

US FOREST SERVICE NORTHWEST MONTANA BACKCOUNTRY AVALANCHE ADVISORY



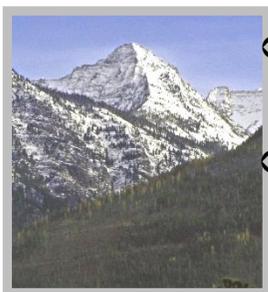
FOR THE GLACIER PARK AND FLATHEAD & KOOTENAI NATIONAL FOREST AREAS

Avalanche advisory does not apply to developed ski areas

Issue Date: 8:00 AM, Tuesday, March 20, 2012
Valid Until: Midnight, Tuesday, March 20, 2012
Next Update: Friday, March 23, 2012
Issued by: Tony Willits

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, with new storm snow accompanied by moderate to strong SW/W/S winds

2 - Mod : below 5,000

Avalanche Danger Trend

Remain at current levels through Wednesday. Moderating after Wednesday night as winds moderate

AVALANCHE – INSTABILITY DESCRIPTION



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

Danger Level	3 - CONSIDERABLE
Confidence	Fair
Travel Advice	<ul style="list-style-type: none"> Dangerous avalanche conditions Careful snowpack evaluation, cautious route-finding, and conservative decision-making essential Caution is advised on lee slopes of exposed ridges where wind slabs are building with moderate to strong SW/W/S winds
Likelihood of Avalanches	<ul style="list-style-type: none"> Natural avalanche possible Human triggered avalanches likely
Avalanche Size & Distribution	<ul style="list-style-type: none"> Small avalanches in many areas Larger avalanches in specific areas Very large avalanches in isolated areas

AVALANCHE – INSTABILITY DESCRIPTION



All Mountain Ranges – below 5,000 ft. elevation

Danger Level	2 - MODERATE
Confidence	Fair
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 and wind loading • 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"> • The region, transitioned from the warm moist air mass on Friday into a colder wet air mass by midday on Saturday which continued into Sunday. Overnight Sunday and through Monday, most areas except the Northern Swan and the Missions received only trace to light amounts.
Precipitation	<ul style="list-style-type: none"> ○ Friday through Sunday ranged with .8 to 1.4 inches of snow water equivalent within the region. The Northern Swan, Missions and West Cabinets received > 1.0" of SWE ○ Monday all sites but the Northern Swan and the Missions received light to trace amounts of new snow. The Northern Swan and the Missions received more moderate snow fall with gains of .4 to .7 inches of SWE, respectively.
Temperature	<ul style="list-style-type: none"> • Temperatures trended downwards since Saturday and Sunday with highs above freezing but cooled Monday with highs into the mid 20's and overnight lows into the mid teens.
Wind	<ul style="list-style-type: none"> • Winds moderated from Sunday and were light on Monday

Field Observation Locations

Monday, 3-19-12	<ul style="list-style-type: none"> • McDonald Mountain in the East Cabinets 15 air miles south of Libby • Noisy and Jewell Basin's NE of Bigfork
-----------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Observer Report Locations

Sunday, 3-18-12	<ul style="list-style-type: none"> • Obs from Little Shields area in Glacier NP.
-----------------	-------------------------------------------------------------------------------------------------

<u>Avalanches Observed</u>	<ul style="list-style-type: none"> • None observed on Monday, with only fair visibility in the late afternoon in Noisy Basin and poor visibility prior to late afternoon. • Good visibility in the East Cabinets revealing wet slab activity from warming temperatures and rain on Thursday but no activity observed on Monday.
-----------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Instability Concern / Avalanche Problem	Level of Concern	Most★★★ Less★★ Least ★		
New Storm or Near Surface Snow	★	<ul style="list-style-type: none"> New storm snow was dense early on in the period, especially on Saturday. The new cycle transitioned into a relatively less dense storm snow over the period Saturday through Sunday. The transition from warmer to cooler temperatures, revealed weak interfaces in the snow accumulations over the storm cycle. Weak interfaces occurred between the melt freeze crust from the warming late last week and the new snow. Shears were Q2 during stress tests with moderate force in the surface 30 cms. 		
Wind Loading	★★	<ul style="list-style-type: none"> Wind slabs were beginning to develop on Monday with light winds from the SW with at least moderate amounts of soft new snow available for transport. With existing soft new and new loading, coupled with at least moderate SW/W winds (both Tuesday and Wednesday) ...unstable wind loading will result on NE through E aspects. Avoid areas of wind deposits until settling does occur. Avoid unsupported convexities on lee side of ridges. 		
Recent or Persistent Buried Weak Layer	★	<ul style="list-style-type: none"> Colder temperatures helped form a strong melt freeze layer from last week's warming, which supported the recent storm snow. This near surface melt freeze layer was close to 10 cms thick. Below 70 to 80 cms, pencil hard layers can be found which are affording more substantial bridging over persistent weak interfaces. Although the persistent weak layers still could be triggered in some locations with shallow snow accumulations and should not be ignored, especially with snowmobiling activities in high basins . 		
Spring Wet Snow or Melt-Freeze				
Rain-on-Snow				
Loose Snow				
Other Concerns		<ul style="list-style-type: none"> As temperatures warm again on Thursday avoid areas with large cornice overhangs below steep run outs. 		

Weather Forecast

[Current NWS Backcountry Forecast](#)

Summary	<ul style="list-style-type: none"> Another system with high amounts of moisture will arrive within Northwest Montana on Tuesday. Between Tuesday and Wednesday we could receive from 10 to 15 inches of new snow above 5000 feet although moderation could be expected in far Northwest Montana.
Precipitation	<ul style="list-style-type: none"> 10 to 15 inches of snow with freezing levels climbing after Wednesday night.
Temperature	<ul style="list-style-type: none"> Temperatures will be in the 20's until Wednesday night
Wind	<ul style="list-style-type: none"> SW/W winds are expected to be at least in the moderate range (17 to 24 mi/h) through Wednesday night.
	<ul style="list-style-type: none">

	•
	•

Avalanche Outlook

Trend	• Avalanche hazard will remain at current levels through Wednesday night. May moderate into Thursday.
Concern	• Avoid travel over convex ridges on wind loaded aspects. • Be aware of the potential for cross loading with new snow accumulations on westerly aspects with SW winds.
Comment	• <i>ALWAYS carry and know how to use your avalanche safety equipment</i> <ul style="list-style-type: none">○ <i>Transceiver</i>○ <i>Probe</i>○ <i>Shovel</i> <p style="text-align: center;"><i>(A lack of this equipment played in the recent fatal incidents)</i></p> • <i>Watch for any rapid changes in weather conditions beyond forecast amounts</i> • <i>Check out the site specific snow stability before jumping in or on any slope that has the potential to avalanche</i>