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Knots and Basic Self Rescue Skills Workshop

Wednesday, July 30, 2008

10 am -12 noon

Wilderness Medicine Conference

25th Anniversary & Annual Meeting of the Wilderness Medical Society

July 25-30th, 2008

Snowmass, Colorado

Obtain the adequate training before you get into situations where you absolutely have to take care of yourself!!! There are many classes out there that provide this level of training and much more to effectively carry out your own self rescue of yourself or a teammate.

Ropes/Knots you should know: (these will be taught during the workshop)

- Figure 8
 - On a bite
 - Follow through (tie in knot for climbing)
- Fisherman's knot (connect 2 ropes for rappel, etc.)
- Simple Hitch
- 2 wrap prusik
 - prusik cord is generally 2/3 the size of the rope it is being applied to
- 3 wrap prusik
- High tension tie off (no loss of rope strength due to knot)
- Munter (rappelling/belay knot – be careful)
- Clove hitch
- Bowline (good adjustable tie off - *** make sure you place back up knot on the tail)
- Triple Bowline (seat and chest harness)

Webbing

- Water knot (roll to untie knot)
 - Wrap 3 pull 2 (anchor without losing strength of webbing through the knot)
- Harness tie

Anchors (brief discussion)

Mechanical Advantage Systems

- 3:1, 9:1

Slope angles – be carefully not to overload system

Rope Strengths/Knot Strengths (knots decrease rope strength by 1/3)

Static System Safety Factor (need 10:1)

Demonstration of:

- Ascenders
- Prucell prusiks
- Whistle test (safety if operator was to be taken out of system)

- 540 belay device (if available)
- Prussic minding pulley (PMP)

References:

1. Rigging for rescue, and other intensive hands on courses.
 - www.riggingforrescue.com
2. Other climbing books:
 - Mountaineering – The Freedom of the Hills. 7th Edition. The Mountaineers
ISBN 0-89886-828-9
 - The Climbers Handbook. Garth Hattingh. Stackpole books. 1st Edition.
ISBN 0-8117-2706-8
 - Fundamentals of Search and Rescue. National Association of Search and Rescue. Jones and Bartlet Publishers.
ISBN 0-7637-4807-2
3. Other experts

Provided:

Sections of old climbing rope – for classroom teaching only – do not use for climbing/rescue.

3 ft rope section

1-2 ft of webbing

1-2 ft of cord