

2021-22 Annual Report



Gallatin National Forest AVALANCHE CENTER



GRIZZLY OUTFITTERS

HIGHLINE PARTNERS

BLITZ MOTORSPORTS and YAMAHA

YELLOWSTONE CLUB COMMUNITY FOUNDATION

MONTANA STATE PARKS

GALLATIN COUNTY SEARCH AND RESCUE

OnX BACKCOUNTRY

Spark R&D

Uphill Pursuits

World Boards

Mystery Ranch

Cooke City Super 8

Alpine Orthopedics

Stronghold Fabrication

Gallatin Valley Snowmobile Association

Community Food Coop

MAP Brewing

Cooke City Motorsports

Knoff Group Real Estate

Community Food Co-op

Montana Backcountry Alliance

Upper Yellowstone Snowmo Club

Werner Wealth Management

Advanced Innovation

Bridger Bowl

Beartooth Powder Guides

Yellowstone Ski Tours

KLIM

Gastrognome

Chad Bunting-Edward Jones

Madison-Gallatin Wild Montana

First Nat Bank of Gilbert, MN

Gaia GPS

GNFAC Staff: Doug Chabot, Alex Marienthal, Ian Hoyer and Dave Zinn



2021-2022 Annual Report Gallatin National Forest Avalanche Center

August 2022

We just ended our 32nd year of operation. It was a low snow year with snowpack totals 70-80% of normal. The first snow fell on October 11 and our first recorded avalanche was on November 7 when a skier was caught in a loose snow slide in the Bridger Range. During the season we issued 12 early season bulletins before the start of our daily forecasts on December 12. We ended with our 122nd and last forecast on April 10 followed by 7 spring updates.

The GNFAAC team of 4 full-time avalanche specialists remained the same, with me, Alex, Dave, and Ian getting in the field, writing forecasts and teaching. This season Hannah Marshall was our intern and she was able to get out with us on many days.

We spent most of the year patiently waiting for the monster snowstorm that never came. Weeks without snow created faceted, weak snow at the surface that would get buried an inch or two at a time. As forecasters we were challenged to not sound like a broken record in our forecasts and videos, "Once it snows..." we would say over and over again. Even with low snow amounts, there were weak layers buried, dangerous, especially on the heels of a snowstorm. Tragically there were 3 avalanche accidents that killed 4 motorized users: 3 in Cooke City, 1 in Lionhead. Nationwide there have been 15 avalanche deaths (5 ski/snowboard, 6 motorized, 3 snowshoers).

The Friends of the Avalanche Center and the GNFAAC worked together to teach avalanche classes. We ran field classes and lectured both in person and online. In total we offered 82 classes to 3,349 people, including 391 kids under 18 and 283 snowmobilers.

GNFAAC INDEX

- Total number of people getting our daily forecast: 6,736
- Number of field days: 117
- Area with the most field days: Cooke City with 29
- Number of snowpits we recorded in SnowPilot.org: 169
- Snowmobile damage: 2 shocks, 1 tie rod, 1 handlebar, 2 a-arms, and 1 actual arm (Dave's dislocated shoulder).
- Sled miles ridden in Cooke City and the rest of the forecast area: 600 and 1,200
- Best quote of the season: "I'm pretty sure it will work fine" said my partner as he showed me his cracked beacon that opened like a clamshell.
 - His plan: tape it back together and call it good.

- Chances of doing his plan: 0%
- Reported avalanche incidents (aka. close-calls): 38
 - Total caught, partially buried, fully buried, injured:, and killed: 19, 1, 4 , 3, and 4.
- The most avalanches recorded in a single day this season: 8 on February 6
- Number of videos and total views: 127 and 1,388,347 views
- Total number of minutes/days watched on YouTube: 589,926 minutes/410 days
- Total followers on Instagram, Facebook, YouTube and Twitter: 19,700; 16,073; 7000; and 2,311.
- Percentage increase from last year: 18%

THIS WINTER
6,743 PEOPLE A
DAY RECEIVED
OUR AVALANCHE
ADVISORY.



Mike Thom, Gardiner District Ranger, skins outside Cooke City

AVALANCHE FORECASTS

Our goal is to give current and relevant information so people can make good decisions in the backcountry. Last winter we issued 122 advisories that reached 6,736 people a day, mostly through email. We also wrote 12 pre-season avalanche bulletins and 7 post-season. We rely heavily on our personal field days, observations from the public and typically use photos and videos to help demonstrate the danger of the day.

The official forecast gets posted and emailed every morning at 7: 30 a.m., but those that follow us on social media get a teaser of the next day's forecast by



watching our afternoon field videos on Instagram and YouTube. These supplement our daily avalanche message and give viewers information about the next day's avalanche concern.

FIELD DAYS

Getting out in the field is critical to our operation. "To know there, go there" are words we live by. This season we had 117 field days digging and recording pits (169) and investigating avalanches. We do not go in the field solo. We go out with each other, our intern, or from a carefully selected group of volunteers. This season we were in Cooke City (27) followed by the Bridger Range (19) and Madison Range (31). Gallatin Range (17), Lionhead Range (14), and Centennials (9). Where we go changes year-to-year since we follow the most unstable snows effecting the most popular recreation sites.

MTAVALANCHE.COM

Our website is an online portal to all things avalanche related. Weather, education, forecasts, snowpits, avalanche activity, articles, pictures and videos are easy to navigate. Anyone planning a day in the backcountry can click on a Regional Page for a specific mountain range and get valuable trip planning resources.

VIDEOS

We created 127 videos this winter that were watched 1,388,347 times on YouTube, Facebook and Instagram. Most days we would film a 1-minute clip about our avalanche concerns and post it that same afternoon. By evening hundreds would have seen it. While reading the morning advisory is chock full of useful information, an person could instead watch all our videos and understand the region's snowpack stability.

YOUTUBE, INSTAGRAM, AND TWITTER

We post videos every afternoon and use social media to advertise education programs, plug the avalanche danger and inform people of recent avalanche activity. The number of likes and followers increased 18% this year with 19,700 Instagram followers, 16,073 on Facebook, 7,000 subscribing on YouTube, and 2,311 on Twitter.

AVALANCHE INCIDENTS AND ACTIVITY

Nationally, 17 people died in avalanches this season, a welcome decrease from the 10-year average of 27. In southwest Montana we had 3 accidents resulting in 4

fatalities: 2 sledders and 1 snowbiker were buried and killed outside Cooke City and 1 sledder was killed in the Lionhead area outside West Yellowstone.

Although we did not get large snowfalls this season the conditions were still unstable at times. We only hear of a fraction of all the avalanches, yet the more serious ones resulting in burials, injury typically get reported.

- 29 avalanches were unintentionally triggered by skiers and snowboarders that resulted in 15 being caught, 3 getting injured and 1 partially buried.
- 9 avalanches were unintentionally triggered by sleds and snowbikes resulting in 4 caught, buried and killed.

Over the last ten years Montana has had 33 avalanche fatalities, the second highest in the nation. Pages 22 and 23 show the last 10 years of avalanche incidents grouped by activity and state.



Alex Marienthal checking out a crown on Mt Abundance.



AVALANCHE EDUCATION

By Shannon Regan and Jodi Redfield, Education Coordinators

Season Totals:

- 82 Classes (chart on pages 24-25)
- Total participants: 3349
 - including 283 snowmobile participants and 391 youth participants.
- 42 Friends Instructors working Awareness, Fundamentals, CRC, Cooke City, and SAR Group Programs.

Successes:

- Continued to adapt class types and offerings amid the ongoing pandemic
 - Implemented a new Hybrid Format for the Avalanche Fundamentals course with pre-recorded lectures, a Live Q/A session with presenters and the field sessions.
 - Expanded our Fundamentals course reach with field day options in Ennis, Gardiner and Dillon.
 - Our online lecture series reached over 15,000 people
 - Introduced weekday field sessions.
- Re-introduced in person awareness lectures and private courses.
 - Continued to offer virtual lecture options.
- Returned to in school programming at the local middle schools.
- Maintained the City of Bozeman beacon park for 6 weeks.
- Maintained our presence in Cooke City for our Saturday outreach program.
 - Added private avalanche awareness for a large user group every month through partnership with the Super 8.
 - Maintained the seasonal beacon park in Cooke City for the second year.
- Partnered with MSU Outdoor Recreation to create a 5 part campus lecture series.
- Hosted the biannual medical refresher for staff with a turnout of 17 instructors.
 - Taught in house which adds to the interface with leadership (forecasters, coordinators).
- We offered our fifth Annual Staff Training in November 2021 online.
 - Hired 9 new instructors to take on the new demands for this year (2 snowmobile instructors).
 - We trained on:
 - Consistent and efficient messaging for varying user groups.
 - Highlighted effective educator attributes to create an ongoing

list for future resource development.

- Utilized our varying instructor backgrounds to highlight points of improvement in our differing user categories (school, professional: patrol and search/rescue, guides, backcountry users, motorized users).
- Added a Spring Snowpack talk to our Awareness offerings.
- Continued our SAR specific training presentations with field sessions for Gallatin County, Park County and Red Lodge SARs.

Thinking forward to 2022-23

- We have a strong program and want to generate and maintain partnership to continue running community education events.
- Continue to expand Fundamentals course field day offerings to match public availability and spread out pressure at field locations.
 - Continue to build weekday availability.
 - Revive existing out of town fundamentals partnerships with the new hybrid online format.
- Build and nurture new and returning staff to build in a hierarchy of experience: course leader, lead instructor, shadow/assistant.
- Build our motorized instructor team and tap into a relationship with the UYSC in Cooke City to get a solid foundation for staffing the Cooke program.
- Return to more in school programming.
- Expand community engagement and presence:
 - Town Beacon Clinics, outreach at events, more social marketing for free awareness programming.
- Build up gear collection – beacons, shovels, probes.
 - Create a gear locker or consistent place for it to be logged, checked out and tracked/updated.
- Continue to standardize our teaching curriculum.
 - Consider seeking feedback via surveys from Students about educational outcomes and usefulness of varying courses.
 - Build resources for instructors to encourage consistency, quality and industry standards.
- More in person Awareness offerings as we start to get out of the pandemic doldrums.
- Expand Companion Rescue Clinics to balance MSU’s rescue course offerings.
- Down the road: School Specific Products by age groups.

WE TAUGHT 82
CLASSES TO
3,349
PARTICIPANTS.



BEACON CHECKERS

Beacon checkers are a no-brainer. They help people remember to turn their beacon and remind them that they are entering avalanche terrain. Stand next to one and it will blink green if your avalanche transceiver is on. The FOAC has worked with many groups to buy, install, and maintain these during the winter. Currently we have 9 with 2 more planned for 2022-23.

- The north gate at Bridger Bowl that leads to Bradley's Meadow.
- On the Beehive Basin trail north of Big Sky (Big Sky Owners Assoc).
- At the Buck Ridge trailhead on highway 191 (Gallatin Valley Snowmobile Assoc).
- On the snowmobile trail leading to Lionhead outside West Yellowstone.
- On the groomed snowmobile trail heading to Two Top outside West Yellowstone.
- There are 2 in Cooke City, one leading east of town on the Beartooth Highway and another leading north on the road towards Sheep Creek (Upper Yellowstone Snowmobile Assoc).
- At the trail junction in Fisher Creek leading to Round Lake outside Cooke City (UYSA) and also at Pilot Creek parking area.
- NEW NEXT SEASON: Tepee Creek Trailhead.
- NEW NEXT SEASON: Portal Creek Trailhead.



Dave Zinn digging a snowpit.

SNOWPILOT

SnowPilot (www.snowpilot.org) is open-source, free software that allows users to graph, record and database snowpit information. We developed this program in 2004 and it currently has over 5,000 users and 36,000 snowpits in 4 languages (English, Spanish, Icelandic and Swedish). This season we dug 169 snowpits and recorded them all on SnowPilot. We also added a map of all our snowpit locations on our snowpit profiles page on mtavalanche.com.

FINANCES OF THE GNFAC

The Custer Gallatin National Forest provided the Avalanche Center with 51% of its funding to cover salaries, benefits, travel, vehicles, computers, and office space. We rely on our long-term supporters, Friends of the Avalanche Center and Montana Fish, Wildlife & Parks, for the remaining 49%.

FRIENDS OF THE GNFAC

The Friends of the Avalanche Center is a nonprofit organization whose mission is simple and focused:

The Friends of GNFAC supports the Gallatin National Forest Avalanche Center in providing quality avalanche education and awareness programs to the greater Gallatin community and all backcountry users in southwest Montana.

Their support falls into 3 core areas:

1. Direct support of the GNFAC,
2. Avalanche Education Program,
3. SnowPilot (funded through a restricted donation).

The Friends cover expenses related to the avalanche education program, as well as administrative, snowmobile, weather station and website costs. The Friends is run by a Board of Directors, all volunteers, with two paid staff: an Education Coordinator (Shannon Regan) and Treasurer (Allyson Fauver).

The Friends were founded in 1992 and have donated over \$1,099,96 to the operation of the GNFAC. This year their total contribution was \$127,734. This total reflects spending \$80,070 for avalanche education, \$47,664 for direct GNFAC support and \$3,679 for SnowPilot maintenance. Almost all monies came from local businesses and individuals in southwest Montana with the following long term, recurring support:

- 22nd Annual Powder Blast, *online* (\$73,872)
- Yellowstone Club Community Foundation (\$10,000)



- 19th Annual King and Queen of the Ridge at Bridger Bowl (\$31,400)
- Bozeman SplitFest (\$5,300)
- Give Big Gallatin Valley (\$5,684)



SINCE 1992 THE FRIENDS OF THE AVALANCHE CENTER HAVE DONATED \$1,099,965 TO THE OPERATION OF THE GNFAAC.

Ian Hoyer at the Taylor Fork weather station.

BOARD OF DIRECTORS

Friends of the Avalanche Center:

Jeannie Wall (President), Ben Nobel, Tyler Allen, Mark Greeno, Laura Ryan, Dawn Brown and Leah Knickerbocker.

SNOWMOBILES

This winter Blitz Motorsports and Yamaha loaned us 4 snowmobiles. Two of them were used in Cooke City and the other 2 were trailered in Bozeman. These loaners were essential to our ability to gather snowpack data in popular riding areas. Sleds are an expensive part of our operation and having Yamaha support us was critical.

AVALANCHE INTERN

This winter Hannah Marshall was our intern. She was our primary field partner

on 26 days, taught for the FOAC, and helped us post pictures, videos and snowpits. We relied on her to help us get out in the field as much as we did. And valued her partnership.

FIELD VOLUNTEERS/INTERN

We do not go in the field solo and it's not always possible for us to partner with each other, so we rely on a team of skilled volunteers to help. Twenty-three volunteers accompanied us on 38 field days: Tim Baucom, Dave Bienapfl, Lucas Browning, Haylee Darby, Lilly Deford, Jim Earl, Eric Knoff, Allyson Fauver, Mason Griffin, Kevin Hammonds, Nina Hance, Spencer Jonas, Brandon Kwasnick, Jordan Mancey, Sam Marshall, Cambria McDermitt, Jake Mundt, Tyler Nyman, Tyler O'Leary, Elise Otto, Shannon Regan, Kevin Rose, and Mark Shaffer.

We also rely on folks emailing their personal field observations, stability test results and snowpits. The accuracy of our forecasts is a direct reflection of their detailed and regular reports. We owe a special thanks to Big Sky and Bridger Bowl Ski Patrols for their daily observations as well as Beartooth Powder Guides, Yellowstone Ski Tours, and Six Points Avalanche Education.

23 VOLUNTEERS
ACCOMPANIED
US ON 38 FIELD
DAYS .

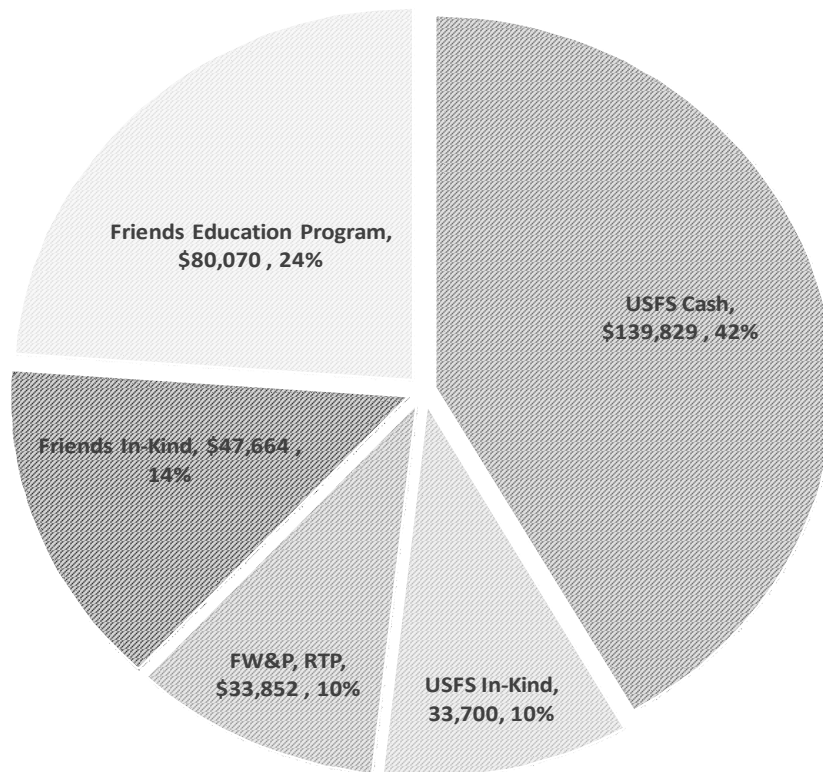




Total Costs

Custer Gallatin National Forest (salaries/benefits)	\$139,829
◆ CGNF In-Kind (vehicles, office, etc)	\$33,700
Montana FW&P Rec Trails Program (salaries)	\$33,852
Friends of the Avalanche Center: Education program	\$80,070
Friends of the Avalanche Center: Direct Support	\$47,664
Friends of the Avalanche Center: SnowPilot	\$3,679
Total Costs	\$338,794 (100%)
<i>CGNF Contribution</i>	<i>\$173,529 (51%)</i>
<i>Outside Contributions (non federal government)</i>	<i>\$165,265 (49%)</i>

TOTAL COST



GNFAC Season Snowpack Summary 2021-22

by Alex Marienthal

Snow began to accumulate in our forecast area in early October. On October 12 there was enough snow on the ground for us to issue our first early season bulletin. Warm, dry weather through October eliminated much of the snowpack at low elevations and on sunny slopes. We issued our second early season bulletin a month later, on November 7. That day we had the first reported avalanche of the season which was a skier triggered dry loose avalanche in a steep couloir. The skier was caught, but un-injured. Through November we issued snowpack updates 2-3 times per week as snow slowly stacked up. Small storms added no more than 6-12” each week, and warm temperatures slowed the growth of the mountain snowpack.

Avalanche activity in November and early December was limited to small wind slabs and wet loose avalanches. There were a couple avalanches on persistent weak layers near Cooke City where it was cold enough to grow weak facets at the ground and have enough snow to drift into a slab.

We issued our first daily forecast with danger ratings on December 10, with a moderate danger throughout the area. Through December, steady snowfall and wind kept danger at moderate to considerable. We issued two consecutive avalanche warnings for the mountains near Island Park when they were favored with heavy snowfall in mid-December. These would become the only warnings we issued this season.



Crown of the avalanche that killed two snowmobilers near Cooke City on December 27, 2022.



On December 27 two snowmobilers were killed in an avalanche on Scotch Bonnet Mountain near Cooke City. The avalanche broke 3-5 feet deep under a slab of wind-drifted snow on a layer of facets 1.5 feet off the ground. The area had received 7-9 feet of snow equal to 8.9" snow water equivalent (SWE) from December 6 through 27.



Surface hoar that grew during extended dry weather in January.

January started with the season's first forecasted low danger in parts of our area. On January 6, danger was elevated to at least moderate through the entire area before extended dry weather allowed danger to drop to low throughout the area from January 15-20. During this period, the January drought Layer began to form. We anticipated avalanches to fail on this layer with each storm that followed its formation, but snowfall amounts were underwhelming with almost every storm. Danger bounced between low and moderate through late February, and slabs of new snow and wind-drifted snow seemed to quickly facet into another weak layer on top of a weak snowpack.

On February 6 a snowmobiler was killed in an avalanche on Lionhead Ridge near west Yellowstone. Danger was rated low in that area for the 23rd day in a row, and the area had received only 1" of SWE over that time. The avalanche was a slab of snow that formed after steady strong westerly winds drifted a few inches of recent new snow. It broke 4-12" deep and 75 feet wide, failing on weak facets or surface hoar that formed during dry weather in mid-January.

Dry weather persisted through February, and most of the area had low danger when there was no new snow. Cooke City was the exception, where enough snow piled on top of the January and early February drought layers to maintain a heightened danger for a persistent slab avalanche problem. In Cooke City danger was moderate or higher every day except one from February 5 through March 30.

On February 19 a snow biker was killed in a large avalanche on Miller Mtn. near Cooke City. Two snow bikers were high on a slope, one stopped on a small ridge while the other climbed higher and triggered the avalanche. He was carried through a gully and over a cliff where he was partially buried with his arm and airbag visible and head 1 foot under the surface. Danger was moderate and the area had received about a foot of snow equal to 1" SWE over the previous week along with strong westerly winds. The avalanche likely broke on facets that formed in January in an area that was thinly covered and recently wind-loaded.



Crown of the avalanche that killed a snowmobiler on Lionhead Ridge on February 6, 2022.



Burial location and debris of slide that killed a rider near Cooke City on February 19, 2022.

Through March we dealt with the standard mix of spring avalanche problems. Enough new snow and warm, sunny days warranted moderate danger most days. A few storms were large enough to bump danger to considerable. At the end of March, the snowpack was hit with above freezing temperatures for seven days in a row and not freezing most nights. Danger quickly rose to considerable for wet snow avalanches and eventually was rated high for a day on March 28. Due to a shallow snowpack we did not see huge wet slides, but activity was widespread during this period with many D2 wet loose avalanches and a few large wet slabs.

Following the late March warmup, cold temperatures froze the snowpack and danger quickly dropped to low to start April. A few spring storms the week of April 5 created a period of dangerous avalanche conditions. Danger subsided to low for our last forecast on April 10.

Through the end of April we issued avalanche and weather bulletins every Monday and Friday. After we culminated daily forecasts, there were frequent wet, cool storms through May that were the biggest of the season. These storms created dangerous late season avalanche conditions and provided a much-needed increase to our snowpack.

Despite having frequent low danger and few days with high danger, we still had an average number of accidents, fatalities, and close calls. The nature of avalanche activity was relatively smaller slides in higher consequence terrain or

less frequently traveled areas. It was a mellow winter in terms of snow, but enough snow fell for an average number of people to be out in the mountains near avalanche terrain.

We are thankful for the support from our partners in the community to help keep everyone safe. We could not succeed without the hundreds of observations submitted by the public, volunteers that join us in the field, and donations from individuals and sponsors.

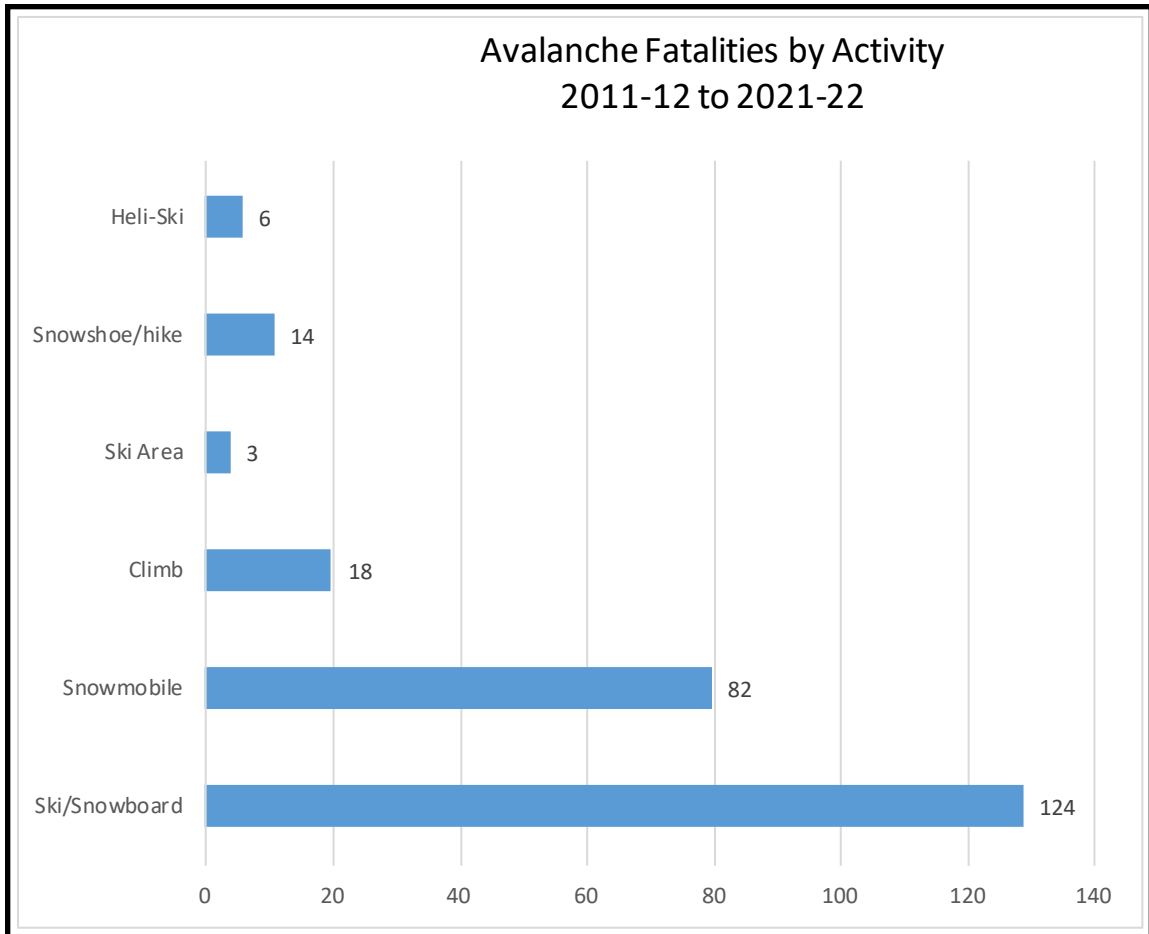


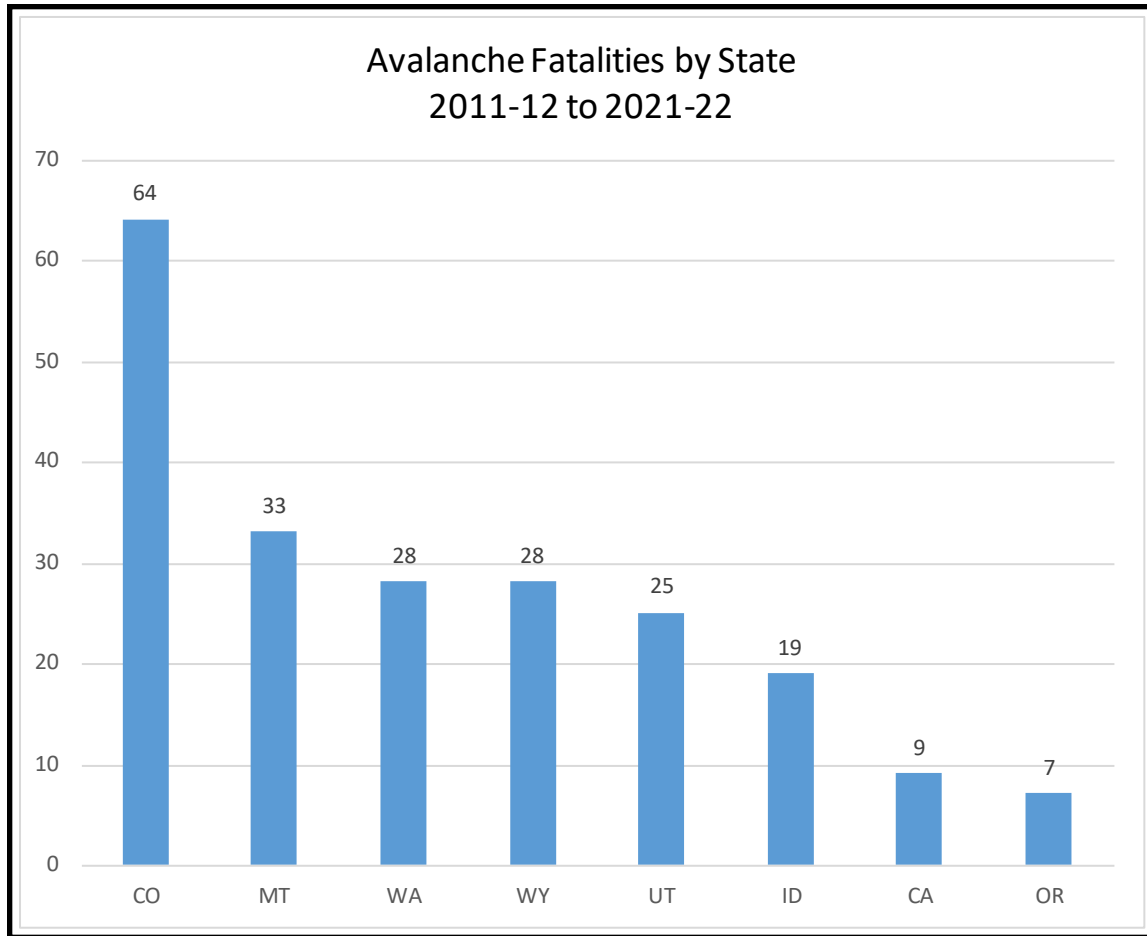
Shallow, wide avalanche on Saddle Peak that occurred during low avalanche danger on approximately January 25, 2022.



Measuring snow depth in the Pinnacles, south of Bridger Bowl.

Avalanche Incident Graphs: 10 Years





US Avalanche Fatalities
2021-2022 SEASON

17 US fatalities

*Compiled by Colorado Avalanche Information Center

Activity	Killed
Skier †	5
Snowboarder †	1
Snowmobiler	6
Snowshoer/Climber/Hiker	4
Other	1
Total	17
† Inbounds skier/boarder	0



<u>Date</u> ▲	<u>State</u>	<u>Location</u>	<u>Description</u>	<u>Killed</u>
05/29	CO	Mount Meeker, Rocky Mountain National Park	3 climbers caught, 1 seriously injured, 1 killed	1
04/25	AK	Ice Face, southeast of Thompson Pass, Chugach Mountains	1 skier caught, carried over cliff, and killed	1
03/19	CO	North Fork of Fish Creek, near Steamboat Springs	1 backcountry skier caught, partially buried-critical, and killed	1
03/17	CO	Pilot Knob, east of Lizard Head Pass	1 backcountry snowboarder caught, buried, and killed	1
03/17	WY	Game Creek Drainage, east of Victor Idaho	2 skiers caught, 1 partially buried-critical, 1 buried and killed	1
03/12	WY	South Fork Miner Creek, Sierra Madre Mountains	1 snowmobiler caught, buried, and killed	1
02/25 †	CO	Yule Creek	3 snowshoers caught, 2 partially buried, 1 buried and killed. 2 dogs killed	1
02/19	MT	Miller Mountain, North of Cook City	1 motorized snowbike rider caught, partially buried-critical, and killed	1
02/06	MT	Lionhead area near West Yellowstone	1 snowmobiler caught, partially buried-critical, and killed	1
01/08	CO	North Star Mountain, Hoosier Pass	2 snowshoers and a dog caught, buried, and killed	2
12/27	MT	Scotch Bonnet Mountain, north of Cooke City	2 snowmobilers caught, buried, and killed	2
12/24	CO	Diamond Peaks, Cameron Pass	1 backcountry skier caught, fully buried, and killed	1
12/17	ID	Relay Ridge near Ryan Peak	1 skier and 1 snowmobiler killed	2
12/11	WA	Silver Basin, closed portion of Crystal Mountain ski resort	6 backcountry tourers caught, 2 partially buried, 4 buried, and 1 killed	1

Avalanche Education

TOTAL: 3,349 (403 kids; 330 snowmobilers)

Date	Group/Topic	Class Total
10/2/21	Friends Medical Refresher - Avalanche Resuscitation	20
10/15/21	CSAW: Perspectives of a skier and forecaster	400
11/2/21	KBYG: Environmental Physiology Class - MSU	16
11/4/21	MSU SAW: 30 in-person/ 291 online video views	321
11/6/21	Norwegian Nordic and Avalanche Conference	250
11/7/21	Snowest Facebook Live: Avalanche Safety	
11/11/21	Uphill Pursuits Forecaster Chat	45
11/16/21	Instructor Training	31
11/17/21	KBYG and Beacon Training: City of Bozeman	10
11/17/21	NAC: Panel discussion on "Saving Lives"	67
11/18/21	Justin Angle Podcast: Avalanches	
11/18/21	KBYG: Online	8
11/23/21	KBYG: Online	4
12/1/21	Women's KBYG and Beacon Training: City of Bozeman	3
12/2/21	Avalanche Fundamentals Q&A/ Panel Discussion	78
12/2/21	KBYG: Hapner Lobby MSU	8
12/3/21	Sacagawea: KBYG and Beacon	70
12/3/21	Jackson Hole Avalanche Night	350
12/6/21	GC SAR	40
12/7/21	West Yellowstone Snowmobile Course	32
12/7/21	KBYG: North Hedges Hall MSU	15
12/8/21	Broad Beta at Uphill: Avalanche Conditions Report	75
12/8/21	KBYG: Online	20
12/9/21	Bozeman Ice Fest: Avalanche Conditions Report	150
12/9/21	KBYG: Yellowstone Hall MSU	7
12/11/21	Cooke City Field	4
12/11/21	Avalanche Fundamentals Field Day	50
12/12/21	Avalanche Fundamentals Field Day	24
12/15/21	KBYG: Spark R and D	9
12/15/21	Sidecountry Awareness: City of Bozeman	2
12/16/21	BSF: Lecture	9
12/16/21	Cooke City Level 1	12
12/17/21	CJMS: Avalanche Awareness + Beacons	107
12/23/21	BSF Field Day	15
1/2/22	Fundamentals Sled Field Day	3
1/7/22-1/8/22	Yellowstone Forever Av. Fundamentals	8

1/0/00	BSSEF Field Day	20
1/8/22	BSSEF Field Day 2	20
1/8/22	Cooke City Rescue Practice at Round Lake	20
1/9/22	Fundamentals Sled Field Day	13
1/12/22	Avy Awareness and Current conditions for GVSA	20
1/13/22	KBYG: Uphill Pursuit	3
1/13/22	KBYG: Basecamp Billings	42
1/15/22	KBYG + Avalanche Rescue	10
1/15/22	Cooke City Rescue Practice at Round Lake	29
1/16/22	KBYG: Cooke City Super 8	18
1/19/22	1-Hour Awareness	3
1/20/22	KBYG: Roskie Hall	5
1/20/22	Avalanche Fundamentals Q&A/ Panel Discussion	57
1/20/22	Avalanche Fundamentals Field Day	2
1/21/22	Avalanche Fundamentals Field Day	25
1/22/22	Avalanche Fundamentals Field Day	47
1/22/22	Cooke City Rescue Practice at Round Lake	15
1/23/22	Avalanche Fundamentals Field Day	64
1/27/22	KBYG: Hyalite Hall	20
1/27/22	Nicholay Dodov Foundation Panel Discussion	55
1/29/2022	Beacon Park: GVSA Poker Ride	30
1/29/2022	Avalanche Fundamentals Field Day	35
1/29/2022	Cooke City Rescue Practice at Round Lake	15
1/30/2022	Avalanche Fundamentals Field Day	28
2/3/2022	Avalanche Fundamentals: Dillon	8
2/5/2022	Avalanche Fundamentals Field: Dillon	4
2/6/2022	Avalanche Fundamentals Snowmo Field: Dillon	10
2/9/2022	Livingston Middle School Snow Day	80
2/11/22	Ennis Avalanche Fundamentals	15
2/13/22	SAR CRC + Avalanche Terrain	10
2/13/22	Avalanche Awareness Cooke City	25
2/15/22	MT-DEQ Avalanche Awareness	18
2/18/22	SheJumps CRC	11
2/18/2022	Red Lodge SAR Awareness CRC	25
2/19/22	Cooke City Rescue Practice at Round Lake	24
2/23/22	West Yellowstone SAR	10
2/26/22	Cooke City Rescue Practice at Round Lake	20
3/5/22	SplitFest Conditions Update	65
3/5/22	SplitFest CRC	16
3/5/22	Cooke City Rescue Practice at Round Lake	15
3/7/22	BoSC Winter Festival	60
3/12/22	Cooke City Rescue Practice at Round Lake	15
3/13/22	Cooke City Avalanche Awareness	20
3/24/22	SheJumps Awareness at Uphill Pursuits	8
3/26/22	Avalanche Fundamentals: Jack Creek Preserve	31

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