

FIELD TRIP #1 PREP – FUNDAMENTALS

Knots, Prusiking, Belays, Leader Tie-off and Belay Escape

| FIELD TRIP #1 PREP– FUNDAMENTALS PREPARATION | |
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| Time: | Dates: February 13 th or 14 th Starting Time: Arrive at 6:15 pm and be ready to go by 6:30 pm Duration: Approximately 3 1/2 hours NOTE: <i>Due to the amount of material that is covered and the time required to create your prusiks, this field trip may last as late as 11 PM.</i> |
| Location: | <i>Tacoma Mountaineer Clubhouse 2302 North 30th St, Tacoma</i> |
| Purpose: | <ul style="list-style-type: none"> ▪ Have seat harness checked and approved ▪ Practice knots ▪ Construct leader tie-off, chest harness, and slings ▪ Construct and size your Texas Prusiks ▪ Practice prusiking ▪ Observe belaying and leader tie-off with belay escape demo |
| Prerequisites: | <ul style="list-style-type: none"> ▪ Attend lecture #1. ▪ Read Lecture 1 reading assignments |
| Assignments: | <ul style="list-style-type: none"> ▪ Read <i>Freedom of the Hills</i>: <ul style="list-style-type: none"> Basic Safety Systems..... Ch 9 BelayingCh 10 Glacier TravelCh 18, pgs 394-399, pgs 408-410 ▪ Read Basic Rock & Glacier Climbing Manual Field Trip 1 Prep material ▪ Practice tying the required knots ▪ Watch this video on the basics of belaying (PBUS device method) : http://blog.alpineinstitute.com/2013/10/toprope-climbing-belay-technique.html |

EQUIPMENT

See Required Equipment FT1P on the Equipment Matrix

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| Special Notes & Items | Bring webbing and perlon materials as described in Required Equipment (Lec.1) Additional Equipment Notes <ol style="list-style-type: none"> 1. Wear Mountaineering boots or sturdy leather hiking boots (NO Tennis shoes!!) 2. Wear appropriate clothing – dresses/skirts and shorts are not appropriate |
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PROCEDURE

When you arrive you will be assigned to an instructor. Have your store cut webbing and perlon available to start constructing your Texas prusiks and slings. Throughout the evening, you will rotate through the different stations, and must complete all the stations before the end of the evening. At the end of the night, we will go through leader tie-off with belay escape one more time, allowing you to ask questions. NOTE: If you already have your Texas prusiks constructed, let the field trip leader know when you walk in.

BELAYING AND LEADER TIE-OFF WITH BELAY ESCAPE DEMO STATION

This station will be used as an introduction to rock climbing. Instructors will demonstrate flaking out and tying into a rope for lead climbing, attaching to an anchor, climbing signals, belay technique, and how to tie-off a climber and escape the belay in case of emergency. Pay attention. You will be practicing this at Field Trip 1 and tested on it at Field Trip 2.

PRUSIKING – TEXAS PRUSIK STATION

Here you will use your newly constructed Texas prusiks to simulate ascending a rope to get out of a crevasse. We will show you how you would tie in to the rope (for a glacier climb), and set up the prusiks, and then walk you through ascension. We will also resize your prusiks as needed.

TYING SLINGS AND TEXAS PRUSIK STATION

Make sure you brought all your store cut webbing and perlon! We will start constructing your Texas prusiks and tying your slings, while letting you practice knots.

Tie-Off Sling/Loop: Take the two 4 foot sections of perlon and tie a loop using the double fisherman's/grapevine knot. These loops/slings have many uses, however, for the purpose of the basic class and as a basic student, you will be using them as friction hitches.

Single and Double Slings: Tie one double and two single slings, using a water knot. The finished single slings should be 2 feet long and the finished double sling should be 4 feet long. Single and double slings are typically used on climbs to build anchors or to extend a piece of protection.

Short Sling: Using the 4-ft piece of 1-inch tubular webbing, tie it into a loop using the water knot. The finished loop should be about 14 inches long. This sling will be utilized in snow belays.

Chest Harness: Using the 9-ft piece of one-inch tubular nylon webbing, tie the ends together using a water knot. but do not cut the webbing until you are absolutely sure it is the right length. Depending on your size, you may need as little as 6 ft. or as much as 9 ft. The length should allow for adjustments in clothing, such as for a cold night wearing layers on a crevasse or in a t-shirt on a warm sunny day.

Pack Sling: You will use perlon or 1-inch webbing for the pack sling. Take 8 feet of perlon, tying it into a loop using a double fisherman's knot, or, one inch tubular webbing, tying it into a loop with a water knot. Use a girth hitch to attach it to your pack.

Tying The Texas Prusik: The Texas Prusik consists of two prusik slings, the foot sling and the harness (or seat) sling. Both prusiks can be made from a 25 foot length of perlon, which will be long enough for anyone under seven feet tall. Use the instructions on page 395 of *The Freedom of the Hills* 9th edition as a guide.

Tips:

- Make sure you measure the leg loops against each other. You want them to be identical lengths.
- Leave excess tail on your Texas Prusiks in case you need to later adjust the length.

KNOTS STATION

Knot-tying is an inherent part of climbing, and your safety depends on knowing how to tie knots correctly. At this station you will practice correctly dressing and tying knots, as well as memorizing their uses.

- Single Bowline (Bowline) (practice this around a post or a table leg)
- Water knot
- Figure 8 loop (Figure 8 on a bight)
- Rewoven Figure 8 (Watered Figure-8 or Prussian Bend)
- Double Fisherman's knot (Double Fisherman's bend; Grapevine knot)
- Prusik knot
- Girth hitch
- Alpine Butterfly
- Bowline on a Coil
- Bachmann Knot
- Münter Hitch
- Clove Hitch.
- Mule Knot
- Flat Overhand Bend

Dressing Knots

This term refers to the practice of ensuring that the rope or webbing used to tie a knot is correctly positioned so the knot material lies cleanly and in correct position in relation to the other strands in the knot. For some knots it is extremely important for the knot to be not only properly tied but correctly dressed. Examples are the prusik knot and the water knot. Final strength of all knots depends on how well they are dressed.