



Bear Mountain Trails

To Those Who Move Rock... We Salute You.

Spring 2009

It's difficult to tell people what happens on this project. "We're building a stairway up a mountain." It sounds interesting, but the difference between telling and showing is significant. For some reason the word "stairway" just doesn't capture it; it's a kind of vulgar summary. Stairways are common things; we all see them, we all use them. Upon seeing what's been completed over the past 3 years however, it's obvious that the term "common thing" has no place in describing the work finished thus far.

The upcoming season presents a serious challenge. This year we plan to open the lower eastern face of the new Appalachian Trail on Bear Mountain, connecting the work completed in 2007 with the work completed in 2008. A large section of the boulder field remains untouched; thus, we need your help.

In order to make this promise a reality we will need a very dedicated set of volunteers to help split the stone, move the rock and build the walls that hold the stairs. Naturally, it's very hard to ask people to donate their time so they may swing sledge hammers, wield rock bars, sling trees and operate winches. Still, the opportunity to build a stairway up a mountain and through the chaos of a boulder field is a rare kind of quest that does not often exist in our world. This work is unique: from the techniques being used to the final aesthetic impact we leave behind. When I've shown people the product of our labor the reaction is substantial.

"Where did you get these stairs from!?"

How long did it take to build this!?

The initial shock is a testament to why we are involved in this gigantic task; to rekindle peoples need to see great things, to help them connect with the outdoors once again. If we can inspire some degree of awe in those who have fallen victim to a sheltered life then the legacy we leave behind is a very real one. After all, this is not something that can simply be tossed into the paper shredder or deleted from a hard-drive; the trails on Bear Mountain will last into the next ice age.

Welcome to the 2009 trail season, I hope to see you out there.

-Chris Ingui, Volunteer Coordinator — Bear Mountain Trails Project



The Lower East Face of Bear Mountain, a.k.a. The Boulder Field.

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Notes from the Manager

2009 should be an exciting year on for the Mountain. Our goal is to open the first section of trail, what is referred to as the Lower East Face (from the ski jump road through the Boulderfield, past the view and waterfall, to the current AT at the Pine Flats). This is only going to be possible with the help and involvement of regular committed volunteers such as yourself and new recruits. To aid us in this ambitious plan, we will have several special guests and opportunities:

In the fall, Peter Jensen, Jed Talbot, Erin Amadon, and Willie Bittner (all of whom taught workshops here during 2006) will be working on the steeper terrain above the boulderfield. This is a rare educational opportunity not to be missed. These folks work full time year in and out building trails across the east coast. Peter in particular comes with over 30 years of professional experience, and will be building mortared and dry abutments for the two bridges over the steep slabs above the boulderfields. Later in the Spring, we will complete the upper boulderfield sections and its high traverse, from where Peter and Crew left off. To aid us with the accelerated schedule, we will use some new tools such as a Ditch Witch mini skid steer near the view and closer to the Pine Flats. The ATC Mid-Atlantic Crew will be working on the mountain for four weeks in the fall. Throughout the year we will also be performing surfacing operations with the Canycom tracked wheelbarrow to get ready for a public opening in the November.

Look forward to an exciting year with lots of momentum, opportunities for learning new things, and being a part of some great accomplishments.



Manager-Eddie Walsh



Congratulations to our Top Volunteers in 2008!

Ronald Quackenbush— 199 hours
Catherine Kelleher— 156 hours
Steven Zubarik— 100+ hours

Thanks to everyone for all their time and effort. Last year we had over 200 individuals who volunteered over 7,000 hours!

2008 Accomplishments:

175 East Face Steps
15 South Side Steps
700 square feet of Cribbing



Rock's Not Dead

A Stone Splitting Review

Despite the common perception of rock being a dim witted substance at odds with inferior foes like paper and scissors; it can in fact be very tricky. Dealing with rock in its raw state can be a frustrating ordeal. Here are some reminders for all of us yearning to split rock in the wild:

1.) **Step back, Relax, and Read the Rock.** Analyze the rock you're going to split/shape. What natural lines does it have, where did it break off originally from its larger parent rock? Are there dominant planes repeated through the stone. Along these planes are the best place to begin the splitting process.

2. **Measure Twice, Split Once.** Before rifting your rock be sure to check your measurements. Are you setting your rock on top of another rock or behind it? If it's a stair, will the rise be too high or the run too short? If it's a wall stone will it fit the available space? After you've determined this, mark the line you're going to split along with chalk or crayon.

3.) **Rift at the Proper Angle.** While not always necessary, if you need a flat stepping or setting surface, be sure to rift the rock with either a rifting hammer and sledge hammer (two people) or a stone buster and striking hammer (one person). This will loosen the structure of the rock along the desired line. When rifting, be sure to hold the rifting hammer at the parallel to the plane in which you want to break the stone. When striking the rifting hammer be sure to strike at this angle as well. Once a groove has been cut into the rock (usually a lucky seven solid passes), it's "safe" to move on.

4.) **Drill at the Proper Angle.** Redundancy is annoying, but as with rifting, pay attention to the angle you want that rock to split and be sure to drill along that angle. While drilling, do not treat your drill like some mere machine; love your drill, pay attention to it. Is it trying to run away from you? Is it making a squeaking sound or jerking up and down? If so, be sure your body is pressed firmly against the drill and NOT at any angles that would cause the drill bit to grind against the outer edges of the hole being made. Use a steady pressure, not too hard, but just enough to make sure you have a constant tapping sound. Also its important not to drill too deep or shallow, your hole depth should be equal to the length of your feather, from its shoulder to the bottom.

5.) **Carefully Place and Set Wedges.** Take your feathers and gently place them inside the hole making sure the flared out ends remain exposed and as close as possible to the drill hole. Make sure the gap between the two feathers aligns itself exactly with the line you rifted into the stone. While still holding your feathers with one hand place a wedge between both feathers and tap with your striking hammer until it sets firmly into the rock. Repeat this for each hole drilled, making sure that all the wedges are pressing out in the same direction.

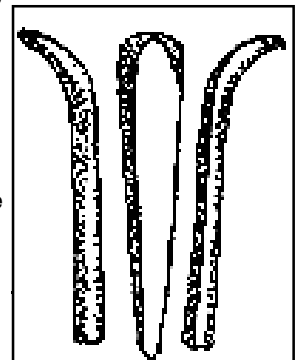
6.) **Snap, Crackle and Pop.** With your striking hammer begin hitting each of the set wedges an equal number of times. Ideally, each wedge should sink into the stone at the same pace, causing them to maintain an equal amount of outward force throughout the striking process. You will notice that the sound of each strike will reach a higher pitch as it drives the wedge deeper into the rock. (*This is a lovely sound.*) Pausing to take a minute break after every couple of runs will help the wedges do their delicate work as they slowly pry the rock apart. If the wedges cease to drive into the stone, take a longer break, try again, then upgrade to a sledge hammer, but be sure your striking skills are good enough to hit the wedge squarely on it's head, otherwise the wedges will bend. Eventually, you will begin to hear a very subtle snap, crackle and pop. This is the rock splitting. At this point drive only one or two wedges, preferably close to the center of the stone. The sound will increase until the rock is split.

7.) **There are No Guarantees, and No Wasted Efforts.** Even after following these basic rules and many others, there is no guarantee that the rock will split exactly as you want it to. You must understand, rocks are much older than we are, they may hold all kinds of secrets beneath their seemingly straight splitting façade. Should your rock not split exactly as you want it to, stay calm and avoid punching it; you will lose. With enough perseverance and concentration, even the most ornery rock can be compromised with and made into a useful feature when building your trail.

-By C.I.



After rifting your rock, holes are drilled at the same angle as the rocks natural resting place. After drilling, feathers and wedges are hammered in at equal intervals, eventually splitting the rock along the rifted seam.



Feathers and Wedge

WANT MORE STONE SPLITTING? WANT TO LEARN?

Attend the March 21st Orientation at Bear Mountain and become eligible to register for our FREE Stone Splitting workshops on March 28th –29th. To register for the Orientation please email us at bearmountaintrails@gmail.com



Workshop Schedule for Bear Mountain

Spring 2009

The following is a list of workshops that will take place on Bear Mountain this spring. In order to attend these workshops you must either 1.) have attended the *March 21st Overview and Orientation* OR 2.) be a regular volunteer on an ATC or NYNJTC trail crew OR 3.) have special permission from a Bear Mountain Crew Leader. If you meet any of these requirements you can sign up for existing workshops online at www.nynjtc.org. If you have any questions regarding the workshops or future work-trips you can email us at bearmountaintrails@gmail.com. All workshops meet at 8:30am in Parking lot A of Bear Mountain State Park, but sign up first!

March 21st

Bear Mountain Overview and Orientation Hike. Join us for an on-site review of the project and a walk-through of the new trail route. The day begins with a slideshow, but most of the day will be devoted to a challenging walk of the new trail route with detailed explanations of the intended work and methods. Email us as bearmountaintrails@gmail.com to register.

March 28th — 29th

Stone Splitting and Shaping — Participants may register for one or both days. March 28th is devoted to general instruction on stone splitting using rotary hammer drills, rifting hammers and feathers and wedges. On March 29th, we will split into two groups. Group 1 will learn the basics of splitting and cutting. Group 2 will work with hand hammers and chisels and learn to finely shape stones as we install steps and crib walls.

April 4th

Stone Stair Construction and Rock Moving Basics — Come learn to build stone stair cases. This class is designed for the beginner to learn basic stair building and stone techniques. Topics covered will be: selecting rocks, setting stairs, tool usage to maximize mechanical advantage and the basics of rigging.

April 11th — 12th

Stone Crib Wall Construction — Participants in this workshop will learn to build dry stack stone retaining walls (a.k.a. crib walls). In addition to key structural and design requirements, participants will also learn how to use stone shaping tools to cut rock to desired shapes and sizes.

April 3rd — May 4th

Special Worktrips with Peter Jensen and Associates: Thursdays through Mondays. Join Peter Jensen and his crew of experienced leaders this spring. Volunteers at all levels of experience can learn from these Master Trailbuilders. Registration is limited, contact Bear Mountain Project Staff at bearmountaintrails@gmail.com sign up or for more information.



Miss Your Crew

Leaders? Here's Whose
Back in 2009!

Eddie Walsh — March-December

Matt Townsend — April-June

Jon Paulson — June-July

Tom Kindling — July-December

Doug Park — May-August

Chris Ingui — March-December

With Very Special Guests:

Peter Jensen and Associates.

All during the month of April
train with Peter Jenson, Jed Talbot,
Willie Bittner and crew as they tackle
some of the project's steep terrain above
The Boulder Field.

These work trips are reserved for
experienced NYNJTC and ATC volunteers
only. If you would like the opportunity
to work with Peter and Co., please email
us at bearmountaintrails@gmail.com.



Dear Dr. Trailhead: Solutions to Trail Works More Frustrating Problems



Dear Dr. Trailhead,

Recently, while in the process of splitting rock I accidentally dropped a pair of feathers inside a drill hole. I tried to retrieve them but couldn't. My crew leader seems nice enough, but takes his feathers and wedges very seriously, what should I do?

Sincerely,

Fallen Feathers

Dear Fallen Feathers,

If your feathers fall inside a drill hole do not panic, go over to your nearest fallen branch, snap off a pair of sturdy twigs and fashion a pair of "chopsticks." With these you can retrieve the feathers with surprising accuracy. In the meantime, should your crew leader get surly, offer him a cookie, sugar has been known to distract them. More importantly, Fallen, remember that proper hole depth is the key to preventing this frustrating situation.

Dear Dr. Trailhead,

Every time I make crush fill rock slams into my shins. At first I thought the welts were really cool and showed them off to all the girls at school, but now I'm having trouble walking. Should I begin kicking banana trees like Thai Kickboxers so I can take the punishment?

Thanks Bro,

Swollen Shins

Dear Swollen Shins,

You need to be more careful with your sledge hammer. The best way to strike a rock when attempting to make crush is at an angle parallel with the ground. If you angle your hammer when striking the stone, it and any debris will fly in the direction you angle your hammer. Most people have a tendency to arc their hammer towards themselves (ironically) causing rock shrapnel to hit the shins. The bottom line: Don't strike a rock in the same direction of your body or anyone else's. Also, this is why shin guards will be available to volunteers in 2009.

Dear Dr. Trailhead,

I've been doing trail work for a week now and I've been eating Peanut Butter and Jelly for lunch every day, I'm about to lose my mind!

Please help,

Perry Beth-Jenkins

Bear Perry Beth-Jenkins,

You're doomed.

Trail Trouble? If you would like to ask Dr. Trailhead a question you may do so by emailing him at bearmountaintrails@gmail.com. Be sure to put "Dr. Trailhead" in the subject line so we may forward your message to him in a timely manner.



Did You Know?

There are more ways than one to volunteer in the woods? The Trail Conference offers a variety of opportunities, such as:

Regional Trail Crews
Trail Maintainers
Trail Land Monitors
Shelter Caretakers
Environmental Monitors
Office/Administrative Support
Marketing
GPSing
Outreach Event Support



Phone: 201-512-9348
Fax: 201-512-9012
Email: volunteers@nynjtc.org

156 Ramapo Valley Road
Mahwah, NJ 07430

Contact Catherine Gemmell, for more information.

Who's who on the Bear Mountain Trails Project:

Eddie Walsh, Project Manager: (845) 591-1537 (cell), bearmountaintrails@gmail.com

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Larry Wheelock, West Hudson Regional Field Representative: (201) 512-9348 x16, wheelock@nynjtc.org

The Bear Mountain Trails Project

is a partnership between the Appalachian Trail Conservancy, the New York-New Jersey Trail Conference, the Palisades Interstate Park Commission, NYS Office of Park Recreation and Historic Preservation, and the National Park Service Appalachian Trail Park Office.

