

# Trip Planning Guide

Ask yourself the following questions and write down your answers. If any issues seem at all uncertain or dangerous, get more info or find a way to change your route or the timing to provide a safer solution. You may have to go through the list numerous times if issues discovered later in the process influence previously-made decisions. Include all group members in this discussion. Not all items will apply to all excursions.

## Preliminary

- Which is appropriate for the trip; tailoring the group to the mission (work) or the mission to the group (fun)?
- Who is going? Whom to include should be well thought-out. Try to avoid last minute additions or drops.
- Is everyone prepared with adequate skills, experience, fitness, and attitude? Be realistic, not polite!
- Does everyone agree on the primary objective for the outing? (Relaxation, summiting, photography, etc.)
- How important is that objective to everyone? (The answer here should be, "Not worth risking lives.")
- Can you identify any natural or cultural points of interest on the route to make the trip more interesting?
- Does everyone agree on standards of conduct? (Leave No Trace, camp chores, leader's authority, etc.)
- What is each person's level of EMS training? At least one WFR or EMT would be good.
- Identify and share significant medical info. Consider leaving sealed medical records with your trip plan.
- Check local regulations on camping, fires, etc. Do you need permits or reservations? Apply early!
- Consult maps, satellite / aerial photos, books, magazines, trail brochures, the Internet, hiking clubs, Ranger Stations, people with first-hand / local knowledge to obtain as much information as possible.
- If forced to use out-of-date maps, you'll have to make your own revisions to reflect the current reality.
- Schedule a pre-trip meeting and gear dump to go over final details and see that everyone is prepared.
- Schedule a post-trip meeting to clean gear, debrief the trip / mission and make notes for next time.

## Gear

- Determine what individual equipment each person will need and who will provide items of group gear.
- Do people know how to use each other's unique items of gear in case of emergency?
- Can you divide group equipment without compromising functional sets in case you get separated?
- Does everyone have MY ESSENTIALS covered?
- Does everyone have clothing appropriate to the season & location and is it broken-in? Check for cotton.
- Get descriptions (color at a minimum) of everyone's outer clothing, packs, and tents.
- Consider making aluminum foil imprints of everyone's boot treads to attach (in shoe box) to the trip plan.
- Identify where each person will carry his or her Aid Kit and medications (especially Epi). Try to standardize this.
- Can you standardize equipment and battery sizes in case you need to repair gear or swap batteries?
- Do you have all necessary mission-specific gear? (LE, SAR, advanced EMS, evidence, fishing, cameras, etc.)
- Can you leave extra food, water, clothing, and car keys in your vehicle in case you return in dire need?
- Synchronize your camera's date & clock with the GPS clock. Do this at the last minute.
- Ensure camera's flash is off (if covert) and macro is turned off.

## Food & Lodging

- Establish sleeping arrangements. How many tents will that require?
- How much fuel will you need for cooking meals, melting snow, and boiling water?
- How much food will you need? Plan your actual meals and repackage food for easy carry & preparation.
- Consider learning a few *easily identifiable* edible plants that are common near your destination.
- Will you need box lunches or money for food stops while driving to or from the trailhead?
- Do you need to make hotel reservations for stops while driving to or from the trailhead?

## Environment

- Are there recurring weather patterns such as afternoon lightning, daily showers, fog, etc. near your route?
- What is the weather forecast for the duration of your trip? Include type and amount of precipitation, high and low temperatures, wind speed & direction, and pressure systems. Monitor for any last-minute updates.
- What is the weather forecast for the week prior to your departure?
- What is the weather forecast for the week after your scheduled return?
- How might the predicted winds be affected by your route (e.g., traveling through passes or over ridges)?
- How might the predicted temps be affected by the predicted / adjusted winds? See Appendix 9.
- How might the predicted temps be affected by your planned altitude? Approximately a 4°F drop per 1000' gain.
- When will the Sun rise and set? Many GPS units can predict this for a programmed location and date.
- When will the Moon rise and set? Many GPS units can predict this for a programmed location and date.
- What phase will the Moon be in (full / new)? Many GPS units can predict this for a programmed location and date.
- Are there plant, animal, or insect hazards (or annoyances) with which everyone needs to be familiar?
- Will you need to bear-bag, use BRFC, or otherwise safeguard your food?
- Will you need insect repellent, head nets, anti-histamines, Epinephrine, etc.?
- Are there human hazards such as open hunting season, anti-government groups, etc. in the area?

## Travel

- Will you need passports or other travel documents?
- How are you getting to the trailhead? If commercial transport, check gear restrictions and book early!
- Are your vehicles adequate for the journey, properly prepared, and well maintained?
- Will you be returning to your vehicles or do you need to arrange for a shuttle at the end of the trip?
- Do you need to make arrangements with air assets or other entities (e.g., guides) for on-scene support?
- Are there turn-around times or other “no-go” criteria you need to establish?
- Check the current declination for your destination at <http://www.ngdc.noaa.gov/geomag-web/#declination>.
- For each leg of the inbound and outbound routes; identify direction (degrees true), distance, pace count, estimated time to travel (at slowest person's speed), terrain evaluation (uphill / downhill, forest / scree, etc.), elevation gain / loss, and waypoint identification features.
- How far will you travel each day? Figure *about* 2 - 3 mph + 1 hr / 1000' gained or 1 hr / 2000' lost.
- Identify catching features and mark them on the maps. Will you recognize them when on the ground?
- Identify baselines and mark them on the maps. Can you identify them in the dark or during a blizzard?
- Identify safety bearings, mark them on the maps, and *have everyone memorize*.
- Where will you switch from one safety bearing / baseline / catching feature to the next?
- Identify potential bailout routes and mark them on your maps.
- Identify campsites and mark them on the maps.
- Will you be able to reach each campsite in time to set up camp before dark?
- Identify water sources along your route and mark them on the maps. Are they consistently reliable?
- How much water do you need to carry?
- Do you need to cache food, water, or other supplies (e.g., batteries) along your route?
- If traveling along the seashore, what are the predicted tidal levels and times? Any Spring or Neap tides?
- Are there any places where the tides will dictate your schedule?
- Are there any physical hazards along your planned route such as rivers, cliffs, glaciers, swamps, etc.?
- Can you plan the route to go around these hazards or otherwise mitigate their danger or misery?
- If your route will cross glacially fed rivers, can you time the crossing for early in the day?
- If your route involves rivers, are there gauging stations or flow meters you can access online to find levels & trends?
- If your route will cross steep terrain or glaciers, do you have the training and equipment to safely go?
- Evaluate the slope angle and aspect of hills you'll be hiking across or below. Is there avalanche potential?
- Are avalanche hazard predictions available for your destination? Check ahead and again pre-departure.
- Identify safe, sheltered locations for rest breaks (or emergency bivy sites) and mark them on the maps.

- Identify rally points and mark them on the maps. Where will you switch from one point to the next?
- Identify benchmarks or easily identifiable places for altimeter calibration and mark them on the maps.
- What is the highest elevation you will be crossing?
- If needed, will everyone have time to acclimatize before starting or en route?
- Do you need to carry acetazolamide, dexamethasone, O<sub>2</sub> or other high altitude precautions?
- Identify the approximate elevation of tree line along your route. Does it change significantly with aspect?
- Identify the approximate elevation of snow line along your route. Does it change significantly with aspect?

### **Communications & Assistance**

- Establish SOP for responding to potential problems (fall through ice, avalanche, injury, lost person, etc.).
- Will you have adequate radio or cell phone coverage in order to contact dispatch or call for help?
- Do you need to consider taking a personal locator beacon and / or satellite phone?
- If you are multi-agency or an otherwise mixed group, are your radios and other electronics compatible?
- Have you established communications plans with each other and Dispatch?
- Identify locally available sources of LE backup / EMS / SAR and their anticipated response times.
- Identify phone numbers and driving directions from the trailheads to the nearest hospital / trauma center.
- Leave a copy of your Trip Plan with a responsible party (family, neighbor, Ranger Station, or Dispatch).

### **Law Enforcement**

- Do you have enough people, with the right training, to safely conduct the operation?
- Do you have a written operations plan and any supporting documents (warrants, photos, etc.)?
- Does everyone understand team positions and the chain of command?
- Have you rehearsed team movement formations and hand signals?
- Have you established Immediate Action Drills for potential scenarios (chance contact, hasty ambush, etc.)?
- Have you rehearsed the actual mission tasks (building entry, arrest procedure, etc.)?
- Have you provided clothing, gear, and food for prisoners (or patients) during the journey back to the vehicles?
- Do you have up to date intelligence on the target / vicinity?

### **Before You Hit the Trail**

- Has weather prior to departure been as predicted? If not, reevaluate the plan based on actual conditions.
- Does *each member* of the team have a map with the routes, waypoints, rally points, etc. marked on it?
- Has everyone formed a mental picture of the overall operations area and *memorized* the safety bearings?
- Has everyone set his or her watch to correct local time (as determined by GPS)?
- Has everyone set the correct magnetic declination on his or her compass?
- Has everyone set the correct map datum and format on his or her GPS and programmed important waypoints?
- Has everyone cleared the track log on their GPS and turned it on with the appropriate interval (if desired)?
- Has everyone calibrated his or her altimeter to a known, correct value at or near the trailhead?
- Has everyone tuned his or her radio to the correct frequency?
- Has everyone tested their avalanche transceiver and then set it to transmit?
- Make sure all trail gear has been removed from vehicles and securely stowed in packs or on stock, ATVs, etc.
- Does anyone have questions or concerns?
- Notify dispatch that you're starting your trip or sign in at the trail register / climbing register.

### **Upon Return to Trailhead**

- Turn off GPS, radios, avalanche transceiver, etc.
- Sign out at trail / climbing register and notify dispatch or safety contact.
- Load vehicles and police trailhead / parking area for gear and trash. Don't leave stuff on your car roof!
- Make any additional notes on trail conditions, food, gear, or other important information for future reference.