



# Caldera Chronicles



Year 25 Volume 1

Winter 2008

## Bill Bloom Memorial Ski

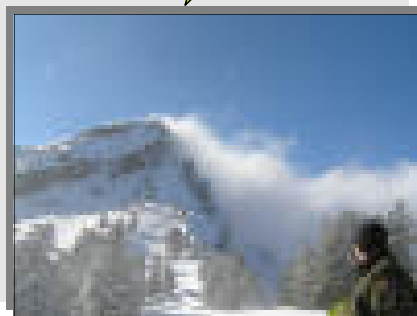
January 21, 2008 marked this years *Bill Bloom Memorial Ski*. With seven new fresh powdery inches over night six patrollers and one Ranger started out on their ski from Headquarters to Sunnotch. It was one of those typical blue sky Crater Lake days, except for an unusually cloud layer that massed the view of the lake. The air temperature was somewhere in the low teens. The conditions were optimal for a fast track and relatively easy trail breaking to Sunnotch. X-patroller Kevin Groh lead the charge up the first hill to Crater Peak trailhead.

Once at the trailhead of Crater Peak and East Rim road the group of Kris Fisher, John Bellon, Kevin Groh, Geoff LeGault, Niel Barrett and Peter

Reinhardt took several minutes to contemplate the avalanche conditions and route selection of travel through the Vida Ride Avalanche prone area. After a brisk discussion, the group decided to ski the East Rim road and not use the Vida Ridge bypass because of the low to moderate avalanche conditions observed.

In the back of all the group minds, lurked the 2001 avalanche that occurred 100yds from their current position. There Kris Fisher and Bill Bloom got buried by an avalanche, but they were very fortunate to have survived during a rescue mission looking for two lost skiers.

When the group reached the Vida Ride Avalanche area several precautions were followed: All patrollers were checked to make sure their avalanche beacons worked and were on transmit, and all had shovels and probes. Only one person at a time skied through the suspected slope. All others watched the per-



son that may had been in danger from a safety zone area. Some skiers removed their ski

pole straps, loosen all equipment, put on mitts, caps, and fasten clothing before being exposed to possible avalanche danger. (Note: Kris was found when he was buried by the avalanche in 2001 because his poles where still attached to his hands but were visible to the rescuers above from his snowy entombment).

As the skiers approached Sunnotch, the cloud layer

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still lingered around Applegate and Dutton peaks like a glove on a hand. The wind danced in rhythmic motion as it carried flakes of snow from the majestic old growth Hemlock Firs. The Hemlocks stood like white statues as the wind slowly striped them of their icy shroud. Sparkly silver snowflakes filled the blue sky with thousands of tiny glittering colored reflectors. As the skiers closed in on the precipice at Sunnotch, the clouds that engulfed the surrounding peaks slowly started to lift. Magically, the clouds parted from Applegate peak giving the skiers a sense of awe of the surrounding beauty.

As we sat for a few moments eating our lunch's the somber companions took turns sharing stories about our friend Bill. Kevin Groh chimed in and said "I believe Bill is looking down at us right now" and I believe so too. Was his spirit helping to guide the lifting of the cloud layer? Be it as it may, a force or spirit of the lake was at work in creating the ambiance of that moment. As we deliberated, the surrounding peaks merged and then again would disappear into the clouds, making that monument in time a very special event.

A short ceremony followed lunch where Pete Reinhardt read a few short touching verses that Carol Bloom had posed. From there, the group moved to the edge of the Caldera. It seemed that the lake was on fire as the remaining clouds assembled on the lakes surface in swirling flumes. Below the light luminosity lit the Phantom ship as it seemed to sail through the firer waters of the lake.

## Doing More With Less

Hurry before I am summoned "any available law enforcement?" I park at Rim Village pull on my boots don the pack and I'm off. Routine. The dread of being disturbed quickly gives way to a mind numbing array of sparkling snow grains (8 degrees last night).

As I strap on my skis a quick assessment reveals a few inches of recrystallized on top of a slightly forging crust- sweet! Not so much for the ascent up but certainly optimal for the ride down. Carvy.....*fast*. The way I like it.

Craving the descent that lies ahead I set a fast pace. The rhythmic motion rapidly eases my paranoia of being the only Ranger on duty and my thoughts drift toward reflection.

It's 8:30 am on May 5<sup>th</sup>. Will this be my last ski descent of for the season? Soon I'll be hiking up here with tourist all over the place. Sure have enjoyed the solitude here on this mountain this winter. Thanks (for the adrenaline rushes). Wouldn't know what I would have done without ya- Garfield.

The usual guests are with

me on the ascent again. The Raven, White Bark Pine, and the areas peaks, Thielsen, Diamond, McLoughlin, Bailey, even Shasta. Will I ever get up all of them? Who knows.....who cares? Nobody but me.

It was a good winter. People say it was a low snow year but being a nonnative it sure seemed like a heck of a lot of snow to me. I gauge the season by how many rocks I hit. This winter I hit very few. Last winter I was in Georgia and the winter before that I was stationed at north end of Lake Chelan (most remote community in the lower 48) and I barely survived a winter of literally, no snow.

So now life is good. This winter I got back to my roots. I lived and breathed winter, the snow.....solitude. I had the honor of working with a wonderful group of volunteers. Members of which helped me back to the basics. To do more with less. Not being much of a Nord guy I was laughed at with my water ski sized planks and 8 pound boots. "Those aren't backcountry skis",

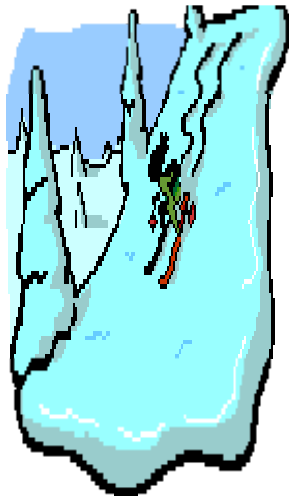
one old timer said to me. Heck they aren't. I ski like a bat out of hell on these babies! Can go anywhere! Ski anything! Rescue anybody! Now I became self conscious. Must get set up with something a little more practical for Crater Lake I said to myself.

Soon I was out with the best of them adding on horizontal miles instead of admiring my vertical. I was actually getting a rush out of Nordic skiing. I must admit I was a little nervous about being on skis nearing the 200 cm mark though. Then I started experimenting with XCD's and light weight plastic touring boots. My first outings were a nightmare. I attempted to attack the same terrain in the same aggressive manner as I did with my hulking downhill gear. Mistake. I got frustrated and discounted the equipment as unworthy and unsuitable for someone like me. I didn't give up though knowing that there was something I was trying to attain. I found it. Again doing more with less I was enjoying long tours with lighter gear. I could travel farther, faster, and the best of all..... I was honing my technique. Skiing downhill on the lighter equipment I regained my appreciation for the telemark

turn focusing on maintaining control, balance, big toe little toe, remaining still above the waist. I was in love with the art of tele all over again.

Today I'm back on my planks. One hour into my miserable slog, sweating, panting, and swearing because the conditions stink for skinning up such steep terrain. I wish I had taken my more scenic route to the summit. Oh well, literally 70 seconds down to the Munson Valley road. Was it worth it?

Doing less  
with more.....  
absolutely.



## 2006-2007 Crater Lake Ski Patrol Training Report

This past season was a busy one for the Ski Patrol Training Cadre. In addition to our standard two training weekends in November and December, we also had 4 other training days throughout the season.

Here is a summary of the training that occurred.

**Summary:** Winter 2006 training maintained the 3-year pre-season training rotation with a medical refresher in November and one of the skills-based trainings in December. These are based on a 3-year rotation:

- 1<sup>st</sup> year (2004, 2007, 2010):  
Snow shelters, snow camping and outdoor patient packaging and transport;
- 2<sup>nd</sup> year (2005, 2008, 2011):  
Ski skills, beacons and a live avalanche drill;
- 3<sup>rd</sup> year (2006, 2009, 2012):  
Map, compass and GPS, ropes and rigging.

The main change this year was the replacement of the ropes and rigging training with real SAR operation on the December Saturday. Consequently the ropes and rigging training was conducted in 2007 during patrol weekends (see below).

**Saturday Nov. 4, 2006:** Search and Rescue live operation on north side of park. GPS, map and compass, incident planning and communication, SAR gridding skills were all covered. Pete Reinhardt, Chris Wayne and Ed Delmolino provided initial briefing.

Dan Miller conducted a de-brief after the incident.

**Sunday Nov. 5, 2006:** Morning began with orientation of the park facilities: Ambulance orientation (Ed and Maria), Patrol Rig ("Norm Jr.") orientation (Neil) and SAR cache orientation (Anne Michael). After lunch we conducted a CPR refresher with Maria, Erick, Pete, Sharla, Ann and J.T. instructing.

**Saturday Dec. 2, 2006:** John Salinas started the day with a council introduction and vision for the coming season. NPS personnel including Dave Grimes, Ed Delmolino, Pete Reinhart and Chris Wayne provided information on visitor contacts, NPS organization, SOPs and safety. The remainder of the day was spent on a 1<sup>st</sup> aid refresher led by Erick Bishop. Basic skills were practiced in break-out groups with various scenarios presented.

**Sunday Dec. 3, 2006:** After a de-brief of the previous day and orientation to the weekend sign-ups, we launched into a map, compass and GPS training led by Doug Robben and Donna Short. The morning session consisted of short lectures followed by hands-on table-top exercises. The late morning and afternoon took us out into the field where we used our new skills to follow a pre-laid course behind Steele Circle.

**2007 Summary:** Patrol Season 2007 offered numerous short training sessions during the course of regular patrol weekends. Two weekends included full-day basic techni-

cal rescue, and three weekends included half-day avalanche training. Challenges and successes on each incident further emphasized the *absolute necessity* of ongoing, consistent training. Therefore, the training cadre (Ed, Chris, instructors) hope to continue this format with several all-day, scenario-based trainings, and a half-day training every single patrol weekend.

**Saturday Jan. 13:** This was the Basic Technical Rescue course (normally offered during the December training weekend). Ed Delmolino was the lead instructor. The course began with basic knots, rigging and gear identification in the Rat Hall vehicle bay. After lunch (which went almost an hour longer than scheduled, *not good!*) we practiced sled raising and lowering on the Sleepy Hollow cliffs using the Incident Command System. Each of the 11 participants took turns on the mainline, belay and patent attendee teams.

**Saturday January 20:** Half-day avalanche training. Ed Delmolino was the lead instructor. This began with a short pre-incident briefing in which Ed outlined notification and response, communication, size-up, safety, and the Incident Command System.

This was followed by a field exercise of locating and accessing the victim using transceivers, shovels and probes, followed by medical care. Challenges during this exercise included poor communication, confusion of leadership roles and unfamiliarity with transceiver operation. Consequently this exercise warranted an extensive after-action review (AAR).

**Saturday January 27:** Half-day avalanche training. Ed Delmolino was the lead instructor. This began with a short pre-incident briefing in which Ed outlined notification and response, communication, size-up, safety, and the Incident Command System. This was followed by a field exercise of locating and accessing the victim using transceivers, shovels and probes, followed by medical care. Challenges during this exercise were less significant than the previous weekend, probably due to a more experienced group of patrollers. Erick Bishop also organized an impromptu probe drill the next day on the rim.

**Saturday February 3:** Half-day avalanche training. Ed Delmolino was the lead instructor, and the patrollers were essen-

tially the same group as on 1/20. This began with a short pre-incident briefing in which Ed outlined notification and response, communication, size-up, safety, and the Incident Command System. This was followed by a field exercise of locating and accessing the victim using transceivers, shovels and probes, followed by medical care. As a result of the previous challenges and the extensive after-action review (AAR), performance was dramatically improved, or in Ed's words, "they blazed through it." Again, this emphasized the value of repetition of essential skills.

**Saturday Feb. 17:** This was the Basic Technical Rescue course (normally offered during the December training weekend). Jeff Duckett coordinated and Robert Walters was the lead instructor. The course began with basic knots, rigging and gear identification in the Rat Hall vehicle bay. After lunch we practiced sled raising and lowering on the slope of Munson Ridge using the Incident Command System. Each of the 11 participants took turns on the mainline, belay and patent attendee teams.

### Winter 2007-2008:

This season will maintain the 3-year pre-season training rotation with a medical refresher on November 3<sup>rd</sup> -4<sup>th</sup> and a two-day clinic on Shelters, Patient Packaging and Overnight Snow Camping December 1<sup>st</sup> - 2<sup>nd</sup>.

Additionally, we will be offering/requiring half-day trainings every patrol weekend. Experienced patrollers, we need you! Who wouldn't want to learn ski skills from Niel and John Bellon, or patient care from Ellen, or snow camping from Andy Dungan, or igloo making from Len and Ken?!



## Imagine?...

I had never seriously imagined joining any ski patrol, anywhere. The friends I had known who had done such a crazy thing seemed to share a high tolerance (perhaps even a craving) for "trauma and drama", overwork, and too much responsibility. Why anyone would want to do such things to any otherwise perfectly delightful day of skiing was one of the great mysteries of the universe.

A few years ago, when my wife and I moved into Grants Pass from the western Siskiyou mountains around the Illinois Valley, I thought I would go crazy living in town without the shimmering nights sky and the mountain air. I consoled myself with the fact that we were moving closer to the Lower Rogue Wilderness and to Crater Lake. Before long, my buddy Bruce Albert, who by the way is sailing around Baha and sends a fond hello to all, spoke with such enthusiasm about the fun group of adventurous spirits on the Crater Lake Ski Patrol and really encouraged me to give it a try. I remember showing up for my first training weekend still wondering if I had gone nuts, so much to know, so much responsibility. It didn't take long for me to appreciate what a special gathering of people are the CLSP, all with a common love of back country skiing and a reverence for the Park. My first patrol weekend was in the warm company of John and Kathleen Salinas. We floated Dutton in new dry snow and ate like kings... What more convincing did I need? My faith in the natural order of things is strengthened by the fact that a place as inspiring as Crater Lake has

attracted such a spirited band of volunteers, and I am proud to count myself in. The camaraderie I experience among the patrol is unique for me right now in my life. Professionally I am self employed, working with one client at a time, and in my free time I'm usually out hiking or skiing with a buddy or two. To work as part of a mutually inspired organization is a welcome counterpoint in my life.

As my wife and I are expecting our first child in a few months, the lower elevation demands of domesticity are already creeping in. I take inspiration from the Buktenica and Bishop families involvement in the patrol. I hope to emulate this kind of lifestyle choice and bring my kid(s) up to have the experience of working and playing with a group of such spirited "adults".

After my third year of being a candidate I can clearly see how the challenge to become a more capable, prepared and involved patroller is ongoing, and ever changing. My wish for the future is that we may be fortunate enough to continue to have snow in our latitudes... and that I may not be snowed in by all things domestic.

*Marklan*

*Linnemeyer*

## Ski Trails at Crater Lake

We all know that without the ski trails at Crater Lake there would be even less people coming up to enjoy the most beautiful winter place on "Earth". One of our functions as stewards of the park is to provide a safe experience for visitors. The marked ski trails allow visitors to safely access areas of the park that would otherwise be inaccessible for the majority of folks. Marking the ski trails is not an easy task, as many of you can testify.

This year the plan is to focus on marking the stretch of trail from Lightening Springs Trailhead on West Rim Drive, through to the PCT and out to Highway 62. This was started last year with plans for finishing it this winter. Right now the snow is deep enough to be able to mark trails, although we need it to consolidate so we don't sink so deep. It is unusual to have this much snow so early in the year. Let's take advantage of it and try each weekend, when conditions permit, to get out and mark a piece of this trail.

As you ski the various trails you might consider taking some blue diamonds, nails and a hammer

with you, in case you see a place that could use a blue diamond to make travel easier. The weather is hard on them and they crack over time and need replacing. Checking out the trails this way will help you get acquainted with them so you can direct people to the appropriate trails for any given day.

We all have our favorite trails and mostly it depends on the weather conditions as to what trail to ski that day. My personal favorites are:

- **Stuart Falls** on a windy, minimal visibility day.
- **West Rim** on a sunny, wind free day to take advantage of the most beautiful view.
- **Raven** when the snow is perfect, not too fast and very forgiving.
- **Hemlock** is a good warm up ski with Ranger Hill being a great place to play and practice your turns.
- **East Rim out to Sun Notch**, on a clear day is particularly wonderful, then you get to Sun Notch and ski to the rim for a view of the lake, as you don't see the lake for the entire ski.

**Lightening Springs,** when you don't have to push too much snow and want a full day of skiing wonderful downhill, flat and uphill terrain.

However, I will qualify this with, I would ski any of these trails anytime and it would be a perfect day.

At some point during your career on the Crater Lake Ski Patrol you should consider a trip around the rim. It is a 30-mile ski and very challenging. Ask anyone who has done it. The wildly crazy do it in one day but most often 3 days are taken with two nights of camping. The Spring is historically the best time for this ski as there are longer days, better weather and packed snow conditions.

Mostly I want to say just get out there and ski in all conditions and all terrain. Step out of your comfort zone and tackle something new and challenging. Be sure to have fun while you serve the Park and its guests.

*Ski Safely  
and  
Have Fun*

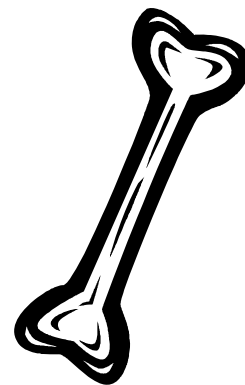
**Barb  
Hansen**

## Femur Fracture

I was asked by Dan to talk briefly about femur fractures as we didn't have a chance to debrief during the training session. The most important thing to remember about the femur fracture is that it's rarely an isolated occurrence. The femur is the largest, heaviest bone in the body and the amount of force it takes to break it is tremendous. When you see a broken femur, automatically start thinking of what else is wrong....think spinal cord injury, head injury, liver and splenic lacerations, pneumo- or hemothorax. In the field typically you would get pressure on any obvious source of hemorrhage, immobilize the spine, put traction on the broken leg, and get the patient out and into an ambulance ASAP where more intensive management can begin. It is very important to get the leg aligned into the anatomic position for several reasons. The first is that a person can lose 4 units of blood into the thigh and this much blood loss inevitably leads to hemorrhagic shock. Bilateral femur

fractures can quickly become fatal for this reason. The thigh muscles are very powerful and when the femur is broken, those thigh muscles start to cramp up and will actually pull the edges of bone further past each other. Aligning the leg back into its anatomic position realigns the blood vessels and cuts down on the shearing effect that the broken bony edges will have on the surrounding muscle and tissue. It also decreases the incidence of fat emboli which can travel to the lungs or the brain causing impaired oxygenation, seizures, permanent neurologic impairment or even death. Lastly putting that leg into traction helps the patient become more comfortable almost immediately which can aid in the rescue effort for many reasons. The traction splint is really used only for femur fractures. Other smaller broken bones are usually just splinted normally and immobilized. Hopefully this makes sense to everybody. Can't wait to see you guys out in the snow!!

*Christy  
Ford*



## What Does a Yeti Nest Look Like?

I'm not easily spooked or afraid of the dark so I had no reservations about heading back out into the night to search for a lost snow shovel handle. I didn't realize that I had lost it until returning to the ski patrol house. It must have come off of my pack when I fell, attempting a kick turn on a switch back. It is hard for

a candidate to leave a competent impression while face planting in 3 feet of powder. Damn, I really liked that handle too; double length extension, snow saw cleverly attached

inside of the handle and it wasn't cheap either! Next time I'll do a better job of attaching it to my pack. It snowed all afternoon with no signs of letting up. I had to go back because waiting until morning would be too late. The team leader and others offered to go with me but we were all tired after a full days' patrol. Besides, it wasn't their problem.....or was it?

The East Rim Trail was fairly easy terrain and it was no more than one half mile to the turn-around point. My head lamp had fresh batteries and I had a radio, no problem, right? The skis and boots that I borrowed earlier in the day had been returned so the going was slow and cumbersome on snow shoes.



Snowflakes swirled around my face, pleasant at first but becoming tiresome as most of 'em ended up in my eyes. My headlamp reflected off of the big flakes like high beams on a foggy night, throwing off my depth perception and balance. Shadows moved and raced everywhere I looked. Was that crunching sound from my snow shoes or the wind or something else? "I'm not scared and I'm not lookin'" Perception is 90%

of reality and it all combined to distort my easily influenced imagination . Uhh...

.ski patrol house, ski patroller Phillip" "Go ahead

Phillip"

My cold thumb nervously searched for the mic button, "I'm at the snow cave site, will be here for 10 minutes or so then head back"

"Good copy, see you then"

"By the way, what does a yeti nest look like?" Static....then snickering, no, laughing. "We'll show you if you make it back"

"I bet there is a yeti holed up in one of those snow caves we dug earlier", I said to myself, "he's probably got my handle too

and now he's trolling for easy pickin's on the East Rim Trail!"

The crew was anxious to have me back into the fold. There was a perceptible sigh of relief when I radioed in that I was back at the trailhead.. Later, I discovered the real reason for their angst was waiting the hour and a half for the entire crew to check in before opening beers!

I never did find that shovel handle, it will probably get crunched in the spring by the snowplow, but I do think I saw a yetis' nest?

You think?

*Phillip*

*Lindesmith*

# Pieps DPS

Recently I bought a Pieps DPS (through Liberty Mountain with John Bellon's help--thanks John!). I conducted actual trials at the Friends Hut, located at 11,500' north-west of Crested Butte, Colorado. It is a very cool place. In fact so cool I frostbite the tip of one finger. No great damage. The tip peeled off and is now better again. But, back to the story. The DPS does in fact appear to be a big leap forward. I conducted search's faster than ever, substantially faster than with a tracker. I was also incredibly impressed with the multiple search feature. It can be fooled if you have the old analog beacons, but even with analog beacons in multiple searches I was MUCH faster. If you are thinking of purchasing I recommend the new Pieps DPS. We should probably consider these for the park. At least we should get a few for testing.

On a side note, I was at the YMCA in Colorado Springs swimming recently and got to be a victim. I was randomly

asked to stage a drowning after swimming a few laps. The state organization conducted it as a test of the lifeguards. It seems like a bit of an unorthodox training. None of the people in the pool were notified that it was training. They had to get out of the pool and many of them thought the whole thing was for real. I guess I am a GOOD victim! Anyone else have opinions about the method. Maybe we should stage some training scenarios (but tell any bystanders it's training) as a training method. The FUN part was everyone said I made a great victim. It has to be all the training at Crater!

On a personal side I am buying a house in Salida, Colorado. It's a 1951 classic. I'm making it a vacation rental so if anyone finds themselves in Colorado and needs a place to stay in the Heart of the Rockies let me know.

Best to everyone. I should be back in Oregon by the end of February. I'm ready for Barb and I'll do the trip around the Rim on March 6 or 7.

*Andy*

# Avalanche Safety

*By Phillip Lindesmith*

Usually articles with safety in the title bore me to tears. I regard them as preachy and not worthy of my time. Reading about avy safety is like reading about the tax code. Both are dry and complicated with too many if's. Disregard either however, and you can find yourself in a world of hurt. After my last mock rescue at Crater Lake, I realized how much info I had forgotten about avalanches since my last mock 2 years ago. My hope is that this general guide will keep you out of trouble or assist you in the aid of a victim. I'll save the tax code stuff for the summer issue of the Chronicle.

Please recognize that I am NOT an avalanche science expert. I've had a class or two, done some mock rescues and read a little but that's about it. This is intended to be a general guide as the greater bulk is beyond the scope of this article.

Imagine a big triangle with you, the back country trekker in the middle. Label the bottom side "terrain", the second side "snow pack" and the third side "weather". You, terrain, snow pack and weather are the key factors in avy safety and they are constantly changing.

You or your party:

- Situational awareness, common sense, what's happening around you. Pay attention to the changing triangle.
  - Weather report, avalanche report.
  - Fitness and ability of those in your party. Skilled skiers have less impact on the snow pack.
  - Number in your party. Smaller groups travel faster but have fewer resources.
  - Spread out! The party that tours close together, gets buried close together.
  - Number with avalanche training.
  - Avy and survival gear, see tool list.
  - Check transceivers before heading out.
  - Undo leashes and pole straps at suspect slopes.
  - Flexibility to turn around or alternate route.
  - Be wary of other parties, especially snowmobiles.
- Travel in same tracks on suspect slopes, (mine field strategy).

Snow pack:

How much new snow is on the ground and how much is falling.

Air temperature, wind, sun or clouds all effect stability of the pack. See weather.

Ice layers cause instability in the slab especially consecutive layers. They create temperature gradients further destabilizing the slab.

Skiers may affect the snow pack to around 5 feet deep, not including fresh powder.

Wind loading of snow on leeward aspects of the slope increases the threat of avalanche.

Learn to dig and interpret Rutschblock and Hasty pits. Ask yourself, "Does this mean I can ski this particular slope at this time in this weather with these people?"

Terrain:

The angle of repose is the angle at which a pile of granular stuff comes to rest. Snow piles up at roughly 35-45 degrees. At steeper angles, it sloughs off more readily but can still be dangerous. At 35-45 degrees the snow piles up, putting more stress on weaker layers before releasing on its own. That's why these aspects are to be given extra consideration; they are just waiting to break loose.

In the Cascades, north and east aspects load up due to wind loading from prevailing south and west winds.

Higher elevation = more snow and wind.

Trees with branches offer great natural slab anchors. Rocks help anchor deeper slabs but not those near the

surface.

Look for avalanche chutes, places where the topography allows the build up and funneling of snow.

Plan an escape route.

Weather:

- Check weather and avalanche reports for your area. At Crater Lake the avy report may be a hybrid of local conditions and reports from Mt. Shasta and Mt. Bachelor.
- Talk to the rangers and other trekkers for their point of view.
- Precipitation- rapid accumulation of snow leads to instability. High water content of snow makes it worse.
- Wind drives snow to the leeward side of a slope and deposits it there. Creates cornices that you may not be aware of.

Temperature extremes create instability in the snow pack. Rain and rapidly warming temps increase danger especially on new snow. Look for pin wheels or snow rollers. Rapidly cooling temps cause poor cohesion in the pack and can also be dangerous.

Red flags and hair raisers:

- Whoomping- literally the sound of weak

layers shifting and collapsing beneath your skis....pucker up!

- Shooting cracks- Mother Natures way of saying, "Get outta here".
- Evidence of recent avy debris or worse, none where there should be especially after a storm.
- Avalanche chutes-scoured paths through the trees, bent and denuded trees, boulders. Cross suspect slopes one at a time, observing until skier has reached a safe stance.
- Rapid accumulation of snow.
- Temperature extremes. Consecutive ice layers near the surface.

#### Avalanche Triggers:

Natural build up releases more frequently on steeper slopes, (doesn't mean its safe).

Skiers, boarders, climbers

Snowmobiles are fast and heavy, major avy triggers.

Sound rarely has enough energy to trigger a release.

#### Tools:

- Compass/ inclinometer
- Avy transceiver- battery check, transmit check, wear under coat.
- Avy probe- substitute tent pole or ski pole with-

out basket in a pinch.

- Shovel- metal blade able to penetrate ice layers, plastic ones inferior.
- Map
- Survival gear- 1<sup>st</sup> aid kit, signal whistle, bivy sack, fire.
- Calm and purposeful disposition.

#### Stuff Ed told me:

Ed Delmolino, Crater Lake park ranger, is an avalanche expert, in fact he is an avalanche geek....just ask to see his snow flake microscope.

- Team leader to coordinate search with dispatch and rescuers, keeps overview of scene.
- Start at last known position and work down, looking for clothing, gear and extremities.
- Searchers switch to receive, bystanders turn beacons off.
- Divide the team, one or two working beacons the rest probing and visual search.
- Once victim found dig from side of slope, not straight down, use probe as guide.
- Turn off victims beacon.

#### Factoids:

- Avalanche slabs can travel at 150 mph.

- 5 minutes after burial gives a 90% chance of survival.
- 30% chance of survival at 30 minutes.
- 25% of all victims die from trauma, (trees, rocks, ice).
- (Most) Avy debris sets up like concrete the instant it stops.
- 90% of avy accidents are triggered by the victim or victims party. Choice is an option you have BEFORE you are caught in an avalanche but not afterwards.

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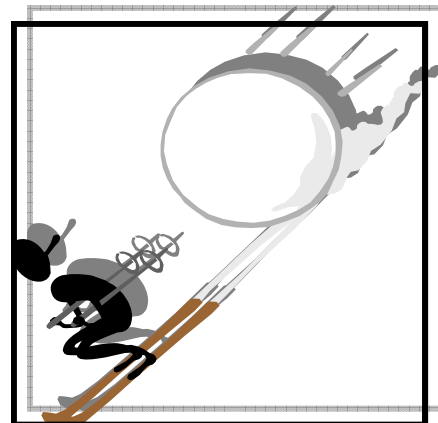
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Weather: Google National Weather Service, Northwest Doppler, NOAA-NWS Western Headquarters, Crater Lake National Park

Avalanche: Google Westside Avalanche Network, Northwest Weather and Avalanche Center, Cyberspace Snow and Avalanche Center



## 25th YEAR ANNIVERSARY POTLUCK AND DANCE

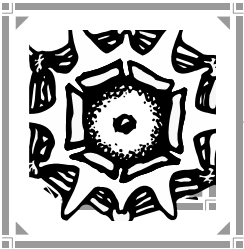
There is some planning going on to have a live band in the park for our **END OF SEASON, ANNIVERSARY PARTY**.

It is scheduled for Saturday, April 26th at the Community Center. Wouldn't it be grand to visit with each other one more time before the summer season sends us each in a different direction?

If you have digital photos, send a disk to Niel so he can put a video together for the party. And, send me a note if you would like to help with the organization.



*Shall we go South Pacific...Hawaiian?*



# Happy Ski Trails

