

# ALWAYS AHEAD 2011



## Public Safety in Avalanche Terrain

The Utah Avalanche Center is a partnership between the Uinta–Wasatch–Cache National Forest and the nonprofit group the Friends of the Utah Avalanche Center. Additional major funding comes from:

Utah Division of State Parks and Recreation, Utah Division of Emergency Management, Salt Lake County and Salt Lake Unified Fire Authority

# AVALANCHE OVERVIEW

**Our goal is to keep people on top of the greatest snow on earth instead of buried beneath it**

## Where do avalanche accidents occur?

Ninety nine percent of all avalanche fatalities occur in the backcountry—areas outside of ski area boundaries where no avalanche control is done. Ski areas and highway avalanche control crews routinely knock down avalanches with explosives before the public arrive each morning. They have done their jobs so well that since 1980, less than one percent of avalanche fatalities have involved general public on open runs at ski areas or on open highways.

## What kind of people get caught in avalanches?

Ninety two percent of people killed in avalanches since 1985 have been recreationists, and they are almost always very skilled in their sport. In almost all cases their skill in their sport significantly outpaces their avalanche skills. Looking at the most recent 10 years of national data, snowmobilers lead the list followed by backcountry skiers, snowboarders, climbers and miscellaneous recreationists such as hikers and snowshoers

## How do people get caught?

In 93 percent of avalanche fatalities, the avalanche was triggered by the victim or someone in the victim's party. Which is actually good, because most of the time, we can avoid avalanche accidents through our route finding and snow stability decisions.

In summary, avalanche fatalities occur almost exclusively in the backcountry, almost always involve recreationists, and almost all avalanche incidents can be avoided if we choose. We give backcountry travelers the weapon of knowledge.

## How to access up to date avalanche information

Our avalanche advisories give the public critical avalanche information they need to make their life-and-death decisions in avalanche terrain and we forecast snow stability and weather trends into the future. Our information helps the public to decide what kind of terrain is safe, what kind is dangerous and we give them useful clues to look for when they venture into avalanche terrain

The public can access these advisories in the following ways:

- The Internet
- Recorded telephone message updated each day
- Live interviews each day on three different public radio stations
- E-Mail
- Podcasts



- In times of extreme or unusual avalanche conditions, we issue an avalanche warning that reaches all the broadcast and print media as well as NOAA weather radio.

Finally, we “preach the avalanche gospel” as much as possible to the local, national and international media. The Forest Service Utah Avalanche Center staff has been featured on dozens of national and international documentaries about avalanches and they regularly appear on the national television news.

## Avalanche education

The UAC staff teaches about 30 free, basic avalanche awareness classes each season and the Know Before You Go program teaches 120 free classes and reach over 22,000 people per year. These not only give the public an overview of the avalanche problem, but also some basic avalanche skills. These classes encourage the public to take a more involved avalanche class offered by the private sector.

## Our Communication Philosophy

Just because people read or hear the information doesn't mean they pay attention. Therefore, we try to make the advisories entertaining so that people will remember what they read and hear and enjoy the experience enough to use the advisories regularly. We try and use all the standard tools of effective writing and speaking such as using active voice, first person, personal examples and stories to illustrate points, humor where appropriate and reading the bulletins in a natural voice, like talking to a friend. The recorded bulletins are informal, chatty and funny, yet informative. The Internet-based products are graphically-based and easy to understand. The advisories are extremely popular with over 2 million page views on our web site.



## A LOOK UNDER THE HOOD

The UAC is operationally separated into five entities:

- Logan area Mountains (Wellsville and Bear River Ranges).
- Wasatch Mountains (Ogden, Salt Lake, Park City and Provo area mountains)
- Western Uinta Mountains (Mirror Lake Highway, Weber Canyon, Evanston WY, Daniel's Summit)
- Manti Skyline (Fairview Canyon - Wasatch Plateau)
- La Sal Mountains (near Moab)

Toby Weed staffs the Logan operation. A generous contribution from the Utah State Parks funds this position.

Based in Moab, Dave Medara forecast for the nearby La Sal Mountains. The Moab office is located in the Moab Ranger District on the Manti-La Sal National Forest and is supported by both the Moab Ranger district and a generous contribution from Utah State Parks.

Grant Helgeson forecasts for the Manti Skyline and Western Uintas. He also helps extensively with education and outreach in the more rural areas.

Craig Gordon issues forecasts for the western Uinta Mountains, does the lion's share of avalanche education for snowmobilers in northern Utah and runs the Know Before You Go education program. This position is supported by a generous contribution from Utah State Parks.

Last, but not least, the vast majority of the backcountry use occurs in the Wasatch Range of northern Utah. A staff of four full time workers covers the Ogden, Salt Lake City, Park City and Provo area mountains—arguably the most heavily used mountain range in the U.S. Bruce Tremper, in his 25st season, is the Director. The rest of the very experienced Salt Lake staff include: Evelyn Lees, Drew Hardesty and Brett Kobernik. All are Forest Service employees under the Uinta-Wasatch-Cache National Forest. The Salt Lake office is co-located with the National Weather Service at the Salt Lake International Airport.

Finally, a private, nonprofit group, the Friends of the Utah Avalanche Center, contracts a number of "volunteer" observers, who receive \$10 per day for taking the extra time to call or e-mail their observations after they return home at the end of an outing.



### Utah Avalanche Center

From left, Brett Kobernik, Bruce Tremper, Toby Weed, Evelyn Lees, Drew Hardesty, Craig Gordon, Grant Helgeson, not pictured, Dave Medara

# CONTACT

Ways you can find the critical avalanche information and contact our office



## The public can access bulletins in the following ways

### Telephone

- All Areas (courtesy of Backcountry.com). (888) 999-4019
- Manti Skyline (courtesy of Utah State Parks). (800) 648-7433
- Snowmobile hotline (courtesy of Utah State Parks). (800) 648-7433

### Radio Stations

- KRCL 91 FM (7:50 am weekdays)
- KPCW 92 FM ((8:06 am weekdays)
- All other radio stations via both long and short podcasts.

### Internet

- [www.utahavalanchecenter.org](http://www.utahavalanchecenter.org) (Friends of Utah Avalanche Center)
- [www.wrh.noaa.gov/Saltlake](http://www.wrh.noaa.gov/Saltlake) (National Weather Service)

### E-mail

We offer daily automated e-mail of the advisories free of charge. About 3,000 e-mails are sent each day.

### To contact our office

- PHONE: (801) 524-5304
- FAX: (801) 524-4030

The Utah Avalanche Center welcomes any questions or feedback from the general public. We would love to explain our organization to anyone who is interested in the different functions that the Utah Avalanche Center has.

# SEASON HIGHLIGHTS

## Record Setting Snowfall

Wow, what a year! The winter of 2010–2011 was one of the snowiest winters on record. Because the snow was denser than normal, snow amounts ended up below record setting years; however water amounts set all time records in many areas or finished a close second. Most areas of northern Utah ended the season with between 160 and 200 percent of normal water amounts. The winter started fairly early and snowed hard well into May. The UDOT weather station at Alta, which maintains records for the past 60 years, ranked this season as the third wettest winter on record. At Snowbird, as well as many other areas, it ranked as the wettest on record.

## Annual Fatality Numbers Down

An average of four avalanche fatalities occur in Utah each winter, so we are pleased that only two occurred this season--a snowmobiler early in the season in the Uinta Mountain and a backcountry skier fairly late in the season on the Manti Skyline. While the consistent series of storms throughout the season did produce lots of avalanches during the storms, it did not lend well to persistent weak layer development which is the culprit for most avalanche fatalities.

## Change of Avalanche Course Strategy

Times change. For the past 25 years, we provided a standardized, 3-day avalanche class, which educated most of the present-day, hardcore backcountry users in Utah. But in our modern, time-constrained, short-attention-spanned world, we noticed that our target audience of risk-taking youth did not show up for a 3-day class, but they were much more likely to show up for shorter classes. So this season, instead of doing 3 day Level 1 courses twice a season, we decided to do a more basic course 6 times a season which consisted of a 3 hour evening lecture followed by a day in the backcountry of hands on learning. This allowed us to reach around 220 people rather than the 70 and it seemed to attract more of the risk-taking audience that desperately needs to hear the avalanche message.

## UAC Utilizes Twitter for Avalanche Updates

The Utah Avalanche Center started using Twitter to broadcast important avalanche related updates when significant activity was occurred. Not only could the daily forecaster in the office send tweets, but forecasters that are in the mountains doing field work could send messages about critical conditions they encountered. The public can receive Twitter messages via a text message on their cell phones. With good cell phone coverage through most of the Wasatch Range, this allows people out in the backcountry to get up to date avalanche information to help them with decision making.

## January Rain Event

On January 16th, 2011, a very unusual rain event occurred. Up to four inches of water in the form of rain fell on our snowpack and it fell to the highest elevations. Once frozen, the crust, which would be dubbed the MLK crust (Martin Luther King Jr), was varied in thickness from un-penetrable to fairly thin in some places. We found many percolation columns throughout the range which is very unusual for Utah, famous for our dry snow. This crust was the most significant rain-on-snow event in at least 40 years and avalanche professionals continued to talk about for the rest of the season.

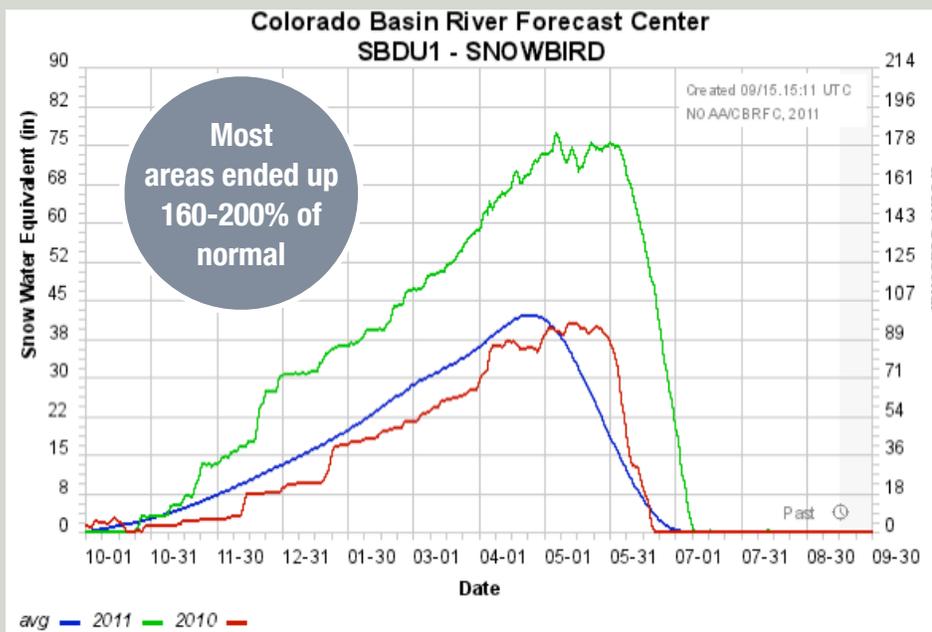
# SNOW AND AVALANCHES

The Alta UDOT site, which has operated for the past 60 years, ranked this season as the third wettest season in its history and the wettest April on record. They had 553 inches of snow from November through April. The winter started early and finished very late, snowing almost nonstop with only a slight break in January and early February. It did not stop snowing until near the end of May.

You would think with record-setting snow, we would also have record setting avalanches. But counterintuitively, low snowpack years almost always have more dangerous avalanche conditions because periods of clear skies create most of the weak layers involved in human triggered avalanches. Instead, this season, it snowed and snowed with very few breaks, which created a deep, stable snowpack with few of the “persistent” weak layers, which cause most of our accidents.

We had an unprecedented, rain to the highest elevations on Martin Luther King weekend in January, which froze into a stout, thick layer like a thick pane of glass. Normally, this layer would produce many avalanches for the rest of the season, but luckily, the snow continued to fall and with a deep, overlying snowpack, the dreaded temperature gradient metamorphism around the rain crust was kept to a minimum.

What really set this season apart was the the continued snow until near the end of May--over a month later than normal. Snowbird Ski Area was open for skiing, top to bottom, on the 4th of July weekend, which has never occurred before. Amazing.



*The 20010-11 season in green was well above the average in blue and last season's snowpack in red. It did not quit snowing until the end of May.*

## SEASON SUMMARY



### Record Setting Winter

Top - A skier triggered an avalanche and escaped - Adam Barker photo

Middle - Avalanche forecaster inspects the crown face of a recent avalanche

Bottom - Widespread avalanche activity from rain event.

# AVALANCHE INCIDENTS AND ACCIDENTS



Left: A skier fatality on the Manti Skyline on Horseshoe Mountain.

Below: Snowmobiler partial burial and injury in the Uintas

Lower Left: Snowmobiler fatality, Cherry Hill, Uinta Mountains



## Fewer avalanche incidents and fatalities than usual

Only two avalanche fatalities occurred in the state – the first an early season fatality in the Western Uintas on November 26th, the second on the Wasatch Plateau on March 26th.

Despite the stable snowpack, conditions are usually less stable in areas outside the Wasatch Range where less snow falls combined with more wind. And that is exactly where both fatalities occurred this season--the western Uinta Mountains and on the Manti Skyline.

For the past several seasons, we have noticed a disproportionate number of fatalities in rural areas. Although, by far, most of the backcountry use occurs in the Wasatch Range, fewer per capita fatalities occur there because of a deeper, more stable snowpack and a mostly avalanche-educated population. Areas outside the Wasatch Range have a double whammy of a thinner, less stable snowpack and local populations that are less avalanche aware.

UNINTENTIONAL HUMAN TRIGGERED AVALANCHES	TRIGGERED	CAUGHT	INJURED	KILLED
	62	34	4	2

# CHERRY CREEK FATALITY - WESTERN UINTA MOUNTAINS, NOVEMBER 26, 2010

Two snowmobilers from Evanston, Wyoming were riding in Humpy Creek drainage in the western Uinta Mountains. They accessed the area from the trailheads out of Evanston. They were both experienced, high-end riders and well-known in the community. They did not plan to ride on steep terrain so they left their beacons and shovels in their vehicles at the trailhead.

One rider apparently decided to at least partially ascend "Cherry Hill" a popular snowmobile play slope in the drainage north of Superbowl. The other rider, playing on low angle terrain adjacent to Dennis, did not see him ascend but saw the dust cloud of the avalanche and there was a lone snowmobile track halfway up the bowl.

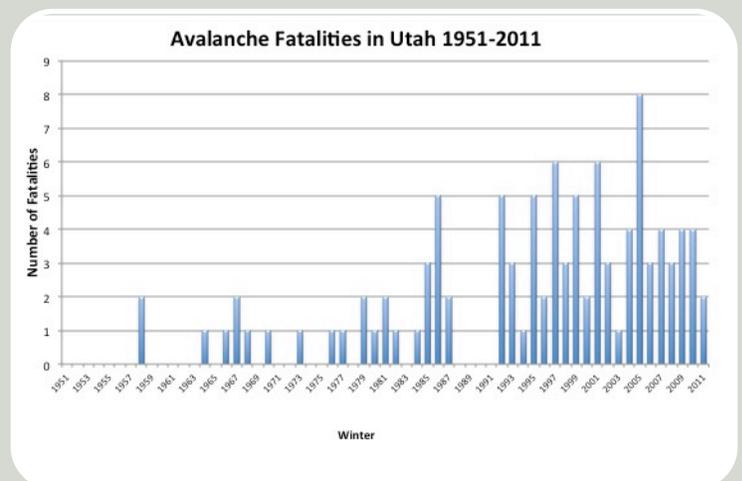
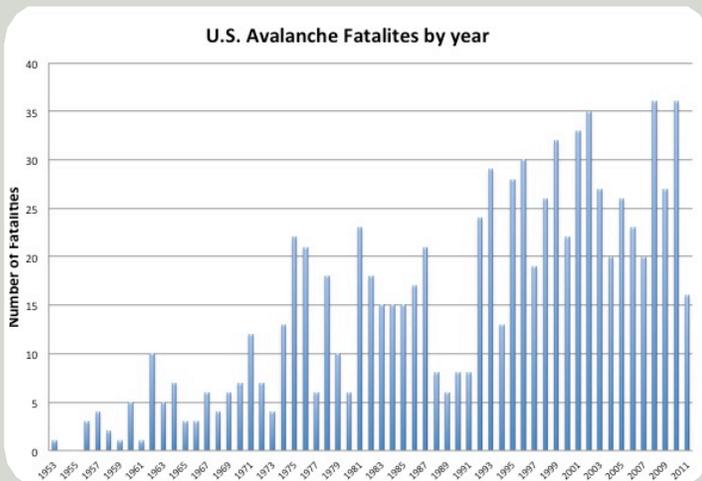
He assumed his friend was buried and did a quick search of the debris and did not find any surface clues. Since he had no beacon or shovel, he rode to a high point where he could call for a rescue and went back on the debris to continue searching. He eventually located the tip of a snowmobile ski sticking out of the snow, possibly with other riders in the area. Someone had an avalanche probe and they located the victim just uphill of his snowmobile. He was buried about 2 feet deep and he did not respond to resuscitation.

# HORSESHOE MOUNTAIN, MANTI SKYLINE, MARCH 26, 2011

A group of seven expert skiers equipped with proper rescue gear wanted to ski a steep slope in Big Shoe Bowl. Two of them lowered onto the slope with ropes and dug a couple snow profiles to test the stability of the slope. They decided it was too dangerous, so as they gathered their equipment to leave the area, party members waiting above unintentionally triggered a large cornice, which caused the slope to avalanche, which caught three people, two of which were partially buried.

The party performed a textbook rescue and quickly located both partially buried victims. One appeared to have suffered major trauma, was unconscious and had no vital signs. Despite heroic rescue efforts by both the party and the organized rescue team, the victim did not survive

You can find more details at [www.UtahAvalancheCenter.org](http://www.UtahAvalancheCenter.org)



# KNOW BEFORE YOU GO PROGRAM



Know Before You Go (KBYG) in its seventh full season, continues to evolve as the premier, basic avalanche awareness program for the UAC. This winter we focused on smaller groups such as outdoor oriented schools along with scout groups and provided many hands on sessions which allowed students to dig snow pits, practice with avalanche rescue gear, and look at safe terrain options. A partnership formed last year with Backcountry Access puts avalanche beacons, shovels and probes into students hands so they can practice with this critical rescue gear. We gave 120 KBYG talks, reaching out to nearly 14,000 young adults statewide.

## Program Results

A total of 133 presentations were made by 25 instructors in Utah during the winter of 2010–11. Nearly 14,095 young adults participated in the program and an additional 48,000 were given information regarding the program at scouting events and safety fairs. (See the complete list at [www.UtahAvalancheCenter.org](http://www.UtahAvalancheCenter.org)) Since program inception in 2004, 130,000 people have gone through the program and our perfect record of no program participant fatalities continues.

In addition to presenting the 50 minute awareness program, we expanded our Know Before You Go outreach by presenting a two day technical avalanche workshop to a group of professional and aspiring pro freeskiers at Snowbird Resort in December as part of an effort to build a culture of avalanche awareness in the pro community with high public exposure via films and product promotion. We believe that an effective way to build awareness among young aspiring freeriders and side country skiers is to build awareness among their role models and show the pros assessing avalanche conditions on film before charging the big lines.

The KBYG program and video are used by avalanche centers both nationally and internationally, reaching out to thousands of additional backcountry users of all disciplines. The extremely popular KBYG video is also shown on the closed-circuit Snowbird TV channel several times each day and is regularly viewed by several thousand more locals and tourists alike.

## New for 2011



Nearly all avalanches that involve people are triggered by the victims themselves or a member of their party. Therefore, if you know how to recognize avalanche danger, you can avoid it. Thus avalanche education and avalanche forecasting saves lives.

KBYG will become a national program and we're excited to partner with the National Ski Patrol (NSP) to take this already success model to the next level. NSP will help identify local avalanche educators on a national level and they will implement the turn key program into their communities. This is an exciting direction for KBYG and the first time a well proven avalanche awareness program will be available to everyone... for free!

Also, this summer we plan to re-edit the amazingly popular KBYG video and update it with a new soundtrack, athlete interviews, and footage. In addition, a fully compatible version of both the video and narrated Power Point are available online. And finally, next season we hope to implement a reward system where participants can take a basic 10 question quiz and be able to acquire discount avalanche rescue gear upon successful completion.



# Are You Beeping Program

The Are You Beeping program continues to grow and this year we again partnered with Backcountry Access and Salt Lake Cities National Weather Service to add several more sites. We replaced an older style beacon checker at the very popular Grizzly Gulch trailhead in Albion Basin, near Alta Ski Resort. In addition, two signs and beacon checkers made their way north to Powder Mountain and were installed at high traffic egress gates

Also, in conjunction with the Utah Snowmobile Association we expanded the

Are You Beeping signage program to include fourteen major snowmobile trailheads statewide. In conjunction with the signs, we also installed a new BCA beacon checker at the Soap Stone trailhead. Now, three beacon checkers are in place at high traffic trailhead entries in the western Uintas. These are a huge asset and the visible LED lights can be seen for several hundred feet, easily catching the attention of riders heading into avalanche prone terrain. We hope to continue expanding this very popular addition to our outreach program and look forward to purchasing more units for the upcoming season.



# FREERIDE AVALANCHE SUMMIT



The UAC has always done an outstanding job catering to the traditional backcountry, telemarking, granola eating crowd, though we never really courted a relationship with the up and coming big mountain freeriders. Here's a group of athletes that frequently ride in avalanche terrain, but don't necessarily want to become avy professionals, ski patrollers or guides. In addition, they often don't have time to invest in a traditional Level One class. For the second year The Freeride Avalanche Summit, created to fill this gap, brought the avalanche professional and freeride communities together. This unique concept was designed to give riders the information they need to rip big lines, but not inundate participants with information they'll never use. Partnering with Snowbird Ski Resort is a natural fit for the workshop and each morning begins with a pre-public 7:00 tram. Riders were treated to spectacular, 5-star sunrises and had the mountain all to themselves for the first couple of hours each day. We then moved into the classroom where topics included snowpack analysis, terrain assessment, first aid techniques, emergency notification procedures and more, along with ski patrol briefings and actual line selection sessions with professional athletes. Each afternoon was filled with on the snow activities from partner rescue and strategic shoveling, to snowpits and route finding. In addition, we added a knots and belay station and students get to put it all together with a "take charge" scenario.

Instructors include members of the UAC- Craig Gordon and Bruce Tremper, along with guest speaker extraordinaire Ian McCammon. In addition, pro riders Chris Coulter, Forrest Shearer, Caroline Gleich, Ben Wheeler, and Hannah Whitney brought their big mountain training and experience to the workshop. The two day summit was well received, creating quite the buzz in Little Cottonwood Canyon for several weeks. We're psyched with the programs success and plan to continue offering this yearly addition to our outreach initiative. We look forward to partnering with Snowbird again next year and the world class support they provide.

# UTAH AVALANCHE CENTER



## FRIENDS OF THE UTAH AVALANCHE CENTER ACCOMPLISHMENTS IN 2010-2011

- Fiscal year revenues were estimated to exceed \$296k, a new high
- The September 2010 Black Diamond Party enjoyed record attendance with over 1000 people attending and raised \$56k for the Utah Avalanche Center
- We taught 133 Know Before You Go presentations to over 18,000 people
- We made minor functional and aesthetic upgrades to the website.
- We introduced an avalanche alert and update system, prototyped in 2010 to provide text messages via Twitter for instant updates
- We developed and taught six new backcountry 101/advanced avalanche skills classes for backcountry and side country riders and snowshoers and snowmobilers. The classes were well received and profitable
- The FUAC Facebook page achieved over 3,100 fans by season end
- Six forecasters attended the fall 2009 International Snow Science Workshop
- Paid website advertising increased
- Financial support from the State of Utah appears to have survived uncut in a legislative session dominated by reduced spending, reflecting at least in part the good will that the UAC has developed with the state legislature and Division of Natural Resources.





## Education

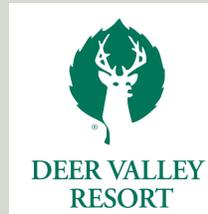
At the Utah Avalanche Center we believe that avalanche education is the best way to avoid getting injured or killed in an avalanche. Part of our mission is to help educate the public. We do this by providing avalanche awareness classes as well as the following list of avalanche classes and workshops available through private companies.

- A contract with Salt Lake Unified Fire was executed to formally acknowledge our relationship and provide ongoing funding and avalanche education for emergency response personnel in the Salt Lake Valley
- The first annual 12 hours of Snowbird endurance ski took place as a FUAC fundraiser raised an amazing \$26k
- Avy Ride 4.0, a fundraising snowmobile ride and dinner, occurred once again in the Uintas and at the Homestead Resort, raising \$5k
- We initiated a relationship with National Ski Patrol to promote Know Before You Go nationally
- We distributed the Know Before You Go program slide deck and video to Mt. Hood Meadows (Oregon) and the Snoqualmie Pass (Washington) ski patrols
- The Eccles Foundation provided a \$10,000 grant to help us build an online education module. A complete KBYG program was recorded and posted on the website and a learning resources outline was created, to be filled in during the summer, 2011.
- The Dumke Foundation provided a grant for \$7,000 to further promote avalanche awareness in Northern Utah
- We signed a Special Services contract with Park City to partly offset the cost of presenting KBYG in Park City



## Lift Ticket Partnership

Many thanks to Backcountry.Com, Ski Utah, and all our great ski resort partners for their very generous support with this years discount lift ticket program. In particular we want to thank Alta, Brighton, Solitude, Deer Valley, Park City Mountain Resort, Canyons Resort, Powder Mountain, Snowbasin, Wolf Mountain, Beaver Mountain, Sundance, and Brian Head. In addition, big thanks to Snowbird for hosting the incredibly successful fundraiser- "12 hours at Snowbird" which was an amazing event. This season we raised over \$36,000 and all proceeds go to support the non-profit Friends of the Utah Avalanche Center (FUAC).



The Utah Avalanche Center holds various events throughout the year in order to raise awareness for their organization and increase the donations they require in order to remain an active non-profit organization within the community

# UTAH SNOW AND AVALANCHE WORKSHOP

## Workshop 2010

Back for a third helping, the UAC again hosted and coordinated the very popular Utah Snow and Avalanche Workshop (USAW). Held in early November at The Depot in Salt Lake City, the regional-wide workshop was well attended by over 500 working snow professionals and high end backcountry users. The “closed door” morning session gives professionals a venue to share critical snow safety information along with the latest innovations in the profession. Kicking off the morning were presentations by Karl Birkeland, Bob Comey, Ian McCammon, Titus Case and Brett Kobernik to name a few. Morning topics were safety oriented and ranged from communication pitfalls, to an avalanche fatality in the work place, and wrapped up with side-country avalanche issues. The registration cost includes some great swag along with a catered gourmet lunch provided by Utah Food Services, giving everyone a chance to socialize and discuss the morning’s events while filling their gas tanks.

The afternoon is open to the public and the focus centered on continuing education for advanced backcountry users. Bruce Tremper, Karl Birkeland, and Liam Fitzgerald were among the lineup. Presentations included a summary of ISSW, along with a review of the deadly avalanche at last years Big Iron snowmobile event on Boulder Mountain in Canada. In addition, a recap of a close call as told by by an avalanche survivor makes for a powerful testimony late in the day. Liam Fitzgerald wrapped up the seminar with a look back at the early days of avalanche control work at Snowbird.

The day wrapped up with a social hour sponsored by Uinta Brewing and the Friends of the UAC. Both pros and recreationists alike socialized, caught up on things and planned for the winter. The success of this event has been phenomenal and we’re already planning for next year’s workshop.

## 12 Hours of Snowbird

The first annual 12 hours of Snowbird, benefiting the Friends of the Utah Avalanche Center, kicked off with a big, bright beautiful moon. Competitors began riding at 7:00 pm on the evening of February 18th and continued through the snowy morning hours of February 19th, ending at 7:00 am. 100 people (individuals and teams included) participated in the event. Athletes were tracked by flaik™, a tracking device that records skiers & riders positions on the mountain in real time along with: vertical feet, speed, miles skied, average speed and runs skied. The event started on Hidden Peak with a pace setting lap down Gad Valley to the Gadzoom chairlift where competitors rode until midnight. Participants then headed to Peruvian Gultch for the second leg of the event, riding the Peruvian Express from midnight to 7 a.m.

The first annual 12 hours of Snowbird was an outstanding success and all the forecasters at the UAC along with our nonprofit



Friends organization want to thank everyone who made this event possible. In particular, many thanks to our great partner and host Snowbird Ski and Summer Resort. The entire support staff matches a mountain in a class by itself and we couldn’t have pulled this off without all the amazing support! In addition, huge thanks to all the volunteers who helped keep things in order, allowing the event to run with flawless precision. And finally, the event was such a triumph because of all of the remarkable athletes who endured a sleepless night, riding to the light of Friday’s big, bright, beautiful moon, helping to raise \$26,000 for the Utah Avalanche Center. Everyone deserves a huge high five.... and a good night’s sleep!





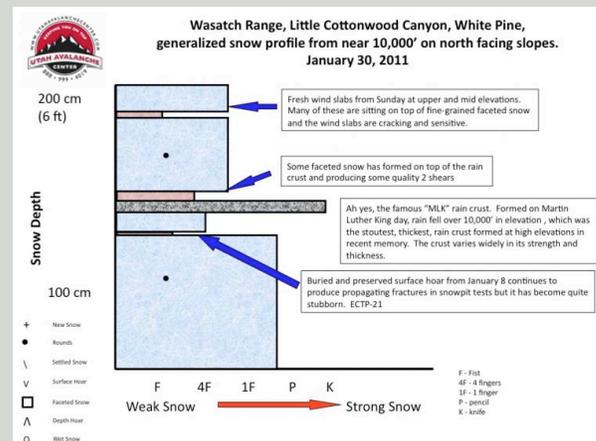
## OBSERVER PROGRAM

We have just completed the second year of our new web based observation system, and it has become an amazing community project. A huge effort by the general public and the Friends of the Utah Avalanche Center's excellent paid volunteer observer's program has produced an enormous collection of backcountry observations that report snow and avalanche conditions, including photos, videos and snow profiles. One amazing part is the remarkable quality and quantity of the observations we receive. This highlights the expertise of the Utah backcountry users, and their commitment to helping to make the backcountry safer for all users. And most important, the public can access all this information in "real time", as the UAC forecasters check the observations and post them multiple times each day into the evening. We are so excited that this huge bank of information is available to Utah's backcountry users.

The Friends of the Utah Avalanche Center's excellent paid volunteer observer's program is the backbone of our popular Current Conditions page. Observers receive a very small token of thanks each time they make the effort after a long day in the backcountry to email or phone in an organized observation, often accompanied by photos and snow pit profiles. The quality, content and detail of the observations were amazing. The extra effort made by these knowledgeable observers makes a huge difference to backcountry users and to the Utah Avalanche Center forecasters in the morning.

Since we can only have one to two of our forecasters in the field each day, and we have a large area to cover, these extra eyes and brains out there are a tremendous help. These talented, knowledgeable backcountry travelers and avalanche professionals provide indispensable snowpack information to the staff forecasters. This past winter we received almost 800 observations from the Friend's network. We thank each and every observer. We continue to look for growth in the observer network in the Logan, Western Uinta and Provo area mountains – information that is seasoned by many years of skiing, boarding or snowmobiling in an area provides invaluable local knowledge.

Huge thanks also goes to all the other backcountry travelers whose steady stream of observations, whether just once a season, on a weekly basis, or multiple times a week, can often be critical pieces in the snow stability puzzle we're trying to complete.



# WEB AND CALL STATISTICS

Our website was again very popular this season with **two million** web page views! That averages about 11,000 page views per day from late October through early April.

As usual, when we look at page view numbers for the different regions, Salt Lake is the most viewed advisory. The Salt Lake emailed advisory is also included. The Salt Lake region is the only region that emails the advisory. About 40% of the emails are opened which adds up to about 210,000 views.

The number of people who get their avalanche information over the telephone recordings continues to drop as more and more people access critical avalanche information using the internet, both through their computer and mobile devices. In other words, 15 times more people access the advisory over the web than through the telephone recordings.

Still, the telephone information is important because many people tell us that they like to check the recordings while they are driving to the trailhead.

# MEDIA CONTACTS

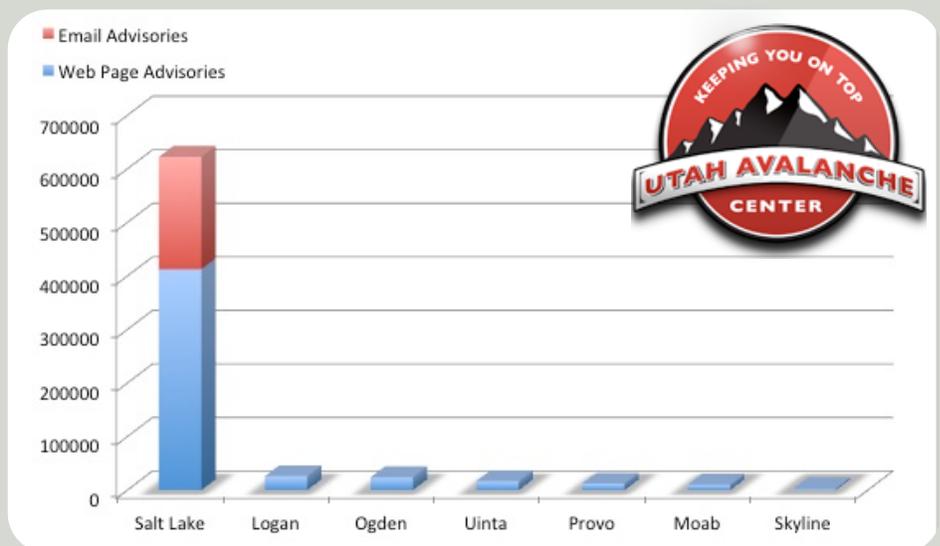
The UAC forecasters documented over 70 media contacts this season, and the real number is likely well over 100 because we handle so many requests during avalanche warnings that some go unrecorded. In addition we do daily, live radio interviews each morning on local Public Radio station KRCL and KPCW, a Saturday morning interview on KSL and a Friday night live call on Park City TV. Our daily short pod cast is also picked up by some radio stations, and the Salt Lake Tribune posts the daily danger ratings for all the regions on their weather page. Finally, we often post avalanche warnings as a heads up on popular ski and snowmobile website forums.

Many of our local media contacts are with the four Salt Lake city local TV stations, and we are impressed and pleased with their increased coverage of avalanche conditions. Sometimes this involves a taped or live interview with one of

our forecasters, but more and more, they provide avalanche information from our web site on their own initiative, especially during storm cycles. We believe the local TV news is an excellent way for critical avalanche information to reach a broad group of people.

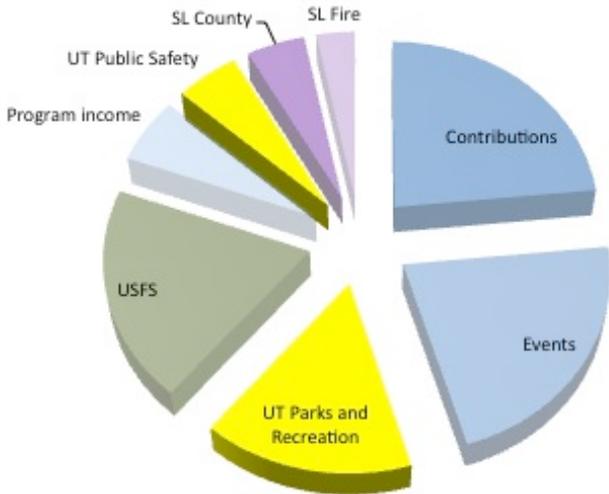
The Forest Service national policy limits our contacts with national and international media to those that are pre-approved well in advance. As a result of tight time constraints, national and international media contacts have dropped from around 20 per year to 5 this season.

These media contacts have become an increasingly essential part of our program. Many avalanche victims are relatively avalanche-unaware and most victims do not read the avalanche advisory before heading out. Therefore, the only way to reach many potential avalanche victims is through the media sources they already use. We feel that media contacts really pay off, especially during times of heightened avalanche danger.



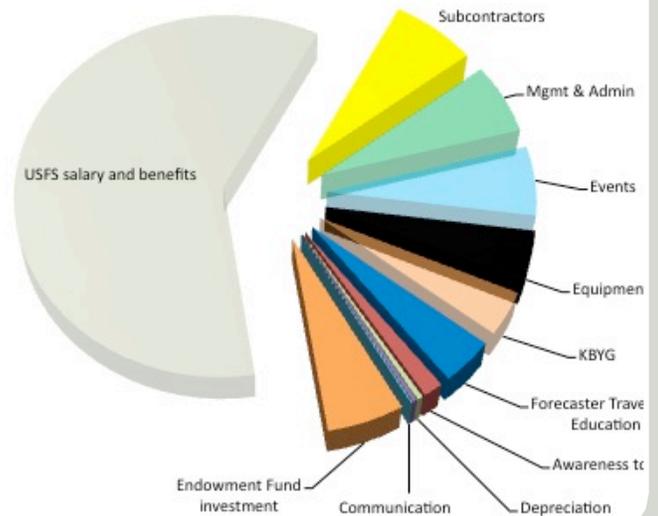
# BUDGET

## Total Utah Avalanche Center Program Funding Forest Service + Friends of UAC



Total statewide funding by all funding sources is \$486,000

## Total Utah Avalanche Center Program Expenses Forest Service + Friends of UAC



Total fundraising from the Friends of the Utah Avalanche Center is \$296,000

The Utah Avalanche Center is a Forest Service – nonprofit partnership, which operates symbiotically to provide avalanche forecasting and education to the state of Utah. Around 80 percent of our funding comes from outside the Forest Service from various private and government sources who share a similar interest in developing and maintaining a state-of-the-art avalanche forecasting and avalanche education.

This season, the non-profit, Friends of the Utah avalanche Center (FUAC) donated \$96,400 to the Forest Service to be used as salaries for UAC staff. The FUAC spends about \$122,000 outside the Forest Service (see graph for a breakdown of their budget) and they raise nearly three hundred thousand dollars per year.

Utah Division of State Parks and Recreation has been a longtime funding partner with the shared interest in providing avalanche forecasting and education especially to snowmobilers throughout

Utah. Their contribution of \$73,522 funds avalanche forecasting for Logan and the western Uinta Mountains and without their support, avalanche forecasting would not exist in either of these areas. Thanks so much to OHV Program Coordinator, Fred Hayes and Director Mary Tulus for their valued support and friendship through the years. Fred Hayes was promoted this year and Chris Haller has taken his place, and we look forward to working with Chris.

Utah Department of Public Safety, Division of Emergency Management has been a longtime supporter of the UAC with an annual contribution of \$25,000, which is used throughout Utah to help fund avalanche forecasting and education.

Salt Lake County has helped fund the UAC for many years with an annual contribution of \$22,500, which helps fund the Salt Lake-based avalanche forecasters.

# SPONSORS



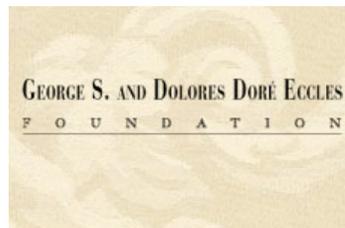
STATE OF UTAH  
NATURAL RESOURCES  
Division of Parks & Recreation



**Black Diamond**



**backcountry.com**





Steiner Foundation



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