems to your supervisor.
12. Should you discover a marked trail that you suspect has not been authorized by the Conference, take no immediate action but report your findings to the Conference as soon as possible.
13. Don't simply keep repainting old blazes. Take a fresh, objective look at the trail each year; add and subtract blazes as the need arises.
14. Remember the importance of good blazing. Always think of the safety and comfort of the hiker.

BLAZING METHODS

Squeeze bottle:

A simple, effective technique is to use plastic squeeze bottles to apply paint to the brush in small amounts. This method is very neat, provided you squeeze carefully and do not squirt. A tool belt that can accommodate the diameter of the bottles is an ideal carrier.

Brush and can:

Use 1" wide brushes for painting main blazes and neutralizing old ones. Cheap throw-away bristle brushes are good; foam brushes do not hold up to rough treatment but are OK for touch-up work. Always paint the last stroke up to collect potential drips.

Rig up a carrier for open paint. As an example, consider a pail with a handle; inside, place paper cups holding 1 to 1-1/2" of blaze paint, dark paint for trimming or eliminating old blazes, and extra cups for brushes. Keep reserve paint in your pack.

Stamp and paint box:

Make a foam pad, or use a commercial paint 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 extra pads and plastic bags for used pads. This is a fast and sure method with little cleanup needed.

Spraying:

Tempting though they may be to use, spray paints do not work well for blazes. Drips, overspray and poor coverage are frequent. Please do NOT use spray paint for blazes. It IS acceptable for neutralizing old blazes after scraping.

Stencil:

Another alternative is to use a stencil, a piece of cardboard or other firm material with a hole the exact size of a blaze. Hold the stencil firmly against the tree and apply paint with a stiff, short brush. Use paint sparingly to avoid drips. Frankly, stencils can be messy and the results uneven. We do not recommend their use. However, especially

if you're new to blazing, a stencil isn't a bad thing to have in your pack as a double-check on blaze size as you work.

Cleanup:

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.

ADVICE ON TICKS

Ticks may carry diseases including Lyme disease, Rocky Mountain Spotted Fever, Babesiosis and Erlichiosis. You can greatly reduce the risk of contracting these diseases by preparing for your hike in advance. Wear light colored long pants, and light colored shirt and socks. Women's white knee-highs over socks or sock liners under socks are necessary from mid-summer through fall because tick larvae can travel through treated thick woven athletic socks. Always tuck your pants into your socks, and shirt into pants.

DEET based insect repellents have little effect on ticks, so use a repellent containing permethrin and follow the directions. The instructions on the aerosol can or pump spray bottle direct the user to apply the spray 4 hours prior to donning treated apparel. Spray both pairs of socks, sneakers, and pants. Treat the entire pants (not just from the knees down) because ticks occasionally grab on as high as mid-thigh level.

People with chemical allergies should seek medical advice regarding use of permethrin. Clear tape is useful for removing ticks from clothing. Also, quick wiping with a rag and isopropyl alcohol will remove large numbers of larval ticks from untreated surfaces.

Stay on paths and try not to brush against vegetation. Inspect for ticks periodically. If you see a tick on your clothing, pluck it off and flick it into the woods. They are very "grabby" creatures so it takes a very determined flick to get them off your finger. Immediately before re-entering your vehicle, check yourself and have someone check you for ticks.

To remove attached ticks, do not use petroleum jelly, a hot match, or other products. Use fine-pointed tweezers to grasp the tick at the place of attachment, as close to the skin as possible without crushing the tick. Gently pull the tick straight away from your body. According to the Center for Disease Control, if a tick is attached to your skin for less than 24 hours, your chance of contracting Lyme disease is extremely small. An itchy red spot may develop even if the tick was only attached to the superficial layers of skin for a short time.

Later in the summer, the Lone Star larval ticks hatch in large numbers and cause hikers to have mysterious bumps that itch for weeks. People have been calling them chiggers, but every sample sent to SC Vector Control has been identified as Lone Star ticks. As you walk through a portion of trail with dense lowbush blueberry plants, or high grass rubbing against your pant legs you may begin to notice that you are picking up splotches of red on your pants.

Look closely, and you will realize the splotches were comprised of hundreds of tiny individual creatures. If your pants are untreated, they will rapidly spread out looking for skin. After a short while, unless you look carefully, they will be so spread out that you won't see them. When, they land on treated pants, they rapidly crawl on top of each other to avoid the permethrin-treated cloth and literally drip off of your pants. When you return home always, remove your clothing. You may find hundreds of dead "specks" in your shoes, between layers of socks and in the outer creases of your clothing, but you won't get a single bite if you prepared properly. If you didn't treat your clothes properly, place them in the dryer for 15 minutes.

Periodically test for Lyme disease. Every day when you come home from the woods, check your entire body for ticks. You won't find them troubling if you understand them. Simply stated, they grab on anywhere from the shoe laces to mid thigh. They then start traveling straight up, looking for a place to attach. Looking for them and flicking them away has become almost an unconscious act. It took a while to develop a method for dealing with larval ticks, but it is effective. If you love to visit Long Island's beautiful natural places these extra precautions will not seem burdensome.