

Wallowa Avalanche Center



2010-2011 Annual Report

**The Wallowa Avalanche Center is recognized as a 501(c)(3)
non-profit organization.**

Visit us on the web

www.wallowaavalanchecenter.org

Contact us:

info@wallowaavalanchecenter.org

(541) 263-8727

History

The Wallowa Avalanche Center (WAC) began when a core group of concerned and motivated community individuals met one evening in June of 2009. Much was discussed during this meeting, but the end result was the expressed and dire need for some type of mechanism for avalanche safety dissemination in Northeast Oregon. Enthusiasm grew quickly among these individuals, which led to the Wallowa Avalanche Center's incorporation with the State of Oregon on July 27, 2009. By August 2009, a Board of Directors (six total, most from the original core group) and a team of four advisors were chosen. WAC became live on the web in September 2009.

WAC received 501 (c)(3) non-profit status March 4, 2010

Mission Statement

The Wallowa Avalanche Center provides the winter backcountry traveler with the tools to make an informed decision about winter travel in the mountains of Northeast Oregon.

The Mission

Our mission is simple – give people the tools to stay safe in the winter backcountry environment. Reaching a diverse user group requires good data and the tools to share time-critical information. We accomplish our mission through:

- Education events
- A powerful website
- An Observer network
- Weekly Condition summaries
- Cooperative Weather stations
- Partnerships with government agencies

Wing Ridge – Northern Wallowa Mountains

Note the large heart shaped avalanche just left of center



Education

Avalanches kill more people on National Forests than any other natural event and nearly every avalanche fatality in the US occurs on a National Forest. The Forest Service encourages the public to pursue various forms of winter recreation on National Forest including snowmobile riding, back country skiing and snowboarding, and snowshoe hiking. These activities are potentially quite dangerous if they are carried out in avalanche terrain during unstable snow conditions. Public avalanche awareness classes and associated information can significantly reduce the risk to Forest visitors by providing them the tools they need to make informed and rational decisions.

Providing the tools for people to make their own informed decisions requires a diverse menu of educational opportunities. We consider the educational component as integral to all our products. Traditional avalanche education certainly plays into our operation as well, in the form of short programs to multi-day certification classes. During the 2010-11 season we conducted 5 awareness programs that ranged from group specific classes to those geared toward the general public. An awareness program typically runs for an hour or so and covers the basics that someone should consider for safe winter travel.

Participants often leave these presentations with a desire to further their knowledge and WAC continues to bring a full spectrum of avalanche education opportunities to the region.

American Avalanche Association (AAA) educational guidelines include three levels of advanced courses beyond the awareness program. Generally Level 1 and 2 courses provide the knowledge required of professional guides. During the 2010-11 season WAC sponsored a Level 1 class



open to the public. Our Level 1 course was designed to meet standards of both AAA and the National Ski Patrol (NSP) allowing participants to meet qualifications from both organizations. A Level 2 class was also available through one of the local outfitters.

An avalanche beacon practice park was installed this season at Salt Creek Summit through a joint venture between WAC and a number of local groups. The park provides an excellent state-of-the-art training opportunity to practice avalanche beacon use.

Groups that benefitted from WAC Awareness Programs

Eagle Cap Extreme Sled Dog Race

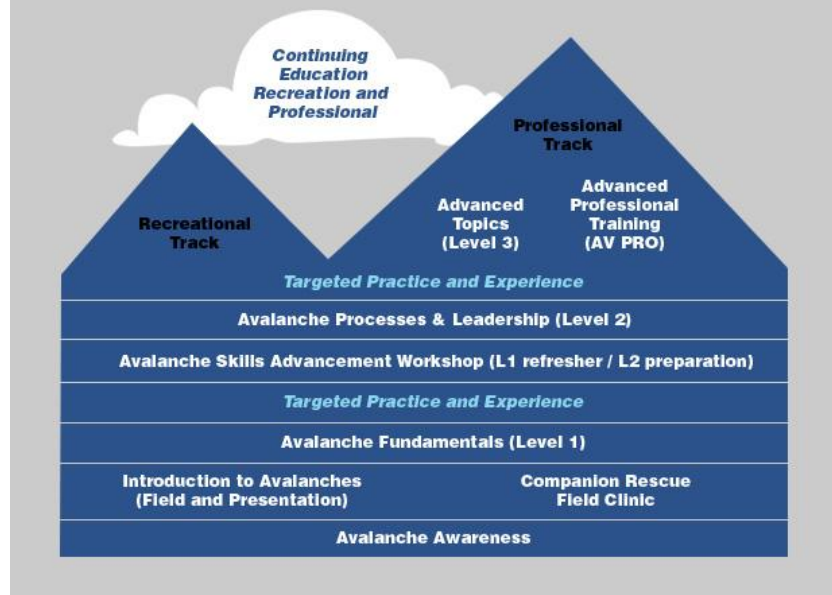
Oregon State Snowmobile Association

Wallowa County Search and Rescue

Union County Search and Rescue

Awareness programs typically last for about an hour. We conduct some non-traditional field based programs as well, such as

American Avalanche Association U.S Avalanche Education Progression



AAA Avalanche Education Progression

Website

Our website provides the cornerstone for both education and data sharing. Last season we upgraded the website to the Drupal 6 platform, an open source content management system used by large government agencies, brand name retailers, non-profit organizations, and a number of avalanche centers. The system incorporates powerful modules that allow us the flexibility in designing custom data inputs and dynamic views of the collected data. Our website continues to evolve through this powerful platform and we plan a number of improvements for the 2011-12 season. Our data shows that website users found value in our online product as unique hits to the site were up over 50% from the previous season.



Condition Summaries

Concentrating our efforts in the Northeast Wallowa Mountains, we conduct weekly data gathering trips into the backcountry collecting data on snow stability. Every Thursday by 5 P.M., a condition summary is posted on our website. We limit our summaries to a detailed description of field data collected by WAC staff, weather data, and observed conditions submitted by people in the field. At this point our operation does not support the actual scheduled avalanche hazard forecasts; however, we continue to position ourselves through strategic partnerships to perhaps offer this service in the future.

During the 2010-2011 Season, WAC Staff.....

Made **43** field trips into the backcountry, typically lasting an entire day,

Recorded **77** snow pits, plus a number of smaller hand pits,

Took over **700** photos in support of our condition summary product alone,

Drove **1200** volunteer vehicle miles in support of the condition summaries

Condition Summary vs. Avalanche Hazard Forecast....What's the difference?

An avalanche hazard forecast uses the standard North American Danger Scale to rate the overall hazard for a specific future time period.

A Condition Summary issued by WAC details actual observed conditions over the past week and gives the user historical context that can be used to evaluate current danger.

Providing information every week in the form of a condition summary requires detailed historical snow and weather observations over the course of a season. In addition to snow stability data, we also maintain detailed weather observations that help us understand the trends affecting snow stability. Remote sensing provides some of the data that help define the overall hazard; however, the need for consistent, on-the-snow observations throughout the entire season cannot be understated. Snow stability is a complex and dynamic science that requires an understanding of the snow-pack in historical context over the course of the winter. Our condition summary provides the user who cannot otherwise obtain this information, a detailed history of snow and stability conditions that form the basis of an informed winter travel plan.

Information Sharing

As we serve a large geographic area, the success of our mission depends on input from individuals in the field that provide critical data that is easily shared.

Through our website, anyone may submit an observation from simple road conditions to the trailhead to detailed snow pit profiles. During the 2010-11 season, 86 observations were submitted and posted on the WAC site.



Natural avalanches were observed on ESE-WSW aspects in the form of slabs, point releases and wet loose slides. A large slab released off the E side of Cornucopia that ran to Pine Cr, full track and ended as a wet slide. Not sure on the date, but rain that started on 3/29 in the alpine could have been culprit. Natural slabs were observed on WSW aspects of Granite Ridge and SSE side of Red Mtn.

Excerpt from an observation on the WAC website.



Avalanche on Dollar Ridge, Aneroid Basin

Weather Stations

In August 2010 we installed our first weather station in the Wallowa Mountains. We identified this location to provide an indication of wind speeds at the higher elevation, a critical component in snow stability and loading.

Our weather station on Mt. Howard was located through a partnership between WAC, Wallowa



County and Wallowa Lake Tramway. The location serves our mission in addition to providing valuable real-time weather information to the tram company and backcountry users. Our weather station information is available real-time on the Internet, as well as through a properly equipped radio receiver with good coverage throughout the region.

Observer Network

The 2010-11 winter season saw a continuation of our successful Observer Network program. We identify interested individuals with at least a Level II American Avalanche Association certification who are interested in providing WAC with snow pack information. Early in the season we conduct a short briefing where we discuss our needs and goals and answer any questions. Observers then submit observations directly to our website where they are accessible to the general public.



WAC Snowpit in Aneroid Basin

Partnerships

In October 2010 we formalized our partnership with the USDA Forest Service through an agreement with the local District. The District provides WAC with meeting space and computer access for generating the weekly condition summaries. In return we provide the district information on winter use activity that we observe in the course of conducting our field work.



We look forward to continuing and further developing this partnership with the Forest Service. In times of tight budgets, we look for synergies that can be obtained with minimal budget pressure.



In 2009 we visited the National Weather Service in Pendleton, a visit that initiated a valuable, continuing relationship with an agency reaching out to serve. We meet in person annually and follow up several times during the winter season. The NWS team in Pendleton supports us through customized weather products and winter weather briefings. The NWS invited WAC to join in the semi-weekly briefings that cover a detailed analysis of each winter weather event and provide an opportunity to ask questions directly to the NWS forecast team.

New for 2011-12 will be additional weather products developed with our input for the winter traveler. These products will be available both through the NWS and the WAC website.



Snow pit analysis on Wing Ridge

Development

Providing a quality product to the public requires that we maintain the highest degree of professional knowledge in the field of snow science. We maintain an advisory board with individuals nationally respected in the field. In addition we submitted our products for review by the American Avalanche Association (AAA). In October 2010 the AAA officially recognized WAC with a “dot-on-the-map” and WAC became one of the first non-government sponsored avalanche centers displayed on the AAA (www.avalanche.org) website. We appreciate the vote of confidence from the national governing body for avalanche centers.



In October 2010 WAC staff attended the International Snow Science Workshop (ISSW) in Squaw Valley, California. With a theme of “merging theory and practice” this workshop brought together 920 paid registrants including 98 from outside North America. Presentations covered a broad spectrum from the latest snow stability tests to highway mitigation techniques.

WAC Director Keith Stebbings presented a paper at the ISSW on the climatic regime of the Wallowa Mountains, a project co-authored by staff from the Utah Avalanche Center in Salt Lake City.

We participate in on-going industry forums including the National Avalanche Directors meeting held each fall and a small avalanche center round-table group. We also communicate regularly with staff from other avalanche centers that provide valuable insight and guidance toward industry accepted best-practices.



WAC was represented in a break-out group at the ISSW for small and developing avalanche centers.

Funding

While volunteer hours account for the majority of work accomplished by WAC, we incur expenses related to the operation and administration of our organization. Funding sources include private donations, corporate sponsors, and grants.

Private Donations

We accept private donations either by mail or through a PayPal link on our website. The majority of our donations come through PayPal. During the 2010-11 season we provided a thank you gift to donors at the \$50 level and above. Private donations play a significant part in our operation and we are thankful to those users that kindly donate after using our products.

Corporate Sponsors

Our successful corporate sponsor program includes a logo on the front page of our website. These companies, both local and national, pay a fixed amount or donate an equivalent amount of merchandise that we can use as incentives or raffle items.

Grants

In 2011 we received our first grant from the Wildhorse Foundation. This grant specifically covers development of an avalanche awareness program. We plan to roll out this program for the upcoming season and integrate the basic educational concepts throughout our products. The awareness program targets multiple user groups and will include basic safe travel concepts and danger avoidance strategies. In addition the program includes guidance on how to use our website both for pre-trip planning and submitting relevant data.

Fundraisers

WAC participates in the annual Frostbite Film Festival in Joseph, held in January. This year the festival was sponsored by a number of non-profit groups that were able to pool resources and share the proceeds. Additional funds were raised through logo hat sales and a raffles for new equipment donated by corporate sponsors.



Risk analysis on the Eagle Cap Extreme Race course

Goals

Our goals include both short term and long term targets that we hope will enhance our product and strengthen our long term viability as an organization.

❖ Education

The Wildhorse Foundation grant gives us an excellent opportunity to launch a new and improved awareness program. We hope to offer more awareness classes targeting diverse user groups. We would like to continue offering Level 1 and 2 certification courses in the local area.

Beginning this season, we will expand our education program to schools in the local area. Using proven materials and additional local content material, we believe that reaching out to users at a young age will influence them toward good decisions in the backcountry throughout their lives.

❖ Weather Stations

Our successful weather station on Mt. Howard will hopefully be a part of an expanding network of weather stations cooperatively managed by WAC. Funding weather stations is a need we are looking to meet as we develop further sites.

❖ Partnerships

Our partnership with the Forest Service will gradually evolve to an integrated relationship similar to that of other avalanche centers in the United States. Eventually we would like to see the Forest Service fund a seasonal employee that would take over responsibility for writing the condition summaries and take on formal forecasting duties. This type of arrangement would best serve the public with the highest level of safety information. As with other avalanche centers, we see our role evolving as a non-profit organization assisting with product development, website operation, and fundraising.

Our short term goals include a further support role from the Forest Service to allow us easier access to some of the remote areas and an expanded volunteer relationship with the agency.

❖ Corporate Sponsors

We continue to receive good support from a number of corporate sponsors and would like to expand both the number of sponsors and the level of sponsorship. As our website traffic grows, we feel that we will be able to support these goals in the future.



Practicing at the Avalanche Beacon Park at Salt Creek summit

Funding Needs

Our primary funding needs include:

Education

- Funding a part-time position for presenting avalanche awareness programs. Current grant covers the development of the program only. We need additional funding to bring our educational program to a wide geographical audience and user base within the Wallowa-Whitman National Forest area.
- Additional funds are required to bring our backcountry safety and avalanche awareness program to local schools.

Weather Stations

- Additional weather station sites have been identified and we would like to build and expanded network throughout the region. Additional potential sites are located in the Southern and Eastern Wallowa Mountains and the Northern Elkhorns.

Operations

- Funding for costs related to the weekly condition summaries. We would like to fund this position, ideally through a Federal agency, as most avalanche centers operate.
- A stable funding source will ensure the long term continuity and sustainability of WAC.
- Funding for website development and maintenance. Our full featured website took hundreds of volunteer hours to develop and we would like to secure the funds to ensure that it remains properly maintained and updated to the latest standards.