

I. INTRODUCTORY SUBJECTS

1. Equipment - clothing, lights, cave pack
2. Cave Geology - types of caves, formations
3. Cave Conservation - formations, out arrows, carbide dumps
4. Cave Owner Relations - gates, carbide and cattle, permission, conduct
5. Safety - equipment (light, food and water, hypothermia, protection from sharp rock, protection from falling and falling rocks), technique (jumping, belaying, loose rock, number of cavers, leaving word above-ground), flooding, air, individual vertical equipment

II. INTRODUCTORY VERTICAL SUBJECTS

1. Equipment - rope types and care (review), chain coiling, rope damage from carbide lamp flames and wheat lamp acid, equipment cleaning and retiring
2. Knots - review of uses, stress on safety rules (backup overhands, 2nd check) and their importance in caving situations
3. Anchors - trees, bolts, formations, rigging to multiple anchors (use of bowline-on-a-coil, and sling and carabiner between two anchors for self-equalizing anchors)
4. Belaying - belaying a rappel from the bottom, use of Munter hitch, tying off fallen climber
5. Rappelling - safety rules as under knots, how to stop, tie off, change to ascend, and change back to rappel
6. Ascending - "double redundancy" of attachments to rope, importance of seat harness, style and conservation of energy, Texas Y rig with prusik knots, Jumar and Gibbs ascenders, 3-cam rig with 1" webbing and Gibbs, breakovers
7. Escape Techniques - prusik with end of rope, ascending with just end of rope, french prusik, hitch series, Munter hitch for rappel, diaper seat, 1-leg loop seat

III. INTRODUCTORY VERTICAL PRACTICE SESSION

1. Tie Texas Y rig, and ascend. Show good style. Go over breakover.
2. Rappel; stop and tie off, change over and ascend to top with Texas Y rig.
3. Belay with Munter hitch.
4. Practice arm and body rappels.
5. Tie and use 3-cam rig using Gibbs ascenders and 1" tubular webbing.
6. Ascend with 3-cam rig. Show good style.

IV. INTRODUCTORY CAVE TRIP (HORIZONTAL)

(Must have completed I, and ideally II & II first)

1. Use of carbide lamps.
2. Moving caver through cave efficiently.
3. Changing carbide.
4. Remembering way through cave.
5. Reading cave maps.
6. (optional) - Short vertical pitches requiring belaying, ascending, rappelling.

V. INTRODUCTORY RESCUE AND EMERGENCY MANAGEMENT

1. Hypothermia, Exhaustion, Fatigue - carbide lamp as heat source, storm shelter or space blanket, dangers of CO<sub>2</sub>, conduction, food and water
2. Self-rescue vs. Outside Help - CRCN, local resources, self-rescue
3. Crawl Emergencies
4. On-Rope Emergencies - lowering rope, solo rescue (basic)
5. General Rescue - use of drag sheet or reeves stretcher
6. Pit rescue - suspension systems, hauling systems, use of supplemental hauling line to bring litter over edge, use of tag lines

VI. INTRODUCTORY CAVE TRIP (VERTICAL)

(Must have completed I-IV, and ideally V, first)

1. Rigging rope for rappel
2. Rappelling and use of bottom belay.
3. Rigging 3-cam or other rig.
4. Ascending tandem if appropriate.

Caving Gear (Basic)

1. Carbide Lamp
2. Helmet with non-stretch chin strap and lamp bracket
3. Coveralls or other suitable outerwear
4. Wool or other suitable innerwear
5. Leather gloves
6. Old boots or caving boots and wool socks
7. Cave Pack:
  1. Carbide in waterproof container
  2. Water (at least 250 cc)
  3. Carbide dump bottle or bags
  4. Light source #2: reliable, cave-proof flashlight
  5. Spare batteries and bulbs for above
  6. Light source #3: spare carbide lamp or flashlight (you can rationalize a candle and waterproof matches into a third light source if you have a good imagination)
  7. Repair kit
  8. Hypothermia supplies: storm shelter/space blanket, spare food, wool hat, etc.
  9. Small first aid kit with paper and pencil, TP
10. Minimum vertical rig: diaper seat, oval biner, prusiks
  - Vertical rig (full) if appropriate
  - Lunch if appropriate
  - Additional food, water, carbide for long trips