

2019 / 2020 ANNUAL REPORT



ABOUT US The CBAC is a 501c3 non-profit avalanche center

Staff

Than Acuff Executive Director

Karen Williams Development Director

Forecasters

Evan Ross Eric Morrow Ian Havlick Zach Kinler

Board of Directors

Keitha Kostyk ^{President}

Steve Banks Chad Berardo Ben Breslauer Jim Duffy John Dugenske Chris Read Seth Tucker The unique and diverse snow climate, acres of pristine wilderness of the Elk Mountains and the remoteness of Crested Butte, Colorado, has presented challenges and limitations for statewide forecasting operations. The result is a need for accurate snow and avalanche information in the Gunnison Valley. From this need the Crested Butte Avalanche Center (CBAC) was born in 2002. Unlike other government funded centers, the CBAC was started by volunteer forecasters issuing daily forecasts from a basement work station.

Each year the CBAC strives to make huge improvements to meet the demands of our growing backcountry community.

OUR MAJOR GOALS EACH YEAR ARE:

- To provide the most accurate avalanche and weather information to help all winter outdoor recreational users make the most informed decisions when traveling in the winter backcountry environment.
- To secure enough funding to competitively pay and retain professional forecasters and staff, year after year.
- To raise general public awareness about the Crested Butte Avalanche Center, avalanches and safe backcountry travel through various community outreach events held throughout the winter.

5 WAYS FOR THE GENERAL PUBLIC TO GET THE MOST ACCURATE WEATHER AND AVALANCHE INFO...



Online at **cbavalanchecenter.org**



Give us your email and we'll send it to you every day!



Tune into KBUT or KAYV daily at 8:00am and listen.



Visit our YouTube channel for field videos.



#CBAVY on Instagram and Facebook for real time updates.

FROM THE EXECUTIVE DIRECTOR



It was a rollercoaster of a season, one that provided great recreation in the mountains only to come to an abrupt and sad close. The following pages will reflect what we had for a season specifically but suffice it to say, the end of the year was tough.

We kept our doors open until our planned April 20 closing date with the forecast team keeping everyone informed through the Covid-19 pandemic. We discussed whether or not to remain open during the early onset of pandemic protocols and decided that people are still getting into the mountains so we needed to continue to get them the information necessary to help guide them in their decision making process.

Once closed, we continued the conversation through Facebook, Instagram and our observations page into May.

The community was dealt a huge blow when a friend, longtime local and passionate mountain traveler perished in an avalanche on April 27, an accident that had many friends wondering why, how and, ultimately, what can be learned.

We at the Crested Butte Avalanche Center hope that you, your family and friends are making it through these crazy times safe and healthy and look forward to seeing you, and hearing from you, in 2020-2021.



MASAN

Than Acuff, Executive Director



2019 / 2020 Forecaster Summary

Prepared by: Evan Ross & Eric Murrow



CBAC OPERATIONS

The Crested Butte Avalanche Center (CBAC) forecasting team consists of four professionally trained staff members with Evan Ross as lead forecaster, Eric Murrow as full time forecaster, Ian Havlick as a part time forecaster and Zach Kinler working in a variety of roles including producing online weekly summaries, Elkton Snow Profiles, videos, and spring forecasting.

This season the CBAC issued 145 weather and avalanche advisories, beginning November 27, 2019 and ending April 19, 2020. Additionally, before our daily forecast started, the CBAC posted a couple conditions updates to the homepage on our website, posted new observations, and sent weather/avalanche information out via social media. An all inclusive spring travel advice summary was posted on the website on April 20, 2020. We continued the conversation following April 20 via social media and our observations page on our website.

SNOW AND WEATHER SUMMARY



Let's start off using the graph above. This is a snow water equivalent graph for the Gunnison River Basin. It gives a rough estimate of the amount of water sitting across the area in the form of snow. This graph further lets us compare the snowpack against the last several winters and the average of all the data.

A Classic Continental Snowpack, started right from the beginning. Just like normal. The first notable snow accumulations started off in late October. That was followed by a dry first half of November. During the dry period of November the snow melted off the sunny side of the compass and begin faceting on the northern half of the compass. That is the start of a weak foundation for the snowpack and what we see most winters. Snowstorms turned back on for late December as you can see with the spike in the graph. Unstable snow first developed on the northern half of the compass where slabs were developing over those early season facets.

The biggest spike in the graph was roughly from late November to the start of January. That is when we saw the best accumulating snowfall and a nice consistent increase in the snowpack. From January through the rest of the season we saw fairly constant snow and the snowpack increased near or just below average for that timeframe. By the time we got to the snowpacks peak on April 6th, we had slowly fallen below average. We were sitting in the 84% range of average on that date. Of interesting note, that peak snowpack was only 60% of last year's peak.

Billy Barr records weather information in Gothic. Here is a brief summary of his data on April 11th. "This winter's snow total is 41% below average, this is ranked 44th of the past 46 winters. A week ago this winter

was at 39% below average". "This winter's snow water equivalent (SWE) = 16.55", 28% below average. A week ago this winter was at 25% below average".

Looking at the two forms of data. It is clear that the snow water equivalent roughly peaked 20 to 30% below average. At least it didn't feel that bad, and I think we were saved by fairly consistent snowfall keeping conditions somewhat fresh. We just didn't have the big storms that some of the better winters typically have.

NOTABLE WINTER STORMS AND EVENTS

This is a selection of the most notable weeks from Zack Kinler's weekly Summaries

November 29 to December 5: This period included a major natural avalanche cycle and multiple backcountry riders becoming partially buried in avalanche events.

This period began with a Pacific NW closed low pressure system digging into the Great Basin. This system provided a surge of moisture aided by the subtropical jet as well as large-scale forcing and cold air behind the front. Moderate to strong winds with gusts over 70 mph accompanied this storm which initially blew from the South before transitioning to SW-W-NW. Cool, dry air filtered in behind this system and skies cleared on 11/30 with lows dropping below zero and highs in the teens.

12/4 was a transition day as a closed mid-level low moved onshore into Southern California before tracking west and opening up into a shortwave as it tracked across Colorado. Light south winds with gusts into the 20s initially gave way to moderate and strong westerly winds with gusts up to 40 mph once frontal passage occurred. This was not a particularly organized system however, moisture, orographics, and cold air came together nicely to produce snow totals on the high end of the forecast during the day on 12/5.

Storm Totals 11/29-11/30

Schofield Snotel: 12" snow/1" SWE Gothic: 7.5" snow/ .61" SWE CBMR: 9" snow Butte Snotel: 7" snow/ .5" SWE Upper Taylor Snotel: 7" snow/ .5" SWE



Storm Totals 12/5

Paradise Divide: 12" snow Schofield Snotel: 10" snow/ 1.0" SWE Gothic: 7" snow/ 0.5 SWE CBMR: 7" snow(estimated from cam) Butte Snotel: 7" snow/ 0.6" SWE Upper Taylor: 0.4" SWE



Large, widely propagating avalanches followed the 11/29-11/30 cycle with areas north and west of town in the bullseye.

Since November 25th, there have been 8 people caught in avalanches and 7 partially buried. There have been almost 200 recorded avalanches with numerous human triggers. Early season snowfall lurks in the areas with the best coverage and riding conditions however this is where we have our first major Persistent slab problem.



On 12/5 a snowboarder triggered a large D2 avalanche which broke on old snow near the ground and led to a partial burial. The rider never lost his airway and was assisted by his partner. A Preliminary report can be seen here. This was a large avalanche that broke ~100 ft wide and ran ~400 vertical feet carrying the victim with it in the main debris channel which stacked up to 280 cm at is deepest. This main channel was also where the victim was partially buried. We at the CBAC are grateful there were no injuries and will take this opportunity to learn while moving forward.

December 13-19: Our first atmospheric river event of the winter led to our largest avalanche cycle to this point of the season.



This period began with a multiple day cycle providing an extended period of light-moderate snowfall with embedded heavier showers. On 12/13 a 180 knot jet stream was efficiently transporting moisture in NW flow into our area. This moisture had origins in the Pacific near Hawaii marking our first Atmospheric River event of the season. With the strong jet stream came very strong winds with ridgeline speeds in the 40s and gusting into the 60s. Accumulations came overnight before a break in the action with snowfall beginning again around 20:00.

On 12/14, moderate snow fell through the night with the jet stream and moisture tap still in place. As the jet and the associated cold front pushed south, flow shifted to the WSW as the second wave of moisture and dynamics moved through. Again, moderate snow with heavier showers and strong winds in the 20s gusting into the 40s followed. This moisture rich Pacific air led to a warming trend starting around midnight before the front moved through. The jet stream finally shifted south of our area with snow winding down and winds began to decrease around 18:00.

Storm Totals 12/12 - 12/15

Schofield: 21" snow/ 2.5" SWE Gothic: 20.5" snow/ 1.63" SWE CBMR: ~15" snow(cam) Butte: 12" snow/ 1.4" SWE Town of CB: ~12" snow(ob) A widespread natural avalanche cycle followed our first Atmospheric River event this week after 1.5"-2.5" of SWE fell accompanied by strong to extreme westerly winds. This overloaded multiple weak layers throughout the snowpack including surface hoar and crust/facet combos from early December. On aspects from NW-N-E where these mid-pack weak layers overlay October snow(now Depth Hoar), avalanches were breaking at the ground regardless of where they initiated. This put the bullseye again on the wind drifted shady half of the compass where we saw many large D2-D2.5 avalanches. Sheltered slopes below treeline got in on the action as well as these areas held the weakest early season facets and Depth Hoar. Crust/facet combos formed on the southerlies in early December. These interfaces were finally overloaded by the recent cycle which led to our first major avalanche cycle on S and SE aspects near and above treeline. It appears the crusts were able to support a large load before failing which created some of the largest avalanches of this cycle with several D2.5 size avalanches and our first reported D3 on a South aspect near Gothic. With a long duration loading event, the extent of the avalanche cycle is sometimes hidden, however as more obs come in, so does more evidence of recent avalanche activity. This was a widespread cycle of large to very large avalanche with our first HIGH danger day and Avalanche Warning.



This D3 avalanche on the "Camel Back" is the largest avalanche reported this winter and signals a persistent slab avalanche problem that is moving around the compass to the sunny southerly aspects.

January 17-23: This was a wild week with snow, wind, and a streak of human-triggered avalanches.

This period began on 1/17 with a vigorous upper level trough moving in from the southwest US. Strong southerly flow brought the first wave of moisture followed by colder west and northwest flow after frontal passage. Light south winds ramped up quickly by afternoon sustaining 20-30 mph with gusting to 80 mph at both Cinnamon and Scarps Ridge. Highs temps in the teens and twenties early with temps dropping through the afternoon.

1/17-1/18 Snow Totals

Irwin: 1.4"SWE/ 15"snow Schofield Snotel: 0.9"SWE/ 13"snow Gothic: 0.48"SWE/ 6.5" snow Upper Taylor Snotel: 0.6"SWE/ 9" snow CBMR: 8"(cam) On 1/19, skies cleared with a cold start in the valleys as strong inversions were in place. Valley locations were well into the -20s while mountain locations remained around +20F. Mountains saw warming under strong solar while the inversion held strong below 9,000'. 1/21 saw SW winds and a warmer air-mass scrubbing the inversion out with valley temps warming and mountain temps remaining steady overnight. West to northwest winds continued to increase on 1/22 as one shortwave departed and another one dropped in from the NW. Winds around 15-20 mph gusting into the 30s and light to moderate snowfall favoring the Kebler Pass area we observed. A favorable NW jet stream and additional lower level moisture kept the orographic snow machine going into the overnight hours and into 1/23.

1/21-1/23 Storm Totals

Irwin: 1.8"SWE/ 25.5" snow Schofield Snotel: 0.7"SWE/~10" snow Gothic: 0.47"SWE/ 6" snow Upper Taylor Snotel: 0.3"SWE/ 5" snow CBMR: 5" snow(cam)

Avalanches

This was an active week of avalanches following another two rounds of snow and wind. Avalanches during this time were confined to drifted terrain near and above tree line generally from E-S. In areas like this, incremental snowfall has built slabs over multiple weak layers in the upper snowpack and natural avalanches are breaking during peak instability while human triggering similar terrain has remained possible after loading has ended. Avalanches during this time ranged from D1-D2.5 with a couple breaking into weak layers near the ground and one large repeater slide on the east face of Peeler.



Large avalanche on Peeler Pk. This is the largest avalanche reported this week and this path has slid previously this winter.

Incident, accidents, close calls

This week there were 4 human-triggered avalanches in a period of four days. Two of these were triggered by snowmobile/snowbike and the other two by skiers. Wind-loaded terrain features were common in all of these incidents with E-SE aspects near and above treeline common to all. The most dangerous incident occurred on 1/19 in Red Lady bowl when a solo skier dropped off the looker's right ridge and triggered a large persistent slab avalanche which failed on a fragile crust/facet combo which formed in late December. For a couple weeks now, incremental loading from westerly winds has built a slab on this interface and others in the upper snowpack. This avalanche stepped down to weak layers near the ground. The skier was hit from behind unaware that he had triggered the slide. This is a very close call with a happy ending and lots to learn.



This snowmobile triggered avalanche is on an East aspect near tree line with previous drifting.

March 20-26: An extreme wind event initiated our most destructive avalanche cycle of the season with mayhem in certain alpine areas.



300 mb wind chart and the 48 hour wind rose for Scarp Ridge showing impressive SW winds as a result of a 160 knot jet streak moving directly over Colorado. This was a multi-day wind event producing sustained winds of 50+ mph and gusts near 100mph.

From 3/20 to 3/24, multiple short waves passed through. These small storms westerly winds steady in the 10 to 30 mph range and each produced several inches of snow. Total snow accumulations during this period were in the 6 to 12 inch range for an average.

On 3/25 the large trough responsible for recent shortwaves dug south along the CA coast bringing the SW oriented jet stream directly overhead. Wind ramped up from the consistent 10-20 mph the previous day to 20-35 mph with gusts increasing to 50-80 mph, indicating the approaching jet max. Winds at Cinnamon Mt were more southerly averaging SSW(195) while Scarp Ridge was an incredibly consistent SW(223). Winds below tree line remained fairly calm. Mostly cloudy skies with carbon copy temps from the previous day with freezing level around 11K was observed. The wind event ramped with even more on 3/26 with the jet max overhead. Cinnamon Mt had sustained winds at 30-40 mph and Scarp Ridge was at 40-50 mph. Between 04:00 and 07:00 sustained winds averaged 55 mph. Max Gusts were also impressive with Scarp Ridge at 99 mph and 82 mph on Cinnamon Mt. Skies were partly cloudy with slightly warmer temps than the previous day. Freezing level was around 11,500'. As of 18:00, winds were sustained at 25-35 mph and gusting 50-60 mph, SSW(195) on Cinnamon and SW(226) on Scarp Ridge.

Avalanches

This period saw our most destructive avalanche cycle of the season after heavy snow and SW winds built slabs over recently buried crust/facet combinations in the upper snowpack. A shallower Persistent Slab avalanche problem developed initially on buried crust/facet combinations in the upper snowpack around the 3/18 interface. The first large to very large avalanches began breaking on 3/22 as smaller Wind Slabs began stepping down to the 3/18 interface as seen on Gothic Mt. SW winds increased on 3/23 as large cornices began falling, triggering this Deep Persistent Slab avalanche on Whetstone. This somewhat surprising avalanche proved to be the beginning of an impressive cycle of similar avalanches reaching D3 in size, triggered by large Cornice or Wind Slab failure. These avalanches were very consistently breaking on slopes facing E-N above tree line where the bullseye for loading was pointed from extreme SW winds.

A combination of factors likely led to this event. Early season Persistent weak layers buried under hard slabs had become unreactive given a lack of loading from a season of incremental events and increasing snowpack depth. Rounding and sintering of these weak layers had reduced sensitivity however these grains remained weaker relative to the slab above. Recent warming likely softened large cornices that have been looming on these aspects throughout the season without causing failure. Additional loading from the wind event this week caused these cornices to grow even larger and eventually break. This provided the large triggers needed to awaken the deeply buried weak layers as some cornices further triggered smaller slabs in the upper snowpack which were able to step down to the ground.



Whetstone M Face. Cornice Triggered Deep Slab. 3/24

INCIDENTS

The CBAC received reports for a number of avalanche incidents this past winter, but thankfully, none of these accidents resulted in a fatality or serious injury. CBAC staff investigated 4 of these incidents over the course of the winter. Site visits were conducted the day of or the day after the incidents occurred.

The first incident occurred on December 1st in the Kebler Pass area. A solo party triggered several avalanches in a run called "Big Chute" located in the Anthracite Range and was caught, carried, and partially buried. The individual was able to self extricate out of the debris in approximately 20 minutes and did not sustain any significant injuries. A full investigation was completed the following day in conjunction with the CAIC which can be found <u>here</u>. The avalanche was classified as a Persistent Slab.



Solo-rider triggered avalanche with partial burial and self-rescue. Big Chute (Anthracites), 12/1/19.

Then on December 5th, a stormy day, a snowboarder triggered and was caught, carried, and partially buried in an avalanche in a piece of terrain called "Cabin Shot" immediately above the townsite of Pittsburg. The triggered avalanche was a Persistent Slab. The individual was partially buried and was excavated by a touring partner. Thankfully, no injuries were reported. CBAC staff were notified of the incident shortly after it occurred which allowed forecasters to make a site visit the same day. The site visit observation can be found <u>here</u>.



Snowboarder-triggered avalanche and partial burial in the "Cabin Shot" above Pittsburg, 12/5/2019

Another close-call came on January 19th when a solo-skier triggered a large Persistent Slab avalanche in Red Lady Bowl on Mount Emmons. This avalanche was witnessed by several people in town and was almost immediately reported to Crested Butte Search and Rescue and CBAC. This 'close call' had a positive outcome with the individual able to self-excavate and egress back to the trailhead without significant injury. This was the second solo-traveler, partial burial incident reported this winter. The lookers left portion of this bowl, out of sight in photo, had descent tracks in it previously, this day, and the day following the accident without other triggered avalanches. An investigation into the accident was performed by the CBAC and CAIC on January 20th. Additional information can be found <u>here</u>.



Solo-skier triggered Persistent Slab avalanche in Red Lady Bowl on Mount Emmons, 1/19/2020

The final incident of the winter for the Crested Butte area came on March 3rd. An observation came to the CBAC from a resident of Meridian Lake development with a photo that showed a solo ski track entering an avalanche above Long Lake. The terrain shape did not allow a view of the debris in the photo, so it was not possible to identify if the person who triggered the avalanche was safe. CBAC chose to visit the site shortly after receiving the observation to look at the debris to confirm nobody was buried or injured. Thankfully, a small hole in the debris and solo track leaving the debris confirmed the individual that triggered the avalanche was able to self rescue. CBAC contacted members of Crested Butte Search and Rescue after receiving the observation to Long Lake and broke through the ice allowing water to fill the hole where the subject was partially buried. You can see more in the observation from the site visit <u>here</u>.

It is interesting that three of the four partial burials were of solo backcountry travelers. There were numerous other human-triggered avalanches over the winter that did not involve people getting buried or hurt. The CBAC appreciates the willingness of the community to share near-misses and accidents as it provides a learning tool from others.



Meridian Lake Accident 3/3

MEDIA

The CBAC website (<u>www.cbavalanchecenter.org</u>) is our primary method of communicating avalanche, snowpack and weather information with the public. Total viewership for the website declined over the past few years. This decline was likely due the "average" nature of snowfall this past winter and by the fact that there were no fatalities or injuries associated with avalanches this winter. The website had 105,805 page views and 55,044 sessions this winter. Around 55% of these users are utilizing mobile devices to view the forecast. Approximately 58% of users are from the Gunnison Valley while the substantial other portions comes from Denver and the front range communities of Colorado. The CBAC, in addition to website products, distributes an email every morning that reaches more than 400 people. CBAC forecasters prepare a morning radio report each day and supply it the local radio stations KBUT and KAYV for airplay. A very basic report is updated to CBTV-10 each day as well. Forecasters also contributed several Backcountry Notes articles that are printed in the Crested Butte News paper.

The CBAC continues to utilize social media to help further distribute information. Each day posts are made to Instagram and Facebook to reach a wider audience and make it as easy as possible for users to get useful information about avalanche conditions in the Crested Butte area. CBAC published 140 Instagram posts and 164 posts to Facebook (through 4/15). The amount of viewership and engagement continues to grow each season; social media has allowed the CBAC to find more avenues to communicate avalanche messaging to the public. Throughout the winter, informational videos are published and shared on social media as well. The CBAC produced 19 videos this winter and distributed them on Facebook and YouTube.

The CBAC was also involved in two additional media related projects over the past two seasons. In March of 2019, the CBAC, Matchstick Productions, and the North Face shot an avalanche educational video in Crested Butte. This video was released to the public in February of 2020 and received wide circulation on the internet. Additionally, in January of 2020, the CBAC assisted NatGeo with production for one of their television shows that was partially produced in Gothic. Two CBAC forecasters spent nearly a week with the NatGeo crew at Irwin and Gothic

OUTREACH + EVENTS









The Crested Butte Avalanche Center remained as the focal point for continued conversation among local and visiting backcountry users as well as the citizens of the Gunnison Valley in a number of ways. Each year we host an Avalanche Awareness Night complete with presentations by professionals in the field and follow that up the next day with free beacon and rescue training open to the public. The two events combined brought in close to 600 people.

In addition, we instituted a monthly speaker series dubbed Fireside Chats during which we invited avalanche professionals to give a talk and then opened the floor to an open discussion on a variety of snow-related topics. Those were also free and open to the public.

Furthermore, the CBAC was in charge of snow safety and course decisions associated with local non-profit partner CB Nordic and their event the Gothic Mountain Tour. Thanks to our efforts, CB Nordic was able to pull off their most successful Gothic Mountain Tour to date.

2019 **FINANCIAL REVIEW** 2020

October 15, 2019 - April 15, 2020



2019 **DIGITAL REVIEW** 2020

October 15, 2019 - April 15, 2020

WEBSITE



USER SESSIONS



* During the winter of 2018/2019 we had a large and destructive avalanche cycle in March, and user sessions increased dramatically due to this. This past season was "average" and while our numbers did not quite meet the winter of 2018/2019, they increased 8% from the last average season of 2017/2018.

DIGITAL TRAFFIC IS CONCENTRATED IN COLORADO 56% Gunnison Valley 44% Denver, Boulder, Colorado Springs

 Colorado Springs, Ft. Collins

WAYS PEOPLE FOUND CBAC ONLINE:

- 45.6% ORGANIC SEARCH48.1% DIRECT SEARCH*3.7% SOCIAL2.6% LINK
- * Direct search for CBAC increased from last season while social and direct links have decreased. This means more people are aware of who we are and the services we provide, which is one of our organizational goals.





The average person visited the website 1.92 times which equals 105,805 page views. Some people visited only once; a smaller subset visited daily.





SOCIAL MEDIA







3,517 FOLLOWERS

CBAC GAINED 895 new followers this season!

PARTNERS + SPONSORS

The CBAC strengthened existing partnerships and forged new ones this season. We would like to extend a sincere thank you to all our partners, sponsors and volunteers who contribute to the quality of our product.

The CBAC has a partnership with the Colorado Avalanche Information Center (CAIC) under the common goal of working cooperatively to promote avalanche safety. Both centers share weather, snowpack, and avalanche data, engage in daily meetings and consultations on data collection, the forecast process, product delivery, and collaborate on accident investigations. The CBAC provides local avalanche specialists to collect, analyze, and log data into a statewide database, and the CAIC offers in-kind support including weather and forecasting tools, database management, and web support. By working together, our two forecast centers can provide high quality local and statewide forecast products, and we look forward to future collaborations.

Furthermore, the CBAC provides avalanche mitigation and forecasting for avalanche areas within the town of Crested Butte.

Irwin Guides continues to be a major resource and valuable partner for CBAC operations. Their snow safety team shares daily snowpack, weather and avalanche information from their cat ski tenure daily as well as observations of the surrounding backcountry along the Kebler Pass corridor. Irwin also provides remote data access to their Scarp

Ridge wind station and Lake Irwin snow study plot. Their backcountry guides submit post-trip field observations to the CBAC as well, another tremendous resource. Irwin also provides financial support, training opportunities and professional correspondence to the CBAC. CBAC's media partners are a key component in circulating our avalanche information to the public. The KAYV broadcasts our advisories several times per day, KBUT plays our advisory every morning at 8:00 a.m. and CBTV relays our avalanche danger rating across the TV screen while providing technical support for our YouTube videos.

The Crested Butte News provides print space for our "Backcountry Notes" section in the newspaper.

We rely on the resources of several government agencies for our daily operations. The National Weather Service in Grand Junction provides weather products and resources while relaying avalanche watches and warnings. The National Resources Conservation Service (NRCS) maintains several SNOTEL weather stations (including Schofield Pass, Butte, Upper Taylor and Park Cone) which are vital to our daily operations.

The CBAC would not be able to operate without the many businesses and donors that contribute financial resources. We would like to thank everyone who contributed through membership purchases and private donations and want to acknowledge the donations this season made in memory of Brad Sethness, Dan Krajewski and Chris Mikesell. We also want to give a special thanks to the Budd Family, the Dugenskes, the Jean Thomas Lambert Foundation, Gunnison County Electrical Association, The North Face, the Town of Crested Butte and the town of Mt. Crested Butte for their generous donations or grants.

VOLUNTEERS

As always, we have unbelievable support from community members for everything from helping to put on our fundraisers to a constant and consistent influx of observations from the field.

In addition, we created the Pit Crew this past season. The Pit Crew is a volunteer group of avid backcountry travelers who are more engaged with the CBAC in providing accurate observations. We started the season out with a training session to inform them of exactly what we are looking for out of observations and a handful of them followed through with their efforts throughout the season. We look to continue with that program in the future and look to draw in some of the younger crowd to be a part of the Pit Crew.

DONORS + SUPPORTERS

CBAC's financial and in-kind sponsors and supporters are a huge asset to our operation. Thank you to these businesses and individuals who donated cold hard cash or in-kind goods or services for our events.

SNOWPOCALYPSE \$5,000 +

Anonymous Skyhigh Offroad Yamaha Outdoor Access Initive

WHITEROOM \$3,000 +

Alpineer Avery Brewing Blister Gunnison County Met Rec Irwin Guides Midnight Marketing Solutions

WAIST DEEP \$1,500 +

Glacier Earthworks GO Orthopedics Gunnison/Crested Butte Tourism Association

THIGH DEEP \$750 +

Alpha Theory Brick Oven Pizzaria & Pub Crested Butte Builders Inc Elk Mountain Lodge Fullmers Ace Hardware Huckstep Law Law Offices of Michael Vaughn Precise Painting SAW Contracting, LLC Teocalli Tamale The Last Steep

KNEE DEEP \$500 +

Action Learning Associates Avalanche Bar & Grill Crested Butte Physiotherapy Crested Butte Publishing & Creative ES Nauman Housewright Mountain Colors Paint & Design Rocky Mountain Biological Laboratory

BOOT TOP \$250 +

Alpine Lumber B&B Printers Beacon Guidebooks Beckwith Builders/Brickwerks Crested Butte Bank Dragon Sheet Metal Friends Hut Old Town Inn Pat's Screen Printing Resource Engineering Group Unearth Construction, LLC

EVENT SPONSORS

Black Tie Ski Rental First Ascent Coffee Roasters Irwin Guides

GRANTS

Brad Sethness Foundation Chris Mikesell Foundation Jean Thomas Lambert Foundation Marcia K / Dan K Weather Station Truettner Family Foundation Town of Mt. Crested Butte

IN-KIND DONATIONS

Backcountry Access Big Agnes Blue Dot Design Clear Creek Reps DaKine Deuter USA Flylow Gear High Altitude Sales & Consulting Honey Stinger KBUT Keitha Kostyk **KNS** Reps Mammut Nite Ize Ortovox Yeti Cycles

INDIVIDUAL DONATIONS

Dawn Banas Anthony Borland Joe Currier Peter Dea Jon Donaldson Michael Dow Nicholas Fountain Steve Gibbs Bryan Hansen Jonny Holton Journey's End Builders Mark & Sarah Kaufman Chris Laggis Luisa Naughton John Parks Mark Robbins Jon Wolff

CONTRACT SERVICES

Crested Butte Nordic Gunnison County Electric National Geographic Russell Budd Town of Crested Butte

Thank you to the many partners and sponsors this year who support our mission to save lives and promote avalanche safety in the Gunnison Valley.

THE FUTURE OF THE CBAC





The big news for the future is we have hired Zach Guy back as our lead forecaster after he spent the past three years as the director of the Flathead Avalanche Center in Montana. In addition, the rest of the team is committed to returning for the 2020/2021 season as we look to expand our reach even further with a couple of ideas simmering in the pot.

Still, as we all know, the future is uncertain given the current state of affairs. Fortunately, we have been diligent in maintaining a large enough reserve balance to remain operational for an entire season if all funding were to disappear entirely. Therefore, we are looking good and our reserves buy us time to adapt and survive depending how the Covid-19 pandemic plays out and how that affects funding in the short and long term.

We look to get back into the swing of things on October 15. Until then, stay safe, stay healthy and remember Spock's wise words in Star Trek II, Wrath of Khan as you negotiate your way through this new reality.

"The needs of the many outweigh the needs of the few."







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