
Even though avalanche deaths are likely to grow,
odds can be improved with a quick rescue.

Avalanche Dogs:

Improving the Odds

by Hatch and Judy Graham

The odds aren't good for a person buried in an avalanche.¹ *The Snowy Torrents*, a compilation of avalanche accident reports in the U.S., notes that a completely buried victim has only a 39 percent chance for survival, regardless of all other factors. And after the first 30 minutes of burial, the chances of survival are cut in half.

Avalanches can happen wherever snow meets a high-angle slope. While they're more common in the mountainous west during the winter, people have died in avalanches in every month of the year and in two eastern states. People have been trapped — and killed — by snow sliding off the roofs of their homes and work places, according to reports in *The Snowy Torrents*.

As more and more people go where avalanches are likely to happen — whether for recreation, travel, or by building homes and cabins in avalanche paths — the number of avalanche

fatalities will probably grow.

One way to try to improve the odds, and reduce the fatalities, is by quick rescue. That's where the avalanche dog comes in.

For a search and rescue dog, avalanche training is one part of a well-rounded education. For an avalanche victim, that dog's training could be the gift of life, but only if that dog is in the right place at the right time.

Unfortunately, up until now, most of the avalanche dog success stories in this country have been body recoveries. There's been one notable exception.

In April 1982, a German Shepherd named Bridget made avalanche-dog history in the U.S. when she found Anna Conrad buried under snow in the ruins of a ski lift terminal in the Alpine Meadows avalanche. It was the first live rescue of an avalanche victim by a dog in this country. (See *Response!* Spring 1982, "Avalanche!")

In Europe, dogs have saved the lives of many people buried in avalanches. In the April 1982 issue of *Dog Sports Magazine*, WOOD handler Sandy Bryson — who trained with the French avalanche

dog teams — gives a reason for the successes, "European avalanche dogs have performed many live recoveries because they are permanently stationed at most ski areas and villages with a high avalanche hazard and can arrive at the slide scene quickly.

In the U.S., most of the avalanche victims that have been found by dogs haven't been so lucky. Trained dogs are generally several hours away from the avalanche site. *The Snowy Torrents* reports on a number of avalanche finds by dogs — all fatalities:

- In March 1969, a dog from the German Shepherd Search and Rescue Dog Association in Seattle found the body of a ski tourer buried in an avalanche on Mt. Rainier. The find occurred two days after the fatal accident.
- It was eight days after an avalanche caught and killed a solo skier at Guanella Pass, Colorado, that Saint Bernard search dogs located his body under two feet of snow. The December 1974 search effort had been delayed by storms and high avalanche hazard.
- An untrained Golden Retriever survived the avalanche that killed his master and a companion on Indian Peak, Idaho, in January 1976. When searchers arrived at the slide, they found the dog sitting at the spot where the companion was buried.
- In November 1979, the WOOD dog Bridget located the body of a young ski tourer under three feet of snow at Mammoth Mountain Ski Area. He'd been buried five hours. A coarse probe line had passed over the spot before the dog worked it.

Not reported in *The Snowy Torrents* is the location, by a dog, of one of the victims of the January 21, 1978, avalanche at Turnagain Pass, Alaska. This slide claimed the lives of four ski tourers. Bad weather and continuing avalanche danger prevented a search in the days following the avalanche. In late July, a week after one of the victims surfaced, the Anchorage Rescue Council scheduled an exercise to try to recover the remaining bodies.

Teams from Dogs Organized for Ground Search were requested to run a hasty search of the slope, and within five minutes one of the dogs — a Shepherd-Collie cross — alerted, ran 100 yards up the hill, and began digging. The body of one of the victims was found there under two feet of snow and encased in approximately three inches of ice — and with an avalanche cord entwined around the torso, feet and legs.

The dogs also alerted at another spot where snow deposition was 20 to 40 feet deep. With a storm moving in, searchers

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The one notable exception to avalanche dog body recoveries was "Bridget" finding Anna Conrad in 1982 at Alpine Meadows.



weren't able to dig at the site, but a second body was later recovered at that spot.

There have been other avalanche finds by dogs, too recent to be recorded in the latest *Snowy Torrents*:

- Four days after a skier was reported overdue at Schweitzer Basin Ski Area, Idaho in February 1981, a WOOF dog found the body under six feet of snow in a small cornice avalanche.



An avalanche dog digs down to uncover a "victim" in this training exercise.

- A Rocky Mountain Rescue dog team located the body of a deer hunter missing in southeastern Idaho in November 1982. The man's tracks were found entering but not leaving a gully where a soft slab avalanche had run. On the day after the accident, it took just 20 minutes for the dog to indicate the body under three to four feet of snow.

Dogs aren't infallible. Along with the successes, *The Snowy Torrents* documents cases where dogs found nothing at all, or found buried articles belonging to avalanche victims but not the victims themselves. Some of the failures are attributed to contamination of the search site by several hundred other searchers before the dogs arrive, or extremely deep burials.

In one case, a dog alerted at the correct location, but because the area had already been probed without success, shovelers didn't follow up on the alert.

Avalanched snow and the behavior of scent hold many mysteries. There may be other factors influencing the dogs' ability to find people under snow. Some handlers theorize there may be a period, between the time of death and the beginning of the decay process, when an ice mask around the body hinders the vertical diffusion of scent. An ice crust on

the surface can also lock the rise of scent unless handlers probe at intervals to break the crust.

Nevertheless, avalanche dogs remain one of the fastest means of locating people buried under snow. But, as these cases show, the odds are still against a live rescue. Alpine Meadows was very much the exception, and WOOF handlers who worked that mission have termed it more a disaster than an avalanche search.

Roberta Huber, the handler whose dog found Anna Conrad, speaks of the large number of people and equipment in the area, with diesel fumes from the rescue vehicles, as well as debris from the ski lift terminal. "Two hundred employees had clothing and gear in the locker room where Anna was." This contributed to a difficult search.

But more significantly, the lift-terminal debris and the extra clothing enabled Anna Conrad to survive for five days until rescuers could extricate her; the employees' lockers collapsed above her, creating an air space, and clothing from the lockers helped her keep warm.

Alpine Meadows was an exception. In the typical avalanche — where a victim's chance of survival is cut in half after the first half-hour of burial — the avalanche dog should be on scene at the time of the slide, or available within minutes afterwards, if he's to save a life. This means at the top of the hill at a ski area, or accompanying travelers in the backcountry.

At this time, there just aren't enough trained avalanche dogs to make this possible, and many of the dogs aren't in the right places. Educated guesses put the number of trained avalanche dogs in the U.S. at between 45 and 55. Many are dogs living with volunteer handlers who reside some distance from avalanche country.

Dick Epley, a founder of Rocky Mountain Rescue Dogs and assistant director of the National Ski Patrol's Intermountain Division, reports that most ski areas in Utah have avalanche dogs. But in other avalanche-prone states it's often a different story. Colorado, for instance, has only a handful of dogs trained for avalanche work.

In the East, avalanches are less common, and so, understandably, are avalanche dogs. A few handlers include some under-snow work in their training, if only to broaden their dogs' range of experience. (One handler discovered that an introduction to avalanche work heightened her dog's water searching.)

In a pinch, an untrained dog may be better than nothing. An example is the Golden Retriever who located his master's skiing companion. *The Snowy Torrents* gives good advice, "In avalanche

rescue situations, all available help, be it untrained dogs or untrained rescuers, can be used provided they help, not hinder, the search."

In the meantime, volunteer SAR dog units located within responding distance of avalanches, as well as a number of ski areas, continue to train their dogs.

As with most facets of dog training, there are different philosophies in avalanche work. Dogs owned by some ski areas are trained only for avalanche search. But many handlers feel that a dog cross-trained for wilderness and disaster as well as avalanche work — and kept in year-round training — is more reliable and better able to adapt to unusual situations, like an early season avalanche that runs before the winter-only avalanche dog goes back into training, or like the disaster-type Alpine Meadows slide.

Reilly Richey, a SEADOGS handler in southeastern Alaska, points to a Juneau subdivision built in an avalanche path. "If a dog and handler are going to respond to something like that, they have to have some disaster background."

Juneau is built on a narrow strip between steep mountains and water, with nowhere safe to grow. As construction expands into avalanche paths, Juneau faces being called the country's worst risk for a major avalanche disaster. The small SEADOGS unit trains hard to cope with that disaster, if and when it strikes.

Avalanche dog training is not a casual sport. While some handlers occasionally set their dogs to searching for buried articles like gloves or packs, most training is done with live people as "victims." It's time-consuming and requires a lot of manpower, and the risks are never to be ignored. Handlers follow strict safety precautions. Most of them have played "victim" for other handlers' dogs, and that experience instills a permanent respect for the power of snow.

The number of people caught under snow will probably continue to grow as more and more winter recreationists and travelers put themselves in the way of avalanches. One way to cut down the fatalities may be to have more trained dogs in the right place at the right time. □

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