

Kids transferring skills to working with Avalanche Beacons.

Numbers of backcountry travelers in side country terrain off of resorts have grown in the past ten years along with avalanche deaths in the backcountry. In the U.S. from 1997-2007, 13.8% (33) of the avalanche fatalities (238) were individuals under the age of 20 and 1% (3) of the avalanche fatalities individuals between the ages of 11-15 (CAIC). Access has become easier for skiers to venture out of controlled areas into avalanche terrain through permanently open gates. Many resorts require basic avalanche equipment (beacon, shovel, probe, brain) to access restricted areas within resort boundaries. As I'm thinking about all these statistics and new options in terrain I am being passed hiking the ridge at Bridger Bowl by a kid who couldn't be older than 14 years. All these things add up in my head to one thought; kids learn some basics about avalanche safety and how to use their beacons along with their adult ski partners.

Why not incorporate this education into some of your advanced children's lessons. More and more people are wearing beacons within ski area boundaries. Educating children about avalanches and practicing beacon searches not only improves their awareness of skiing safely in avalanche terrain, but also introduces a new component of the ski culture your advanced students will be excited to discover.

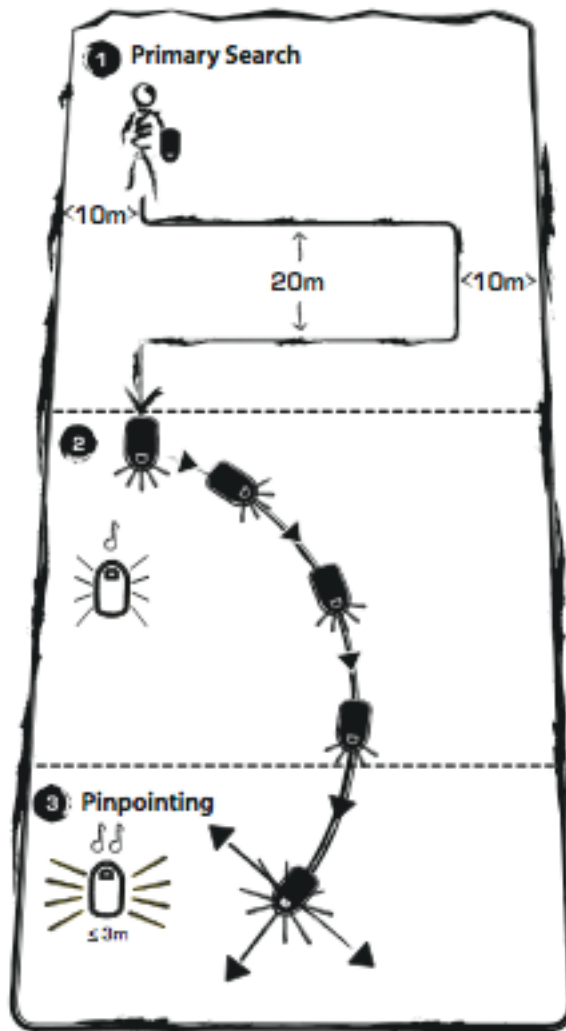
Over the past holiday season, I had the opportunity to work with some kids who had recently been outfitted by their parents with avalanche beacons. This extra precaution was considered a "no brainer" as the parents had heard multiple stories in the news about in-bounds avalanches at many resorts (3 inbounds avalanche fatalities to date (1/2009)). So we (12 year old girl and 14 year old boy) ventured out to learn about this box that was uncomfortably strapped to their chests. (Before attempting to teach anyone about avalanche beacons you should feel extremely competent in your own skills first.)

Children today have many experiences to draw from when it comes to using electronics. Instruction was very simple honestly, hand them the beacon, teach them to turn it to receive and they have a video game equivalent of hide and go seek. A simple explanation on how digital beacons use an electromagnetic signal to hone in on a hidden beacon/victim along a flux line is done by laying the beacon on the ground and drawing the flux lines in the snow so they can see how they come out of the beacon. With this established you could explain that there is a computer in the digital beacon that can read

the intensity of these flux lines and bring you to the beacon/victim. Demo how to hold the beacon in your hand and how to search by turning your whole body not the beacon. You will need to show them how to put the beacon on their torso, turn the beacon on, and how to switch it to receive. Do a full demo of the primary, secondary and pinpoint searches of a beacon that is just laid on top of the snow, as an example. With this concept in mind I showed the kids how to do a primary search (where you find the original signal) and then the secondary search (where you find the beacon/ victim and start probing), but our goal was to really just have fun and find the beacon hidden in the snow. Then have them take the beacon in hand and find the hidden beacon (laid on top of the snow) without peaking. You gradually increase the difficulty next by burying a transmitting beacon (in a small stuff sack, never bury beacons naked). Explaining the methodology as tactics that will help them be faster at this new game of hide and seek. With the basics out and a few coached runs it is time to race the clock. All of these initial activities are done just in boots, no skis. You can take these activities further and do head to head searches. I was working with competent skiers so we were able to take this game further to a hide and seek game on tree runs. I would hide in a tree well and my student would first acquire a signal in the primary search and then hone in to me on the secondary search. We took this “hide and seek” game all over the mountain, where we took turns hiding and locating.

The success rates were high with the primary and secondary searches and the kids were excited to use and understand their new piece of equipment. The kids struggled initially with the pinpoint search component (<2m). They were able to meet the goal of doing basic beacon searches and took away a deeper understanding of one of the tools used by skiers.

To do this activity with children you should first go and get some avalanche education by taking a class. This information will be the basis from which you can draw from to teach children or adults. Once you have some background, go practice, practice, and practice. Now you will be able to teach some of the basics about beacon use. I recommend using only digital beacons for teaching children, as they will take some of the internal visualization needed with analog beacons out of the picture. It should be understood that beacon work is only one component to traveling in avalanche terrain; why not start kids avalanche education early with some fun games of hide and go seek.



References:

Backcountry Access

<http://www.backcountryaccess.com/english/education/teaching.php>

Colorado Avalanche Information Center

http://avalanche.state.co.us/pub/accidents_us.php

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