



Your Adventure Starts Nearby.

CREW LEADER HANDBOOK

A COMPREHENSIVE GUIDE FOR NCTA CREW LEADERS

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I. Objectives

The Crew Leader Handbook is designed to provide information for Crew Leaders organizing and overseeing projects on the North Country National Scenic Trail. This Handbook is intended as a compliment to the in-person North Country Trail Association Crew Leader training program, which is available to all volunteers looking to expand their skills sets and gain new leadership skills.



II. What is a Crew Leader?



OVERVIEW

The Crew Leader is responsible for organizing and leading crews in the field. In addition to knowledge about NCNST trail construction standards, the Crew Leader should be able to safely lead and motivate volunteers and have a good understanding of successful project planning and implementation. Crew Leaders must have a strong commitment to building sustainable trails and get satisfaction out of helping others have a good time while doing good work. Leading trail work volunteers entails teaching and supervising the technical tasks of a particular project while managing a team of people who typically bring a wide range of skills, experience and physical stamina to the crew.

CREW LEADER ROLES AND RESPONSIBILITIES

The division of Roles and responsibilities may vary from crew to crew, depending on the skill sets of the leader and members. Keep in mind that a Crew Leader does not need to do everything independently, but rather assess the needs and skills of the crew and organize the team to function in the most effective way possible.

A Crew Leader May:

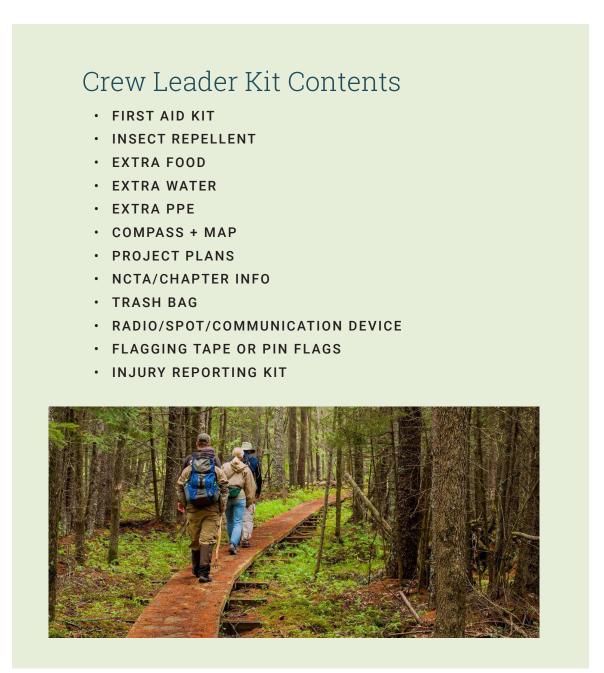
- Manage safety and risk
- Teach technical information and skills
- Connect Agency and Organization to volunteers
- Delegate assignments
- Motivate crew members
- Boost morale
- Make decisions
- Resolve conflict
- Teach stewardship information
- Represent NCTA

CREW LEADER QUALIFICATIONS

- Crew Leader Training
- CPR & First Aid
- Trail maintenance and construction experience
- Leadership and Group Management skills
- Chainsaw Certification (if applicable)

CREW LEADER KIT

It is essential for Crew Leaders to be prepared for each project. Careful planning will help to prevent problems from occurring on a project. Below is a checklist of suggested items that Crew Leaders should ensure the crew has available at each project:



III. Building Partnerships

WORKING WITH NCTA

North Country Trail Association (NCTA)

The mission of North Country Trail Association is to develop, maintain, protect and promote the North Country National Scenic Trail as the premier hiking path across the northern tier of the United States through a trail-wide coalition of volunteers and partners. NCTA is the primary partner of the National Park Service in the management of the NCNST.

Staff members are based either at the Association's national headquarters in Lowell, Michigan (HQ) or in the field (Regional Trail Coordinators (RTCs). Staff members manage the day-to-day operations and growth of the Association, following goals set by the Board. NCTA staff manage the organization's finances (including chapter accounts) and reporting needed to maintain our 501(c)(3) status. Staff members provide technical assistance, leadership, and coordination to the Association's volunteers, Chapters, Affiliates and partners. Staff members also provide various services and act as a central point of contact for members and the public and facilitate committee work with the Board of Directors.



Regional Trail Coordinators are the primary point of contact for local chapters and Crew Leaders. Crew Leaders may also work with other staff as appropriate. A full list of NCTA staff contacts can be found here: https://northcountrytrail.org/contact

NCTA Chapters

NCTA Chapters establish methods and set budgets, priorities and work schedules for their own activities and for the Trail in a designated geographic area. Chapters operate under the bylaws of the NCTA and the direction of the NCTA Board of Directors. Chapters must follow all Association policies for the management of the organization and all NPS policies regarding the management of the Trail. Chapters are accountable to the Board of Directors, and to designated staff acting on behalf of the Board.

Individual Chapters will determine how the Crew Leader fits into their organizational structure. Having trained Crew Leaders in your Chapter can be a great asset to the Chapter and can alleviate responsibilities from other members and volunteers. Contact your local chapter to learn more about becoming a Crew Leader and upcoming projects looking for leaders.



A list of Chapters can be found here: https://northcountrytrail.org/volunteers/ local-contacts

WORKING WITH AGENCY PARTNERS

National Park Service (NPS)

The NPS administers the North Country National Scenic Trail. It ensures compliance with federal laws and regulations, establishes agreements with federal and state partners, provides technical assistance and guidance as needed, supports a portion of the operational expenditures of NCTA, and provides volunteer tort and liability protection, safety equipment, tools and signs.

Other Federal, State and Local Land Managers

Most land management agencies have professional employees who have direct responsibility for trails, often as a portion of a larger recreation responsibility. Establish a working relationship with these representatives responsible for the public land and trails where you might be hosting a project. Crew Leaders will often work with Chapter Leaders and Land Managers to develop annual plans. If you are unfamiliar with these contacts, reach out to your Chapter Leader or NCTA staff.



WORKING WITH OTHER PARTNERS

Private Landowners

In cases where the NCNST is located on private land, Crew Leaders may develop a relationship with the land owner. Your Chapter Leadership or NCTA Regional Trail Coordinator should be able to assist in making these contacts as necessary.

Partner Organizations and Affiliates

NCTA has agreements with other organizations responsible for managing the NCNST. These organizations are not managed by NCTA but work in coordination for the best management of the trail. If you are working in conjunction with one of these organizations, get to know their policies and procedures.



A list of Affiliates can be found here: https://northcountrytrail.org/volunteers/ local-contacts

IV. Crew Leader Skills



TECHNICAL SKILLS

Overview

While Crew Leaders should be proficient in the general skills needed for trail maintenance and construction, the Crew Leader does not necessarily need to serve as the technical expert. The Crew Leader's function is to organize and lead the members of the crew and ensure safe and enjoyable volunteer experiences.

This manual only provides an overview of the trail skills a Crew Leader may need to be familiar with. Volunteers wanting to develop their technical skill sets are encouraged to utilize the Volunteer Resources Center on the NCTA website: https://northcountrytrail.org/volunteers/resources/ or seek out further training opportunities.

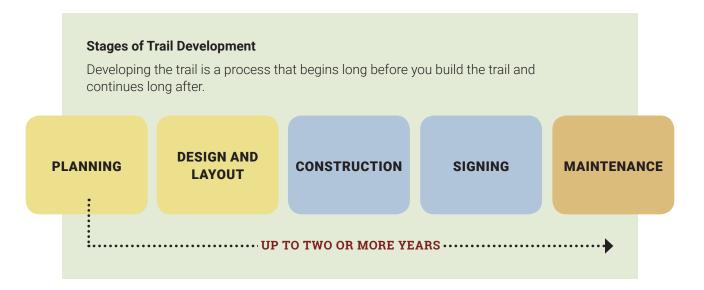
NCTA Volunteer Resources Center: https://northcountrytrail.org/volunteers/resources

Design, Construction and Maintenance Handbook

Crew Leaders should familiarize themselves with the content of the handbook and be proficient in practices defined within. The handbook identifies and defines workable trail standards that can be utilized trailwide. The objective of trail standards is to ensure a consistent look without compromising local initiative, a high standard of quality without over-building, a basic level of safety without removing all risk, accessible portions without compromising the character of the trail, and environmental and resource protection. Standards were developed to meet these objectives without compromising the character of the trail or imposing undue hardship upon those who maintain the trail. Whenever it is possible to retain the foot-trail-through-the-woods character, but still allow a very determined, mobility-impaired individual to get through simply by increasing trail width, it should be done. There are case-by-case exceptions, but every effort should be made to conform to the trail standards when building or rebuilding trail.



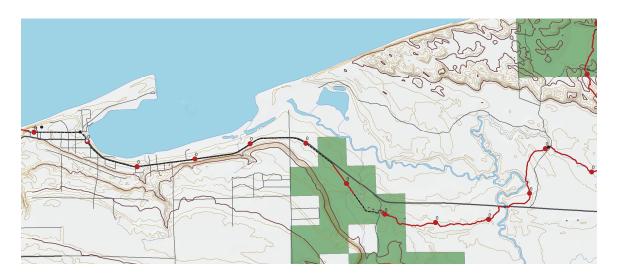
The North Country Trail Handbook for Trail Design and Construction and Maintenance can be viewed or downloaded online here: https://www.nps.gov/noco/learn/ management/ncttrailconstructionmanual1.htm



The Trail Development process outlined below is included as a reference for Crew Leaders to better understand the "big-picture" of Trail Development. This process covers how to locate segments of the trail to fill gaps where no trail has been developed, or relocate the trail when there are changes in land management or opportunities to put the trail in a more sustainable, permanently protected location. Both NPS and NCTA can provide more extensive resources and guidance on the individual steps in this process.

- 1. Form a trail planning committee that includes your agency partner, NCTA and NPS staff if needed.
- 2. Set objectives for the optimal location.
- 3. Inventory the area Identify control points. Get out on the ground to scout the options.
- 4. **Identify rules and regulations** What restrictions do you have from land managers, landowners, federal regulations, state laws, etc. What are the necessary permits and/or environmental and cultural resource surveys that will need to be completed?
- 5. Analyze your options Look at multiple routes, get input and then select the best option.
- 6. **Project funding** Funds for construction and maintenance projects can come from various sources including and not limited to the NPS, NCTA, chapter funds, federal, state and local grants.
- 7. **Develop a Construction Plan** You have decided why and where in the previous step, now put together the who, when and how it will get done. It's important to consider the timing of the resource reviews and permits mentioned in step 4.
- 8. Layout the Trail Flag and refine the route
- 9. In both #5 and #8, choose the option that offers the best combination of permanency and good design parameters such as scenery, dry/constructible soils, least stream crossings, etc.
- 10. Clearing the Trail and building Trail Follow the guidelines provided in the NPS manual on Design, Construction and Maintenance for the NCNST as well as guidance and approval from the land manager.

- 11. **Volunteer Support** Dependent on complexity of the project, you may be able to accomplish it with a weekend work party or you may want to consider contracting with another organization like AmeriCorps-NCCC, Student Conservation Association, Minnesota Conservation Corps, a Boy Scout troop or host an American Hiking Society Volunteer Vacation. Or, if you have considerable, recurring construction to do, consider establishing a chapter trail construction crew patterned after the Brule St. Croix Rovers in Wisconsin. Some of these options cost and some don't, but all require coordination far in advance of the planned project date.
- 12. **Support Structures** Follow the guidelines provided in the NPS manual on Design, Construction and Maintenance for the NCNST as well as guidance from the land manager for what structures are appropriate and what permits are required. Contact the NPS or NCTA for sample construction plans if needed.
- 13. **Signing the trail** Follow the guidelines provided in the NPS manual on Design, Construction and Maintenance for the NCNST. Some basic signage is provided (see NPS Order Form) and your chapter can apply for grants for larger signage needs like highway signs. Additional information on signs can be found in the Adopter Handbook.
- 14. **Tools and Equipment** The NPS provides basic tools as needed for chapter use (see the NPS Order Form) and provides funding for larger equipment like mowers and trimmers as funding is available. Many chapters own trailers to house and transport their tools. Tool trailers should be licensed to and insured by NCTA including all equipment within. Adding official NCTA decals to your trailers is a great way to promote the Trail and the Association.
- 15. **Safety First!** Make sure all volunteers on the project are signed up as Volunteers in Parks (VIPs) and that everyone takes necessary precautions for the situation, anyone using a chainsaw has a current certification and that safety issues are addressed properly
- 16. Project Completion Make sure you fill out the certification application to insure your sections of trail are considered official North Country National Scenic Trail by the National Park Service. Certification applications must meet the approval of the land managers or land owners to ensure the longevity of the NCNST on their property.
- 17. **Update maps and trail information** NCTA manages a GIS database for the entire trail. As soon as a section of trail is built arrangements should be made with the NCTA (either the GIS Coordinator or local RTC) to get this new construction GPS'd and mapped. Often times a chapter may have a particular volunteer that has worked closely with NCTA regarding the requirements for GPS'ing a section of Trail
- 18. **Celebrate success!** If is a significant addition or reroute of the trail, we should celebrate. Promote your accomplishments within your chapter, local community; and NCTA staff can help sing your praises across the seven states.



Trail Layout and Design

Trail layout and design should always be carried out by an experienced trail designer. Laying out a new trail does not happen overnight and can take multiple seasons from concept to construction. More detailed information about trail design can be found in the NCT Handbook. Crew Leaders may familiarize themselves with the process so as to better understand the projects they may be undertaking.

Oftentimes, Crew Leaders are not the trail designers and will be following the markings that someone else laid out. Not all trail designers use the same system of flagging, so a Crew Leader should clearly understand how the trail was flagged. Crew Leaders should walk the project area with the trail designer prior to a project, if the trail is laid out by someone other than the Crew Leader.

There are two primary types of flagging used in trail planning; corridor flagging and pin flags:

- **Corridor Flagging** is the most commonly used flagging technique and refers to surveyors tape that is placed to show the intended location of the trail corridor. Corridor flagging is typically done when constructing new trail. The direction of a knot may indicate which side of a tree, etc. the trail is intended to be constructed.
- **Pin flags** are placed in the ground to show the trail location between control points or to identify specific task locations. Pin flags can be used as the final flag line and can be placed on the centerline, inside edge or critical edge of the trail.



New trail will be marked either at the centerline, inside edge or critical edge. A trail may also be broken down into sections marked with stakes marked with standard civil engineering notation (1+00, etc.) that will correspond with the project notes/construction notes. Flagging can also mark special features for a Crew Leader to be aware of such as hazards, structure locations or obstacles for removal.

Stages of Trail Construction

New trail segments should be constructed to the appropriate specifications for the location. Crew Leaders should work with Land Managers to determine site-specific guidelines and also become familiar with Chapter 4 of the North Country Trail Handbook: Standards for Trail Construction.

NCTA Standards for Trail Construction: https://www.nps.gov/noco/learn/management/ upload/NCT_CH4.pdf

Crew Leaders can walk a new segment of trail with their crew to outline the specifications for the project and discuss the work needed before any work begins. Alternatively, Crew Leaders may share a map overview with volunteers before beginning a project.

The 6 step method of trail construction can be very efficient in organizing crews on a new trail construction project. Each of these steps may be done concurrently by various members of the crew. (For example, the corridor does not need to be cleared for the entire trail prior to beginning tread construction)



STEP 1: Clear Trail Corridor STEP 2: Establish Starting Point of Construction STEP 3: Establish Initial Tread Surface STEP 4: Establish Backslope STEP 5: Establish Outslope STEP 6: Finish work (Final 10%)

Trail Maintenance

Much of the work done on the NCT is ongoing trail maintenance. Trail maintenance is the process of keeping a trail as close as possible to the intended design standards (which vary by location, use, etc.) Maintenance includes any repair, improvements or other work done on or near a trail to improve the safety and sustainability of the trail, correct any original design defects or otherwise improve usability of the trail. Trail Adopters typically set and follow an Annual maintenance schedule, based on the specific needs of their segments. The Trail Adopter Handbook covers this schedule in detail.

When assessing trail maintenance needs, the following groups of general maintenance categories should be considered:

Vegetation Maintenance

- Brushing/clearing areas
- Remove fallen trees/branches
- Hazard tree removal
- Slope revegetation
- Backslope grooming
- Vista maintenance

Sign Maintenance

- Sign repair/rehabilitation
- Sign replacement
- Blaze repainting and maintenance
- Cairn repair
- Barricade/closure device repair

Drainage Maintenance (culverts, waterbars, reverse/rolling grade dips, drainage ditches)

- Cleaning/repairing structures
- Replacement of existing structures
- Install additional drainage structures

Structure Maintenance

- Bridge repair
- Cribbing/retaining wall repair
- Barrier/guardrail repair
- Step repair
- Fence/gate/stile repair

Tread Maintenance

- Grading tread
 - slough and slide removal
 - slump repair
 - filling erosion ditches
 - grubbing rocks/ roots/stumps
- Spot surfacing
- Turnpike section repair
- Surface replacement (similar material)
- Surface repair
- Remove loose rocks

Litter Clean-up

- Old dumps near trail
- Current discarded litter



Trail Triage and Setting Priorities

Because there is almost always more trail work to be done than trail workers to do it, Crew Leaders must constantly decide what work to tackle now and what can be postponed until later.

TRAIL TRIAGE HAS THREE LEVELS OF PRIORITY; LEVEL ONE BEING THE MOST IMPORTANT WORK

LEVEL 1: SAFETY – Repair hazardous conditions LEVEL 2: RESOURCE DAMAGE – Correct trail damage LEVEL 3: STANDARDS/USER EXPERIENCE – Restore trail to standards

Structures

Specifications for building trail structures are outlined in detail in the NCT Handbook. Crew Leaders should reference these guidelines before leading a structure building trail project and enlist the help of skilled trail builders to install more advanced structures.

Signs

Signs are probably the quickest and easiest way to leave the trail user with a positive impression. If the signs are high quality, well maintained, and properly located, other trail problems which are harder to solve are often over-looked (e.g., wet areas). Consistent signs are the quickest way to increase the trail's identity and the public's support for the trail. Other objectives are to:



- 1. Provide positive exposure of the trail to attract more users
- 2. Educate the user about the trail through trailhead kiosks
- 3. Reassure the user that he/she is on the right trail and will not get lost
- 4. Control trail usage and create a safer, more enjoyable, environmentally friendly experience

These objectives are to be balanced with aesthetic considerations to avoid "sign pollution."

Standardization of the types and locations of signs along the trail is desired. An inventory of existing signs should be regularly updated. It is recommended that as new signs are needed or existing signs need replacement, the uniform signing standards suggested in the NCT Handbook should be followed.

Most signage can be classified as informational, regulatory or wayfinding. Common signs you may find on the NCNST include:

- Information signs for highway users
- Warning (Pedestrian Crossing) signs for highway users
- Entrance sign
- Trailhead Information sign/Kiosk
- Regulatory (usage control) signs
- Road Crossing signs
- Reassurance markers/blazes
- Direction change indicators
- Confirmation/Identification signs (trail logos)
- Interpretive signs
- "Crossing Private Land" signs
- You-Are-Here signs
- Destination signs
- Boundary signs
- Adopter signs



Crew Leaders should refer to the "Blazing for Beginners" document before any blazing project: https://northcountrytrail.org/docs/resources_docs/Blazing%20 For%20Beginners.pdf

Tools

A wide variety of tools are available for trail use. Local and individual preferences often dictate the kinds of tools which are chosen for various tasks. Some of the most commonly used tools and their functional purpose are identified in the NCT Handbook.

Many Chapters are equipped with tool trailers. Before leading a project, Crew Leaders should work directly with their Chapter to check the inventory and availability of tools in the trailer. Some Land Managers may loan hand tools for projects as well.



Tools being used for a project should be identified by the Crew Leader in the Tailgate Safety Session. In the introduction to each tool, Crew Leaders should cover <u>C</u>arrying, <u>U</u>se, <u>S</u>torage and <u>S</u>afety – known as "<u>CUSS</u>." Crew Leaders are responsible for making sure that the crew is following these practices traveling to and from the worksite and throughout the project.

Tool Carrying:

- Tools should be carried at your side, never on the shoulder
- Limit to one tool/hand
- Gloves should be worn while handling tools
- Use sheaths if necessary
- · Maintain safe distance while hiking with tools
- Carry tools with their most dangerous side facing down.

Tool Use:

- Use the proper tool for the job at hand
- Practice good body mechanics
- Maintain safe working distance (dime, circle of death, blood bubble)
- Do not lift tools above head unnecessarily
- Establish communication signals for lifting or otherwise moving rocks, logs, etc.
- When passing by someone working on the trail be sure to announce "coming by"
- When moving materials downhill, be sure that the area is clear of hikers or other volunteers.

Tool Storage:

- Store tools off trail when not in use
- Store tools together in one location
- Place the tools on the uphill side of the trail
- Utilize a tool checklist to ensure that the crew departs with all tools brought to the site

Tool Safety:

- Revisit "CUSS" throughout the day
- Use appropriate Personal Protective Equipment (PPE)
- Switch tools to avoid repetitive stress injuries
- Remove or flag broken tools
- Ensure crew members receive training on how to properly use each tool
- Be alert and aware at all times, take frequent breaks.

Tool Maintenance:

Tools should be kept in good condition. A file should be carried for spot-sharpening edges throughout a project. At the end of the work day, all tools should be cleaned, sharpened, lightly oiled, and stored properly. Thoroughly wire brush at the end of the day or weekend to remove all dirt and begin to remove any accumulated rust if the tools were not routinely maintained. Each time this is done and the subsequent work use will result in brighter, cleaner, better functioning tools. Damaged tools should be flagged and noted before returning to tool cache. Seasonal tool maintenance will keep tools in great working order for many years.



PROJECT MANAGEMENT SKILLS

Planning a Project

Local Land Managers, Chapters and Affiliates engage in annual planning with NCTA and NPS, and have a good sense of what projects are planned or proposed for the year and where Crew Leaders may be needed. Remember that a one-day and a multi-day project will have very different needs.

Budgeting for Your Project

Before volunteers can start digging in the dirt, the cost of a project should be budgeted and funds must be raised. There is detailed guidance in the Chapter Leadership Handbook. Crew Leaders may not be directly responsible for project fundraising, but should be aware of the process; especially information that might be necessary for a project budget.

In budgeting for a project, consider costs such as:

- Materials
- Tools
- Staff time
- Transportation
- Meals for volunteers
- Lodging

There are many resources available to fund trail projects. Check with chapter members, local conservation and recreation supporters, local businesses, local and regional community and personal foundations, and service clubs.

The North Country Trail Association encourages chapter initiative, in coordination with Association objectives and policies, to pursue grant funding at the local level. For all grants over \$500, chapters must first coordinate with and obtain permission from Headquarters before submitting the grant application. Additionally, NCTA also offers the Field Grants program, which provides funding in the amounts of \$200 - \$5000 to Chapters, Affiliates, Regional Trail Coordinators, and Trail Councils.



A GOOD PROJECT

- Fulfills an existing maintenance or construction need on the trail
- Is an appropriate skill level for available volunteers
- Meets environmental needs of the landscape
- Is in line with Trail Management Objectives for the segment
- Has been approved by Land Manager
- Has funding to complete necessary tasks

Project Planning Timeline

Crew Leaders may be involved in the entire process of planning a project or may step in once the planning has been initiated. Either way, it is good practice to become familiar with the steps of planning a project.

Up to 2 years before the project:	Two to six months before the project:	One week before the project:	One to two days before the project:
 Scout project and prepare scope of work Obtain approval from land manager Secure necessary permits (stream crossing, wetland, etc.) Inform NCTA and NPS 	 Prepare a clear project outline Establish Emergency Plan and familiarize with necessary communication devices Recruit volunteers and share project details Meet with land managers or necessary staff to review your plans 	 Inspect tools, gear, equipment Update first aid kit Print Paperwork Sign-in Sheet Job Hazard Analysis (JHA) for all applicable tasks Contact volunteers with any remaining pre-project information 	 Check weather forecast and communicate with volunteers Prepare/purchase food Communicate itinerary Notify Land Manager that project is a "go" or of any changes

Scouting

Scouting, or visiting the project site in advance to gather information, is a critical step in the planning process. Information needed falls into three categories; inventory, assessment and prescription.

Inventory: accurate basic information about the trail. Trailhead access, size and location of structures, camp location, etc.

Assessment: an objective perspective of what exists on the trail and how that measures against the trail's standards. Clearing dimensions, blaze frequency, tread width, etc.

Prescription: what should be done to meet standards. Structures needed, amount of tools and volunteers to complete the tasks, etc. Note: Check for the nearby availability of materials if needed for a project.



How to gather information

- Take detailed, thorough notes that can easily be understood by others who may not be as familiar with the site.
- Include photos to accompany your notes. Photos taken from multiple angles with items for scale are most useful. Remember to turn on location information for your photos if using a cell phone camera, to easily reference location for planning.
- Maps and GPS information can be incredibly helpful both in informing necessary personnel and enabling you to hand over the work to someone else if/when necessary.
- Keep in mind that any changes to the trail alignment will require collection of additional data. GPS data for all completed new segments should be collected and submitted to NCTA.

Creating Project Maps

NCTA's online map and trail data are great project planning tools. Crew Leaders can download PDF maps for planning, create maps of project areas to share with Volunteers or research project areas. Maps can be found online at: https:// northcountrytrail.org/trail/maps/

Estimating Work

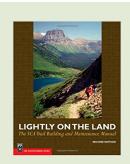
Once you have selected projects that are appropriate for your crew, estimate how many volunteers you will need to accomplish the tasks in the time you have available. One way to estimate the amount of labor needed is to break down the project into tasks you could do yourself with one less-skilled volunteer. Then estimate how long it would take the two of you, taking into account travel time, safety talks, breaks and some trail fun. If it appears the total project would take the two of you six days, then $6 \times 2 = 12$ volunteers needed to do the project in one day, assuming good volunteers, good weather, and good leadership.

If you usually have a 10-20% no-show rate for volunteer projects, best to add a few more volunteers for the project. Remember that group size may be limited in some areas. Also, with a larger group, be sure to include enough assistant crew leaders to maintain a 1:4 ratio of skilled to less-skilled labor to maintain quality and safe work.

If the project you plan to do is complex, invite the Land Manager, RTC or other skilled project leader to join you for a site visit and to help with work estimation. There is a wide array of factors that affect how much work volunteers can do.

Consider asking the following questions to more accurately estimate work: (adapted from Lightly on the Land)

- How long will it take for the crew to travel to the worksite from a trailhead or camp?
- What tools will be needed and how will they be transported?
- What building materials will be required? Are they on site? If they must be moved a distance, how will they be moved?
- Will the agency provide any on-site personnel in the form of work supervisors or laborers?
- Will the site be closed to public use? Is the crew likely to lose time waiting for trail users to pass?
- How will you re-direct trail users safely through or around your work site?



Lightly on the Land: The SCA Trail Building And Maintenance Manual

- When work is complete, how much time will be required to close down the project, clean up the area, carry out tools and gear and store equipment?
- Are there seasonal patterns of heat, cold, precipitation, or other environmental conditions that could affect production? Will the crew require time to acclimate to a high elevation before being able to work at full strength?
- Can a crew complete the project safely? If you have concerns about what you see, time estimates become secondary to finding a safe way of doing the work or abandoning the project and locating another that is more appropriate.
- How many volunteers can safely operate in the project area without being crowded? This is particularly important on switchbacks and steep slide slopes
- Will the project engage the interest of crew members and leave them with a sense of accomplishment?
- Can the site accommodate a variety of projects allowing volunteers to swap out from more "high energy" tasks?
- Will the crew members transport their gear and provisions to camp?
- Where is the camp located? Shortening the end of day hike as much as possible will keep motivation high.
- Is there a backup project if they finish the work ahead of schedule?
- Will your project require pack stock assistance? How many?

Additionally, add at least 10% more time and volunteers to your estimate to allow for final details that make a good project into a great one.

Once you have a good idea of what your project will be, you can locate the appropriate JHA(s) for the job and know what Personal Protective Equipment (PPE) the tasks will require.

Calculating Tool Needs

When scouting a project, be sure to note what tools are needed. Can brush be cut with loppers and handsaws or would it be more productive to have a brush saw? Will this project be in a designated Wilderness area, eliminating the potential for power tools? Estimate to bring two tools per person. This should cover all of your needs. Also consider how tools will be transported. Know the abilities of your group and their limits as far as transport.



Recruiting Volunteers

Chances are, there are many great volunteers in your chapter who you can ask to help with your project. Additionally, your local chapter should be able to provide contact information for potential volunteers and be able to aid in the recruitment process. All volunteer opportunities should be listed on the NCTA and chapter pages, calendars, newsletter and social media.



Additional places to recruit volunteers include:

- Meetup
- Volunteer Match
- Chapter Hikes
- Park bulletin boards
- Facebook
- Newsletters

Once participants register, the crew leader should contact the volunteers as soon as possible to acknowledge their participation and provide any project information that is available. A second email can be sent closer to the project date with information updates, weather forecast, etc. The most important things to remember when communicating with volunteers are to use clear messaging and give thorough details about projects. Volunteers may not be as familiar with the project as you are.

Make sure the information you distribute to volunteers includes:

- Gear and equipment
- Camping location and access
- Site-specific safety concerns and mitigation

Sample initial email to registered volunteers:

Hi Mary,

I'm delighted you're planning to participate in the NCNST Moraine State Park project on Saturday September 9th!

I will be your crew leader for the project, my cell phone number is (616) 897-5987. Please plan to meet at the North Shore parking area at 9:00 am. Driving Directions are on the Project Information Sheet attached here. Please note: There is no access to the North Shore from PA 422 headed east from I–79, so take the South Shore Exit, get onto PA 422 West and take the North Shore Exit. Look for the signs that say "Volunteer Trail Crew." Please wear appropriate work clothes including long pants and sturdy closed-toed shoes and plan to bring work gloves, sunblock, lunch, and at least two liters of water. See the Project Information Sheet for more detailed information on what to bring. Camping will be available on Saturday evening at Bear Run Campground. Let me know if you'll plan to stay the night.

I'll be reaching out to you again a few days before the project with any last-minute details. In the meantime-If you have any additional questions, please let me know. I look forward to seeing you on the trail!

Thanks, Valerie

Retaining Volunteers

Retaining long-term volunteers is an art. Crew Leaders can help to create great volunteer experiences that will encourage people to come back for years and become a part of the NCT Community. Some strategies to consider:

- **Provide a great experience**: Volunteers who have a great time will likely return. Give a good training and orientation and make them feel welcome throughout the project.
- Connect volunteers with opportunities that suit their interests and skills: When you give people ways to contribute that they personally enjoy or feel that they're qualified to do, it's much more likely that their experience will be a positive one.
- Make personal connections and welcome them to the team: Social interaction is a huge motivation for volunteers. Crew Leaders should make sure that they are cultivating relationships with new volunteers as individuals and creating welcoming opportunities for them to plug into the existing volunteer network.
- **Provide regular opportunities** : The best way to get volunteers to come back is to provide frequent and varied opportunities for them to engage. Remember, not everyone can commit to each event, so try to reach out directly to volunteers you know may be interested in a particular project location or task.
- **Give recognition**: Make sure to say thanks as often as possible and look for opportunities to recognize achievements.
- **Create opportunities for advancement**: Volunteers will stay interested if they see opportunities to learn and grow. Crew Leaders can encourage volunteers to learn new skills or take on additional responsibilities as appropriate.



LEADERSHIP SKILLS

Effective Leadership

A Crew Leader is, above all else, a people manager. It is important to ensure every NCTA volunteer has a safe and enjoyable experience. Crew Leaders create these great experience through managing group dynamics; connecting with volunteers and connecting them to each other and to meaningful and rewarding work. By gaining a better understanding of volunteer motivations, expectations, skills and personalities, Crew Leaders can ensure success amongst their teams.

Group Dynamics

Crew Leaders can help shape the dynamics of a group. A group that spends a length of time together will naturally transition between stages of group dynamics. Crew Leaders can help guide the group through these transitions and may change leadership styles based on the stage the group is in. Tuckman's model of group dynamics is commonly referenced in discussions of group dynamics and highlights the forming, storming, norming, preforming and adjourning stages.

Forming: In this stage, the group is coming together and beginning to form as a group. Volunteers may be excited or anxious. As a Crew Leader, you can help set roles and responsibilities and expectations. Icebreakers and Introductions are incredibly helpful Crew Leader tools in the forming stage.

Storming: In the storming stage, volunteers are sorting out group processes and roles. Conflict amongst the group or against authority is possible. Crew Leaders should check in regularly with members of the group at this stage and continue to reinforce the group roles and goals. It may be useful to break tasks down into smaller achievable steps.

Norming: In the norming stage, the group begins to agree on the goals and functions of the team. The team begins to be more cohesive and develop a stronger commitment to the team goal. Crew Leaders should continue to check in on progress.

Performing: In the performing stage, the group is functioning as a unit and achieving goals. Crew Leaders should acknowledge individuals and recognize the group effort at this stage. Volunteers are comfortable and may be willing to try new roles.

Adjourning: Crew Leaders can help to provide closure as the group project comes to an end, following up with feedback and gratitude.

Motivations

Learning volunteer's motivations can be a helpful tool for Crew Leaders to shape supervision style, recognition and expectations.

Researchers David McClelland and John Atkinson identified three motivating characteristic types in human behavior:

THE ACHIEVER: This person is committed to accomplishing goals, welcomes a new challenge and looks for opportunities to test out new skills and improve performance.

THE AFFILIATOR: This person values relationships, enjoys working with others and seeks out opportunities to be helpful and supportive.

THE POWER PERSON: This person seeks to influence people and events so that change is realized.



Learning Styles

There are many different learning styles. Crew Leaders should use varied teaching methods to accommodate the range of learning styles and highlight different ways to do tasks. See below for a few examples of learning styles.

Visual Learners: Learn through seeing. These learners need to see the teacher's body language and facial expression to fully understand the content of a lesson. They tend to prefer sitting in front of the classroom and taking notes. They may think in pictures and learn best from visual displays including: diagrams, charts and hand-outs.

Auditory Learners: Learn through listening. They learn best through verbal lectures, discussions, talking things through and listening to what others have to say. Auditory learners interpret the underlying meanings of speech through listening to tone of voice, pitch, speed and other nuances. Written information may have little meaning until it is heard. These learners often benefit from lecture and discussion.

Tactile/Kinesthetic Learners: Learn through moving, doing and touching. These people learn best through a hands-on approach, actively exploring the physical world around them. They may find it hard to sit still for long periods and may become distracted by their need for activity and exploration. Their mantra is often "let me do it, then I'll understand."

Conflict Resolution

Conflict will occur in almost all group settings. A Crew Leader's role is to help manage conflict and turn issues into positive learning experiences. Open dialogue, effective listening and de-escalation of tense situations are critical to resolving conflict. Several scenarios will be covered in Crew Leader training to help Leaders develop effective conflict resolution skills.

Giving and Receiving Feedback

Giving and receiving frequent and honest feedback is critical to the ongoing success of any group. Feedback may be positive, negative or constructive. Crew Leaders should avoid negative feedback. Some tips for giving and receiving feedback are below:

- · Feedback should be specific and honest
- Feedback should be given at an appropriate time
- Encourage and build on comments that volunteers share
- Be supportive. Use a "compliment sandwich" (compliment-area for improvement-compliment)
- Take time to listen and remind others to listen to one another
- · Ask key questions that will stimulate interest and provoke thought
- Rely on personal observations
- Give recognition using different methods

Recognizing Volunteers

Volunteers are the lifeblood of NCTA and should be recognized at every opportunity. Volunteers who feel appreciated are likely to return and continue to contribute, growing their skills, talents and contributions over time. Crew Leaders have a unique opportunity to be on the "front-lines" with volunteers and the interactions that volunteers have with Leaders will shape their experiences greatly.

Day-to-Day recognition (from OSI Guide to Crew Leadership for Trails)

- Say thank you
- Ask for opinions
- Greet volunteers by name
- Show interest in their interests
- Smile!
- Involve volunteers in discussions
- Provide educational opportunities
- Celebrate achievements
- Give equal treatment
- Deliver positive affirmations

Awards

NCTA and NPS recognize volunteers with Annual Volunteer awards based on accumulated hours and notable accomplishments. Chapters and Affiliates often also have award programs for volunteers. As a Crew leader, you may share information about these programs with your crews and create opportunities for your volunteers to be recognized.

V. Risk Management



SAFETY OVERVIEW

How can we ensure the safety of our volunteers in the future? By integrating a "culture of safety" into each task we perform and each decision we make, and being strong enough to stop ourselves or others when safety is about to be compromised. Take the time to review and discuss safe work practices before the start of a project, and at each changing phase of the job.

Basic Safety Rules and Proper Attitude

- Work in advance with your local authorities to notify them of your plans on the trail. Ensure emergency responders know how to find you in the event of an emergency. When seconds count, time spent directing emergency responders to your remote location is time you don't have.
- Ensure that all volunteers have the appropriate PPE know how to use it, and actually do use it. Consult the JHA's for recommended vs. required PPE.
- PLAN your WORK & WORK your PLAN. The phrase "Short Cut" has more than one meaning.
- Avoid working on the trail alone if at all possible. If you must go alone, someone should know your location and expected time of return.
- Check the weather forecast. Dress appropriately. Have plenty of water and energy snacks on hand.
- Everyone is responsible for their own safety, as well as the safety of others. Speak up if you have questions, concerns, or see something that is unsafe. Stop the work, resolve the problem, and continue safely.
- Don't exceed your personal physical or skill limitations.
- There is no single inch of the trail that merits even one drop of blood from anyone.



Crew Leaders should review the NPS Safety Handbook for details on managing specific safety concerns. Visit https://www.nps.gov/noco/getinvolved/ supportyourpark/upload/FINAL_Final_NCT_Safety_Handbook-1-1.docx

OVERVIEW OF TRAIL SAFE!

TRAIL SAFE! is a unique safety training program designed specifically for National Park Service (NPS) Trail Volunteers, but is useful to everyone! It's based upon NPS Operational Leadership Training, where the Human Factor of safety is explored. Trail Safe captures the core learning objectives of the 16-hour Operational Leadership course while allowing volunteers to learn from their own homes on-line.



We recommend that Crew Leaders familiarize themselves with Trail Safe and utilize the lessons and best management practices in their leadership. The video series can be found online at: https://www.nps.gov/noco/trail-safe.htm

MINIMIZING RISK

The term "risk" includes three concepts: the hazard, the possible outcomes and the likelihood.

- 1. A hazard is a situation that can cause harm to a person.
- 2. An outcome is the resulting injury due to a hazard.
- 3. The likelihood describes the level of probability of the outcome.

Crew Leaders will need to continuously assess risk throughout the work day. The more aware Leaders are of potential risks, the more the likelihood can be minimized. Each site and task with have unique hazards associated with it, so planning ahead is essential.

EMERGENCY ACTION PLAN (EAP)

Ideally, all crew leaders should be certified by the American Red Cross in basic first aid and CPR and have a First aid kit equipped for the trail project. A first aid kit should be checked, complete and large enough for the crew and the job at hand. Above all, it should be taken along on the job, and crewmembers advised of its location. Professional assistance may be hours away.

Crew Leaders should be equipped with a completed, site-specific Emergency Action Plan for every project location. The EAP should be completed PRIOR to the project and communicated to the Land Manager or NCTA representative and should include:

- Emergency Contacts
- Communication Plan (devices, etc.)
- Location of nearest hospital, etc.

COMMUNICATION DEVICES

NCTA crews will utilize varying methods of communication depending on project location. Phone, Satellite Messengers and radios will be the primary modes of communication. It is imperative that Crew Leaders know how the equipment works and test its functionality before setting out on a project. When scouting a project site, be sure to check for phone reception, etc.

EMERGENCY CONTACTS

Each chapter should have Non-Emergency contact numbers for their local area, to notify authorities of planned work dates, locations, and other info prior to work projects.

911 SHOULD BE CONTACTED FIRST AND FOREMOST. IN ADDITION, CREW LEADERS SHOULD HAVE CONTACT INFO FOR:

- Ambulance/EMS
- Fire
- Police
- NCT Chapter Leader(s)
- Others

INCIDENT MANAGEMENT & REPORTING

Because volunteers of the North Country National Scenic Trail work in distant locations from NPS offices where immediate access to US Department of Labor forms is not possible, Injury Reporting Kits have been created and distributed to all chapters and affiliate groups. It is strongly recommended that volunteers review the materials in these kits before their use is required, that the kits be made available to volunteers in all work activities, and that volunteers be advised on the location of the kits within a chapter or affiliate area (i.e.: staged in a tool trailer, carried by a crew leader, etc.). Each kit was initially set up to process up to three separate injury incidents. If your chapter received five kits, you have adequate resources to process 15 injuries, and so on.

VIP PROGRAM

The Volunteers in the National Parks Act of 1969 (VIP) authorizes National Park Service agencies to work with volunteers and provide them certain protections. Members of NCTA and volunteers listed on each Chapter's existing group agreement are covered under VIP. Crew Leaders should use the 301A Volunteer Agreement Form to sign up individuals and groups as official NPS VIP's if they are not already listed on a group form with the Chapters



The Volunteer Agreement Form is available online at: https://www.nps.gov/noco/ getinvolved/upload/NOCO-OF-301a-3.pdf



VI. Organizing the Project Day

STARTING THE DAY

Having an organized structure to the volunteer day will allow Crew Leaders to be successful and provide volunteers with a consistent experience.

Prior to volunteers arriving:

- Meet with other Crew Leaders, Assistant Crew Leaders and project support team. Walk project site if time permits
- Set-up directional signs at confusing junctions and turns and to reassure volunteers
- Lay out tools. PPE, water and snacks, etc.
- Provide sign in paperwork in a convenient location for volunteer arrival

Welcome and Orientation:

- Greet Volunteers as they arrive and make casual conversation
- Gather the group for Introductions. Ask for people's background to learn any skills or limitations they might have. Consider Icebreaker activities if appropriate.
- Point out availability of "Creature Comforts" (nearest restroom, water, etc.)
- Remind volunteers to inform Leaders of any physical issues, conditions, allergies, etc.
- · Give special thanks and recognition to any volunteers of note or Agency Partners attending
- Remind participants of Leave No Trace Principles

TAILGATE SAFETY SESSION

THIS IS THE MOST IMPORTANT PART OF YOUR DAY

Prior to leading a project, Crew Leaders should carefully review the NCT Volunteer Safety Handbook and the NCT Handbook information on Safety Considerations for Trail Workers.

Provide a Project Overview: Provide your group with an honest, brief, yet complete, overview of the day's work. Lay out the goals of the project and set expectations. Be sure to cover hike distance, weather forecast and trail conditions. Also, provide an idea of when the group will meet up for breaks/lunch and what time you expect to finish the day.

Review Job Hazard Analysis (JHA): It is important that all volunteers are aware of potential hazards and safety procedures related to their assigned tasks. Crew Leaders should carry a copy of the JHA relevant to their project in their Crew Leader Kit and must review the JHA in the Tailgate Safety Session and revisit if and when new hazards are present.

JHA's can be found on the NPS Volunteer page and are numbered for easy reference and correspond to the Job Descriptions: https://www.nps.gov/noco/getinvolved/volunteer.htm.

A successful way to cover the JHA and any safety concerns is to have each participant read one of the items on the JHA and pass it around the group. Make sure to list any site specific concerns that may not be listed and ask people if they have any specific additional safety concerns and encourage them to take an active part in promoting safety throughout the day.







EMERGENCY PLAN

Establish a plan and delegate roles in advance of an accident or serious injury. The Crew Leader should have established the closest medical facility and have printed contact information and directions. The individual with the highest level of medical training should carry the first aid kit and be designated as the First Aid Lead. Assign a Communications Lead and other roles as necessary. Ask all volunteers to share any allergies or pertinent medical information with the Crew Leader or First Aid Lead.

TOOL AND SAFETY TALK



NCTA has developed a video of a Tailgate Safety Session that highlights examples of what to showcase in a tool and safety talk: https://vimeo.com/111450859

Some items to remember in your safety talk include:

- Ensure all paperwork is completed.
- Review JHA and any site-specific safety concerns.
- Check that all volunteers have appropriate gear for the conditions and work.
- · Give an overview of the work and an approximate schedule.
- Ask about health concerns or physical conditions you should be aware of (volunteers can share with you in private).
- Cover the emergency protocol and define roles and responsibilities in managing a situation.
- Review tool use and safety

BEGIN PROJECT

Walk and Talk: Utilize the hike to the project site to give an overview of the day's work, including stopping to point out any specific project sites and defining the beginning and end of segments as needed. This briefing gives volunteers the opportunity to find projects they may be interested in working on when you divide into work groups. The walk and talk should be brief, and Crew Leaders can go into greater detail when checking in with work groups.

During the walk and talk, remember to review accomplishments from the previous day (if on a multi-day day project) and set daily goals. "We'll work from the trailhead to this stream crossing", etc.

CREW LEADER PRIORITIES

- 1. Safety: your most important task
- **2. Fun:** establish a positive atmosphere for all
- 3. Work: accomplish work goals with your team



Establish work groups: Divide the group into smaller teams as needed to focus on miniprojects or to take ownership of a trail segment. Volunteers may be interested in working on specific tasks. Creating work groups is a great way to pair experienced volunteers with newer crew members and facilitating positive group dynamics and peer-to-peer communication.

ONGOING/THROUGHOUT THE DAY

Check in with Crew Members: The Crew Leader should spend the majority of the work day checking in with work groups. A crew leader who has their head down, working all day is not serving as an effective leader. Crew Leaders can provide work groups with technical oversight and ensure all team members are working to the desired trail specifications. NOTE: While the group is gathered for lunch, use the break to check in, get a progress update and revisit the plan for the afternoon.

Crew Leader's Roles during the workday:

- Keep people busy, engaged and interested.
- Provide varying tasks and meaningful work
- Make sure breaks occur and the schedule is adhered to.
- Watch for safety issues.
- Monitor environmental conditions.
- Monitor quality and consistency of work.
- Provide explanations and instruction to each work group.
- Utilize teachable moments.
- Talk with everyone, facilitate good communication.
- Hand out goodies and praise!
- Conduct ongoing assessment of each volunteer.
- Monitor progress of work and record accomplishments.

END OF PROJECT

Before leaving worksite:

- Allow time to complete the final 10% of the project work
- Finalize any trail connections and install necessary signage
- Minimize your crew's impact by ensuring the area around the work site is fully restored
- Sweep for gear, trash and tools
- Collect GPS data for any new trail segments

At camp or Trailhead:

- Gather tools, PPE and equipment
- · Check tool list to ensure all tools are accounted for
- Take time to do an on-site debrief
- · Review accomplishments and thank volunteers
- Allow time to break down camp and pack out if applicable





POST PROJECT DUTIES

Reporting work:

Volunteer hours are one of the biggest demonstrations of public support when justifying Federal funding or other grants and when telling people why they should care about the NCNST. Your hours illustrate the commitment citizens have to the Trail and why it should be supported by our communities.



Volunteers have several ways to report their hours. You can fill out the form online at https://www.northcountrytrail.org/members/report-volunteerhours or complete the individual or log sheet and mail it or FAX it to NCTA Headquarters.

Some chapters choose to report on behalf of the entire chapter on a regular basis and others let the individual members handle their own reporting. Check with your Chapter for how to best report hours from your volunteer project.

Volunteer Log for Groups should be completed by:

- A group who performs service on a limited basis (i.e. the Boy Scouts or a college group.) Total hours can be reported for the group as a whole. Individual names do not have to be listed but a total number of adults and youth is needed.
- A list of volunteers who gathered to work on a specific project. Individual names can be listed for credit. Names and addresses of those who are not NCTA members can be listed on the back of the form so that they may be added to our mailing list.

We tally the numbers each year after the October 15th deadline and report number of volunteers, volunteer hours and an estimated worth of those hours to the National Park Service. Where do we get that last number and what does it mean? Federal agencies, nonprofits and foundations use data collected by the Independent Sector, a nonpartisan coalition that represents thousands of organizations across the country, to quantify the value of the work that you do as volunteers. The National Park Service does not send cash to NCTA based on your reported volunteer hours – we wish! But we do use those numbers to quantify the volunteer match on grant applications, to advocate for NPS funding with our elected officials and to show the world the great contribution you make with your time and energy.

FOLLOW-UP AND FEEDBACK

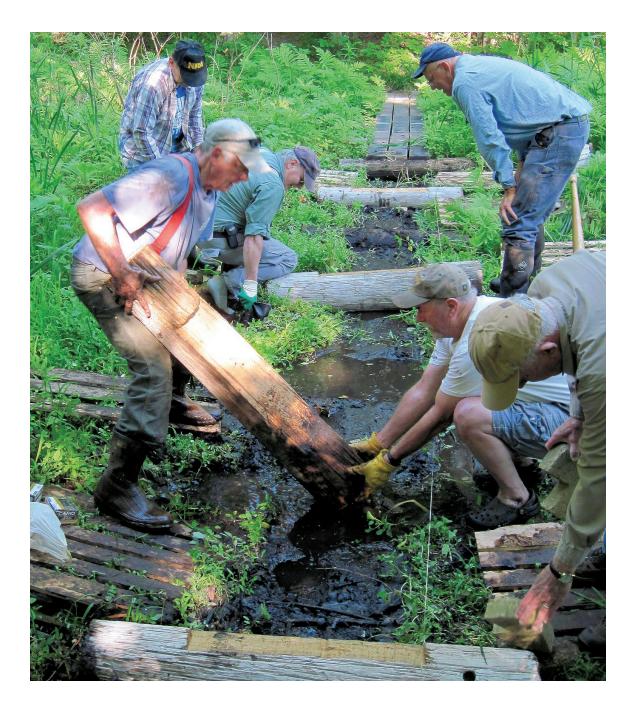
- Check out with Agency partners (if necessary)
- Submit GPS data on any reroutes or new construction to gis@northcountrytrail.org
- Return any tools and gear
- Get Volunteer feedback via survey, etc.
- Send photos or share via social media
- Consider sending a Thank you note to your volunteers



VII. Summary

Crew Leaders are a vital part of the North Country Trail team. This manual is intended as a framework for all of the tasks and procedures that one might encounter in this role. The roles of an individual Crew Leader will vary across the trail and from project to project but a Crew Leader's primary role is to lead, support and manage a team of volunteers, not to know all of the answers all of the time. As always, Chapter Leaders, Regional Trail Coordinators, NCTA staff and Agency Partners will provide support and guidance as necessary.

Thank you for all of your hard work and for being ambassadors for the North Country Trail!





Your Adventure Starts Nearby.



North Country Trail Association

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