

Welch / Dickey Steward Summary Report

June - September 2005

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On June 1, 2005 Antioch New England graduate student Christopher Hilke began working as a summit steward on Welch and Dickey mountains in Waterville Valley, NH. The creation of the position was a result of a collaborative effort between the Waterville Valley Athletic Improvement Association (WVAIA), the Waterville Foundation, the Guy Waterman Stewardship Fund (GWSF), and the United States Forest Service (USFS). Funding for the position was provided through the WVAIA and the Waterville Foundation, and coordinated through the GWSF. Given that both Welch and Dickey are managed by the United States Forest Service, all decisions; restoration initiatives and interpretive information were coordinated through the USFS. Advisors to the Welch / Dickey project include: Rebecca Oreskes (USFS, GWSF), Laura Waterman (GWSF), Jennifer Preiss (USFS), Richard Fortin (Antioch New England Graduate School, {ANEGS}), Nat Scrimshaw (Center for Mountain Stewardship, {CMS}), and Tom Wessels (ANEGS). The position also served as a practicum for Christopher Hilke through Antioch New England Graduate School, Keene NH. Ultimately, the 2005 initiatives were a continuation of work initiated by the Sandwich Range Conservation Association (SRCA) and the USFS in 1991 and 1992.

The 2005 position required the presence of the steward atop the Welch ledge area for three days a week, with a fixed weekend schedule, and a "floating" third day during the week. Funding was provided for 240 hours, while the practicum through ANEGS required 300 project hours. The steward was charged with several responsibilities, foremost of which was initiating visitor interactions as a means of facilitating dialogue regarding the principles of backcountry stewardship, low impact hiking, as well as educating the public of the natural communities specific to that area. The latter component also included working with the advisory staff and the USFS in creating interpretive material for kiosks and mobile signs. Further responsibilities included restoration initiatives on the Welch ledge area aimed at reducing further substrate loss, as well as a quantitative and qualitative analysis of the ledge outcrop community.

The first two weeks of June were spent observing visitor behavior, noting behavioral trends, as well as attempting to quantify daily visitor presence. Previous soil "island" delineations had degraded to such an extent that in most cases clear boundaries were hard to discern. As a result, visitor movement across the ledge area was widespread and inconsistent. During the six days of observation, approximately 390 people visited the ledge area, with only 77 people accessing the overlook via the delineated (yellow blaze) main trail. The impact on the developing vegetation was immediately evident through the increased mobility of "scuffed" substrate, and the trampling of new seasonal growth. During the month of June Christopher Hilke made approximately 100 visitor contacts, in an attempt to understand visitor expectations, past experience levels, as well as to provide an opportunity to talk about backcountry stewardship with specific regard to outcrop communities. Most of the visitors encountered during that period of time were non-local, inexperienced hikers, the majority of which were families (many children). Of the contacted visitors, more than 70% indicated they had learned of Welch / Dickey via the internet, where the 4.4 mile loop trail is advertised as a good beginners hike, and offering substantial scenic reward for minimal effort. In response to the information and observations made during the month of June; July, and the first two weeks of August, were spent implementing restoration initiatives that would facilitate a balance between; providing easy and unobstructed access to the ledge overlook, protecting the rapidly receding soil / vegetation, as well as providing the opportunity for visitor education.

The first step taken was the reestablishment of the ledge kiosk to its former location, having since fallen over and partially obscured from view. Next, Christopher Hilke hauled rock and wood debris to re-delineate the previously created vegetation "islands" (work initiated by summit steward Richard Fortin '91 and '92). Observations made during the second week of July in response to this work indicated that the changes had provided little improvement. During the 3 observation / contact days of that week, of the 276 observed individuals, 51 stopped to read the sign. Furthermore, people seemed confused as to where to walk, due to the number, and erratic location of the delineated islands. Of the 276 individuals, less than half managed

to stay on the main trail. As a result, several "lessons" became apparent. The first was that low-lying boundaries often go unseen, particularly for beginning hikers. Secondly, the more clear the delineation, the less confusion and stress imposed on the visitor as they navigate their way through the ledge area to the overlook. Lastly, it became evident that the kiosk was going to remain largely ignored unless it was in very close proximity to the path of the hiker, and even then, directly in line of sight.

In response to these observations, Christopher Hilke created an easily discernable boundary of wood and rock, requiring that people have to work to step over it, all along the left, or north side of the ledge area. This served to considerably reduce the number of "islands" into one protected area. Next, a "bottleneck" was created on the initial approach to the ledge area, and the interpretive kiosk was moved to that location. This directed all visitors to a single point, and provided a greater likelihood of capturing their attention with the Kiosk information. The results were immediately evident. Observations made during the second week in August revealed that of 159 visitors, over 100 individuals stopped to read the sign, and only 3 individuals deviated from the trail. Furthermore, the increased simplicity of the layout seemed to afford less confusion. People knew where they should not walk, more importantly, they knew where they should walk, and why. The new changes were successful! The realization was that it was not that people did not care about the previous delineated areas, rather, they were focused on reaching the overlook, and unless the delineations were made very clear, it was likely that people would pass right through them without realizing they had done so.

During the remaining part of August, attention shifted to providing meaningful and appropriate interpretive material. With assistance from members of the advisory board, two new ledge kiosks were constructed. The dilapidated kiosk, located at the "bottleneck", on the initial approach to the ledge area was replaced. The second kiosk was placed on the other end of the ledge area, with the intention of reaching hikers coming down from Welch summit to the ledges. New interpretive material was created for both the ledge kiosks. The kiosks were constructed in such a way as to allow the interpretive material to be easily changed and updated, thus providing flexibility, depending upon what information was successful at capturing visitors attention. In cooperation with the advisory board, a new interpretive panel for the left side of the lower parking lot kiosk was also created. The remaining hours in August were spent hauling wood and rock to build upon the newly created boundaries, and making visitor contacts with the purpose of assessing the response to the new layout. Of 46 people specifically polled, not one seemed to find the delineations inconvenient or cumbersome to navigate. From August 20 to September 11, Christopher Hilke was approached by 27 individuals, all of whom provided positive feedback regarding the initiatives undertaken thus far, maintaining that the restoration delineations in and of themselves, held a unique aesthetic appeal. Five visitors made specific reference to the fact that the kiosk information went a long way in explaining the physical layout of the ledge area.

The work for September was focused on vegetation sampling within the delineated areas as a means of creating base-line information for subsequent seasonal measurement of revegetation within those areas. Four transects, along which lay 26 subplots, were created within previously trampled areas. Within each subplot, measurements were recorded for % cover, frequency, and height for specific species. The initiation of community sampling will allow for a quantitative assessment of the progress of revegetation from season to season within the delineated areas, and will offer insight into the effectiveness of the management prescriptions undertaken thus far. The community sampling along the ledges of Welch Mountain provided the final work done for the summer 2005 season. The stipend hours ended on September 9th, and the practicum hours were fulfilled on September 24th.