



Northwest
Avalanche
Center



HIKE • BIKE • SKI
ROSLYN, WA
110 W. Pennsylvania Ave, Roslyn, WA

An adventure oriented bookstore and cafe featuring freshly prepared meals, craft cocktails, great wine and awesome brews. Open seven days a week.

Olympics

Issued: 6:13 PM PST Saturday, December 24, 2016 by Dennis D'Amico

NWAC avalanche forecasts apply to backcountry avalanche terrain in the Olympics, Washington Cascades and Mt Hood area. These forecasts do not apply to developed ski areas, avalanche terrain affecting highways and higher terrain on the volcanic peaks above the Cascade crest level.

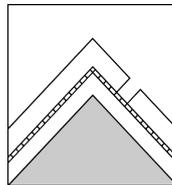
The Bottom Line: Persistent slabs still warrant your attention in the Olympics. Remember that persistent weak layers are generally involved in larger avalanches and above normal caution is still advised. Identify the snowpack structure in the area you want to ski or ride before committing to avalanche terrain and err on the side of caution. Wind slab may be still be sensitive on lee slopes mainly near and above treeline.

Elevation	Sunday		Outlook for Monday
Above Treeline	Moderate	Heightened avalanche conditions on specific terrain features. Evaluate snow and terrain carefully; identify problem features.	Considerable
Near Treeline	Moderate	Heightened avalanche conditions on specific terrain features. Evaluate snow and terrain carefully; identify problem features.	Considerable
Below Treeline	Moderate	Heightened avalanche conditions on specific terrain features. Evaluate snow and terrain carefully; identify problem features.	Moderate

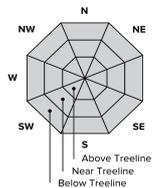
Avalanche Problems for Sunday

Persistent Slab

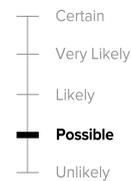
Persistent slabs can be triggered by light loads and weeks after the last storm. You can trigger them remotely and they often propagate across and beyond terrain features that would otherwise confine wind and storm slabs. Give yourself a wide safety buffer to handle the uncertainty.



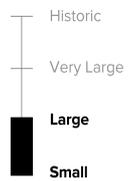
Avalanche Problem



Aspect/Elevation



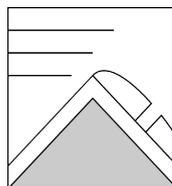
Likelihood



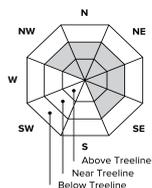
Size

Wind Slab

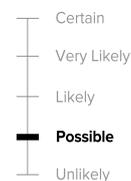
Wind slabs can take up to a week to stabilize. They are confined to lee and cross-loaded terrain features and can be avoided by sticking to sheltered or wind scoured areas.



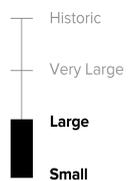
Avalanche Problem



Aspect/Elevation



Likelihood



Size

Snowpack Analysis

Weather and Snowpack

A front crossed the Northwest on Thursday followed by an upper trough on Friday. This has caused about 8-10 inches of snow at Hurricane. South winds Thursday became light on Friday a cooling trend Friday.

Scattered snow showers, a mix of sun and clouds, and generally light winds summed up the weather on Saturday.

Recent Observations

NWAC pro-observer Matt Schonwald was at Hurricane Ridge on Friday and gave an important report. He was triggering collapsing and whumping in every open area that he visited on Friday. In 2 snowpits on slopes less than 30 degrees he found the December 17th PWL and preserved surface hoar and preserved faceted snow at about 46-50 cm below the surface with moderate Extended Column tests indicating propagation. While the ski conditions were excellent he was unable to access steeper higher open terrain safely.

Matt also reported that cornices were growing on the lee northeast sides of ridges on Friday.

On Saturday NPS rangers indicated several 30-40 cm slabs had been skier triggered on S-SE aspects above the Hurricane Ridge Road, with one slide hitting the road. However, outside of this slab avalanche activity, only small loose natural and skier triggered slides were noted in steep terrain. In more north facing terrain ski tourers ventured out of Hurricane Ridge, no whumping, shooting cracks or general signs of instability were noted.

Detailed Avalanche Forecast for Sunday

Christmas should be cold and mostly sunny with generally light winds.

Shallow wind slab formed Thursday and Friday has become less likely to trigger.

Persistent slabs still warrant your attention in the Olympics. Remember that persistent weak layers are generally involved in larger avalanches and above normal caution is still advised. Identify the snowpack structure in the area you want to ski or ride before committing to avalanche terrain and err on the side of caution. Wind slab may be still be sensitive on lee slopes mainly near and above treeline.

Mountain Weather Synopsis for Sunday & Monday

A shortwave ridge moving over the PNW will provide us with some fine weather on Christmas Day. Freezing levels will be low but at least skies will be mostly clear with light winds. The fair weather will not last long as a strong westerly jet once again becomes squarely aimed at Washington Monday night. High clouds should increase overnight and through Monday morning as moisture begins to stream into the region. Cloud ceilings should lower quickly Monday afternoon with light rain and snow spreading south from the Olympics and north Cascades. Alpine winds will also ramp up quickly Monday afternoon, so expect reduced visibility late in the day if above treeline. The bulk of precipitation from the incoming frontal system will move in Monday night. A slight warming trend should take place overnight out ahead of and with the frontal passage for the Olympics and west slopes of the Cascades with snow levels peaking around 3000 feet after midnight through the early morning hours of Tuesday for the central Cascades including Snoqualmie Pass and 3500 feet for the south Washington Cascades including Crystal, Paradise and White Pass. Heavy precipitation will hold off until after midnight for Mt. Hood as the front slowly sags south.

24 Hour Quantitative Precipitation ending at 4 am

Location	Mon	Tue
Hurricane Ridge	0	.50 - .75
Mt Baker Ski Area	0	1.00 - 1.50
Washington Pass	0	.75
Stevens Pass	0	1.00
Snoqualmie Pass	0	1.00 - 1.50
Mission Ridge	0	.25 - .50
Crystal Mt	0	.75
Paradise	0	1.50
White Pass	0	.75
Mt Hood Meadows	0	.50 - .75
Timberline	0	.75

LT = less than; WE or Water equivalent is the liquid water equivalent of melted snow in hundredths of inches. As a rough approximation 1 inch of snow = about .10 inches WE, or 10 inches of snow = about 1 inch WE.

Snow Level/Freezing Level in feet

Day	Northwest Northeast Central South					Easterly Flow in Passes
	Olympics	Cascades	Cascades	Cascades	Cascades	
Sunday - Sunday Night	1000'	500'	500'	500'	1000'	
Monday Morning	2000'	500'	500'	1000'	1500'	*
Monday Afternoon - Monday Evening	3000'	1500'	500'	1500'	2000'	*
Monday Night	4000'	2500'	2000'	3000'	4500'	*

Cascade Snow / Freezing Levels noted above refer to the north (approximately Mt Baker and Washington Pass), central (approximately Stevens to White Pass) and south (near Mt Hood). Freezing Level is when no precipitation is forecast.

* Note that surface snow levels are common near the passes during easterly pass flow and may result in multiple snow / freezing levels.