

## Ice Ax and Crampons

An ice ax and crampons are as important for safe glacier travel as they are for travel on any firm, sloped surface of snow or ice. The ice ax aids with balance and provides a means for self-belay and self-arrest. If a rope mate drops into a crevasse, other climbers on the rope use their ice axes to go into self-arrest, controlling and stopping the fall. The ax needs a uniform taper from the spike to the shaft, because a blunt spike or jutting ferrule (metal cap or ring on the shaft) makes it hard to feel the snow when you are probing for crevasses.

Crampons give you secure footing and enable efficient travel on refrozen snow, which is typically very hard in the early morning. A word of warning about using crampons for descending steep glacial terrain: A number of accidents and falls have resulted from crampon points getting caught on climbers' clothing, gaiters, or gear hanging low from gear loops. It is important to develop good habits of foot placement, and avoid having slings hang below your thigh (see the "Crampon Safety Rules" sidebar in Chapter 16, Snow Travel and Climbing).

## Ascenders

### Prusik Slings

For personal safety, one of the most important pieces of gear a glacier traveler can carry is a set of prusik slings for ascending the rope after a crevasse fall. The slings are two loops of 5- to 7-millimeter perlon accessory cord attached to the climbing rope with friction knots. When you put your weight on a prusik sling, the knot grips the rope firmly; when you remove your weight, the knot can be loosened and moved up or down the rope.

Figure 17-3 gives details on how to make the Texas prusik slings, using 6-millimeter accessory cord. As with all prusik systems, sizing the slings correctly for your height is critical (see Table 17-1, below). Figure 17-4 shows a way to approximately gauge the correct sizing. When you are standing in the sling (as shown in Figure 17-20c in "The Texas Prusik" later in this chapter), the top of the foot sling should be at about waist level and the top of the seat-harness sling should be at about eye level. The distance between the two knots is the distance that you will move up for each movement

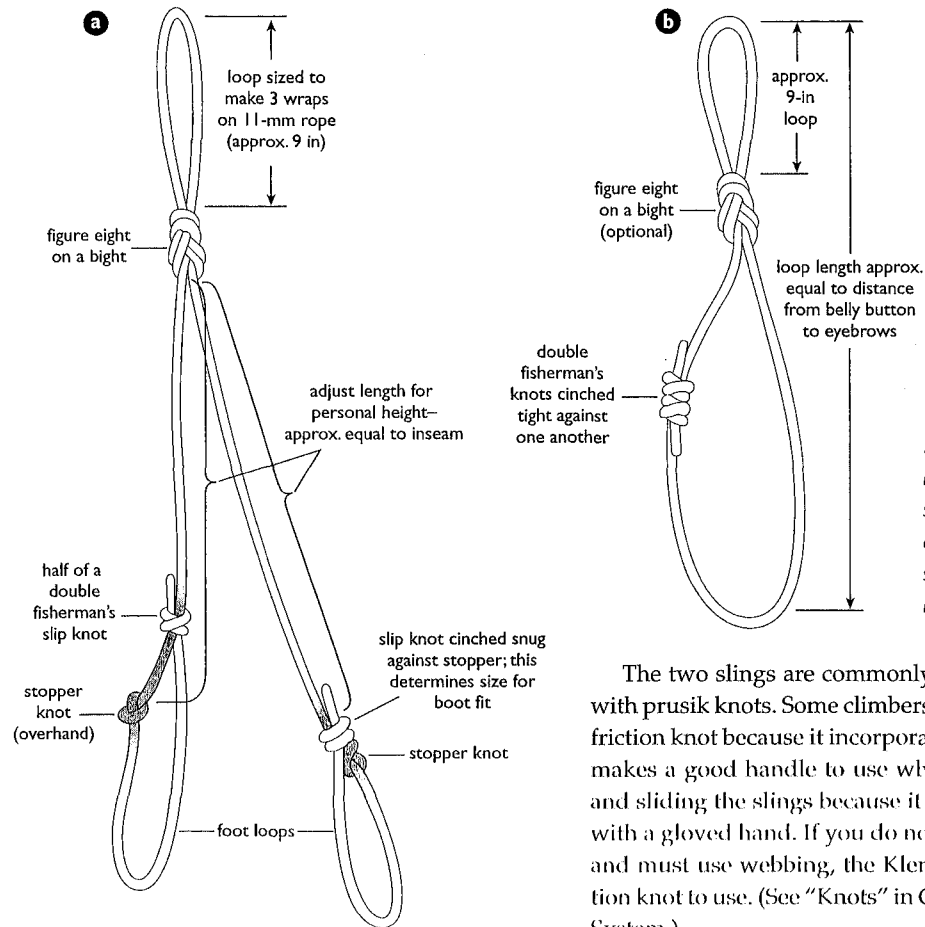


Fig. 17-3.  
How to make Texas prusik slings using 6-millimeter accessory cord: a, the foot sling, with two foot loops; b, the seat-harness sling.

The two slings are commonly attached to the rope with prusik knots. Some climbers prefer the Bachmann friction knot because it incorporates a carabiner, which makes a good handle to use while you are loosening and sliding the slings because it can be gripped easily with a gloved hand. If you do not have accessory cord and must use webbing, the Klemheist is the best friction knot to use. (See "Knots" in Chapter 9, Basic Safety System.)

cycle you make using the Texas prusik.

Before you take your slings out onto a glacier, check their sizing at home. Dangle yourself in the slings from a rope thrown over a garage rafter or a tree limb to find out what adjustments you need to make in the sling lengths.

### Etriers (Aiders)

Some climbers attach etriers (also called aiders) rather than conventional slings. The steps in these ladderlike slings can help you climb up and over a crevasse lip if the rope is entrenched in the snow. (See "Etriers" in Chapter 15, Aid Climbing.)

TABLE 17-1. SIZING PRUSIK SLINGS

Climber's Height	Foot Prusik Length	Harness Prusik Length
5 feet (1.5 meters)	11 feet (3.4 meters)	5 feet (1.5 meters)
5 feet 6 inches (1.7 meters)	11 feet 6 inches (3.5 meters)	5 feet 6 inches (1.7 meters)
6 feet (1.8 meters)	12 feet (3.6 meters)	6 feet (1.8 meters)
6 feet 6 inches (2 meters)	13 feet (3.9 meters)	6 feet 6 inches (2 meters)