OUTDOORS

Know the snow before riding it



Outdoors

By John T. Unger

Marmot Town. Longfellow. Study Plot.

These named avalanche slide paths exist just above the trail used by most Red Mountain Pass winter recreationalists. They are only a quarter of a mile from the highway, and yet very few skiers, snowshoers, boarders or snowmobilers are aware that they have traveled beneath these potential dangers.

One of these slide paths is directly above and adjacent to County Road 14 which forms the trail. Last Saturday's snow conditions were not likely to result in an avalanche from this particular slope, but this weekend a slide is much more likely there.

More than two feet of snow fell on Red Mountain Pass between Sunday and Tuesday, prompting the Colorado Department of Transportation to close Highway 550 there from Sunday evening through late Tuesday.

Avalanche control work required cannon, explosives, snowplows and blades. Now picture that two feet of fresh snow that is perched on the old snow in the slopes, gulches, and hills that lie on either side of the highway.

What is that heavy layer of new snow directly resting on? That answer can be found by knowing what the weather was like there on the day before that snowstorm.

Saturday was a very warm day in Montrose, and on Red Mountain Pass it was unseasonably warm also, having



Wiley Freeman, right, of Montrose, discusses stability clues with another skier in a snow pit near Red Mountain last weekend. (Courtesy photo)

IF YOU GO

Get informed and be well prepared before skiing the backcountry. Seek professional instruction in avalanche education. Several places this can be done include Silverton Avalanche School, Mountain Rescue Aspen, and local ski guiding services.

been predicted to almost get to 40 degrees. While it did not warm up quite that much, those of us skiing it that day noticed that the direct sun and the relatively warm air there was altering the surface of the snow.

Surface hoar developed. This made for a very slick surface for the next storm's two feet of snow to fall upon. That does not make for a strong bond, and thereby raises the chances for snowslides to occur on slopes that would not

Tips

from the Posse

By Mark Rackay

ordinarily slide.

Fortunately, excellent information is readily available from the Colorado Avalanche Information Center through their website at avalanche. state.co.us. Updated once or twice a day, the site gives the general public easy access to the observations of snow scientists and other observers. The avalanche danger rating available there is presented in understandable layman's terms.

Getting an even more direct

impression of the snowpack before riding or skiing on it is surprisingly easy to do and yet shockingly underused.

Dig a pit to the ground on a slope like the one you intend to ski, and you can find out enormous amounts about the stability or instability of that slope.

Saturday I dug a pit to the ground, using the normal sized avalanche shovel in my pack. That five foot deep, five foot long, three foot wide pit took less than ten minutes to dig. The real benefit is that my group could then see any icy layers in the wall, could feel the airy collapsible pockets near the ground, and sense how heavy a block of snow actually is.

This was priceless information, on a logical level but also on a gut level. Not only did it confirm what the avalanche forecast had revealed online that morning, but it made the snow stability concepts literally in-your-face knowledge.

Only two members of our group of four have had advanced avalanche certification, but even the two who have had no such training gained firsthand knowledge with which to make informed choices about skiing or not skiing a particular slope, direction, or day.

In a pit, using nothing more than a shovel, a probe pole, and a four foot long piece of cord, a person's hand can feel the crystals as loose as sugar, crystals that may be between the five foot layer of snow and the ground. A test block of snow can be cut with that cord in order to see how easily it does or does not slide off an otherwise hidden ice layer in the middle of the snow wall.

While this technically only reveals what is happening on that particular slope that day, the results often are found to be similar to that of other pits done in the area. No one should make his or her decision about snow stability based on the information from a single pit.

But digging even a single snow pit on your next outing gives more information than digging no pit. When combined with the day's avalanche report and some experience, there is a good chance that one can lower one's risk while enjoying snow sports in the mountains.

Then take an easy five minutes to let gravity help you fill in that pit as you head off to ski where you have chosen.

John T. Unger is a Diplomate of the American Chiropractic Board of Sports Physicians, with over twenty-five years of practice in Montrose. He gives thanks that we have these mountains to ski in and on. Ideas for future columns are welcomed at sportsdocunger.com.

When Jack Frost Bites

One cold winter's morning, in my tenth year of life, found me hiking around in the woods behind our house. The temperatures were near zero and the wind was howling.

My gloves were soaking wet from an incident earlier at a creek crossing. The fingers in the not so waterproof gloves had gone from prickly and tingly feeling to straight numbness.

When I removed the glove on my left hand I noticed that my fingertips were a pale whitish color and the skin looked very hard. I found out later that I was experiencing frostbite.

Frostbite is the most common on the ears, toes, fingers, nose and chin. Because it starts with numbness, you may fail to notice it coming on. For many people, it takes someone else to notice it first.

Frostbite occurs in several stages, the first being frostnip. With this very mild form of frostbite your skin can turn red or pale in color and will feel very cold. If you don't address it right away, the skin will turn numb and perhaps a prickling feeling will start. If you begin warming the skin now, you may feel a bit of pain, but there should be no permanent damage from frostnip if you catch it early.

The next stage is called superficial frostbite. This is when the reddened skin begins to turn white or pale.

While the skin may still feel soft, some ice crystals are actually beginning to form in the tissue

orm in the tissue. Your skin may feel warm, which is a

warning sign of a serious condition. Rewarming the skin at this stage may make it appear mottled, blue or purple. A fluid blister usually appears 24 hours after rewarming the skin.

The final stage is called Severe Frostbite. This occurs when all the layers of the skin are affected. You may experience numbness and lose all sensation of cold, pain or discomfort in the affected area. Your joints and muscles may no longer

function. Large blisters will form 24 hours after rewarming. Afterward, the area will turn black and hard as the tissue dies.

Seek medical attention if you experience the symptoms of superficial or deep frostbite. Also watch for fever or any new or unexplained symptoms.

It is much better to prevent frostbite rather than to have to treat it. Try not to wear clothing that is not appropriate for the conditions. Clothes that are too tight or do not protect against getting wet should be avoided.

The risk increases substantially when the temperature falls below 5 degrees F or when there is a light wind at low temperatures. Frostbite can occur on exposed skin in as little as 30 minutes

in a wind chill of minus 15 degrees. You should also avoid touching ice, cold packs or metal with exposed skin.

If you suspect you are experiencing frostbite, protect your skin from further exposure. Cover with a dry gloved hand. Mittens are far warmer than gloves as they allow the heat from the whole hand to stay in the same space. Never rub the affected area and never rub snow on frostbitten skin. Get out of the cold and remove wet clothing as soon as possible.

Gently rewarm the affected areas. Soak hands or feet in warm water, between 98 and 108 degrees F. Never use direct heat such as a stove, heat lamp, fireplace or heat pad.

Do not walk on frostbitten feet or toes, as this will further damage the skin. If there is any danger of refreezing the affected area, especially in multi-day excursions, do not rewarm. It is better to walk on frozen feet than to allow them to refreeze. And above all else, get medical attention as quickly as possible

ly as possible.

Being aware of the possibility of frostbite and preventing it is the best choice. Having the proper clothing, to include good gloves and warm boots is imperative when spending time outdoors in the cold times. Don't let old Jack Frost ruin your day. Until next time, see you on the trail.

Mark Rackay is a freelance writer who serves as a Director for the Montrose County Sheriff's Posse. For information about the Posse call 970-252-4033 (leave a message) or email info@mcspi.org



Frostbite strikes exposed skin areas first – ears, fingers, nose and chin. Because it starts with numbness, you may fail to notice it coming on. (Courtesy photo)

