

**BOOTS: YOUR SOLE SUPPORT**  
**Presented by Skip Forsht for the WBC**

**I. Function**

- A) Prevent excessive pronation
- B) Insulate you from the cold
- C) Keep you from slipping
- D) Cushion your knees and joints from shock
- E) Cradle your feet without creating hot spots
- F) Protect your feet from punctures, bruises and stubbed toes
- G) Keep you feet dry from internal and external moisture.

**II. Categories/Uses**

- A) Approach: For trails; No carried weight; Sneaker like
- B) Light Hiker: For trails; Day pack or overnight weight
  - 1) Leather and nylon upper (or split/suede leather), multiple seams
  - 2) Below ankle or ankle high
  - 3) No shank or ½ shank; shallow lugs
  - 4) Flexible, easy break-in, lightweight
- C) Trekking/Backpacking: On & off trail; Overnight to extended trip weight
  - 1) All leather (full grain, split or nubuck) with few seams
  - 2) Above ankle high, may accept crampons
  - 3) ½ or ¾ or full shank; deeper lugs
  - 4) Heavier, stiffer, some breaking-in, stronger, waterproof
- D) Mountaineering: Off trail; Extended trips on snow/ice/wet/rough terrain
  - 1) One piece full grain leather or plastic
  - 2) Above ankle high, accepts crampons
  - 3) Full length shank
  - 4) Insulated, stiff, heavy, bombproof

**III. Components**

- A) Outsole: Gives secure grip
  - 1) High carbon content for durability
  - 2) Lugs: Shallow or deep
- B) Shank: Controls torsional rigidity and protects from stone bruises
  - 1) Steel, nylon, fiberglass, polyurethane, texon
  - 2) Arch only (1/2 length), 3/4 length, full length
- C) Midsole: Cushions, stabilizes and supports
  - 1) Ethyl vinyl acetate (EVA): light, cushiony, economical
  - 2) Polyurethane (plastic): more durable and firm
  - 3) Rubber: Most durable and stable
- D) Insole: Molds to stabilize and cushion
  - 1) Styrofoam, EVA, plastic
  - 2) Removable for drying
- E) Upper: Protects, insulates
  - 1) Nylon, suede, split leather, full grain leather
    - a) Nylon: Lightest, coolest, least expensive, most breathable, dries quickest, least break-in time, least support and protection
    - b) Leather: Study, protective, supportive, longer lasting, waterproof, warmer, stiffer, more expensive, longer break-in time, heavier
    - c) Plastic: Most protective, expensive and supportive

- 2) Lining
  - a) Gore-Tex, Sympatex: Water repellent, expensive
  - b) Cambrelle, nylon, three bar knits: Inexpensive, wicks moisture, light
  - c) Glove leather: Molds to foot, expensive, durable

F) Features

- 1) Scree collar/cuff: Keeps dirt, rocks from coming into boot from top
- 2) Gussetted tongue: Keeps moisture/dirt out of front of boot
- 3) Toe rand/bumper: Protects leather from abrasion
- 4) Lacing systems: Allows differential tautness in laces
- 5) Heel counter: Cups and holds heel in place

G) Construction

- 1) Stitched: Norwegian, Goodyear, Littleway
- 2) Cement/glue: Most common, lightweight, inexpensive, facilitates resoling

IV. **Fitting/Purchasing**

- A) Make an arch outline
- B) Shop at the end of the day with lots of time to spare
- C) Bring socks, insoles and orthotics
- D) Bring well worn pair of shoes (sneakers) to show wear pattern
- E) Be measured (Brannock Device); Weighted and unweighted, both feet
- F) Ignore box sizes. Start ½ size below your measured size, work up to best fit
- G) Unlaced – slide foot forward one finger width at heel
- H) Laced – Thumb's width from toe to end of toe box
  - 1) ¼" heel lift, toes can wiggle and don't touch toe box, feet and ankles can flex
  - 2) Skier roll (side to side): No slippage
  - 3) Use incline (or kick a post or wall)
  - 4) Use rock board (or lead weights)
  - 5) Fit:
    - Rear-foot: Snug yet comfortable
    - Mid-foot: Snug yet accommodating
    - Fore-foot: Spacious and roomy
  - 6) Grab toe and heel: Twist (torsional rigidity) - Flex
- I) Ask about
  - 1) Conditioning/waterproofing
  - 2) Resoling
  - 3) Return policy
  - 4) Break-in recommendation

V. **Break-in**

- A) Quick method: Soak boots and wear for a day until dry
- B) Best method - At end of day - Wear at home
  - Wear on street
  - Wear on local trails
  - Wear on trails with weight
- C) Condition immediately after break-in
  - 1) Seal stitching and seams
  - 2) Waterproof: Hold boot upside down (No petroleum or solvent products)

VI. **Use**

- A) Brush dirt off after each use
- B) Dry with newspaper inside and outside (never heat)
- C) Remove insoles
- D) Condition/waterproof regularly