

2016/04/03 - Colorado - Grandfather Couloir, Bear Creek drainage

DATE FILED: May 10, 2017
CASE NUMBER: 2016S26

Published 2016/05/01 by Jeff Davis - Forecaster, CAIC

Avalanche Details

Filed in the _____ Court
San Miguel County, Colorado

MAY 10 2017

- Location: Grandfather Couloir, Bear Creek drainage
- State: Colorado
- Date: 2016/04/03
- Time: 12:15 PM (Estimated)
- Summary Description: 2 sidecountry riders caught, 1 carried
- Primary Activity: Sidecountry Rider
- Primary Travel Mode: Ski
- Location Setting: Accessed BC from Ski Area

Number

Avalanche

Site

- Caught: 2
- Partially Buried, Non-Critical: 0
- Partially Buried, Critical: 0
- Fully Buried: 0
- Injured: 0
- Killed: 0

- Type: L
- Trigger: AR - Snowboarder
- Trigger (subcode): u - An unintentional release
- Size - Relative to Path: R1
- Size - Destructive Force: D1
- Sliding Surface: I - New/Old Interface

- Slope Aspect: NW
- Site Elevation: 12800 ft
- Slope Angle: 40 °
- Slope Characteristic: Gully/Couloir

Avalanche Comments

This was a loose snow avalanche, triggered by a snowboarder, small relative to the avalanche path, relatively harmless to people, and slid on the interface between the old and new snow (L-AR-R1D1-I). This was a small Loose Dry avalanche in very consequential terrain.

Weather Summary

The day of the incident was a "beautiful bluebird" spring day. Skies were clear, there was plenty of sun, and winds were calm. Early morning temperatures were close to 20F, and quickly rose to the mid-40s.

Snowpack Summary

Telluride area received around two feet of fresh snow in the week prior to the incident. The snow fell on a deep,

winter-like snowpack on north-facing slopes near and above treeline. Observers reported that buried weak layers in the snowpack were not reactive on those slopes. The recent snow remained dry and "powdery" on shady northerly facing slopes like Oblivion Bowl and the Grandfather Couloir.

On other aspects and elevations the new snow fell on a consolidated, spring-like snowpack. Warm temperatures and ample sun settled the recent snow in the days prior to the incident.

Events Leading to the Avalanche

Two separate groups (Groups 1 and 2) left the Telluride Ski Resort boundary intending to descend two different lines on the Little Wasatch Face, on the north side of Wasatch Mountain. Group 1 (Skiers 1 and 2) planned to ski the Grandfather Couloir. Group 2 (Riders 1 and 2) planned to snowboard down Oblivion Bowl, which joins with the Grandfather Couloir.

Both groups reached the top of the Little Wasatch Face around 11:30am. The two groups discussed their separate descent plans. The Oblivion bowl hangs precariously over the lower Grandfather Couloir, putting the lower portion of the couloir and a mandatory rappel at high risk from any debris coming from above. Thus, the two groups decided they would not descend at the same time. The plan was for Group 1 to descend the couloir and when they were clear and in a safe position, use a cell phone and call Group 2 and let them know they were OK to begin their descent.

Group 1 skied the upper section of the Grandfather Couloir to the rappel, and Skier 1 began rappelling. Skier 2 stayed at the anchor at the top of the rappel. Group 2 waited on the ridge for the call from Group 1 for 45 minutes. Group 2 wondered if Group 1 did not have cell service in the bottom of the Bear Creek drainage. As another group approached, Group 2 decided their window of opportunity to descend the line was closing, and started their descent into Oblivion bowl.

Accident Summary

The avalanche was triggered by Group 2 in Oblivion Bowl. Rider 1 began his descent into Oblivion Bowl, staying to the rider's left side of the bowl to avoid sluffing snow initiated by his turns. The loose snow entrained additional snow and accelerated down the steep slope and into the Grandfather Couloir. Rider 1 recalled "I had some pretty serious sluff working so I stayed left of the gut. Suddenly it ripped past me, much more snow than I had been anticipating. It had gained velocity with the steepness of the slope and by the time it poured into the Grandfather Couloir it was a full on sluff-avalanche.

The avalanche ran into a narrow, extremely steep couloir. Group 1 was caught in the lower couloir, while rappelling over the lower cliff band.

Skier 1 was about 5-10 feet above the bottom of the rappel when Skier 2 (still at the rappel anchor) heard a loud noise. Skier 2 looked up and saw a loose snow avalanche coming down the couloir. Skier 2 yelled to Skier 1 about the incoming avalanche, and wrapped his arm around the rappel rope. The avalanche hit Skier 2, but he was not carried downslope. Skier 1 held onto rope for as long as possible, but eventually the avalanche knocked her from the rope and swept her down the couloir. When the avalanche stopped Skier 1 was on top of the debris and sustained only minor injuries.

Rescue Summary

Skier 1 realized she was okay, and took out her beacon to switch to search mode. Skier 2 also switched his beacon to search mode and continued his descent. Skier 2 skied out of the couloir, also uninjured, and made contact with Skier 1. Both skiers made it to a safe zone and waited until the Group 2 came down. Group 2 descended to the bottom of the Grandfather apron where they encountered Group 1.

Comments

...s was a small avalanche, but had high consequences because of the extremely steep and exposed terrain. Both parties provided detailed observation reports: [Group 1](#), [Group 2](#). This incident is a clear illustration that even small avalanches can have serious consequences in extreme terrain and/or combined with terrain traps. Clearer communication between the groups could have prevented Group 2 from triggering an avalanche onto Group 1.

Media

Images

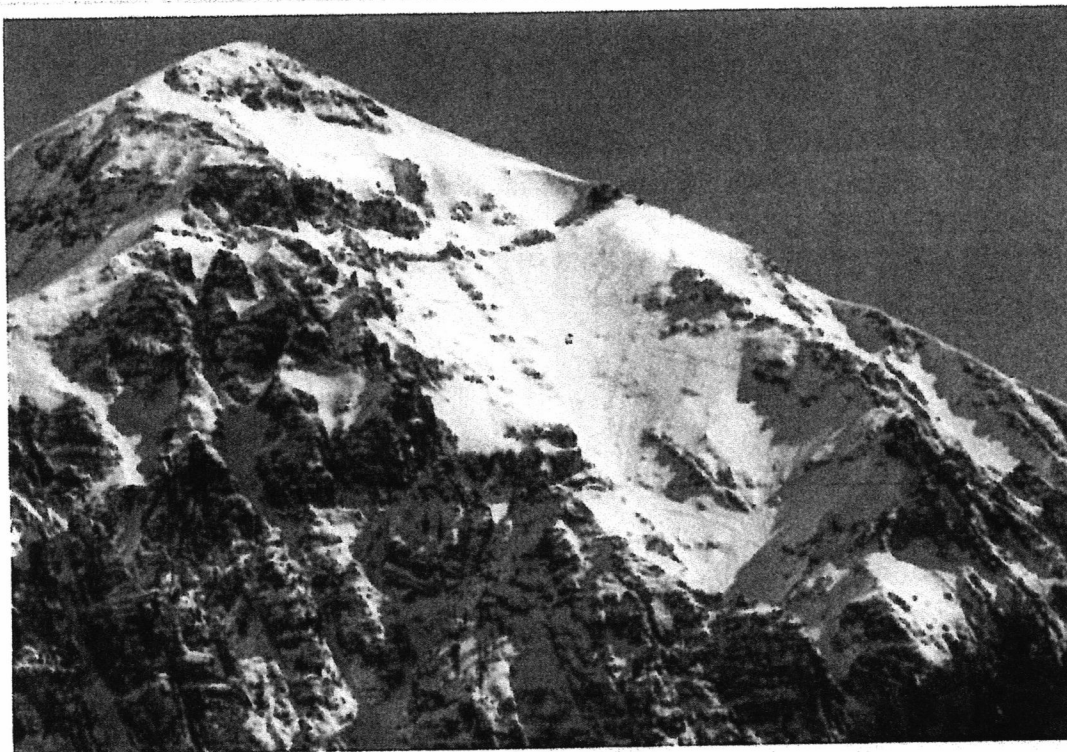


Figure 1: Photo of the Upper portion of the Grandfather coulior and Oblivion Bowl taken for the town of Telluride. You can see both groups' tracks and the Loose Dry avalanche on the looker's right.

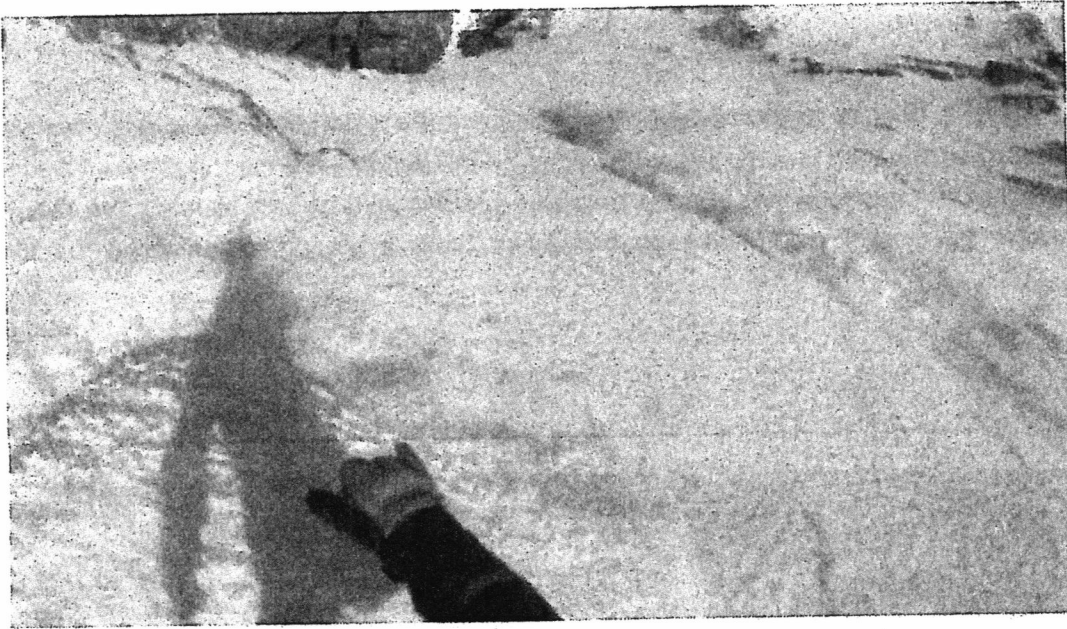


Figure 2: Rider 1 Triggering a sluff above Grandfather coulior.

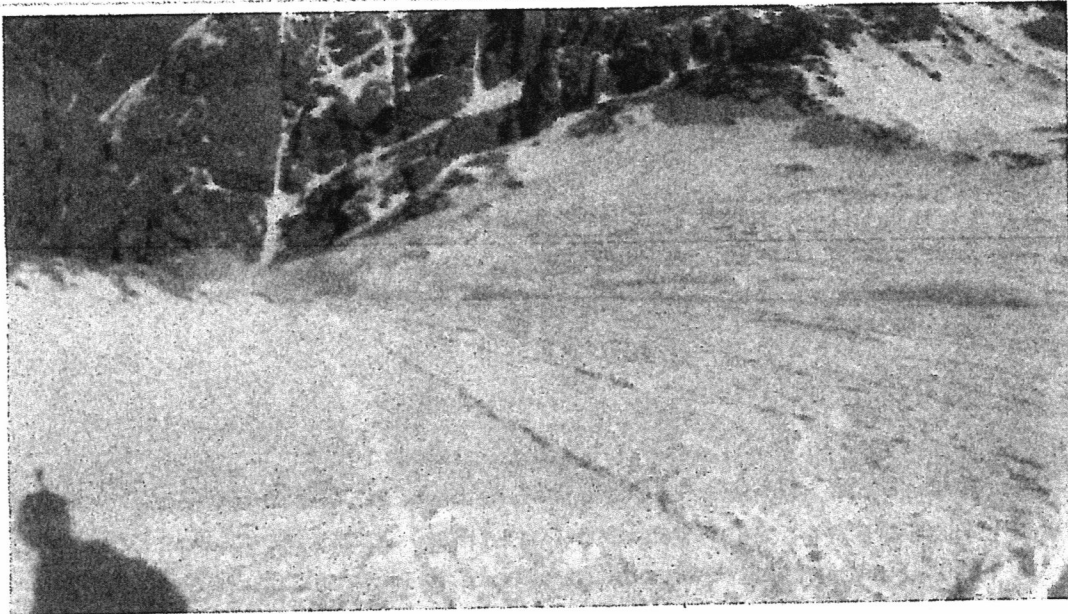


Figure 3: Looking into Grandfather Coulior from Oblivion Bowl as snow moves through the narrow choke.



Figure 4: Google Earth image of the Little Wasatch face with both groups' estimated travel paths.

AFFIDAVIT OF ETHAN GREENE

STATE OF COLORADO)
) ss.
COUNTY OF LAKE)

I, ETHAN GREENE, being of lawful age, being first duly sworn upon oath, states as follows:

1. I am the Director of the Colorado Avalanche Information Center ("CAIC").
2. The CAIC is a program within the Colorado Department of Natural Resources, Executive Director's Office.
3. The purpose of CAIC is to promote safety by reducing the impact of avalanches on recreation, industry, and transportation in the state through a program of avalanche forecasting and education.
4. To further the CAIC program, CAIC hires Avalanche Forecasters across the State to document avalanches and weather and snow conditions.
5. Regular job duties of a CAIC Avalanche Forecaster include collecting information on current snow, weather, and avalanche conditions, assessing the avalanche hazard, preparing avalanche forecasts, , documenting human avalanche involvements, and providing avalanche safety training.
6. During the 2015-2016 avalanche forecasting season, Jeff Davis was employed by CAIC as a seasonal Avalanche Forecaster for the San Juan Mountains, Colorado.
7. On April 3, 2016 an avalanche event occurred in the Grandfather Couloir, of the Bear Creek Drainage in San Miguel County, adjacent to Telluride, Colorado.
8. As part of his regular duties and responsibilities for the CAIC, Jeff Davis prepared a report of the Grandfather Couloir avalanche of April 3, 2016 based on observations and interviews with the persons involved. The report includes the location of the avalanche, the type of avalanche, the number of people caught in the avalanche, events leading up to the avalanche, a rescue summary, photos of the avalanche site, and an accident summary of the avalanche.
9. The avalanche report was published on the CAIC website on May 1, 2016.
10. As the Director of the CAIC, I certify that the avalanche report for the Grandfather Couloir avalanche event dated April 3, 2016 was prepared by Jeff Davis as part of his regular job duties as an Avalanche Forecaster for CAIC. Jeff began working on the report within a few days of the event. The report was completed within a month of the occurrence. The report is an accurate description of the incident based on the information we obtained while preparing the report.


FURTHER AFFIANT SAYETH NOUGHT

Ethan Greene 5-8-17
Ethan Greene Date

On this 8th day of May 2017 before me appeared Ethan Greene, proved to me on the basis of satisfactory evidence to be the person whose name is subscribed within this instrument, and whom further acknowledged to me that he executed the same in his authorized capacity as evidenced by the signature above.

WITNESS, my hand and official seal.

ADRIENNE ALERIS GREEN
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 2016038011
MY COMMISSION EXPIRES OCTOBER 4, 2020

Notary Signature 

My Commission Expires 10/04/2020