

US FOREST SERVICE NORTHWEST MONTANA BACKCOUNTRY AVALANCHE ADVISORY



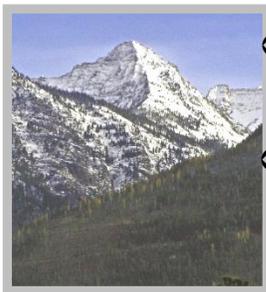
FOR THE GLACIER PARK AND FLATHEAD & KOOTENAI NATIONAL FOREST AREAS

Avalanche advisory does not apply to developed ski areas

Issue Date: 6:00 AM, Tuesday, February 28, 2012
Valid Until: Midnight, Tuesday, February 28, 2012
Next Update: Friday, March 2, 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

3 - Considerable : 5,000 to 7,500 ft. elevation, on steep, open slopes and gullies, especially in areas with significant amounts of newly precipitated or wind deposited snow

2 - Mod : below 5,000

Avalanche Danger Trend

Trending higher Wednesday through Thursday with the arrival of another significant Pacific storm system

AVALANCHE – INSTABILITY DESCRIPTION



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

Danger Level	3 - CONSIDERABLE
Confidence	Good
Travel Advice	<ul style="list-style-type: none"> Dangerous avalanche conditions Careful snowpack evaluation, cautious route-finding, and conservative decision-making essential
Likelihood of Avalanches	<ul style="list-style-type: none"> Natural avalanche <i>possible</i> Human triggered avalanches <i>likely</i> Small avalanches in many areas Larger avalanches in specific areas Very large avalanches in isolated areas
Avalanche Size & Distribution	<ul style="list-style-type: none"> Concern is steep slopes and gullies lacking vegetative and terrain anchors, particularly slopes with a relatively thin snow cover and a basal layer of weakly bonded, eroding, faceted grains Concern also with unstable surface snow poorly bonded to buried surface hoar or layers of melt-freeze ice

AVALANCHE – INSTABILITY DESCRIPTION



All Mountain Ranges – below 5,000 ft. elevation

Danger Level	2 - MODERATE
Confidence	Good
Travel Advice	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Natural avalanche unlikely • Human triggered avalanches possible
Avalanche Size & Distribution	<ul style="list-style-type: none"> • Small avalanches in specific areas • Larger avalanches 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	<ul style="list-style-type: none"> • Another strong Pacific storm system swept over the region Friday through Sunday bringing heavy new snowfall to many mtn locations, often accompanied by wind/.
Precipitation	<ul style="list-style-type: none"> • Moist, heavy, snowfall in many mountain locations, Friday through Sunday <ul style="list-style-type: none"> ○ <u>Northern Swan Range, Whitefish Range, and West Cabinet Range</u> with over a total of 4-inches of snow water equivalent, equating to approx. 32-inches of new snow depth ○ <u>Western mtns of Glacier Park, and the Mission Range</u> with approx. 2.5-inches of snow water equivalent, equating to approx. 20-inches of new snow depth ○ <u>Eastern mtns of Glacier Park, East Cabinet Range, and the Purcell Range</u> with approx. 1-inch of snow water equivalent, equating to approx. 8-inches of new snow depth
Temperature	<ul style="list-style-type: none"> • Temperatures began mild then cooled. <ul style="list-style-type: none"> ○ <u>Friday and Saturday</u> - mountain average daily temps near 25° F ○ <u>Sunday</u> - mountain average daily temps cooling to near 18° F ○ <u>Monday</u> - mountain average daily temps cooling further to near 16° F
Wind	<ul style="list-style-type: none"> • Moderate to strong winds generally from the W

Field Observation Locations

Monday, 2-27-12	<ul style="list-style-type: none"> • Snowshoe Mine, E Cabinet Range, S of Libby on Kootenai • Skyland Creek Area, S of Highway 2, W of Marias Pass on Flathead
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Observer Report Locations

Saturday, 2-25-12	Whoopee Basin, W Cabinet Range, SW of Troy
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Avalanches Observed	<ul style="list-style-type: none"> • Saturday, 2-25-12, Snowmobile and motorized snow bike triggered avalanches W Cabinet Range Skyland Cr area, W of Marias
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Instability Concern / Avalanche Problem	Level of Concern	Most ★★★ Less★★ Least ★		
New Storm or Near Surface Snow	★★★	<ul style="list-style-type: none"> Significant new snow depth received across the region over the weekend <i>Northern Swan Range, Whitefish Range, and West Cabinet Range</i> approx. 32-inches of new snow depth <i>Western mtns of Glacier Park, and the Mission Range</i> approx. 20-inches of new snow depth <i>Eastern mtns of Glacier Park, East Cabinet Range, and the Purcell Range</i> approx. 8-inches of new snow depth 		
Wind Loading	★★★	<ul style="list-style-type: none"> Weekend winds produced wind transport and lee slope loading W-SW winds most mtn ranges <u>except</u> Mixed winds along the Continental Divide 		
Recent or Persistent Buried Weak Layer	★★★	<ul style="list-style-type: none"> Concern with the buried surface hoar, buried melt-freeze ice crusts and buried graupel dominated layers <ul style="list-style-type: none"> Buried surface hoar was the failing layer in both fatal avalanches last week at Lost Johnny and Skyland. All these weak layers when present continue to fail with little to moderate force in shear tests Concern also remains with basal depth hoar found beneath shallow snow covers <ul style="list-style-type: none"> Found along the East Front and near the Continental Divide Also found further west on wind scoured slopes and areas like Jewel Basin where overall snowfall has been below normal 		
Spring Wet Snow or Melt-Freeze	★	<ul style="list-style-type: none"> Not applicable currently with reestablished cloud cover Can occur rapidly however with even just short clearing periods following a new snowfall 		
Rain-on-Snow		Not applicable		
Loose Snow	★	<ul style="list-style-type: none"> Mild temperatures generally promoting surface snow consolidation BUT this takes days not hours or minutes 		
Other Concerns				

Weather Forecast

[Current NWS Backcountry Forecast](#)

Summary	<ul style="list-style-type: none"> Another significant Pacific storm system is forecasted to impact the region Wednesday through Thursday Separate storm projected for Saturday The another next Monday/Tuesday
Precipitation	<ul style="list-style-type: none"> Each new storm system has the potential to produce up to 12-inches of new snowfall
Temperature	<ul style="list-style-type: none"> Little sign of a significant temperature change during the next week
Wind	<ul style="list-style-type: none"> Winds expected to be slightly less than this past weekend, but still capable of transporting snow Gusty W'erly winds Wednesday and Thursday should load E'erly aspects

Avalanche Outlook

Trend	<ul style="list-style-type: none">• Wednesday and Thursday we expect the avalanche danger to trend upward with the new storm activity
Concern	<ul style="list-style-type: none">• Be particularly alert to new snow loading either from precipitation or wind upon an existing buried weak layer
Comment	<ul style="list-style-type: none">• <u>ALWAYS, ALWAYS, ALWAYS</u> carry and know how to use your avalanche safety equipment<ul style="list-style-type: none">○ <i>Transceiver</i>○ <i>Probe</i>○ <i>Shovel</i><p><i>(A lack of this equipment played in the recent fatal incidents)</i></p>• Watch for any rapid changes in weather conditions beyond forecast amounts• Check out the site specific snow stability before jumping in or on any slope that has the potential to avalanche• If you lack the knowledge and experience to assess snow stability during these times of storm activity and existing instability - - AVOID ALL PLAY AND TRAVEL IN AVALANCHE TERRAIN• Don't die being reckless or doing something stupid