

# The Powder Cloud



Newsletter of the Utah Avalanche Center

**DONATE NOW**

December 2019

## Happy Holidays from the entire staff of the Utah Avalanche Center!

We would like to send our sincere thanks to all who have donated to our year-end appeal, and any time in 2019. You have made an important difference as part of our giving community! Haven't donated yet? Please scroll down to the Giving Back section to learn how you can have an impact!

## What's New

### Join the Utah Avalanche Center's Giving Community

The nonprofit UAC is responsible for raising approximately two-thirds of the funds necessary to operate the UAC. See "Giving Back to the UAC" for how you can support the UAC this season.

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### New UAC Staff

Last month you met Nikki Champion, the new UAC forecaster. The UAC has also grown with the addition of 2 nonprofit staff members.

- After a year-long internship and 3 years working as a contract educator for the UAC, **Andrew Nassetta** has joined our staff in August as an Outreach and Education Specialist. Amongst other things, Andrew is responsible for the UAC's trailhead sign program and manages the over 100 Know Before You Go presentations the UAC delivers each season.
- **Hannah Whitney** has a great history with the UAC having met her husband when they were both KBYG instructors. Hannah joins the UAC as our Development Director responsible for the UAC's fundraising.



At a small organization like the UAC, all staff, interns, and volunteers wear many hats to ensure smooth and successful operations day in and day out.

Read more about Andrew and Hannah on our [Staff Page](#).



## Meet the Forecaster

### Greg Gagne

When Greg isn't forecasting for the UAC, you can find him at his day job as a Computer Science Professor at Westminster.



#### What is your personal background?

I grew up in New England and learned to backcountry ski in the tight trees of northern Vermont. I moved to Salt Lake in 1990 following graduate school where I took a job teaching computer science at Westminster College. I still teach at Westminster and forecast part-time (one day per week) for the UAC.

I enjoy working as an educator and feel forecasting provides me an opportunity to not only teach avalanche classes, but provide educational moments in my field observations, blogs, and even forecasts.

#### How did you get into avalanche forecasting?

I have to admit to secretly desiring being an avalanche forecaster for quite a long time. And during the 2015-16 winter season, some staff changes at the UAC opened up the opportunity for a part-time forecaster to forecast one day per week. Although I consider my entry into avalanche forecasting very non-traditional, I did take a Level 3 course (today's Professional Level 2) and have spent countless hours skiing and talking with UAC forecasters/mentors over the past several years on everything about snow. I feel incredibly fortunate to have had the opportunity to work closely with the UAC staff, and in many ways, I feel they have given me the best preparation I ever could have imagined for working as a forecaster.

#### How did you start working at the UAC?

Prior to beginning working as a forecaster in 2015, I have been teaching avalanche classes and working as a field observer for the UAC for about 25 years.

## What was your greatest learning moment about avalanches and what was it?

There has been no single moment; it has been the accumulation of experience in avalanche terrain that has helped me learn about avalanches. I have been especially interested in furthering my understanding of snow metamorphism - particularly the near-surface faceting process - and have worked closely (and learned immensely from) Brett Kobernik. The Wasatch is fortunate to have a generally deep and stable snowpack, but our primary weak layer forms at the surface during periods of high pressure, and it can become a problem if it gets buried underneath storm or wind-blown snow. What I love about working with snow is I feel there is so much more to learn and I feel like a perpetual student who has the opportunity to continually learn.

## What would you tell a 25-year-old version of yourself?

Two things:

1. You don't have to have all the answers.
2. Foster a strong feeling of curiosity, patience, and humility.

## What's one piece of advice you have about avalanches?

I've become increasingly focused on planning ahead of going on a tour and then following up at the end of the day with reflection. Proper planning - followed by reflecting what you did right and what you could have done better - are part of the recipe for a safe and rewarding lifetime of backcountry ski touring.

## What do you like doing besides playing in the snow?

I love traveling uphill and during the summer months, this primarily involves trail and mountain running as well as rock climbing. When I'm not exercising I spend a lot of time reading.



## Education

### New On-Snow Education Curriculum

The UAC staff spent the summer and fall updating our curriculum for the *Backcountry 101: Introduction to Avalanches* and *Introduction to Companion Rescue Basics* classes. If you have never taken a class or if it has been a few years and you need a refresher, now is the time to do it. The goals of a *Backcountry 101* are to:

- Describe the equipment necessary for winter backcountry travel.
- Recognize that most fatal avalanche accidents are triggered by the people involved and that preparation and training prior to backcountry travel can save lives.
- Find and interpret local mountain weather forecasts and avalanche advisory information.
- Differentiate avalanche terrain from terrain where avalanches can not occur.
- Describe a basic process to manage risk for winter backcountry travel.
- Perform basic skills required for companion rescue.
- Interpret the avalanche forecast.

- Create a trip plan for field day.
- Perform safe travel techniques to avoid avalanche terrain.

The goals of an *Introduction to Companion Rescue Basics* course are to:

- Be able to perform a full avalanche burial rescue in less than 10 minutes using proper techniques
- Wear & operate an avalanche beacon.
- Perform a mock companion recovery of a single and/or multiple burial search (dependent on personal experience level).
- Understand the challenges involving multiple rescuers and learn basic group management & communication.
- Understand how to continue to practice and improve rescue skills.
- Knowledge of additional educational resources.
- Location of beacon training parks.
- Perform a signal search, coarse search, and fine search.
- Properly demonstrate proper probing techniques.
- Properly demonstrate strategic shoveling techniques.
- Effectively communicate during a rescue with each other.

For more information on the UAC courses, see our [detailed course descriptions](#).

## Tech Tips

### **What Can Backcountry Users Learn from the “10 Common Missteps of Avalanche Practitioners”**

Avalanche Pros are often on the snow in avalanche terrain 5 or more days per week. This gives a pro as much backcountry exposure in 1 season as a recreational user would get in 3-4 seasons. With the expedited learning curve, there are a lot of valuable lessons that a recreational user can learn from the missteps of pros.

1. MISAPPLICATION OF TERRAIN: Guides may at times push terrain past the point of safety due to client expectations or choosing the path of least resistance. At times the “I want to ski this because it looks really fun” problem was noted.

How does this apply to a recreationist? Numerous factors could cause a person to push terrain including crowds and group decision making pressure.

2. IMPATIENCE WITH CONDITIONS: When trying to deliver on client expectations, time is often an issue and viewed as a hurdle. Guides reported trying to do too much, too fast in avalanche conditions.

How does this apply to a recreationist? Powder fever is a real thing and it often gets skiers in trouble, even the smart ones.



3. TRYING TOO HARD TO OUTWIT THE HAZARD: "For every complex problem, there is a solution that is simple, neat, and wrong." –HL Mencken. Often pros find themselves trying to think around an issue through logical and analytical problem-solving.

How does this apply to a recreationist? Don't push terrain choices when the conditions are not right. The slope will still be there when the snow stabilizes. Sometimes waiting is the best and only option.

4. ACTING ON THE WRONG EMOTION: With the devil on one shoulder and the angel on the other, pros deal with rational information gathering to properly inform decisions and the emotional draw to just ski some really awesome terrain with blower pow. The power of the emotional part of our brain can outweigh the rational part.

How does this apply to a recreationist? Use a good decision-making process, have a plan, and don't get lured by the devil on your shoulder. Embrace good emotions (for example the thinking of your family at home and backing off a slope), but do not get caught up in the wrong emotions (for example heuristic traps).

5. NOT BEING VIGILANT TO CHANGES IN THE ENVIRONMENT: Weather and snowpack go hand in hand. Awareness of current changes in weather patterns is just as valuable as digging a pit. Failure to recognize environmental changes can lead a guide to making inconsistent avalanche predictions.

How does this apply to a recreationist?  
Read the entire forecast and understand how the avalanche problems relate to the terrain you plan to travel through. Keep vigilant during the day of changing conditions and conditions that are not in alignment with what you expected.

6. LETTING FAMILIARITY INFLUENCE YOUR MINDSET: Extended time on snow in repeated locations will lead to familiarity and intimate knowledge of the terrain.

How does this apply to a recreationist?  
Familiarity can lead to overconfidence and complacency. The perception of knowledge is much different than actual knowledge.



7. **INFORMATION OVERLOAD:** More beta and data is not always better. The sheer volume of available information can be daunting. Guides reported a need to ask themselves “what do I need to get this task done, what is essential to what we need to achieve?”

How does this apply to a recreationist? Figuring out what is of utmost importance and value, and then sticking to it, is paramount in avalanche terrain decision-making.

8. **UNDERESTIMATING CONSEQUENCE:** Failure to make necessary adjustments to terrain choice can be directly related to a lack of respect toward the destructive magnitude of an avalanche.

How does this apply to a recreationist? Understand and discuss the risk and consequence of the terrain you are traveling in.

9. **UNDERPLAYING OF UNCERTAINTY:** The Canadian avalanche industry defines uncertainty as the state (even partial) of the deficiency of information related to the understanding or knowledge of an event, its consequence or likelihood. How does this apply to a recreationist? Realizing and understanding there are unknowns in avalanche forecasting needs to be built into decision-making

10. **LACK OF COMMUNICATION:** The main contributing factor in consequential events reported by guides was a lack of communication, from large-scale teams to one-on-one interactions.

How does this apply to a recreationist? Have you ever lost track of a partner or gotten back to a trailhead and realized that members of your group had misunderstood a part (or all) of your plan for the day? Communication is hard. Have a communication plan and practice it.

Guyn concluded his presentation by offering simple ways to curb these missteps:

- Keep learning, be humble, uncertainty equates to humility and an opportunity to gain knowledge
- Listen
- Think (but not too much, just enough)
- Slow down, be patient
- Recognize and accept uncertainty

Learn more by reading the [full ISSW paper by Todd Guyn](#) or the [summary by Paddy O’Connell in Adventure Journal](#).

## Giving Back to the UAC

### Year-End Giving

The Utah Avalanche Center is a partnership effort between the Uinta-Wasatch-Cache National Forest and the nonprofit Utah Avalanche Center. We need your help because two-thirds of the funding required to run the Utah Avalanche Center is raised through the nonprofit from personal and business donations, grants, and fundraising

events. The remaining funding comes from the Forest Service, State of Utah, Utah Division of State Parks and Recreation, Utah Division of Emergency Management, and Salt Lake County.

Just as you, as a backcountry recreationist, relies on the UAC for the daily avalanche forecast and to provide avalanche education, the UAC relies on you to help provide the funding needed to deliver those services. Whether you choose to give at the end of the year, at the end of the winter, donate monthly, or any time in between, we are depending on your generosity!

Ways that your donation make an impact:

- **\$25** helps save a life by supporting the UAC's services.
- **\$50** covers the costs of 1 observation which includes the forecast staff reviewing and publishing each observation. The UAC forecast staff depends on the daily observations submitted by the public. For the 2018-2019 season, there were 1,112 observations submitted which were viewed over 500,000 times.
- **\$100** covers the cost for the UAC to produce one video on changing snow and avalanche conditions. These videos are one of the most valuable awareness products the UAC produces. For the 2018-2019 season, the UAC posted 324 videos receiving over 3.6M views.
- **\$250** helps sustain the KBYG program by covering the cost of 1 presentation. During the 2018-2019 season, the UAC delivered 108 free KBYG presentations to over 7,500 people.
- **\$500** covers the cost of 1 avalanche forecast. The UAC published 1,157 avalanche forecasts during the 2018-2019 season. To produce one avalanche forecast requires an 8-10 hour field day, several hours to review public field observations, analysis of current and future weather models, discussion with the National Weather Service forecast staff and thoughtful considerations of how all these factors impact the avalanche danger for the day.
- **\$1,000** covers the costs of the instructors for an avalanche class. During the 2018-2019 season, the UAC delivered 41 on-snow avalanche classes to 876 students.

In this season of giving and thankfulness, we hope you value the impact the Utah Avalanche Center has on your experiences in the mountains. Please consider making a gift to support avalanche awareness and education. If you'd prefer to have your contribution occur automatically each month, [please sign up here](#) and select monthly recurring. As always, we appreciate your support.

How can you help?

- Write a check and make certain it is mailed by Dec 31. Mail to Utah Avalanche Center, P.O. Box 521353, Salt Lake City, UT 84152-1353.
- Donate online via PayPal or credit card using the DONATE button below.



You can learn more about the various ways you can support the UAC from our [Donate page](#) or by [emailing Hannah Whitney](#).

The Details

**Upcoming Classes**

See a full list of upcoming [UAC classes](#) and [classes from other providers](#).

- Jan 9 & 11: Backcountry 101: Introduction To Avalanches - Salt Lake City
- Jan 10: Introduction to Companion Rescue Basics - Salt Lake City
- Jan 11: Introduction to Companion Rescue Basics - Ogden
- Jan 13: Avalanche Tune-up Seminar - Vernal
- Jan 14: Avalanche Tune-up Seminar - Vernal
- Jan 16 & 18: Motorized Backcountry 101 - Uintas
- Jan 16 & 18: Youth Backcountry 101: Introduction To Avalanches - Salt Lake City
- Jan 17 & 18: Backcountry 101: Introduction To Avalanches - Ogden
- Jan 17-19: AIARE Level 2 - Salt Lake City
- Jan 22: Know Before You Go - Scheels, Sandy
- Jan 23 & 25: Women's Backcountry 101: Introduction To Avalanches - Salt Lake City
- Jan 25: Avalanche Rescue Course - Salt Lak City
- Jan 31 & Feb 1: Backcountry 101: Introduction To Avalanches - Salt Lake City
- Feb 6 & 8: Motorized Backcountry 101 - Uintas
- Feb 15: Introduction to Companion Rescue Basics - Ogden
- Feb 21 & 22: Backcountry 101: Introduction To Avalanches - Cedar City
- Feb 27 & 29: Motorized Backcountry 101 - Uintas

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## Upcoming Events

For a full list of events, see the [UAC Event Page](#)

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## Update Your Information

Have you moved, changed your phone number or email address? [Please use this link to update your UAC profile and communication preferences](#) so we can send you the information you want, where you want it. If you'd like to make changes to how your donations are acknowledged, such as having them come from you and your spouse, please [contact Hannah Whitney](#).

## Stay Connected

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The Utah Avalanche Center is a cooperative effort between the Forest Service Utah Avalanche Center and the non-profit Utah Avalanche Center