US Forest Service Northwest Montana
Backcountry Avalanche Advisory

For the Glacier Park and Flathead & Kootenai National Forest Areas

Avalanche advisory does not apply to developed ski areas

Issue Date:	**6:00 AM, Friday, February 3, 2012**
Valid Until:	Midnight, Friday, February 03, 2012
Next Update:	Tuesday, February 6, 2012
Issued by:	Stan Bones

This advisory is a product of the US Forest Service, US Dept. of Agriculture. Along with other snow and avalanche information, it is originally posted at http://www.fs.usda.gov/flathead. An audio summary is available via telephone at 406-257-8402

All Mountain Ranges

7,500 ft. elevation

5.000 ft.

Avalanche Danger Summary
2 -Moderate : 5,000 to 7,500 ft. elevation on steep, open terrain
1 - Low : below 5,000

AVALANCHE – INSTABILITY DESCRIPTION

All Mountain Ranges - 5,000 to 7,500 ft. elevation

Danger Level	**2 - MODERATE**
Confidence	Good
Travel Advice	• Heightened avalanche conditions on steep, open slopes and gullies, particularly those that recently received significant new snowfall • Evaluate snow and terrain carefully
Likelihood of Avalanches	• Natural avalanche ***unlikely*** • Human triggered avalanches ***possible***
Avalanche Size & Distribution	• Small avalanches in specific areas or • Larger avalanches in isolated areas • **Concern is steep, open slopes and gullies lacking vegetative and terrain anchors, particularly in the mtns. of the East and West Cabinet Ranges, the northern Swan Range, and the southern Mission Range**

AVALANCHE – INSTABILITY DESCRIPTION

All Mountain Ranges - below 5,000 ft. elevation

Danger Level	**1 - LOW**
Confidence	Good
Travel Advice	• Generally safe avalanche conditions exist • Watch for unstable snow on isolated terrain features
Likelihood of Avalanches	• Both natural and human triggered avalanche ***unlikely***
Avalanche Size & Distribution	• Very small avalanches in widespread areas or • Small avalanche in isolated areas

Because of the general nature of this advisory message, each backcountry party will always need to make their own time and site specific avalanche hazard evaluations. This advisory best describes conditions at the time of its issuance. As time passes avalanche and snow conditions may change, sometimes quite rapidly. Elevation and geographic distinctions used are approximate and transition zones between hazards exist.

Recent Mountain Weather	
Summary	• **Wednesday –Thursday** ---A fast moving storm system brought new snowfall to the region's mtns, with the greatest deposition occurring in the N Swan Range and S Missions.
Precipitation	• Tuesday, the heavy new snowfall of Sunday and Monday gave way to dry conditions • Wednesday and Thursday, new snowfall occurred over the region's mtns. o 0.25-inches SWE average across the region each day o Especially heavy in the N Swan and S Mission Ranges
Temperature	• Relatively mild temperatures over the period • Average 24-hr mountain temperature o Monday - 30° F o Tuesday - 27° F o Wednesday - 28° F o Thursday - 27° F • Variable periods of nighttime clearing Thursday night produced cooling into the low 20's F
Wind	• Winds have generally been calm to light

Field Observation Locations	
Thursday, 2-2-12	• Upper Hawkins Lake, North Purcell Range, 35 miles north of Troy • Twin and Wildcat Lakes region, North Swan Range, NE of Bigfork
Tuesday, 1-31-12	• Snowslip area of John Stevens Canyon, S'ern edge of Glacier Park, Hwy 2, west of Marias Pass
Observer Report Locations	
	None received

Avalanches Observed	• **Wednesday,** 2-1-12 o Cornice fall triggered a large avalanche that killed one skier in the Twin and Wildcat Lakes area of the Jewel Basin Hiking Area of the North Swan Range, NE of Bigfork • **Thursday,** 2-2-12 o Small natural soft slab avalanches and loose snowmobile triggered sluffs in the North Swan Range

Instability Concern / Avalanche Problem	*Level of Concern*	**Most★★★ Less★★ Least ★**
New Storm or Near Surface Snow	★★★	• 6-12-inches of new snow depth received Wednesday, Wednesday night, and early Thursday in the North Swan and southern Mission Ranges • Lesser amounts in other mtn ranges • Fast moving warm front produced mostly graupel and other weakly bonded snow grains early in this storm • Storm ending snowfall was more dense producing an inverted snowpack
Wind Loading	★	• Recent winds have generally been light with wind transport minimal
Recent or Persistent Buried Weak Layer	★★	• Weak layers of faceted, angular, graupel,.or other weakly bonded grains continue to be found between ¼ and ½ way down in the snowpack • These continue to fail in shear tests
Spring Wet Snow or Melt-Freeze		Not applicable
Rain-on-Snow		Not applicable
Loose Snow	★	• Mild temperatures generally promoting surface snow consolidation
Other Concerns		

Weather Forecast	Current NWS Backcountry Forecast
Summary	• A ridge of high pressure will dominate our region for the next several days • Expect to produce dry conditions through the weekend and possibly beyond • Temperature inversions are expect to develop with warmer air temperatures existing in the mountains while colder air becomes trapped in the lowlands
Precipitation	• Friday through Sunday, none expected across the region
Temperature	• Daytime temps gradually warming in the mountains Friday into Sunday • Daytime temps gradually cooling in the valleys over the period • Nighttime lows 15-20 ° F throughout the period
Wind	• Light and variable

Avalanche Outlook	
Trend	• Through the weekend we expect the avalanche danger to remain near current levels
Concern	• Nighttime clearing and the radiant cooling it produces has the potential to maintain, if not enhance, surface and near-surface weaknesses • Watch for surface hoar formation on cold N'erly and E'erly aspects ○ Concern is when this becomes buried by future storms
Comment	• ***Always carry and know how to use avalanche safety equipment*** • ***Watch for a possible rapid change in weather conditions beyond forecast amounts*** • ***Check out the site specific snow stability before jumping in or on***

On Wednesday, 2-1-12, a cornice fall dropped a skier onto the steep, rocky slope below, triggering a large slab avalanche in the northern section of the Jewel Basin Hiking Area, NE of Bigfork. A party of two skiers was traversing the crest of the Swan Range between Twin and Wildcat Lakes at the time of the incident. The second individual was not caught and later alerted 911 of the incident. Because of the unsafe conditions and no reasonable access from the ridge, he was not able to conduct a search himself. Organized rescue efforts Wednesday were turned back by poor visibility and darkness. The skier's body was recovered the next day, Thursday, 2-2-12.

Our thoughts and prayers are with the families and friends of the two individuals.