

**Waterman Fund
End of Project Reporting Form**

Project Title: Lowe's Path Alpine Trail Reconstruction

Organization Name and Mailing Address: Randolph Mountain Club,
c/o Doug Mayer, 79 Boothman Lane, Randolph NH 03593

Contact and Title: Doug Mayer, Trails Co-Chair

Date: 24 November 2007

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Please answer the questions below:

1. What were your major accomplishments?

Our major accomplishment was the reconstruction of approximately one mile of an alpine section of Lowe's Path, between Gray Knob Trail and Thunderstorm Junction, including screeing-in, brushing, packing and pinning of brush, tiling, construction of low scree walls, cairning and recairning (including relocation of cairns), and construction of rock steps.

Other major accomplishments of the project include an online, alpine trail work slide show, hosted on the RMC web site at <http://www.randolphmountainclub.org/trailsinfo/trailcrewprojects/lowespath.html>, as well as the production of a photo album, explaining the project and touching on alpine stewardship issues. Copies of the book will be placed at the RMC's cabins, RMC's valley facility, as well as given to each fall trail crew member, along with our partners at the White Mountain National Forest.

Finally, RMC fall caretaker Leslie Ham wrote an interpretive article

reviewing the project, which will be appearing in the winter RMC newsletter.

2. Describe any setbacks and how you addressed them.

Please see the attached report by RMC Fall Crew Leader Matt Moore.

3. Describe any unexpected results or findings.

Please see the attached report by RMC Fall Crew Leader Matt Moore.

4. Who else has funded this project, and at what level?

The following additional sources of funding were used in this project:

RMC \$1,000 (Gift, specifically for this project.)
USFS \$2,814 Challenge contract, used as match for RMC and Waterman Fund monies.

5. Will this project be sustainable? If so, how?

We believe this project will be sustainable. The work undertaken is sturdy rock construction, which should require little maintenance over the years. Each summer, RMC fields an 8-person trail crew, so the organization is able to keep up with basic maintenance, such as brushing, recairning, repairing of scree walls, etc.

6. Please attach a final accounting for the project, showing cash expenses, other sources of income and amounts, contributed volunteer labor with description of labor and number of hours.

The following expenses were incurred on this project:

Payroll: \$4,701.91
(Payroll includes 4 trail crew members for parts of 7 weeks, plus RMC fall caretaker Leslie Ham's time preparing the newsletter article and

interpretive book showing the completed project.)

Interpretive Alpine Book: \$600.42 (13 copies)

Web programmer: \$200.00

Total: \$5,502.33

Volunteer Labor:

Trails Co-Chair Doug Mayer:

5 site visits:	15 hours
Planning, Alpine Discussion:	5 hours
Miscellaneous project work:	5 hours

Cristin Bailey, USFS	2 hours
Brian Johnston, USFS	2 hours
Rebecca Oreskes, USFS	2 hours

Total, volunteer hours:	31 hours
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7. If there are documents, brochures or other items that are relevant to this project, please attach them. Jpeg photographs and electronic files are preferred.

A copy of the interpretive alpine book will be coming in about ten days.

A copy of the Alpine Trail Work Discussion document is attached.

The RMC web site has a slide show showing the project, including Lowe's Path before and after the work was completed. The slide show is accessible at the following URL:

<http://www.randolphmountainclub.org/trailsinfo/trailcrewprojects/lowes>

path.html

A copy of the article on the project, written by fall RMC caretaker Leslie Ham, will be sent when it appears in print.

Lowe's Path Alpine Trail Project Report

By Trail Crew Leader Matt Moore

After over 100 years of tough love, Lowe's Path had in many sections widened and braided, doing great harm to an unnecessarily large area of alpine vegetation. It was our job to rein in this impact, concentrating it on one treadway. Before we began work there were many places where even the most conscientious alpine hiker could not have chosen the one true path, and many other places where careless or novice hikers had short-cut the obvious path, stomping the vegetation in their way. We set out to solve these problems and quickly developed a style of scree wall, in tandem with brush where available, to herd hikers onto the treadway. In most cases a simple visual line did not seem adequate. We learned quickly how to put ourselves into a "goofer" mind state and walk the path as if we were on a tired plod with no concern for anything other than getting out of nasty weather, or back to the car. So, huffing and looking at our feet in character, we would approach a gentle s curve and it took something substantial, about calf height, to keep us from considering a shortcut.

Of course, each section required a different kind of wall, and in general it was the curves that needed the highest walls. On the other end of the spectrum there were situations that only required one or two well-placed "gargoyles". The method we settled on was using large rock, about as heavy as a strong young man could carry a few feet, microwave size, and stacking them upon each other like dominoes, the uglier and pointier the better, to discourage stepping on or over. A traditional tiered wall was near impossible to make stable; a few well-placed kicks could dramatically alter it. Also, it looked more manufactured. We would place the rocks in a stable orientation, with no "rock levers," and maximize contact with the next rock, usually working uphill. Mostly, these walls are only ten to twenty feet long, as we strove to minimize our visual impact, but there were a few sections that required ten to twenty yards of wall. The walls are stable, and they are effective. We kicked our walls

vigorously and walked over them, simulating the kind of stresses they may encounter. They are built to last. We believe they are not “over the top: in their visual impact.

Brushing was the simplest and perhaps most effective tool for treadway delineation. Much of Lowe's Path was overgrown. This made the treadway undesirable and bootlegs formed. Twenty minutes of work could make an enormous difference, reestablishing the treadway as the obvious choice. A few well-placed rocks or the brush cut was more than sufficient to close the bootlegs in most of these instances. Brush, although somewhat temporary, was highly effective in camouflaging undesirable routes. Although the brush will shed its needles, and eventually break down and/or blow away, for the time that it is there the bootleg will have a chance to grow in.

We developed some novel techniques, packing brush on packboards from up to a mile downhill. We were careful not to take branches so large that they would look out of place in the alpine zone. We toted four pack-frame loads to one particularly bad section, and it made a big difference. We were careful never to rely on brush, our walls were built as if the brush were not there, but its presence, however temporary, eases our minds.

Weather is a huge concern in the alpine zone. Even the slightest precipitation makes the scree field quarries slippery and too dangerous to be carrying rocks out of. And heavy clouds rob us of our greatest tool, our visibility. We were constantly stepping away from our work to look at the cairns above and below, and the line of the trail. Without visibility it is much harder to make good choices. These aside from the obvious concerns of hypothermia, etc. We were incredibly lucky with the weather, enjoying many perfect days. It was important that we be flexible, to "make hay while the sun shines." Our 32-hour per week budget and our plans for bad weather work were essential to our success.

There were many instances where poor cairn placement was contributing to or causing bootleg trails. We moved cairns to be in a clear visual line and adjacent to the treadway.

The Trails Chairs should be credited for fielding an experienced crew. This experience is particularly crucial in this kind of work, as beyond technical skills, a good seasoned sense of how a trail works is required. "Hiker psychology" was the term we used to frame much of our work, and this kind of insight is honed over seasons working on trails. The worker must have a sort of sixth sense telling him or her where to place the treadway and how to keep hikers on it.

For all our resounding success, however, our season risks being a failure over all because of the back pain issues we encountered. These walls require large rocks, and to be sensitive to the alpine vegetation we must not only carry these rocks but rock hop with them over uneven terrain. A few of our most demanding projects were, say, 200 feet from the closest quarry and demanded dozens of sizable rocks. The walls are fairly easy to install, and so three quarters of our time was typically spent moving rock. It is by far the most strenuous trail work I have ever done, repetitive and lower back intensive. Two of our crew of four fell victim to debilitating back pain. Our "make hay while the sun shines" attitude led us to work too many long days in a row. As is characteristic of professional trail crews, we strove to work our hardest; this machismo was no doubt a factor in our injuries. The first to go down with back pain had experienced back problems before; I foolishly attributed his injury to his history and soon was sidelined myself. We should have taken time, on the clock, to stretch and strengthen with abdominal exercises. We should have saved the lower brushing, which we did in the first two days, to be integrated into the heavy lifting for variety and relief. But even with these measures I am unsure if the work would be safe enough to do for more than 30 hours per week. Tripods are a clear solution, although they are heavy and likely would require an expensive and noisy helicopter for transport. Also the tripods would need to be moved often as the walls go up fast once the material is there. I do not believe that smaller rocks could be effective, as they are too easily displaced.

Although I characterize the work as a resounding success, it cannot stand alone. A continued presence will be required to monitor and I

am sure correct the work at times. The shoulder season is no doubt the source of much of the impact, but whereas before the shoulder season hikers would create a bootleg or widen a trail and then summer hikers would continue to follow these paths, now this impact will be limited to the shoulder seasons only. Some of this shoulder season impact will be accepted as inevitable but a strong educational program out of the RMC camps would be a welcome ally.