Recent tree well death highlights snow country hazard

By Craig F. Eisenbeis Correspondent

Last month, a snowboarder's death in Washington state once again focused attention on the backcountry danger posed by tree wells. It was reported that Nathan Redberg died after falling head-first into a tree well at the 49 Degrees North ski area north of Spokane. Redberg and his 9-year-old son were reportedly about 100 feet from a groomed ski run at the time of the incident.

The son, who unsuccessfully attempted to extricate his father, sought ski patrol assistance; but, even with a quick response and a defibrillator, Redberg could not be revived.

Immersion Snow Suffocation (SIS) can occur quickly when a victim plunges head-first into a tree well. Tree wells form around the bases of evergreen trees when overhanging limbs interfere with the natural deposition of falling snow, and the resulting cavities can be deadly. The cavity created around the tree will partially fill with loose, unconsolidated snow. Like quicksand, these traps can swallow a person in an instant. Such an accident can be compounded by snow adhering to overhanging limbs, which will often be dislodged on impact, further burying the victim.

Termed Non-Avalanche Related Snow Immersion Deaths (NARSID), suffocation can occur in minutes, especially when a skier or snowboarder enters the tree well head-first. According to the Pacific Northwest Ski Areas Association (PNSAA), in studies conducted in the U.S. and Canada, 90 per cent of volunteers placed in

tree wells could not rescue themselves.

Last year, at this time, another tree well incident in Central Oregon had a happier ending. In that case, the Deschutes County Sheriff's Search and Rescue team successfully performed the rescue. Much of the credit for that telemark skier's survival went to the skier himself because he was well equipped and lucky enough to have cell phone coverage where the accident occurred. Still, that skier's situation might not have become quite so dire if he had not been traveling alone.

Backcountry travelers should never rely solely on a cell phone. Many areas do not have cell coverage, and the initial call in that case did not successfully pinpoint the trapped skier's location. The skier was in an upside down position and could not unclip himself from his bindings. He reported that he was in good condition but was upside down and cold. Fortunately, he was not completely buried and help arrived in time to save him.

While tree wells are an ever-present danger in the backcountry, incidents can occur anywhere. One Santiam Pass ski patroller recalls a similar incident when a skier became trapped in a tree well only about 15 feet off a principal groomed ski run. That skier was skiing alone and lucky that someone saw him go into the tree well. He was hung upside down by his skis, helpless, and no one could see or hear him.

In that case, a rescuer had to go down inside the tree well with the victim to release the victim's ski bindings, which locked him in place. With the aid of another ski patroller, the victim was finally pulled

to safety.

Unfortunately, fatalities are not uncommon and typically occur each year in North America. Fifteen years ago this month, a Bend snowboarder disappeared on Mt. Bachelor; and, despite an extensive 10-day search, she was not found until weeks later, the victim of suffocation in a tree well.

Nine years ago, a Mount Hood snowboarder suffocated in a tree well after just 15 minutes, despite the fact that three other persons were on scene and attempting to extricate him.

Six years ago, British Columbia ski patrol members were conducting a training exercise, when one of the patrol members suffered an unplanned, head-first fall into a tree well; and the training session turned into a very real rescue mission which was video recorded. Even with multiple experienced and well-trained ski patrol members immediately on scene, several minutes were necessary to free the victim, who fortunately survived. Typically, victims are completely immobilized in the loose snow.

As the snow pack deepens over the winter, new-fallen snow can easily create and obscure potential tree well traps. The best way to avoid the danger is to steer clear of trees and other topographical features, such as rocks or creeks, where such wells could be present. Ski patrol officials urge caution and warn that skiers and snow boarders in the backcountry should carry shovels and never travel alone.

If a person falls victim to a tree well, PNSAA recommends remaining calm, because struggling often



Tree wells filled with soft, unconsolidated snow can pose deadly hazards in snow country; and loose snow on overhanging branches can compound the problem.

exacerbates the situation. If possible, the victim should do everything they can to avoid going in upside down. Grabbing a tree limb or the tree trunk can be the difference between life and death. Most importantly, however, always be properly equipped and don't travel alone.







