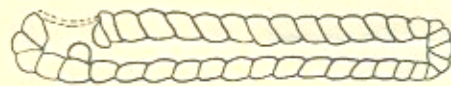


Trader's Tips

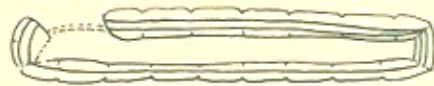
An Insider's Look at Sleeping Bags

The past decade has seen many developments in sleeping bag technology. New fabrics, insulators and construction techniques provide the sleeping bag buyer with more choices than ever before. However, with a little basic knowledge it shouldn't be difficult to choose a bag suitable to your needs. First, one should understand how a sleeping bag works. A bag does not create heat, it only insures that the barest minimum of your own body heat escapes into the environment. It does this by trapping heat energy in the fibers of its insulation. Also, the construction of a bag must keep the insulation evenly distributed and prevent it from shifting and creating thin spots. Finally, the fabric used to construct the bag must have the qualities of being strong, light-weight and comfortable.

There are basically two types of sleeping bag insulation: down and synthetics, each with its own advantages and disadvantages. Down is the layer of "feathers" which lies closest to the body of a duck or goose. It is composed of finely branched strands which interlock to form thousands of tiny air pockets. This structure gives down many advantages as an insulator. Firstly, a little bit of down takes up a lot of space, creating a lot of insulation for a little weight. Down is also highly compressible and can withstand many stuffings without losing its shape. The fact that down is composed of thousands of small individual "pods" also allows it to drape over the body well, filling in air gaps.



DOWN BAFFLING



POLARGUARD QUILTING

However, the structure of down also gives it certain disadvantages. The down pods must be stabilized inside the bag so that they remain evenly distributed over the body. This requires a complex system of baffles which is difficult and expensive to produce. High quality down itself is also quite expensive. The main disadvantage of down, however, is how it responds to water. When down gets wet, it clumps into large balls which are exceedingly hard to dry. Thus a damp down bag will rapidly



PHOTO: FRED LIFTON

lose loft and become heavy. This tendency makes down rather difficult to wash because the matted down forms heavy clumps which are hard to dry and can even damage the baffles if handled carelessly. However, if you can keep your bag dry, the combination of easy compressibility, long-life and a high warmth-to-weight ratio make down the most effective insulator available.

A large number of different synthetic insulators are available today. Quallofil and Polarguard are the two most commonly found in good quality sleeping bags. Polarguard comes in long sheets ("bats") which are trimmed and usually offset quilted into a bag. The continuous fibers of Polarguard make it relatively simple to stabilize but also give the bag a stiff, boardy feel that does not drape as well as down. Quallofil bypasses this problem somewhat by using a finer fiber which is cut into pieces and connected to a backing material which can then be sewn into baffles much like a down bag. The result is a bag which feels softer and drapes better, but is somewhat heavier and more difficult to construct. Some critics also claim that Quallofil is not as durable as Polarguard. In any event, both synthetic fibers are stronger than down and can be treated more roughly. Also, the syn-

thetics absorb very little water and they therefore lose less of their insulating value when damp. Their strength and lack of absorbency also make them easier to wash and dry than down bags.

On the minus side, synthetic bags are bulky and harder to stuff than down. Synthetic insulators are generally less efficient than down so that more insulation is needed to make an equally warm synthetic bag. Lastly, synthetic bags are less durable than down; their fibers lose their "memory" (the ability to spring back after compression) more rapidly than down. This means that over time a synthetic bag will lose loft more rapidly than a properly cared for down bag.

Choosing a bag, then, is mainly a matter of determining your needs. If you are on a budget and do primarily three-season camping, then a synthetic bag will probably serve. If, on the other hand, you plan to head out in the winter, or take extended trips where reducing weight and bulk is critical then a down bag is a better choice. Of course these limitations

are not absolute, some synthetic bags can be used under relatively extreme conditions, while some down bags are suitable for summer camping. Basically, it's just a matter of weighing the pros and cons of each material and deciding which advantages best suit the kind of camping you do most often.

SKIING

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of ski trails on 6300 ft. Roan Mt. For cabin reservations, (615)772-3314; ski rentals and information (615) 772-4178. (Approx. 4 hrs. drive).

MOUNTAIN LAKE RESORT (Va.) / Backcountry Ski & Sports Shop. 20km of maintained trails, 15km of which are groomed. Lodging and X-C package specials (800)346-3334 or (703) 626-7121 (Approx. 5 hrs. drive)

WHITE GLASS SKI TOURING CENTER (W.Va.) 50km maintained (20km groomed) in Canaan Valley State Park plus back-country skiing in Dolly Sods Wilderness. Lodging info and rental rates (304) 866-4114. (Approx. 5-6 hr. drive)