

Avalanche near Lake Ann in upper Fortune Creek, Wenatchee Mountains, WA

[Just southwest of Ingalls Peak and the Alpine Lakes Wilderness]

- * **Date:** Avalanche occurred around 2 PM Saturday, 1/31/04.
- * **Location:** near Lake Ann in the upper Fortune Creek drainage, just southwest of Ingalls Peak and the Alpine Lakes Wilderness (about 19 miles north of Cle Elum, WA)
- * **Who:** 2 completely buried and rescued
- * **State:** WA
- * **Activity:** snowmobile

Preliminary Report prepared on 2/1/2004 by Stephen C Carter—
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Accident and Rescue Narrative

Saturday, January 31: *On Saturday 1/31/2004 at approximately 1420 in the afternoon a large avalanche at Lake Ann near the wilderness boundary in upper Fortune Creek buried two snowmobilers.*

No Forest Service personnel were at the scene. Eyewitness accounts indicate there were between 30 and 50 people in the Lake Ann basin at the time of the avalanche, high marking on the steep slopes or watching others hill climb. A snowmobiler, following an attempt to gain the ridge crest, turned and attempted to side hill across the upper slope triggering the slide. One victim was on his machine high on the slope and was caught immediately. The other was with a group of people sitting in the runout zone at the lake. Most people at the bottom were able to start their machines and race to safety before the slide struck. The second victim was on foot some distance from his machine and not able to get away before being hit by the avalanche.

Both victims were completely buried, one approximately 2 feet deep and the other 5 feet deep. Both were wearing beacons. The other snowmobilers at Lake Ann and some who witnessed the avalanche from the ridge to the east initiated a search with beacons and probes. The one victim was found in about 5 minutes and dug out. He was breathing and not seriously injured, though badly shaken he was later able to ride his machine down to Salmon la Sac Sno-Park. The second victim was found after about 15-20 minutes of searching. He was not breathing when extracted, but was revived by CPR performed by the people on scene. A MAST Helicopter, from the Yakima Training Center, flew that victim to Kittitas Valley hospital in Ellensburg.

During the rescue operation I interviewed approximately 20 people who had been in the area and were members of the parties involved in the avalanche or helped with the search. The snowpack conditions were recognized as hazardous by about 30% of the people I spoke to. One group told me they had seen a couple of snowmobiles break trail to the edge of the Lake Ann bowl in the morning and then turn around and leave the area stating, "The slope is ready to fracture, it is hazardous to be here". Many folks just went ahead and followed the people who went on to the lake anyway, because "there were tracks ahead of them". I talked with 3 parties of 6 to 8 people each, who had made decisions to avoid the Lake Ann area and go to nearby sites in Fortune creek because of what they felt were unstable snow conditions. One positive note is that nearly all of the people in the Lake Ann area were equipped with beacons, probes, and shovels. There was sufficient knowledge in the hastily organized group to locate the victims in a timely manner, and save lives. The ability to use the MAST helicopter was also key to the success in bringing out the more seriously injured victim. The skill of the flight crew in rescue operations with heavy snow falling and decreasing visibility was outstanding.

There is not much basic information about the slide itself. No measurements have been taken to date, due to uncertainty about stability on slopes approaching the scene. Eye witnesses told me that the slide was large and covered much of the headwall on the east side of Lake Ann. The slope has a WNW aspect and

is steep 45 degrees or more. The headwall fracture extended for several hundred feet and was from 18" to 24" deep (depending on who I talked to). The avalanche run was reported to be nearly 1000 ft (again depending on the witness the distance varied from several hundred to 1000ft.) Lake Ann is at approximately 6100 feet elevation in T22N; R15E; Section 22.

A review of the Backcountry Avalanche Forecasts for the area east of the Cascade Crest:

a) The forecast issued at 0830 on Friday January 30 predicted wind slab development of 1-2 feet with the new slabs "slow to settle and stabilize", with an avalanche danger of moderate above 4000 ft.

b) The forecast issued on Saturday 1/31 at 1400 indicated an avalanche danger for Washington Cascades east of the Crest of "Moderate" above 6000 feet and "Low" below. However the snowpack analysis indicated that Saturday morning "8-12 inch soft and wind slabs on steep north and east aspects released by ski cuts were extensive at White Pass ski area". Farther the report states "Backcountry travelers should use caution near avalanche terrain on Saturday."

It should be pointed out that the Upper Cle Elum valley and the Fortune creek area often exhibit weather and snowfall amounts more similar to precipitation west of the crest, but with colder temperatures. The Saturday forecast for the same period for the "Washington Cascades near and west of the crest" was for "Considerable avalanche danger above 4000 feet and moderate below." A check of the Fish Lake Snotel data shows an increase in snow depth during the period of 1/26 to 1/31 indicating 31.0" of new snow. This matches well with reports from snow cat operators grooming the snowmobile route to Fish Lake and Fortune Creek over those 3 nights. On 1/30 there was significant wind with telemetry data at Alpentel showing average wind speed at 5530 ft of elevation varying from 13 to 43 mph, out of the west. Clearly strong enough to lead to large amounts of wind redeposit of snow. Local terrain features near and upwind of Lake Ann may explain the loading on the NW facing slope. During the night of Friday 1/30 a large natural release avalanche was observed by a groomer operator coming off a north facing slope of Hawken's mountain and running clear across Fortune Creek. Another party reported seeing a snowmobile triggered avalanche near Gallagher Lake on Saturday 1/31 just before the Lake Ann incident.

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