

# Basic Rock Climbing Class

Southwest Outdoor Club

Tempe, Arizona

## BASIC TECHNIQUES OF CLIMBING

### I. BALANCE

- A Foundation of Climbing
- B Least demands on arms and hands
- C Posture:
  - 1) Upright posture places weight on the skeleton supported by legs.
  - 2) Legs are stronger than arms.
  - 3) Position hips and shoulders.
  - 4) Upright position more secure:
    - a) Compresses loose rock, keeps it in place
    - b) Maximum friction
  - 5) Leaning into rock:
    - a) Restricts vision
    - b) Hampers movement
    - c) Body weight pushes feet outward, reduces friction, breaks off holds

### II. THREE POINT SUPPORT

- A Body Weight always carried by feet
- B Role of hands + insurance against failure of footholds
- C Climber supported by three hold, moves one limb at a time. Remaining 2 hands and a foot or 2 feet and a hand form a stable tripod.
- D If one hold fails there are still two points of support, normally enough to allow recovery of balance

### III. SMOOTH MOTION

- A. Relax - erect climber is physically relaxed.
- B. Three point support allows mental relaxation.
- C. Move smoothly and continuously from hold to hold.
- D. Gradual transfer of weight - less stress on holds, better friction,
- E. Single move is a three part cycle:
  - 1) Rest position - keep three point contact
  - 2) Shifting of weight from one foot to the other
  - 3) Lifting movement to a new rest position
- F. Initial rest stance:
  - 1) Body poised over supporting foot
  - 2) Weight committed to supporting foot, other foot free to maneuver
  - 3) Supporting leg straight, heel down
  - 4) Leading leg lifts body
- G. Weight shift
  - 1) May shift first then lift entirely with leading leg. Maximum demand on leg strength.
  - 2) Alternately can make a little spring with back leg. More neutral move. Requires less leg strength
- H. Stand all the way up on lifting leg, so it is straight, at the same time back leg moves forward to next foothold.

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## IV Footholds

- A Ideal foothold is a level platform "buckets". Don't be afraid to use.
- B Always look down for holds
- C Small holds are best for:
  - 1) Side of boot or portion of the big toe. This is the key to balance. Side of the boot is preferred to the toe.
- D Toehold puts greater strain on leg muscles = sewing machine leg. Less rigidity with toe support, foot may slip.
- E Better to make intermediate steps on smaller holds, smooth motion and conserves energy.
- F Long strides are tiring, break rhythm, cause loss of footing.
- G Generally each upward step should be no higher than the knee.
- H Smoothness of applying force and attention to vertical position determine how small a hold a climber can trust. Many are of the three second variety, balance can be maintained only briefly. When doing this move continuously until a platform safe spot can be reached,
- I Smearing = using ball of foot on the slope.  
Edging = well defined ledges. Ridged edge of boot catches on small ledges.

## V Handholds

- A. Weight is never suspended from hands, which rest securely but lightly on holds, ready to check a slip of the feet, The hands are chiefly important in keeping the climber in an upright position.
- B Ideal hold:
  - 1) Doorknobs or chickenheads, cling holds.
  - 2) Smaller holds accommodate one or two fingers, maybe enough for balance, not good to hold most of body weight
- C Location of holds:
  - 1) Optimum location for a handhold is between the waist and head, on average chest level.
  - 2) Holds at knee level make you bend at waist losing vertical stance
  - 3) Reaching high, tires arms, similar to doing pull ups.

## VI Testing Holds

- A. Test as fully as circumstances allow
  - 1) General appraisal of rock
  - 2) Inspection of hold in question:
    - a) Foundations
    - b) Attachment to mountain
    - c) Size is of no significance
  - 3) Physical test by weight
    - a) Ascent - most holds are encountered first by the hands, downward pull, harder tug, rough pushes and pulls in all directions
    - b) Descent - feet do all the work, shoving stamping and kicking.
    - c) Pound rock with hand - solid or hollow sound

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## **VII. CLIMBING WITH EYES**

A. Smoothness of motion demands careful preplanning of the route by climbing with the eyes. Before climbing carefully scan the pitch you're going to climb, look for a sequence of holds. If no sequence of holds are seen look for alternatives. Once on the pitch keep looking around. Some holds are not as feasible as they looked from a distance. You may also find new holds that were not visible from the ground. Climbing ahead with the eyes allows you to flow gracefully, not only constantly revising the route, but planning in advance exactly how to use each hold.