Season progression for the Bridger-Teton forecast area

By Bob Comey, Figures by Inversion Labs

The season started early. Twelve-day storm cycle from Sept. 14–26 with 2' of snow and 3.5" of SWE. This snow remained for the rest of the season at upper elevations, northerly aspects.

- From Sept. 14 to Dec. 7, the Teton area received 165" of snow with 17" of SWE (precipitation preceding the DDL).
- First significant deep slab occurred on Nov. 5 in Garnet Canyon. This occurred before the DDL was formed, but was a huge early season event (estimated crown depth, 120").
- Bed surface for the DDL formed on Nov. 24 with warm temperatures and rain to 11,000 feet.
- New snow was deposited on this bed surface between Nov. 25 and Dec. 7 (11" with 1.22" SWE).
- The DDL persistent weak layer formed during Dec. 7–16 when new snow overlying the thick November rain crust faceted during a dry period with cold, clear nights.

Development of the Deep Persistent-slab problem in the BTAC bulletin (as of early March, 2018):

12/16 to 12/22—Wind Slab Problem

12/23 to 1/12-Persistent-slab Problem

1/13 through early March—Deep Persistent-slab Problem

- Deep-slab avalanches cycles occurred in January and February. The most prominent was during the evening hours on Feb 4 through dawn on Feb 5. Many very large deepslab events occurred this night.
- 2 snowmobile fatalities were confirmed on the DDL persistent weak layer:
- Dec 29, Commissary Ridge, Wyoming Range
- Feb 20, Sheep Creek Mountain, Snake River Range (Palisades)
- As of March 9, the Deep Persistent-slab problem remains. From Dec 16 to March 7, the Teton area has received approximately 225" of new snow with 22.5" of SWE.
- There is significant potential for the DDL to be re-activated this spring with deep wet-slab events.

Note on limitations of avalanche events displayed on Snowpack Tracker:

Many, if not most, avalanche events occur during storm periods and are not observed and therefore are not displayed by Snowpack Tracker. In addition, the dates of occurrence of many observed avalanche events are uncertain and estimated.

These very important limitations are essential with respect to the interpretation of avalanche–event data. Users of this tool cannot over-interpret the avalanche activity or lack of activity that is displayed. The displayed avalanche events on Snowpack Tracker often do not correspond well with what has occurred in the real world. ▲





