

# **A Winter Diary from on High**

## A Week in the Life of a Summit Volunteer

by Paul Wainwright

In the course of our busy lives, it is not very often that we get to do something totally different for an entire week. Being a winter summit volunteer for the Mount Washington Observatory is such an occasion. What follows are my thoughts and feelings during my week as a summit volunteer in March of 2003.

### **Wednesday:**

I arrive at the base of Mount Washington full of anticipation for my week on the Rockpile. The weather in Pinkham Notch is high thin clouds, in the 20's, with no wind to speak of. The top of Mount Washington is not quite visible, with gathering clouds beginning to envelope the summit.

Shift change for the observers takes place on Wednesdays, and I am warmly greeted by Chris Perruzzi, Derek Brown, and Jeff De Rosa, with whom I will be spending the next 7 days. Sam Giarusso, a science teacher on sabbatical, also joins us. Other than couples who volunteer together, it is unusual to have two volunteers for the same week, and I am delighted by the prospect of sharing the work with a second person.

Some repairs to the Bombardier snow cat delay us, but by 10 AM we are on our way. This is my first ride in a snow cat, as my previous volunteer experience was in late fall when the Mount Washington auto road was still passable by 4-wheel drive truck. Two things immediately impress me: how slowly the thing moves, and how bumpy it is.

By the time we pass the first mile marker, the novelty of riding in a snow cat has pretty much worn off, and we have 7 miles to go! My body is beginning to feel like it is made out of Jell-O, and it has begun to resonate rhythmically with the bouncing of the snow cat. By the second mile the windows have pretty much fogged up, so my plans to take photographs are abandoned.

Tree line on Mount Washington is just above 4000 feet, about half way up the auto road. I can see snow being whipped up by increasingly strong winds.

Wayne Peterson, the snow cat driver, is using the plow to clear large drifts from places on the road. Huntington Ravine forms a precipitous drop to our right. As visibility drops to less than 50 feet in snow, freezing fog, and high winds, we stop occasionally and wait for conditions to improve enough to see the stakes marking the road ahead of us.

We arrive at the summit around 11:30. It is like another world up here. We are in the clouds with a 50 mph wind, snow, and temperatures in the low 20's – actually warmer than expected given the very similar temperature in the valley.

After unloading the gear and fresh food for the week, Sam and I get a quick orientation from Gigi Estes, the previous week's volunteer. Gigi has a delicious selection of leftover soup and chili waiting for us on the stove.

This part of shift change is always very busy. Food needs to be stored, gear needs to be delivered to bunk rooms, the staff holds a meeting, and the down-going crew's gear – as well as the previous week's garbage – needs to be loaded into the snow cat.

By about 2:30 the snow cat departs with the previous week's staff and volunteer, and a sense of quiet descends upon the summit. Sam and I negotiate plans for dinner, and we decide that I will roast a chicken, and Sam will do vegetables and dessert. Meal planning is a bit of a challenge up here, and it depends totally on what's on hand in the pantry and freezers. Trips to the grocery store are out of the question.

Most days the volunteer's job is to cook dinner for the summit staff. If there are EduTrips, however, the task is more difficult because all meals and snacks need to be prepared for these groups. Fortunately for us, however, there are no EduTrips scheduled for this week due to the devastating fire a few weeks ago that destroyed the power generation building on the summit. The Observatory is back to almost normal with a large portable generator located in the entrance to the state park portion of the Sherman Adams building, but it is not quite normal enough to host a crowd of visitors. Every few hours the Observatory staff needs to check on the generator and other mechanical systems in the building, adding considerably to their responsibilities.

Supper is late. Ordinarily the observers eat dinner at 5 PM, which allows them to complete their scheduled observations and not miss the food. However, I always seem to forget that it takes things a little longer to cook up here at 6288 feet above sea level, and I also forget that it takes a good hour for this behemoth of an oven to heat up. But eventually we get the meal on the table, and everybody seems unconcerned by the delay.

Cleaning up the kitchen is a bit of a challenge in winter on Mount Washington. Artesian wells supply the Observatory with plenty of water, but the septic system

freezes solid sometime back in November. All the waste water is stored in large tanks in the basement of the Sherman Adams building. Thus, water consumption must be kept to a minimum. Clean-up is a bit tedious, but eventually we are done.

As I unroll my sleeping bag I find two love notes that were hidden there by my wife Judy. I wonder how many of mine she has found – I left 37 of them around the house.

### **Thursday:**

I have not slept well – I'm not used to sleeping in a sleeping bag. During the night I could hear Derek de-icing the instruments more than 4 levels above me in the tower. There is the sound of a distant metallic thud – thud – thud as he bangs on the metal supports. This is my indication that rime ice is forming, a wonderful feathery coating that forms when clouds hit a solid object in wind and freezing temperatures. It has an unearthly appearance that is never seen at lower altitudes. One of my goals for the week is to make some artistic photographs of it, and Derek's banging is music to my ears.

The telephone wakes me at 5:30. The Observatory does several radio broadcasts each morning, and the radio stations call the Observatory at specific times when they are ready to record the weather report. New Hampshire Public Radio is the first to call around 5:30. The telephone in the lower-level living quarters is right outside the volunteer's bunk room. Good thing I am a morning person.

I make coffee and hurry upstairs to see what it's doing outside. Chris says it has just cleared. Occasionally a cloud blows by us – it reminds me of flying through clouds in an airplane. The wind is about 70 mph, with a temperature of -5 degrees. From the state park section of the building I watch the sunrise. A cloud hangs above the Wildcat ski area (which is below us), and the sun is behind it with crepuscular rays streaming both above us and also down into the valley below. I take a photograph through the window.

I make some oatmeal for breakfast. It is quiet – no one else is up except for Chris who is upstairs in the weather room doing observations and the morning radio shows.

Nin, the famous Observatory cat, seems to be a bit friendlier this year. The other people on this shift are not really cat people, and Nin has figured out that I am.

I spend some time on the exercise bike, then dress for the day. Because of the winter water limitations, showers are kept to a minimum, and a sponge bath is all

that I get. Flushing is also kept to a minimum. There is a sign in the bathroom that reads: "Our Golden Rule: If it's mellow, keep it yellow. If it's brown, flush it down." You figure it out. This novelty wears out very quickly.

I make soup from last night's chicken leftovers. To cool the soup I place the pot outside the tower for a short while. Very effective.

After lunch I bundle up and take a (very) short walk around the observation deck on the roof of the Sherman Adams building. The early morning sun has given way to an overcast sky, but visibility continues to be good. Temperatures for the day stay a few degrees below zero, and winds decrease to around 40 by afternoon. It is an interesting experience to walk in moderately high wind because your feet do not always land where you think they will, and you stumble around as if you were intoxicated. The rime that formed last night does not seem to be as spectacular as the rime I saw last year. It is quite dry out, and a lot of the fine detail is being lost to sublimation – it is literally just evaporating.

For dinner Sam cooks a delicious concoction of ham and cheese that is loosely based on the "Leftover Casserole" recipe from the Observatory's book Life at the Top. In the evening we all watch the movie Twister, an appropriate show for a bunch of weather nuts. Nin sits on my lap – I think he knows I miss my two cats.

### **Friday:**

Although I slept a little better, I'm up around 5:15. Coffee in hand, I quietly visit the weather room to watch Chris do her NHPR report.

I again watch the sunrise from the state park section of the Sherman Adams building. It is perfectly clear, 2 degrees, and winds around 40 gusting to about 50. The sky turns bright orange, the mountains to the north and east are blanketed in haze. Suddenly the sun bursts over the horizon, briefly reflecting in the Atlantic Ocean beyond the coast of Maine. The haze turns pink. This is an unusually good beginning for a day on the Rockpile.

There is one happy fringe benefit to the somewhat tentative electrical supply following the fire. They are keeping the heat on in the state park section of the building to avoid frozen pipes in the event of another power failure. This is a great benefit for me because I can get away from the small, dark living quarters downstairs and spend some time surrounded by natural sunlight. I have set up my camera equipment here, and I am using one of the park's tables to organize all of the pieces of camera gear that I have dragged up here. Nin also uses the park's tables as scratching posts.

While making my coffee I notice the kitchen sink drain is plugged up. Looks like a plumbing “opportunity” for the volunteer.

However, no time for plumbing projects! Today is an absolutely gorgeous day. Shortly after 7:00 I bundle up and go out to have a look around, and immediately return for my camera to photograph what is left of the rime. I have bright sun, temperatures in the single digits, and winds under 40 mph – extremely rare for March on the mountain.

I use a large format camera with a cloth bellows which suffers from vibration in high winds. Over the past year I have designed and built a modification to enable me to use it in the wind, and today is the field test. It functions perfectly. It is a rather odd looking thing, but I’m hopeful that I will have some good artistic interpretations of rime. The light here is much brighter than what I am accustomed to at sea level – at least one stop more, a factor of 2 increase. This is due to the lesser amount of atmosphere above me, and reflections from all of the snow and ice around me.

As I work with my camera, many hikers begin to appear, taking advantage of the unusually good weather to bag a winter hike to the tallest peak in the northeastern United States. As I return to the building, a number of them are relaxing and eating lunch. I introduce myself as the resort photographer. Everyone has a good laugh.

The wind picks up to around 50 gusting to 60, while temperatures hold near zero. A high thin cloud cover moves in, but not enough to obscure a beautiful sunset, which illuminates the entire sky. I serve the chicken soup, and Sam makes calzones. Someone else must have cleared the sink drain.

## **Saturday:**

With no call from NHPR today, I sleep in until about 7:00. During the night I could again hear Derek removing rime from the instruments, so I knew we were in the clouds and thus the sunrise would be nonexistent.

The clouds begin to clear around 8:00, revealing a landscape covered in a fresh coating of rime, and a panorama of the near-by peaks with clouds moving swiftly around and over them. The temperature is 7 degrees, winds are around 45 mph. Another unusually good day for Mount Washington.

A call comes in from the Air National Guard – they will be taking publicity photos around the mountain with 2 Black Hawk helicopters. I spend most of the morning outside with my 35mm camera taking panoramic photographs, and photos of the ‘copters.

It is quite slippery underfoot, and I attempt to attach my new crampons to my boots for the first time, without instructions. There are several unsuccessful attempts as the crampons come off after only a few steps. I am quite embarrassed in front of the many hikers who again are frequenting the summit in this fine weather. Several of them take pity on me and show me the correct way to attach crampons.

I make my famous pasta sauce, and successfully turn out two loaves of bread. We all enjoy dinner so much that we forget to go upstairs and watch the sunset – one of the nightly rituals up here when it is clear.

It is very dry in the Observatory's living area this week because none of the humidifiers are working for want of filters or something. My sinuses are bothering me. I let a 16 quart pot of water simmer on the stove, which seems to help.

The weather maps are suggesting that we will have some very high winds tonight. Derek is predicting 125 mph, but Chris thinks it will be 60 or 70 at most. We all place bets – I guess 92 mph for no particular reason.

## **Sunday:**

Oh goody, the day I get to take a shower!

I am up briefly in the night, and I am immediately aware of strange noises. The wind is hissing through cracks in my window, and I can hear a loud roar outside. The inside door between the Observatory living area and the state park section is being blown open by pressure surges within the building. It is like being in a haunted house. The anemometer on the wall of the living area is holding steady at 86 knots, which translates into 97 mph!

Around 6:30 I get up and immediately go upstairs to look at the wind recorder to see what we hit during the night. The highest gust was 132 mph! Looks like Derek wins the bet. Currently it is 22 degrees (relatively warm), average wind speed of 76 mph, and only about a 50 foot visibility in snow and freezing fog. This is much more typical weather for Mount Washington. There won't be any hikers today. It seems relatively quiet as I sit here with my coffee in the state park section of the building. No rime seems to be forming, and I didn't hear Derek banging in the night.

After exercising on the bicycle, I take my shower (yum!), and then photograph the wind chart to show what a 132 mph wind looks like.

I spend most of the morning reading in the state park area. It is nice to get some natural light even with no visibility outside – it helps to fight the feelings of cabin fever. High winds continue in the 60 to 70 mph range, and temperatures fall to the negative teens. As the week progresses I find that I pay less and less attention to what the weather is doing outside, especially when we are in the clouds like this.

It is afternoon, and I am making baked butternut squash soup, a recipe given to me by my good friend Susan Snyder. Of the few things that I know how to cook, I think this is my favorite. I am not much of a chef, and my only motivation for learning to cook is to enable me to come up here for a week in the winter. The others here don't know this, but I've really only learned to cook seven things – enough for one week as a summit volunteer.

Everyone likes my soup. Jeff even asks for the recipe – quite a compliment. Sam serves chicken oriental stir fry, which is also well received. Being a weather observer on Mount Washington is not a lifetime career, and those who do it are generally in their 20s with extremely high metabolisms. I am constantly amazed at the quantities of food they can eat. For dessert Sam serves a blueberry pie, which Derek requested as his reward for coming the closest to predicting the 132 mph wind. Derek says he likes having two volunteers at the same time because there seems to be an unspoken cook-off going on between us.

The fog, wind, and cold continue into the night.

### **Monday:**

The sun has just come up, but it is only visible as a faint orange disk. We are still pretty much in the clouds, but we seem to be just below the top of them, and it looks clear above us. My buddy Nin sits with me in the state park section of the building. It is negative 16 degrees outside with winds around 55 mph. The sun fades in and out of view as the clouds blow past us, at times forming a bright circular aura around the sun that is orange on the inside and red on the perimeter – I have never seen anything like it. Chris says it's called a corona.

There is some fresh rime on the ground, and I could hear Derek clearing the instruments in the night. After a while it is possible to distinguish which observer is doing the de-icing from the sounds that they make. Derek gives several really hard blows, while Chris uses many smaller blows, perhaps with a lighter tool of some sort.

Shortly after sunrise the clouds seem to thicken again, and there is no sight of the sun (or much of anything else, for that matter) for the rest of the day.

This is the monotonous part of the week, especially when we are socked in like this. Later in the morning Peter Roberts arrives in the Observatory's snow cat, bringing several people to work on the radio transmitter in the Yankee Building. While here, he does some snow plowing around the summit, and I ride with him in the cat so I can take some photos for Windswept. This is the high point of my day, and is pretty typical of what it is like here when the weather is bad. I spend the rest of my day in the state park section of the building reading Not Without Peril, a collection of stories about the many people who have died while hiking on Mount Washington. Although there is not a lot to see out the windows, at least there is some natural light.

At the end of the day it is -13 degrees with a 75 mph wind gusting to 80, and still in the clouds. It is so cold that the condensation from the generator freezes inside the exhaust pipe, almost closing it off completely. Sam reroutes it so moisture runs down hill and out the end.

Tonight is leftover night for supper. Sam makes a pizza with some of the leftover pasta sauce. I clean the kitchen, still a tedious job because of the water restrictions. The first thing I'm going to do when I get home is go over to the kitchen sink, turn on the water, and just let it run for a while. Then I'll go into the bathroom and flush several times just for the sheer pleasure of seeing the water go down the drain!

Nin is on my lap most of the evening. I think Nin has gained weight since last year. He either needs to go on a diet, or to get a little brother or sister to chase him around.

## **Tuesday:**

NHPR's daily telephone call seems to be my alarm clock this week. Currently it is minus 10 degrees, with winds of 64 mph gusting to 74. We are STILL in the clouds. The sunrise is totally non-photogenic. I spend several hours reading.

Around 9:00 I come upstairs to discover that it has cleared. There is a bright warm sun shining in through the state park's windows. It feels good! The peaks to the north are majestic, with small bits of clouds streaking over their summits. Every so often a cloud blows by us as well, again giving me the impression of being in an airplane. I turn the exercise bike around so I can enjoy the view, and find myself peddling for twice my usual exercise time.

Tuesday is always a difficult day. The crew (and volunteers) are tired, and the hours seem to go by slowly as we anticipate our return to civilization tomorrow.

I start to pack. I've spread myself out pretty well, and it takes a while to collect my photo equipment and outside clothing from around the Sherman Adams building. I take care to leave out the clothing I'll wear down the mountain in the morning.

The day turns out to be quite nice for March on the Rockpile. It warms up to -5 degrees with 57 mph winds gusting to 70, but the sun is out. I help the crew shovel snow out of the state park entrance.

Mike Pelchat (the state park's manager) arrives by snowmobile and stays for supper because he is doing maintenance tonight on the 2 generators up here. I make "Dutch Baby," a wonderful pancake-like concoction made from eggs, sugar, milk, butter, and flour. It is a great hit. Mike is so impressed that he takes a picture of it.

I call Judy before I go to bed. It's "warmer" (5 degrees) with 75 mph winds gusting to 85. She has not yet found all the notes.

### **Wednesday:**

Wednesday at last!

My last chance to photograph the sunrise is a real fizzle. We are socked in again, 10 degrees, with 74 mph winds gusting to 84. Another typical Mount Washington morning.

We all take up our cleaning chores. Sam and I concentrate on the kitchen and bathroom. On the short wave radio we hear progress reports of the snow cat's ascent.

Around 10:30 they are here. Suddenly the rather quiet morning is punctuated by happy enthusiastic newcomers to the summit, all rested up and ready for their week in the Observatory. The outgoing staff breathes a collective sigh of relief that the snow cat has made it through the nearly zero visibility conditions.

Staff meetings and debriefings take place during this changing of the guard. Sam and I introduce ourselves to Richard Boisvert, the coming week's volunteer. There are details about leftovers and refrigerator contents to be communicated. I assume that the observers are upstairs talking about more important things.

Finally all is finished, our gear is loaded, and we depart around 1:30 for the valley. The visibility has not improved much, but Wayne Peterson skillfully guides the Bombardier along the auto road until we are out of the clouds. At this point we stop to drop off the dare devils who want to ski or sled down the rest of the way – everyone except Wayne and me.

I ride up front with Wayne for the rest of the trip – my body again shakes like Jell-O all the way.

We arrive at the base to a totally different climate. Birds are singing. Mud season has begun. My mountaintop experience has drawn to a conclusion for another year.

As I drive home and begin to reconnect with the routines of life, I am happy with my memories of a truly unique experience. I have done something totally different indeed!

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