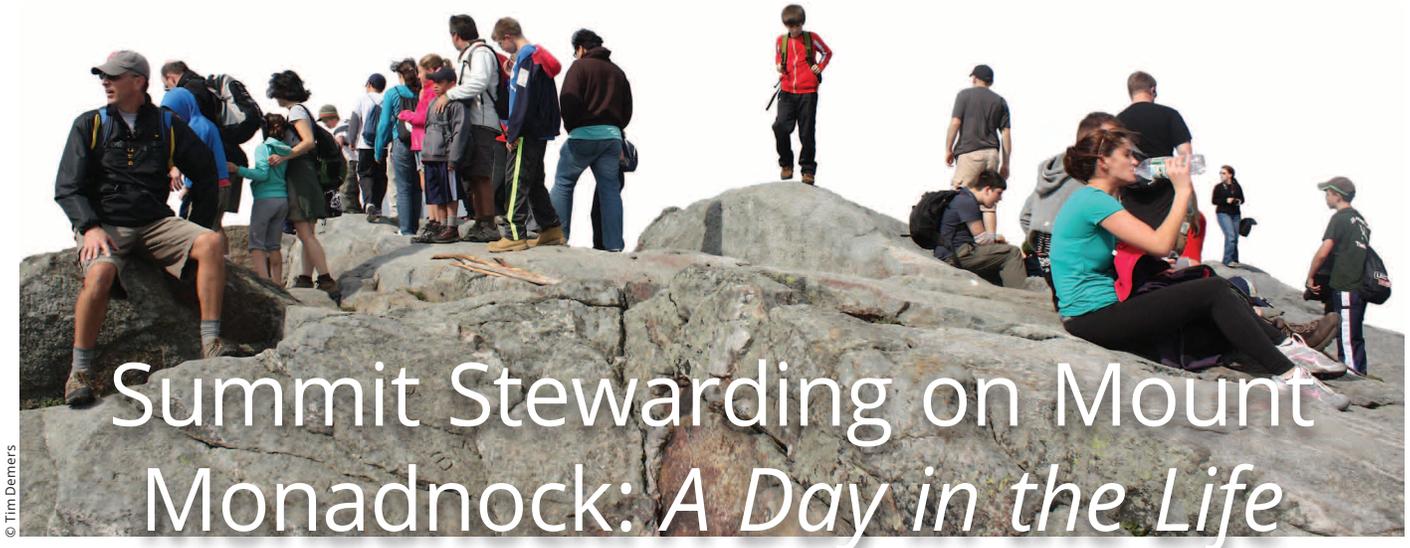




The Alpine Steward

ANNUAL NEWSLETTER

Conserving the Alpine Areas of Northeastern North America



© Tim Demers

by *Tim Demers*

I arrive at the main park entrance at Mount Monadnock State Park and greet the attendant. He warns me, "It's going to be cold and windy up there today." "It's ok, I got my layers!" I reply. The parking lot is still relatively empty, a good sign since I want to get up to the top before the crowd arrives. As a summit steward with Monadnock Ecological Research and Education program (MERE) with Antioch University New England in Keene, NH it's my job to be on the mountain and educate the public about the fragile alpine habitat on the summit of Mount Monadnock. This peak is said to be the third most-hiked mountain in the world. On this day there are a couple large school groups scheduled to be visiting the mountain, over 450 students in all.

I check in with the office and pick up a radio for use in the event of an emergency and start the trek up the White Dot trail, the quickest yet steepest route to the summit. In about an hour I reach the rocky crown on Monadnock. Sometimes I encounter another hiker or two, but I often have the summit to myself, especially on these windier days. I pick up a couple of plastic bottles and orange peels littering the rocks. The solitude and view from the summit are beautiful and I take in all I can as I await the day's visitors.

Soon the radio chatters with park staff communicating that the buses are pulling into the parking lots and that they're giving their education briefings to the groups so the students

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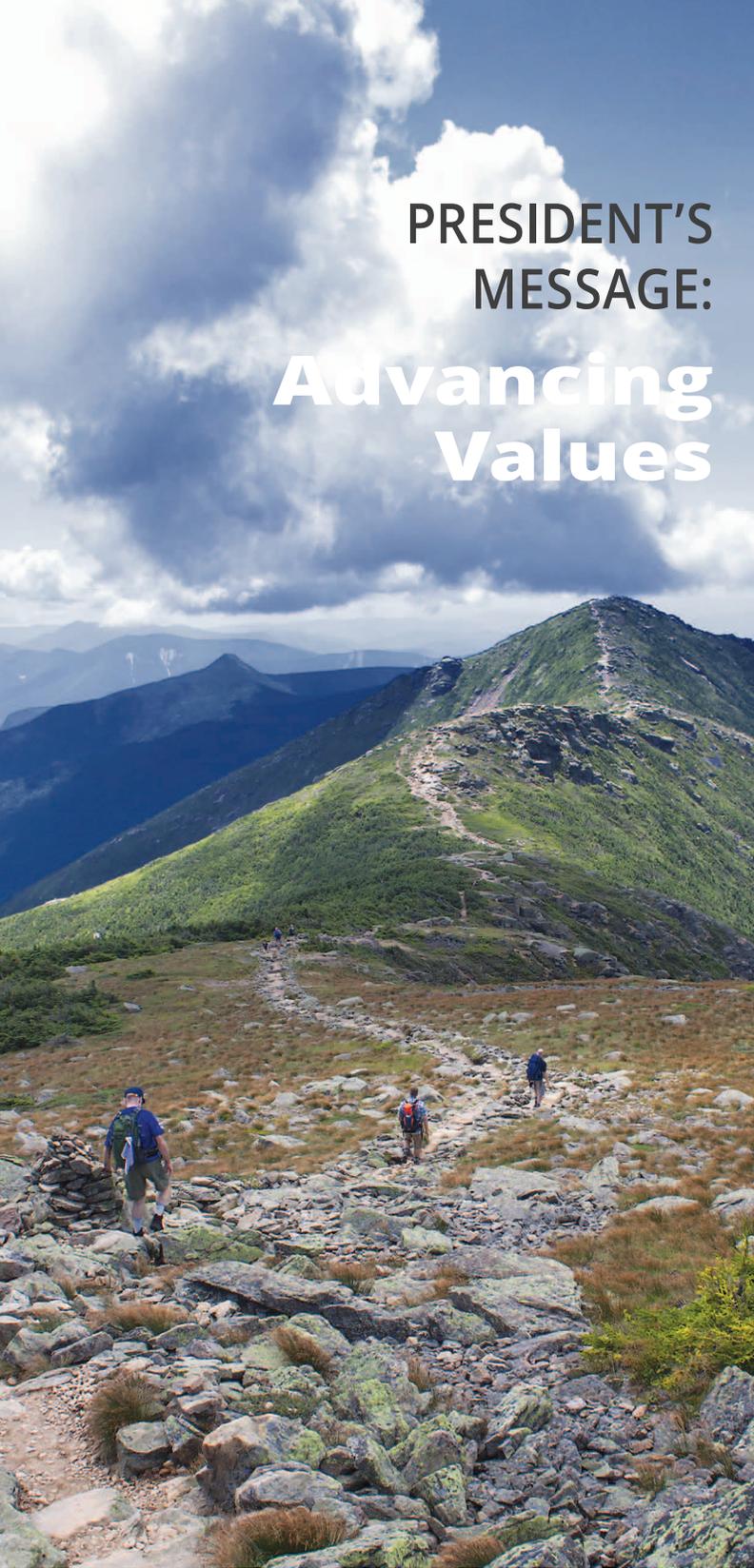
Guy Waterman Alpine Steward Award: 2013

by *Julia Goren*

Kathleen Regan was awarded the 2013 Guy Waterman Alpine Steward Award for her work founding the Adirondack High Peaks Summit Stewardship program. The Waterman Fund awards this prize each year to a person or organization that has demonstrated a long-term commitment to protecting the physical and spiritual qualities of the Northeast's mountain wilderness.

Regan's stewardship work began with The Nature Conservancy in Pennsylvania. Upon transferring to the Adirondack Chapter in 1989, she became responsible for managing TNC's system of preserves, biological monitoring of rare species, legal compliance of conservation easements, and writing conservation plans for ecologically significant areas.

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PRESIDENT'S MESSAGE: Advancing Values

by Rick Paradis

I recently completed reading a small book of wilderness essays by Sigurd Olson. Although perhaps not as well known as Thoreau, Muir or Leopold, Olson wrote passionately about the need to preserve wilderness and captured the attention of a national audience with his personal stories of guiding canoe trips in Northern Minnesota. His words (and deeds as he served on the boards of numerous conservation organizations including the Wilderness Society and National Parks Conservation Association) transcended wild places everywhere, but his voice was honed by the countless personal experiences exploring his home territory. Olson's essays are filled with fluid descriptions of the lakes and forests of the Boundary Waters region. He eloquently pleads his case for keeping segments of our national landscape untrammelled for the many benefits that wild tracts can offer. However, I believe he is at his best when articulating the need of wilderness as a tonic for our hectic and stressful lives, as a spiritual uplift in times of personal unrest and mental exhaustion.

"I have found that people go to the wilderness for many things, but the most important of these is perspective. They may think they go for the fishing or the scenery or the companionship, but in reality it is something far deeper. They go to the wilderness for the good of their souls..."

Like Olson, the Waterman Fund seeks to advance the values of wilderness landscapes wherever they may be found and in whatever shape or form. And also like Olson, we have our roots deeply planted in our own mountain and alpine ecosystems of the Northeast. It is here, in our home territory, that we have dug in and made our stand. Our board members hail from the northeastern mountainous states, from the Adirondacks to Acadia. (We hope, at some point, to have Canadian representation.) They possess a wealth of knowledge and experiences related to alpine and wilderness matters, many of them working professionally in the field here in the Northeast.

Our programs, although geared primarily at audiences and organizations within the region, have cachet and application well beyond our immediate zone of influence. The grants we

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Treasurer's Report

by Jeff Lougee

As of late October, the Fund's total assets are roughly \$350,000, and our investment accounts are up about 10% over the past 12 months. In 2013, we approved \$9,892 in grants to four recipients, and once again awarded \$2,000 split between our two essay contest winners. We are also providing financial support for this year's Alpine Stewardship Gathering being hosted by Antioch in early November. The Fund's year-to-date operating expenses total about \$2,600, which is up roughly \$600 from last year. Once again, a good portion of this (roughly 40%) is related to our ongoing effort to improve and upgrade the Fund's website. The Fund's operating expenses continue to be very small, with most of our dollars going to our core programs. Our year-to-date contributions are just over \$11,000, which is a bit short of the average annual contributions of \$20,000 received over the past six years. But we've still got a few months left in the year to make up some ground!

President's Message ... from previous page

award are directed at projects and programs that advance research, education and stewardship for our regional alpine areas. The results of these efforts are transferable to similar mountain landscapes elsewhere. The annual essay contest has attracted emerging voices and writers well beyond the Northeast writing intimately about wild places on their home ground. And the biennial Northeastern Alpine Stewardship Gathering underwritten by the Waterman Fund has been drawing interest and participation from ever widening circles of attendees and organizations.

Over the past decade, I have traveled to the Highlands of Scotland on numerous occasions with students from the University of Vermont. We have explored the country's mountain landscapes seeking out the conservation and stewardship initiatives operating there. Scotland has a nascent wilderness protection movement underway, spearheaded by the John Muir Trust. (Muir was born in Scotland and moved to the US as a young boy with his family.) I find it fascinating that in a landscape that has been peopled for thousands of years, where much of the original forest was removed generations ago and is only now beginning to recover in some areas, there is a strong desire to identify and conserve wild areas for both pragmatic and spiritual values. Folks there use arguments and strategies on behalf of wilderness preservation that would be familiar to us, but are firmly grounded in their own ecological and cultural place-based context.

I believe Sigurd Olson got it right. We should work to promote a strong reverence for wilderness areas wherever they may be found, articulating the multiple benefits they

possess with an emphasis on their emotive and spiritual values. But we need to do this from the familiar vantage of our own wild landscapes and personal experiences. This can lend both credence and authenticity to our efforts and makes for a much more interesting and engaging story line to share with the rest of the world.

Photo at left: Hikers along the Franconia Ridge.

Two 'must reads' for our long winter ahead!



Forest and Crag is available on Kindle

Eighth Northeastern Alpine Gathering: *Success!*

by Mike Jones

The 8th Northeastern Alpine Stewardship Gathering took place November 1–3 at the Sargent Center in Hancock, New Hampshire, near the base of Mount Monadnock. This year’s theme was “The Alpine: Bellwether of Change.” Nearly 100 alpine stewards, scientists, land managers, and students met for a weekend of presentations, lectures, and discussions and a hike to the summit of Mount Monadnock. The Gathering was jointly hosted by Antioch University New England (AUNE) Monadnock Ecological Research and Education Project (MERE) and the Waterman Fund, which contributed funds to support the event. The Gathering was expertly organized by Peter Palmiotto and Marilyn Castriotta (AUNE/MERE) with assistance from the Waterman Fund’s Julia Goren (also of the Adirondack Mountain Club). Conference attendees hailed primarily from New Hampshire, Vermont, New York, and Massachusetts with additional attendees from Maine, Quebec, New Brunswick, and Newfoundland.

The Gathering began Friday evening with a welcome from Stephen Jones, newly appointed president of Antioch, followed by an overview of the mountains and collaborations profiled in the *Eastern Alpine Guide*, a book project supported by the Waterman Fund in 2010, for which Laura

graciously wrote a very thoughtful and elegant foreword. Seven of the *Guide*’s twenty contributors were present. The evening concluded with a campfire a short walk along the lakeshore from the main retreat center—the path to which was lit by gas lanterns.

Nearly 25 presentations and readings made Saturday an exciting and full day. In a morning research session, Ken Kimball made the case that northeast alpine peaks should be considered refugia rather than bellwethers of change. Guillaume Fortin presented on the past, present, and future climate of the Gaspé Peninsula and Daniel Germain noted that snow avalanches and debris flows do not respond linearly to climate. Nancy Slack presented an update on her studies of snowbed communities and surveys for rare bryophytes and lichens on the Presidential Range (and announced her upcoming expanded alpine field guide). Sean Robinson examined the effect of elevation on reproduction in Adirondack *Sphagnum*. Wrapping up the research sessions, we heard an update from Tim Howard on Adirondack alpine plant monitoring and from Chelsea Little on her studies of the snowbed willow (*Salix herbacea*).

In the subsequent session on alpine management, we were treated to a range of ideas and techniques. Larry Hamilton presented case studies of mountains around the world and asked whether spiritual and/or cultural reverence can protect mountains from development, and concluded with a case study of Flagstaff’s San Francisco Peaks (which, like Mount



© Mike Jones

The 8th Northeastern Alpine Stewardship Gathering met Nov. 1–3, 2013 at the Sargent Center in Hancock, NH. There were nearly 100 attendees.

Washington, are extremely disjunct from larger alpine areas to the north). Paul Wylezol of the International Appalachian Trail proposed that the European model of “GeoParks” be applied to the mountain landscapes of western Newfoundland, which supports many distinct alpine ranges. Patrick Hummel and Alex DeLucia spoke about the history of Monadnock’s heavy visitor traffic and the Appalachian Mountain Club’s (AMC) techniques for alpine trail management, respectively.

Afternoon concurrent sessions explored the changing nature and environment of Mount Monadnock, and the partnership between the Waterman Fund and AMC’s *Appalachia* journal to promote new writing on alpine and backcountry ethics through an annual essay contest. Recent winners Bethany Taylor and Michael Wejchert read their winning essays, and *Appalachia* editor Chris Woodside led a discussion of wilderness ethics and writing. The day concluded with a session on education and stewardship and a whimsical reflection by Rick Paradis on the history of the Alpine Gatherings.

The Guy Waterman Alpine Steward Award was awarded to Kathy Regan, formerly of the Nature Conservancy and currently a Natural Resource Planner with the Adirondack Park Agency. Kathy was instrumental in launching the Adirondack High Peaks Summit Steward Program, which she oversaw for 14 years.



Laura Waterman presents the Guy Waterman Alpine Steward Award to Kathy Regan.

Keynote speaker Amy Seidl, author of *Finding Higher Ground: Adaptation in the Age of Warming*, prompted us to consider the implications of an upcoming millennium of changing climate, chatted with participants and signed books after her talk. Saturday concluded with another fire by the lake, and several groups hiked up Mount Monadnock on Sunday morning.

This year’s gathering was by far the largest to date, and it provided an invaluable opportunity to network and discuss ideas. According to leaked rumors, the ninth Gathering may be held in the wilds of northern Maine in 2015. We look forward to seeing you there!

..... BOARD MEMBER UPDATE

by Rick Paradis

With the departure of Val Stori and Annie Bellerose at the end of last year, the Waterman Fund welcomes two new board members, **Jean Hoekwater** and **Mike Jones**.

Jean lives in Brownville Junction, Maine with her husband John. She is the Park Naturalist at Baxter State Park with responsibilities for park-wide visitor education initiatives including the Alpine Steward program on Katahdin. Jean has enjoyed working with Park staff, visitors, various special interest groups and scientists to document and protect the wilderness experience and natural resources of Baxter since 1988. Her commitment to alpine conservation and stewardship is recognized throughout the Northeast. Jean’s favorite pastimes include kayaking nearby lakes and ponds, watching the night sky and practicing biological diplomacy in her garden.

Mike has explored and studied many memorable wilderness areas from Labrador to the Everglades. He is a conservation biologist at the University of Massachusetts, where he studies



Mike Jones and Jean Hoekwater.

eastern alpine biodiversity (and turtles). Mike proudly counts himself among the thousands of people captivated by the White Mountains. He was fortunate to spend four winters at Carter Notch and four summers at Lakes of the Clouds for the AMC. In 2012, Mike co-edited *Eastern Alpine Guide*, a natural history of eastern alpine tundra. He serves on the board of Beyond Ktaadn and is a graduate of the Center for Northern Studies.

Jean and Mike possess a wealth of knowledge and skills related to alpine ecology and conservation. We look forward to their active engagement in the activities of the Waterman Fund.

SIXTH ANNUAL Waterman Fund Alpine Essay Contest Winners

by Bethany Taylor

The Waterman Fund is delighted to announce the winners of its sixth annual Alpine Essay Contest. The Fund received over fifty entries this year and through much thoughtful reading and fruitful discussion, the Fund's reading committee selected **Michael Wejchert** as this year's winner with his essay entitled "Epigoni, Revisited." Devon Reynolds was chosen as runner up for her essay "Steward's Story." Both writers were awarded a cash prize.

This was the first year that the Fund has specified a theme for the essay contest. All writers were asked to bend their talents towards the emerging question of technology in wild places. The thoughtfulness that all contestants brought to their contributions demonstrated the many questions and few answers regarding the appropriate balance and definition of both technology and wild places.

Wejchert, of Jackson, New Hampshire, is a writer and climber. His essay focuses on questions regarding wilderness, wildness, and technology as seen through the technological changes that have arisen in his twenty-first century mountaineering career. The Fund's reading committee selected Wejchert's essay, a classic mountaineering adventure story, for the articulate and thoughtful examination of these issues that embraces a humble look at our place in the earth's far and wild places. The Fund is pleased to recognize Wejchert as an emerging New England writer and awarded him a \$1500 prize to help him further his writing ambitions.

Reynolds, from Amherst, New York, wrote her essay in response to her experience as a High Peaks Steward in the Adirondacks. Her essay echoes the ancient oral story-telling traditions that she and her fellow stewards embraced while in the woods, divorced from commonly used communication technologies. Reynolds's describes her essay as "detailing the rich relationships that came out of that experience and discussing the impact of technology on friendship. I learned so much about my relationship with technology from being

without it, in the woods of the Adirondacks." Reynolds was awarded \$500 for her essay.

A brief excerpt from Wejchert's essay appears on the following page. Both "Epigoni, Revisited" and "Steward's Story" will appear in full on our website in December and Wejchert's will be published in the Winter/Spring 2014 issue of *Appalachia*, the Appalachian Mountain Club's biannual journal of mountaineering and conservation.

Etymologically, the word "essay" means to try, to attempt. In the six years that the Waterman Fund Essay Contest has been in existence, it has provided emerging writers the opportunity to test the waters of the wilderness writing genre, to try to prove themselves as writers. Wejchert's essay which chronicles the attempt that he and several other climbers made to climb Mount Deborah in the remote Alaskan wilderness, highlights this spirit of attempt, of the trial and error so crucial to our explorations of the boundar-



Michael Wejchert, winner of the 6th Annual Essay Contest.

ies of wilderness, and what we learn through exposure to the reality of wilderness, beyond the glossy pictures and ideals.

While the majority of the essays submitted to the Contest approached the theme of technology in wild places from the perspective of a debate with a clear answer, Wejchert's essay stood out from the rest for his unique ability to tell an engaging story first, while questioning—rather than answering—the respective places of humans, technology, and exploration, all against the backdrop of wildness that calls to people of every generation. As might be expected from a mountaineer, his prose is spare, clean, and starkly beautiful. He swings easily between describing Mount Deborah as "unlike the jagged 'teeth' of the Central Alaska Range, whose steep walls form a phalanx of igneous molars, Deborah heaves upward sistered by nothing: a rotting fang in an otherwise empty mouth," and quoting phone calls with his parents. Wejchert's abilities to be firmly rooted in all aspects of being a young American mountaineer, and not to shirk from the questions and paradoxes therein, mark him as a remarkable writer and the Waterman Fund Essay contest is pleased to be able to support his efforts as a writer and a climber.

From Michael Wejchert's "Epigoni, Revisited"

"C'mon DEBORAH!" I scream, a jilted lover. "Let us CLIMB!" Our systems have failed us. I do not snap photographs; exposed skin means frostbite. After everyone wakes up, we ski towards the wall in our down jackets. Our feet, buried in neoprene-lined double boots, are without feeling. For a second I am detached. I start weighing how many toes I am willing to lose before I turn around. For a minute I contemplate this perverse absurdity in the arctic dawn. The rope between the three of us suddenly comes tight. Bayard, stopping.

"I'm going back. I strongly suggest you guys do the same." Our plans are unraveling. By now, success seems impossible. But just a few minutes of footage, Elliot and I climbing on the face...something for the grant committee. I take some rope from Bayard. Elliot takes some climbing gear. We keep going. Is this what Jonny and Micah thought as they pushed forward with Wade? Or Dave and Don? Does the camera make us any less vulnerable?

I realize the mountain doesn't care who we are, why we're here, or what we've brought.

My frozen fingers unzip four layers and finally fumble with the camera lens. I manage thirty seconds of shaky footage almost automatically: Elliot below the mountain, swinging his feet like a football punter to stay warm. I don't need the film to remember the moment though: we two grown men doing jumping jacks, miles from anywhere, beneath a hunk of granite no one really cares about, pistons of humanity bobbing up and down, fighting for enough warmth to stay alive. The climbing ceases to matter, and the movie, too. Sometimes, surviving is enough.

The 2014 Alpine Essay Contest

Guy and Laura Waterman spent a lifetime reflecting and writing on the Northeast's mountains. The Waterman Fund seeks to further their legacy through essays that celebrate this wilderness spirit.

The 2014 Alpine Essay Contest theme invites emerging writers to ponder the question: *fifty years after the Wilderness Act, does wilderness still matter?*

Aldo Leopold wrote, "It is inconceivable to me that an ethical relation to land can exist without love, respect, and admiration for land, and a high regard for its value." Wallace Stegner, in his *Wilderness Letter*, wrote that "Something will have gone out of us as a people if we ever let the remaining wilderness be destroyed...". It was these words and the actions of these writers and others like them that gave shape to Wilderness as a Federal Land designation in 1964. Much has been done in the last half-century toward the preservation and protection and cultural definition of Wilderness, wilderness, and wildness.

The threats to such landscapes are different today; the questions we ask of our wild places are different from those asked in 1964. Or are they? Do Leopold's and Stegner's words have relevance today? What is the value of wilderness, as a reality or a concept? What shape does

a land ethic take as we move forward? What defines wilderness, where can one find it, and what value does that have personally, culturally, ethically? Is there hope or need for wild places in today's world?

The Waterman Fund encourages all interested, emerging writers to submit their questions and answers on this topic by April 15. The winning essay will be published in *Appalachia* and the essayist shall receive \$1500. Honorable Mention will receive \$500.

For more information and submission details, visit: www.watermanfund.org



Bicknell's Thrush lurking in the subalpine forest on Mt. Mansfield, Vermont.

© Rick Paradis

THE YEAR *in*



1

© Jean Hoekwater



© Rey Center

3



2

© Mike Jones



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4



© Des Callaghan

5



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6

Photographs

1. Kent McFarland leads the Waterman Fund summer outing into the fog on Mt. Washington.
2. Attendees of the 8th Alpine Gathering begin the climb to the summit of Mt. Monadnock.
- 3-4. Beech Street School Program kids exploring and learning about Welch Ledges with the Rey Center.
5. Nancy Slack and colleagues discovered this rare liverwort (*Haplomitrium hookeri*) while continuing their snowbank plant community studies. It has not been seen for over 100 years.
6. Alpine rattlesnake root (*Prenanthes boottii*) in full bloom during the Waterman Fund summer outing into the fog on Mt. Washington.
7. Rick Paradis welcomes the participants to the 8th Alpine Steward Gathering.
8. Marilyn Castriotta, summit steward with MERE, enjoying a day on the summit of Mt. Monadnock.
9. Patches of *Diapensia lapponica* dot the Franconia Ridge line.

© K.P. McFarland



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Good Work Reaps Reprise for Two Grantees in 2013

by Charlie Jacobi

The 2013 Waterman Fund grant awards were highlighted by a second consecutive year of funding for the Rey Center in Waterville Valley, New Hampshire, and the work of alpine ecologist Nancy Slack on Mount Washington. Their excellent work in 2012 on behalf of the northeastern alpine zone, and well-crafted proposals to continue that work, won the support of the Waterman Fund Board last January.

In 2012, the Rey Center's Welch Ledges Stewardship and Science Program led guided hikes to the Ledges for 44 people, mostly children, to teach them about the importance and fragility of the outcrop community, hiker impacts, and Leave No Trace practices. They also trained four "Ledge" Stewards who educated nearly 1,400 hikers over seven days of stewarding, and began a long-term citizen-science monitoring program for the outcrop community. Rey Center Research Coordinator Kim Votta directs this outstanding program focusing on the Ledges, which serve for many as a gateway to hiking in the White Mountains.

In the spring of 2013, the Rey Center extended their education programs on the nearby Welch Ledges to the Beech Street School in Manchester, New Hampshire. Ninety fifth graders from this urban school with a diverse student body hiked to the Ledges to learn about the rare botanical outcrop community, forest ecology, and hiker impacts to this fragile environment. The words of one student from Vietnam are revealing:

"Yesterday I went on a field trip....I climbed to mountains. I learned about plants. I like jumping on rocks. I saw river. I put my hand in river, the water cold. That field trip let me know [how] strong I am. I found a house where bird lives. I saw a beautiful picture at mountains..."

On New England's highest peak, Nancy Slack and colleagues continued their inventory of snowbed communities, bryophytes, and lichens in 2013. Their work in 2012 on Mount Washington resulted in the re-discovery of an ancient liverwort not found on the mountain or in New Hampshire in nearly 100 years and several other rare species. Study



Beech Street School Program kids exploring Welch Ledges.

© Rey Center

results will be compared with earlier work from the 1960s to document changes since then.

A third grant was awarded to the Mount Washington Observatory for a new Summit Stewardship exhibit in the Mount Washington Museum at the top of New England. The Observatory is rehabilitating the museum and creating new exhibits, and the Fund is excited to partner with them to highlight the fragility of the alpine zone and the Leave No Trace hiker practices that will help preserve it. More than 100,000 annual museum visitors will be exposed to the Summit Stewardship exhibit and the work of the Waterman Fund.

With its final 2013 grant, the Waterman Fund renewed its support for the Maine Appalachian Trail Club to continue their long-term stewardship of the Bigelow Range. The Bigelow Mountain Caretaker will educate backpackers and day hikers from the high elevation Horns Pond Campsite. The caretaker will patrol the ridgeline in the alpine zone in this popular range (~ 10,000 hikers), with a special focus on the many organized groups passing through.

The 2013 Waterman Fund grants totaled \$12,453, and since

Continued on next page

Hub Vogelmänn: *Champion of Alpine Stewardship and Conservation*



by Rick Paradis

Hub Vogelmänn, recipient of the 2008 Guy Waterman Alpine Stewardship Award, passed away on October 11, 2013 at the age of 84. Hub spent his entire professional career as a professor of botany at the University of Vermont. He is well known for his pioneering research on acid rain and establishing the Field Naturalist Program at UVM over 25 years ago. Hub was also very instrumental in opening up the field office of The Nature Conservancy in Vermont, conserving important lands on Mount Mansfield and Camel's Hump, and creating the UVM Natural Areas System.

In addition to his alpine research interests, Hub was one of the first to call attention to the degradation of

alpine landscapes due to human activities there. He recommended that educational programs be created to help protect these mountaintop landscapes. Hub also helped establish the region's first corps of alpine stewards on Camel's Hump and Mount Mansfield, now administered by the Green Mountain Club and emulated on other mountaintops throughout the Northeast.

For over forty years, Hub demonstrated a forward-thinking and consistent involvement in researching and protecting alpine areas, and in educating both scientific and recreational communities about these fragile mountain ecosystems. He was indeed a champion of alpine stewardship and conservation.

Grantees ... Continued from previous page

2002, the Fund has awarded more than \$115,000 to a wide spectrum of organizations and individuals to strengthen human stewardship and understanding of the alpine areas of the northeastern U.S. and Canada.

Final reports were received in 2013 from two other organizations funded the previous year, the Appalachian Mountain Club and the Monadnock Ecological Research Center (MERE) at Antioch University.

Ken Kimball, Doug Weihrach and the Appalachian Mountain Club Research Department wrapped up their "bibliography" project. Using library and online searches, personal contacts, and visits to relevant archives, they assembled a database of more than 600 citations, many of them from the hard-to-find "gray" literature. They searched through the archives of six organizations, and scanned more than 150 documents that were previously not available in digital format. The database and digital copies of non-copyrighted documents are available for download in Microsoft Access format (*.accdb), and an Excel and pdf version of the bibliography list are available as well. Their report also outlines next steps for keeping the database current, and making it more visible and user-friendly. Suggestions for new material are welcome.

MERE hired an additional summit steward with the Waterman Fund grant and the new steward made 2,760

visitor contacts on Mount Monadnock in July and August 2012. The overall number of contacts by all stewards more than tripled since 2010 and was accomplished with fewer days on the summit. Under the direction of Peter Palmiotto, MERE continues to make great strides with its summit steward program. The 8th Alpine Stewardship Gathering was hosted this November by MERE and Antioch University in the shadow of Mount Monadnock.

As you read this, the 2014 grant proposals will be coming in to meet the December 15th deadline. Make sure yours is among them.

Deadline for Grant Applications

Grant applications for alpine project funding are due on **December 15th**. For more information, visit: www.watermanfund.org/grants/grant-guidelines or by contacting grants@watermanfund.org.

To apply, please submit an application using the online application form at www.watermanfund.org/grants/grants-application OR send an electronic copy in PDF format to grants@watermanfund.org. Paper applications will no longer be accepted.



Hidden Butterflies in the Clouds

• 2013 WATERMAN FUND FIELD TRIP •

by Matt Larson

In 2008, The Waterman Fund awarded a grant to the Vermont Center for Ecostudies (VCE) for a monitoring project focused on two species of alpine butterflies in the White Mountains. This past July, a group of Fund supporters and board members gathered from throughout the Northeast and visited the study site with Kent McFarland, VCE's conservation biologist and Waterman Fund board member since 2010.

Both butterfly species – White Mountain Arctic and White Mountain Fritillary – are glacial relicts found only in the Presidential Range, where they have lived in isolation from their arctic cousins for thousands of years. The Arctics reside in the alpine zone, where their only known host plant in the White Mountains – Bigelow's Sedge – is abundant. The Fritillaries can be found just below, from the lower limit of the alpine zone down through the stunted, twisted spruce-fir forest known as krummholz, especially in the vicinity of wet meadows, snowbank communities, springs, and streams. Their host plant is unknown, but possibilities include the many *Vaccinium* species found in the subalpine zone, as well as Dwarf Willow, Alpine Marsh Violet, or Alpine Bistort.

When the outing was first proposed, Kent made clear the main challenge focused on these rare butterflies: they fly only when winds are minimal and the sun is shining brightly, conditions that anyone familiar with Mt. Washington knows are not encountered often. Nevertheless, we decided to set a date for the trip. If the weather did not cooperate, visiting the subalpine and alpine habitats these butterflies depend on would be a great opportunity to spend the day above treeline while learning about a pair of alpine inhabitants that most of us knew little about.

The wind was light on the day of our outing, as everyone had hoped, but thick clouds had descended on the summits and were expected to blanket the Presidential Range until long after nightfall. By the time we reached our first stop on the Auto Road, Cragway Spring, we were well into the clouds and visibility was deteriorating. Although not ideal for butterfly flight, the enveloping mist brought our focus down to the flora that surrounded us. Kent pointed out some of the butterfly's preferred food sources: the Arctics, he noted, were often seen nectaring on Mountain Sandwort, while the Fritillaries seemed to prefer Alpine Goldenrod, but could also be found feeding on Purple-stemmed Aster and Meadowsweet. Threats were discussed too. Due to their

restricted range, both butterfly species are highly vulnerable to impacts of climate change: displacement of habitat by lower-elevation species, changes in host plant abundance and range shifts, or population declines associated with increases in extreme weather events.

Next was a descent into the Alpine Garden, which offered what our mountains often do when clouds are low and winds still: a quiet moment to watch airborne moisture coalesce as drops of water on heaths and sedges at trailside, to listen as the drops merged into thin mountain streams and began the long journey downhill, to appreciate the wet climatic regime that supports the cool, moist natural communities that so many alpine species prefer. Even though there were a dozen in our group the mountainside was hushed, our voices muted by encircling fog as we split into smaller groups and walked the trail.

When we regrouped at the summit for lunch and as we descended the mountain that afternoon our talk was varied, but a persistent theme was how our “home” alpine zones were in many ways so different yet still much the same. Throughout the region, it seems, the persistent clouds and precipitation are not just a distinctive trait, but play



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White Mountain Fritillary at Cragway Springs on a sunny day.

a significant role in structuring our alpine communities and delineating treeline. We saw no butterflies that day, alas, but everyone seemed to take home with them a better understanding of and deeper appreciation for the Northeast’s inimitable mountains and the sometime elusive species that live there.

Photo at left: The White Mountain Fritillary, hidden on foggy days, favors streamside plant communities like this one in the Alpine Garden on Mt. Washington.

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Thank You from Page Hollow

Laura Waterman

Brian Post, for helping us manage our website. **Anne McKinsey** of AMCK Web & Print Design, for her artful redesign of this newsletter. **Peter Palmiotto** and the MERE program, for hosting the 8th Alpine Gathering in 2013 at Antioch University New England. **Adrien Vlach**, for continuing to offer his expertise in guiding us through the process of long range planning. **Howie Wemyss** and the Mount Washington Auto Road, for driving us up the mountain for a day of learning about rare alpine butterflies and plants that we offered to our donors. **Brendan Wiltse**, for donating

his brilliant photograph for the Guy Waterman Alpine Steward Award. **Chis Woodside**, editor of *Appalachia*, for her unflagging support for our essay contest, for publishing winning essays in the December issue, and for hosting a discussion of writing on wilderness issues at the Alpine Gathering. **Bethany Taylor**, for ably shepherding the Essay Contest. **Rebecca Oreskes** and **Carl Demrow**, past board members, for reading for the Essay Contest, and **Val Stori**, past board member, for reading for the Essay Contest as well as steering us through the final phases of the long range plan.

Summit Stewarding ... from page 1

know to stay on marked paths and off the vegetated areas as they hike. I greet hikers who are out for their weekly visits to the mountain and introduce myself as the summit steward for the day. After thanking them for coming I let them know about the rare and fragile alpine species that call the mountain home and that staying on the rocks and marked paths will help them survive. I also give the friendly reminder to pack out all their trash to keep the summit clean for the next visitors. Sometimes they know who I am and why I'm there and they thank me. Often people express amazement that plant species that can be found in the Arctic are found right here in their backyard. After sharing this I am sometimes asked questions about the ecology and the implications of climate change for the mountain. Those interactions are great and often last a while before I realize how much time has gone by and that I need to go talk to other groups arriving at the summit. Other interactions don't go past the point of me mentioning the part about staying on the rocks to protect the plant life. Most people, though, do appreciate being told about and learning about the ecosystem that they're visiting.

The school groups arrive around lunch, with the teachers leading the way. Instead of greeting each group in the procession of students coming up the mountain I usually talk to the teachers and they pass the word along to the class

as they arrive. Today's school groups are very respectful and responsibly cruise the summit with friends and exchange high-fives for completing the hike. Inevitably the humorous antics of taking pictures of classmates without shirts on in the chilling wind begin, but today they quickly redress and huddle behind the rocks to warm up. Before the group departs, there is always a class photo taken to commemorate this year's trip, and it is here that I swoop in for the opportunity to address the whole group to thank them for visiting and to ask that they stay on the rocks on the hike down and to pack out their trash. On this day, the school groups were the main visitors and around mid-afternoon the summit is relatively unoccupied and I start my descent back to the car. I still have to get home and do some homework.

Positive encounters—educating people about interesting facts that they were not aware of—is what makes stewardship rewarding. Of course, we do encounter the dismissive personality who seems to have no interest in the rare environment they have entered, but as I watch them descend I notice the careful foot-placement to avoid the little patches of vegetation in the cracks of the rocks.

Tim Demers is a Master candidate in Sustainable Development and Climate Change, Antioch University New England, Keene NH, Environmental Studies Department.

Guy Waterman Award ... from page 1

In this role, Regan became part of a group interested in educating the hiking public about the fragility of rare alpine species. Out of this group, the Adirondack High Peaks Summit Steward program was created as a partnership of the Adirondack Mountain Club (ADK), the Adirondack Chapter of the Nature Conservancy (ANC), and the NYS Department of Environmental Conservation (DEC). Kathy oversaw this program for 14 years, training, overseeing, and guiding stewards and insuring the program's success.

Former Summit Stewards Leslie Karasin, Ariel Lynch, Jeff Lougee, and Sean Robinson nominated Kathy for the award. An additional letter of support was written by Tim Barnett, Vice President of the ANC. In her nominating letter, Karasin wrote, "... it is likely that the program never would have gained the mixture of vision, funding, institutional support, and ongoing management necessary for it to thrive, had it not been for Kathy's dogged devotion to the program and its success." Regan's legacy of stewardship is felt not only in the summits themselves and in the ongoing success of the program, but in the lives of the stewards she supported.

Kathy Regan has continued her stewardship of the Adiron-

dacks since leaving The Nature Conservancy in 2003. She joined the staff of the Adirondack Park Agency in 2008 in their Planning Division as a Natural Resource Planner where she works with the State Lands Team on Forest Preserve projects, including Unit Management Plans, State Land permits, and State land Classification packages.

The award was presented at the 8th Northeastern Alpine Stewardship Gathering, which was held in Hancock, NH on November 1st–3rd.



Alpine Steward Nominations Sought

To nominate someone for the Guy Waterman Alpine Stewardship Award, please send nomination letters to the Waterman Fund (forms available on our website), citing specific examples of the nominee's stewardship of the Northeast's wilderness, along with other relevant personal or professional experience. If you have nominated someone in the past, the nomination remains in our files and is reviewed annually.

Nominations are due January 15th, 2013.

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Species in the Spotlight: *Diapensia*

by Kent McFarland

Dotted across the most weather-beaten ridgelines, the pincushion flower (*Diapensia lapponica*) seems to be in a liliptutian world seated above our own. Found circumpolar, here in the Northeast they grow in some of the harshest alpine microclimates.

Their shape is ideal for survival. Seated low to the ground, their waxy leaves barely move in the harshest winds, allowing for a large surface area for maximum photosynthesis and resistance to desiccating winds. The inner portion is well protected and can be several degrees warmer than the air. It can withstand temperatures as low as -94 F.

Their evergreen leaves are retained to save energy and to be quickly ready for photosynthesis during the short growing season. Helping to preserve the leaves, a red pigment called anthocyanin absorbs harmful ultraviolet radiation, which is re-emitted as heat.

Despite their small size, some of these plants can be hundreds of years old. They grow radially, with the oldest part of the



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plant at the center of the pincushion. In northern Sweden, a study found that they grew just 0.6 mm annually. Even a small cushion can be quite old.

One of the first plants to flower each year, their white flowers with five petals fused at the base are like small goblets in this tiny world. The Appalachian Mountain Club, partly supported by the Waterman Fund, has studied the flowering phenology of *Diapensia*. From 2008-2011 the average flowering date was June 9. Using the Mount Washington summit long-term temperature record they have developed preliminary estimates of how flowering time has changed over the last 76 years in the Presidential Range alpine zone. The

estimated average flowering times for *Diapensia* appears to have shifted by about two days earlier.

A June hike into the alpine zone can be cold and harsh for the traveler, but the reward at the top is wave after wave of white flowers pointed skyward like beacons of hope.