



# Avalanche Awareness



This guide provides information about avalanche danger in Lassen. It is not intended to replace a comprehensive guide or formal avalanche training.

Learn more at [avalanche.org](http://avalanche.org)

Snow travel at Lassen Volcanic National Park requires entering avalanche terrain. Each year, avalanches claim more than 150 lives worldwide. Knowledge, information, and equipment are key to preventing and surviving avalanche accidents. Before you enter the winter wilderness, ensure that you have a solid understanding of avalanche awareness and carry avalanche/rescue equipment.

## Are You Prepared?

### Make a Plan

Travel with a partner—know your abilities and their's. Plan a route avoiding hazard areas and include alternatives. Tell someone where you are going and when you will return.

### Know the Snow

Use a basic pole test or more involved tests such as a snow pit, Rutschblock, or extended column to evaluate the snow as you travel through avalanche terrain throughout the day.

### Carry Your Equipment

Pack a shovel, probe, and transceiver/beacon and know how to use them. Include survival gear.

### Check the Forecast

Lassen Volcanic National Park does not provide an avalanche forecast for the park. A forecast for nearby Mt. Shasta is available from the Mt. Shasta Avalanche Center at (530) 926-9613. A forecast for the Lake Tahoe area is available from the Sierra Avalanche Center at (530) 587-3558.

## Recognize Red Flags

### Recent Avalanches

If there are new avalanches, more are possible.

### Signs of Unstable Snow as You Travel

Listen for warning signs: cracking or collapsing snowpack, “whumpfung” sounds, and hollow drum-like sounds on hard snow.

### Heavy Snowfall or Rain in the Past 24 Hours

Significant snowfall or rain can make the snowpack unstable. Avalanches are often triggered the first clear day after a storm. Because it is sunny does not mean it is safe.

### Windblown Snow

Windblown snow loads leeward slopes, even when it is not snowing out.

### Significant Warming or Rapidly Increasing Temperatures

Warm temperatures can cause the snow to creep downhill and become less stable.

### Persistent Weak Layers

When these are buried in the snowpack, you may trigger an avalanche weeks after a storm or when no other red flags are present.



An avalanche class performs a Rutschblock test



A skier practices transceiver location



Steep slopes along the park road are prone to slides



Ski patrol members enact a rescue scenario



Freeze-thaw cycles create a frozen snowpack on the southeast face of the Lassen Peak



A skier selects a low-danger route above Ridge Lakes



Steep slopes and large cornices are found throughout the Diamond Peak area



Skiers spread out on the steep slopes of Brokeoff Mountain

## Identify Avalanche Terrain

### Slope Angle

Avalanches are possible on any slope steeper than 30 degrees and as steep as 50 degrees. They occur most frequently on slopes **35 to 45 degrees**. Avalanches may also occur on slopes of less than 30 degrees that are exposed to steeper terrain above.

### Aspect

Which way does the slope face in relation to sun, wind? Cornices indicate prevailing wind direction and may be a sign the slope is being windloaded. Does the slope face the sun or is it in the shade?

### Common Trigger Points

Avalanches may be triggered from flatter areas in the runout zone or along ridge crests. Watch for wind deposited snow; breakover or mid-slope steepening; areas **near rock outcrops**; or shallow areas in the snowpack.

### Terrain Traps

Watch for anything that increases the consequences of being caught in a slide. **Cliffs, trees, and rocks**. A flat transition or a gully means a deeper burial.

## Frequent Avalanche Terrain

### Lassen Volcanic National Park Highway

Hazardous, steep side hills with icy conditions and numerous avalanche paths along the park highway.

### Diamond Peak Area

History of avalanches in this area; avoid it by using the “Ranger Cutoff” north of Windy Point.

### Ridge Lakes Area

History of avalanches in area south of Ridge Lakes. Steep, windloaded slopes on north side. Steep, avalanche prone slopes on all aspects of Mt. Diller.

### Lassen Peak

Steep slopes with various aspects. Safest way up is on the summer trail through forested section, then on the southeast ridge to the summit.

### Brokeoff Mountain

Numerous avalanche paths on Brokeoff Mountain and overhanging cornices on summit.

### Loomis Peak

Avalanche chutes sluff off of Loomis Peak at upper end of Manzanita Creek trail.

## Avalanche Terrain Map

