what's new

Brooks-Range Snow Tools Exhibit Attention to Detail

Review by Craig Dostie

In any field, what separates the amateurs from the pros is the knowledge gained from experience. Part of the mark of each is the tools of the trade. In the avalanche forecasting business, that means carrying more than a shovel and probe, and it also means, where possible, carrying the best available tool.

For instance, any shovel is better than none, but all shovels are not created equal. Genswein's report on shovels last year in *The Avalanche Review (see TAR 27-3 & 27-4)* embarrassed most manufacturers, but neglected my favorite. Living in a house that sheds Sierra cement onto the walkways means I'm constantly forced to chop ice in the winter. The Brooks-Range Sharktooth™ Pro Long Neck Shovel is the only avalanche shovel I've ever used that has survived a complete season of this sort of abuse, including chopping ice off a metal grate (repeatedly). The teeth on the leading edge are a bit worn, but the blade is as solid as ever, and the extra-long telescoping handle not only saves your back, but lets you pile more force into every chop and throw each scoop further.

Their snow science tools exhibit the same attention to the details that matter. The Digital Snow Pro Study Kit comes with a digital thermometer, magnifying glass, brush, 100cm folding ruler, field book, crystal card, and pouch to keep it all organized. The display of the digital thermometer swivels for easy reading when stuck in a pit wall, and it can display readings in C° or F°. More importantly, it has an auto shut off so you don't waste precious battery power when you forget to turn it off. The magnifying glass is 5x with a scale in inches and millimeters on the perimeter of the target box and it folds up relatively flat.

The crystal card does more than provide 1mm, 2mm, and 3mm grids for estimating crystal sizes, it also is a great cheat sheet for snowpit tests and nomenclature for recording profiles. The card includes a slope meter, although the accuracy is dependent on a cord that may not hang perfectly straight. Replacing that with a straightened out paper clip should cure that flaw.

As you expand the 1m folding ruler you will notice that each section locks in either a straight or orthogonal position. Thus, besides providing a scale for documenting layers in the snowpack, you could also use the ruler for estimating slope angles with a bit of trigonometric understanding. The field book allows you to write in the rain or cold, with a 6-column grid pre-printed on each page. The only thing you need to supply is a pencil.

Even non-scientist types can appreciate the Pocket Snow Density Gauge™ for the ability to qualify their boasting back in the bar after a day of harvesting face shots. It's an aluminum tube that you hang from a simple mass balance scale calibrated to the weight of the tube. Using the serrated leading edge, drill the tube into the stratum of snow you want to measure, taking care to only touch it on the plastic thumb handle on the end, pull it out, hook it to the scale, and note the density. For storage, the scale hides inside the tube, and a pouch keeps it all together. The entire set-up fits either in your pocket or your shovel shaft.

In the snow saw department several models are available, depending on whether you're using it primarily for utilitarian reasons or analysis. All the saws are marked with centimeter and inch scales, plus 1mm, 2mm, and 3mm grids for crystal identification. Single length or extendable folding saws are available, in left- or right-handed versions that can be strapped to shovel handles or ski poles for extending their reach.

The utility saws, called Igloo Saws, are made of aluminum for light weight with offset blade teeth that leave a wide quarter-inch slot in the snow. Think of these as a ripping blade for fast cutting – perfect for cutting igloo blocks or a cornice.

The Scientist Saws are made of tempered stainless steel with offset thin kerf teeth for a finer cut, like a carpenter's finish saw. These come in three extendable, folding lengths, 35cm, 70cm, and 100cm. The only thing not to like about the Scientist Saws is their weight, but that's part of the price you pay for being a pro, right?

Craig Dostie is the former publisher and founder of Couloir *and* Telemark Skier *magazines. He crafts words as a freelance writer and marketing consultant in Truckee, CA.*

New Brooks-Range Products

Pocket Snow Density Gauge™ 100

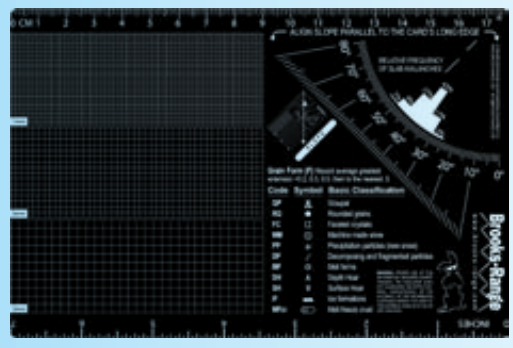
Brooks-Range has designed a compact backcountry snow density gauge similar to that currently used by the National Weather Service. The Brooks-Range snow density gauge is the optimum tool for field measuring of snow density. A specially constructed aluminum tube with a serrated cutter fitted to one end of the tube is scaled to accurately measure water density in the snowpack. The gauge operates on mass balance and its construction makes the gauge compact, lightweight, corrosion resistant, and unaffected by altitude. It is the perfect compromise between laboratory precision and rugged simplicity in a small, convenient, and easy to use design. Snow scientists, avalanche forecast observers, and backcountry skiers can use the snow density gauge to assess the rate of snow metamorphism, new snow quality, snow pit data, precipitation rates, slab information, and snow pack moisture content. Accuracy within 0.1% water; scale reads from 0% to 60% water (0-600kg/m3) in 1% increments. Weight: 3.5oz; MSRP: $49

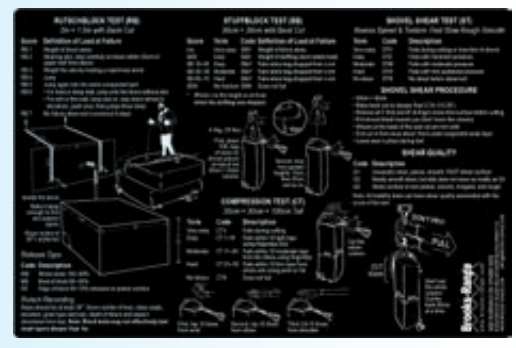
Scientist 100 Rutschblock Folding Snow Saw™

In conjunction with American Institute for Avalanche Research and Education (AIARE), Brooks-Range has developed the Scientist Rutschblock Folding Snow Saw. When extended, the saw is 44" (112cm) long with the handle. The blade measures 100cm *(also available in 35cm and 70cm blade lengths)*. It weighs only 17oz and when folded onto itself is only 15" (38cm) long. Lightweight and packable, the saw features an offset thin kerf that makes for a perfect "finishing saw" for snow study work. The handles of the saw can be connected to the Brooks-Range Backcountry Shovel shaft or to telescoping ski poles to increase the reach. 10% of the proceeds from this saw are donated to AIARE. MSRP: $159

Igloo Snow Saws™

The Igloo Snow Saw is available as a fixed saw or a folding saw. Both are made of high-quality anodized aluminum and are ideal for building shelters and cutting cornices in the snow. They are lightweight and packable, featuring aggressive "ripping saw" teeth that make quick work of any job. The Igloo Saws feature offset blade teeth that cut a 1/4" (6mm) wide slot in the snow, which prevents the blade from binding and freezing while sawing. The Igloo Folding Saw is 22.75" (58cm) long and weighs only 8.4oz (238g). The Igloo Fixed Saw is 19.25" (49cm) long and weighs only 4oz (113g). The handles for both saws can be connected to the Brooks-Range Backcountry Shovel shaft or to telescoping ski poles to increase the reach. MSRP: $24 for the Igloo Fixed Saw; $49 for the Igloo Folding Saw.

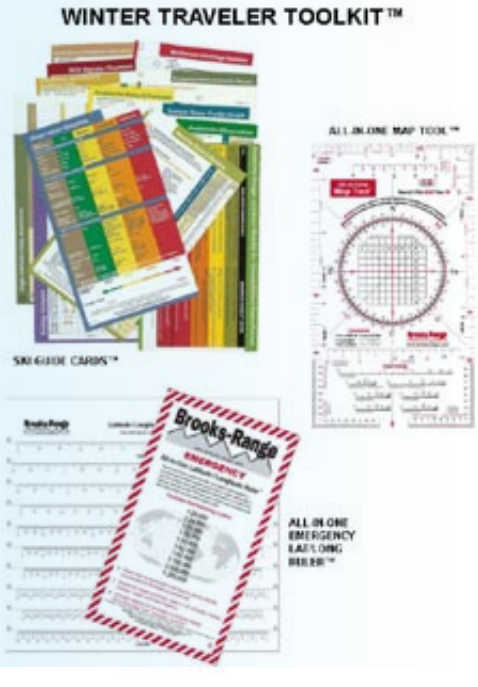




Snow Crystal Card

This snow safety tool helps adventurers make informed decisions about the snowpack. The card is printed with information on snow crystal types; is sized to easily fit in a field book, pocket or snow study kit; and is made from textured aluminum that preserves the shape of the snow crystal during analysis. The card also doubles as an inclinometer by using the attached string and weight. The Snow Crystal Card has a laser-etched 1mm, 2mm, and 3mm grid; inclinometer increments of 1°,; crystal and snowpit "prompt legends;" and a standard/metric ruler. MSRP: $11.95

Winter Traveler Toolkit™



Perfect for snowy environments, this kit includes: Ski Guide Cards (13 water-resistant avalanche/safety cards), the All-in-One Map Tool (a 4" x 7" non-glare, flexible map tool with 10 scales, Universal Transverse Mercator and slope indexes), and the All-in-One Emergency Latitude/Longitude Ruler (a 4" x 7" paper tool for providing lat/long position to air rescue teams in an emergency). MSRP: $53