



MOUNTAIN TRAVEL



Climb the mountains and get their good tidings.

John Muir



GET READY...

- ▶ Pick an appropriate outing
- ▶ Research routes, permits, weather and conditions
- ▶ Dress and gear up for the occasion
- ▶ Have a plan (and a turnaround time)
- ▶ Let someone know where you're going



TRAILHEAD



- ▶ Clean vehicles (remove scented items and valuables)
- ▶ Double-check shared gear
- ▶ Use a tracker, if you have one



GROUP TRAVEL

- ▶ Safety and shared responsibilities
- ▶ Group responsibilities:
 - ▶ Don't wander off
 - ▶ Watch for the folks behind you
 - ▶ Don't bring more than you can carry *or* less than you need
 - ▶ Pull aside for momentary stops and leave your pack
 - ▶ Be a “good” participant



BREATHING

- ▶ Don't pant
 - ▶ Coordinate breathing with steps
- ▶ High altitude (snow travel & snow camp)
 - ▶ Alpine breathing *aka* “Whittaker wheeze”
 - ▶ Take a deep breath, then force out through lips



REST STEP

- ▶ Skeletal resting: lock the back leg and put weight on it. Relax the rest of your body.
- ▶ Exhale. Inhale on next step.





TREKKING POLES

- ▶ Elbow height
 - ▶ Longer downhill, shorter uphill
- ▶ Change length or grip shaft
 - ▶ Keep hands below heart
- ▶ Using straps





TREKKING POLES

- ▶ Keep poles in front of you on descent
- ▶ Use to lower weight on steps
- ▶ Put hands on top of handles for extra height
- ▶ Extend for descents & stream crossings



BREAKS

- ▶ Use breaks efficiently
 - ▶ Eat – drink – fix boot laces – maintenance
 - ▶ Navigate & look around
 - ▶ Rest: sit, lean, squat, lie down
 - ▶ Restroom breaks
- ▶ Avoid long breaks: ~5 minutes per hour
- ▶ Look back for left gear (LNT)



HOW HARD? RATINGS

Usually free

- ▶ Class 1 = on-trail travel
- ▶ Class 2 = off-trail travel
- ▶ Class 3 = rock scrambling

Usually roped

- ▶ Class 4 = exposed climbing
- ▶ Class 5 = difficult & exposed



SIERRA CLUB ANGELES CHAPTER RATINGS

O Class 1, on trail

I Class 2, off trail

M Class 3, moderate snow/rock

E Class 4+, steep snow/exposure



CLASS 1: ON TRAIL



▶ Trail

- ▶ Follow the trail
- ▶ Don't cut switchbacks
- ▶ Give right of way to pack animals & uphill hikers
- ▶ Notice trail junctions



CLASS 2: OFF TRAIL

- ▶ Brush and chaparral
- ▶ Stream crossings
- ▶ Desert
- ▶ Scree
- ▶ Talus
- ▶ Boulder-hopping



MEADOWS



- ▶ Preserve it by going around
- ▶ Avoid wet areas
- ▶ Walk on dirt or rocks, not plants
- ▶ Spread out when there's no trail



BRUSH & CHAPARRAL



- ▶ Slow going
- ▶ Be careful of branches snapping back
 - ▶ Sunglasses
- ▶ Watch for hidden holes or cliffs



STREAM CROSSINGS





STREAM CROSSINGS

- ▶ Potentially very dangerous
- ▶ Scout the safest location
- ▶ Stream height factors:
 - ▶ Snow melt *varies by hours*
 - ▶ Rain *varies by days*
 - ▶ Season *varies by months*
- ▶ Don't go if there's no safe way



DRY CROSSINGS: ROCKS



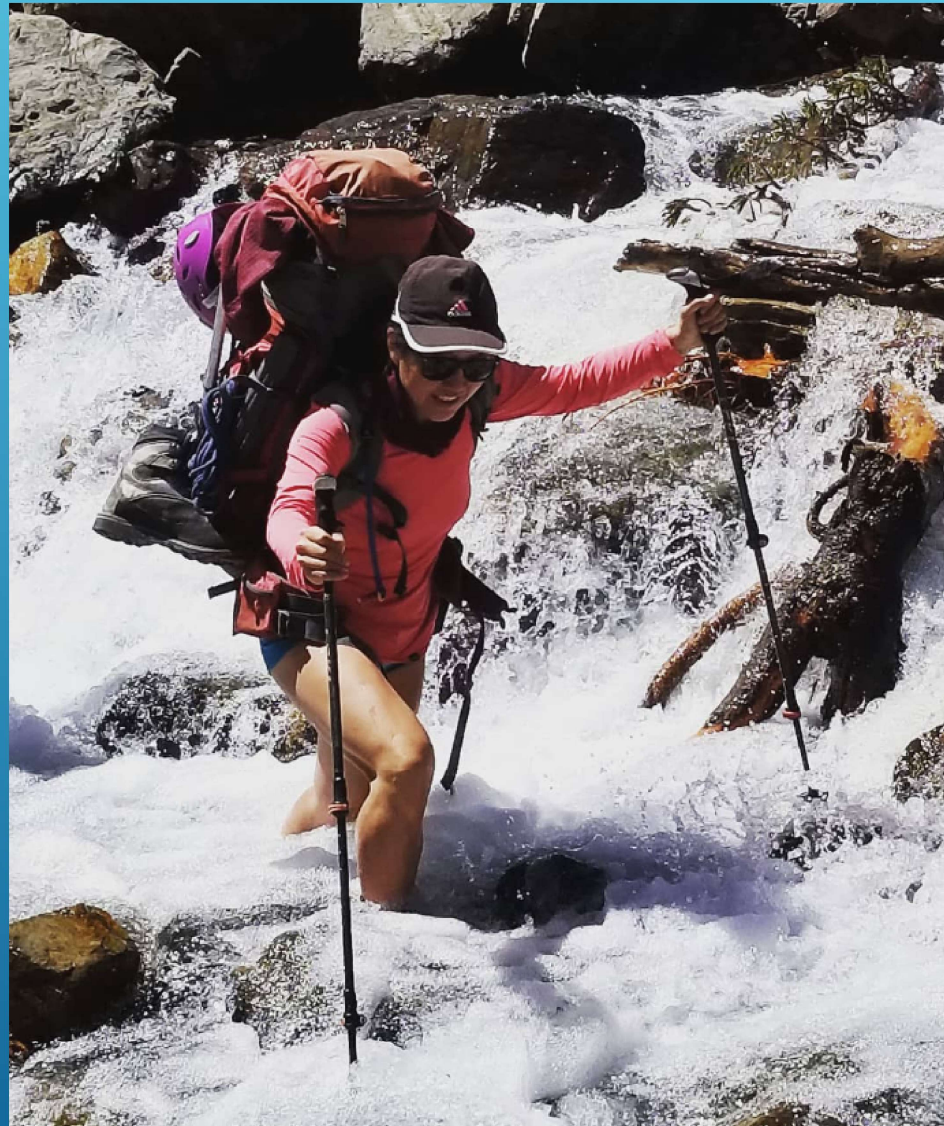


DRY STREAM CROSSINGS

- ▶ Dry crossing always desirable
- ▶ Boulder hopping and log balancing
 - ▶ Don't talk; concentrate
 - ▶ Watch for slippery rocks or logs
 - ▶ Crawl for safety
- ▶ Unclip your pack straps
- ▶ Extend hiking poles
- ▶ A wet crossing (sloshing through) may be safer, but takes more time



WET STREAM CROSSINGS





WET STREAM CROSSINGS



- ▶ Wide, calm, & slow
- ▶ Cross on straightaway
 - ▶ Straight sections have symmetrical profile
 - ▶ Outside curves are much deeper than inside
- ▶ Banks



DESERT



DESERT TRAVEL

- ▶ Special hazards:
 - ▶ Heat & dryness
 - ▶ Sharp plants
 - ▶ Toxic animals
 - ▶ Flash floods
 - ▶ Mine shafts
- ▶ Delicate biome
 - ▶ Don't bust the crust
 - ▶ Walk in washes





CLASS 2: OFF TRAIL (ROCKY TERRAIN)

- ▶ Tighten packs
- ▶ Pay attention
- ▶ Plan your moves ahead
- ▶ Take the step
- ▶ Minimize big moves
- ▶ Boulders of any size can shift



HELMETS



Hats protect from sun
Helmets & gloves protect from rock
Remove rings



ROCK FALL

Rock! Rock! Rock! Rock!

- ▶ Any falling object is a “rock”
- ▶ React right away
- ▶ Avoid looking up



ROCKS UNDERFOOT

- ▶ *Scree*

- ▶ Gravel between sand and softballs

- ▶ *Talus*

- ▶ Rocks larger than a grapefruit

- ▶ *Boulders*

- ▶ Bigger than a chair



SCREE



- ▶ Climb it smoothly, find the firmest areas
- ▶ Going down – scree skiing

Nose over toes, plunge step, scree skiing, watch for cliffs/rock bands

- ▶ Hiking poles & gaiters



TALUS

- ▶ Can be unstable
- ▶ Fresh slides are less consolidated
- ▶ Watch for delicately balanced rocks
- ▶ Hiking poles





BOULDER HOPPING



- ▶ Boulders range in size from chair to house
- ▶ Plan moves ahead
- ▶ Stay level:
 - ▶ Move smoothly and continuously
 - ▶ Don't go up and down
- ▶ Hiking poles may get in the way



CLASS 3: EASY CLIMBING

- ▶ Stow hiking poles
- ▶ Look ahead, climb with your eyes
- ▶ Legs for lifting; arms for balance
- ▶ Keep weight over feet
- ▶ Three points of contact
- ▶ Down-climbing is 2x to 5x as hard



ADVENTURE

Type I Fun – Wow! We are having fun! Yay!

Type II Fun – Well, in retrospect that was fun...

Type III Fun – What was I thinking, that was not fun.





EXPOSURE

- ▶ Air beneath you
- ▶ Heights
 - ▶ Dangerous and thrilling
- ▶ Fear can be managed
 - ▶ Balconies, stairs, and low walls



PLANS: KEEP OR ABANDON?

- ▶ Keep saying “yes” until it’s time to say “no”
- ▶ Try to stick to a good plan or its alternatives
- ▶ Use intermediate goals
- ▶ Be flexible: react to changing conditions
- ▶ Turn-back time

“Reaching the summit is optional, getting back safely is mandatory”

The peak will always be there next time.



SUMMIT

- ▶ *Victory! – You are halfway!!!!*
- ▶ Enjoy the view, but don't dawdle
- ▶ Summit register: Date, name & town
- ▶ Get the “hero shot”





DESCENT

“Most accidents occur on descent ”

- ▶ Tighten boot laces, lengthen poles
- ▶ Down-climbing = route finding can be tricky
- ▶ Rock fall = 2X the chance
- ▶ Damp rocks up = icy rocks down due to cold
- ▶ Stay alert. Take breaks. Don't get lost





DOWN-CLIMBING





BIVOUACS

- ▶ **Plan B:** no choice but to stop and wait for daylight
- ▶ Not an emergency. Find a safe place and stop there.
- ▶ Break out the 10 Essentials, sit pad & pack, and all other resources
- ▶ *Don't expect to sleep; just survive*
- ▶ For warmth: huddle and dance
- ▶ **Fire should be used only with care**
Don't burn down a forest to stay warm
- ▶ Contact whoever misses you ASAP to cancel rescue



RETURN

Get home safely, dry your equipment, tell your stories, and *prepare for the next adventure!*





MOUNTAIN TRAVEL REVIEW

- ▶ Make a plan
 - ▶ Do research
- ▶ Be efficient
 - ▶ Avoid big moves. Minimize weight.
 - ▶ Rest and refresh every time you can
- ▶ Look ahead. Look around. Look back.
- ▶ Push on boldly yet carefully
 - ▶ Persevere but be alert
 - ▶ Turn back when necessary
- ▶ Enjoy the wilderness



QUESTIONS?