CHAPTER 22
LEADERSHIP

Just as every climbing party needs steadfast navigation tools, every climb needs good leadership—but the style and form of that guidance varies with the venture. It is one thing to head out with some longtime climbing companions for a sunny weekend of peak bagging, but it is entirely another to mount an extended technical climb with mountaineers who do not know one another to a peak none of them has ever seen.

Climbers who know each other well achieve good leadership very informally, probably without even knowing it. Climbers less familiar with one another require a more formal, structured organization. In both cases, leadership provides the same things: a way to put a climb together and make it a safe and enjoyable experience. As Chinese philosopher Lao-tzu wrote, "Fail to honor people, they fail to honor you. But of a good leader, who talks little, when his work is done, his aim fulfilled, they will say, 'We did this ourselves.'"

THE CLIMB LEADER

A climb leader is someone who has special responsibility for organizing the climb and for making decisions en route. Depending on the nature of the party, the degree of formal organization may vary from highly structured to virtually

nonexistent. Nevertheless, certain necessary functions of the group are performed one way or another.

Small, informal parties made up of friends often do not select a leader. Everyone feels responsible for organizing, sharing work, and team building. Communication is good enough that each member knows what the others are doing, so coordination is not much of an issue. The climb organizer or most experienced party member may be tacitly recognized as leader of such a group.

Large groups do better with a designated leader. Members of the climbing party cannot know what every other person is doing, so someone needs to be chief organizer if only to make sure no critical details are overlooked. Large groups may also need more focus on team building, because it is likely that the members will not all know one another.

The leadership structure of most climbing parties tends to fit into one of the following categories.

Peers. A group of acquaintances that decide to go climbing together are peers. Usually there is no designated leader, but members informally allocate key functions. Most decisions are made by consensus. Even in this least formal type of organization, one member will usually emerge as "first among equals" and be regarded as leader. It will be the person who displays initiative, good judgment, and concern for the group and who generally inspires the most confidence.

Climb organizer. The person who organizes the climb is the one who has the original idea for the venture and then recruits others. The organizer is usually recognized as the de facto leader, even if the position is never formalized.

Most experienced. A group tends to bestow leadership upon, and to defer to the judgment of, a climber who is clearly the most experienced in the party.

Climbing clubs and schools. Leadership is formally conferred by the sponsoring group when a climb is part of an organized program. Often, leaders must go through an accreditation process to ensure a certain level of experience and competence. There may even be a hierarchy among the leadership, with an overall leader and assistant instructors to help. There is no doubt who is the leader, and it is not up to the party to select one. The leader is expected to organize the climb and to take charge of equipment, transportation, and other logistical matters. Such climbs are often teaching

situations; students are expected to follow the leader's guidance, but they are also supposed to be learning and gaining self-sufficiency.

Guided climbs. Climbers pay guide services to provide competent leadership. Professional guides are often outstanding climbers and are completely in charge of their groups. Guides make the decisions for their clients and assume responsibility for their safety.

ROLES OF THE LEADER

The leader's role is to help the party achieve the team's objectives in a safe, enjoyable manner, with minimum impact on the alpine environment. A leader must be experienced, with technical skills appropriate for the climb, but is not necessarily the most experienced in the group or the best climber. A leader should be in good enough shape to keep up, but need not be the strongest in the party. A leader does need an abundance of good judgment, common sense, and a sincere interest in the welfare of the entire party. Along the way, a leader simultaneously adopts many roles, such as the following:

Guardian of safety. The paramount concern of any party is safety. Starting in the planning stage, a leader should ensure that everyone has appropriate equipment, experience, and stamina and that the route chosen is reasonable for the party and in safe condition. En route, when climbers become tired, impatient, or excited, they get careless. A leader learns to see these conditions as warnings and becomes more alert, watching, gently reminding, and even nagging when necessary. When tough decisions have to be made, such as turning back due to weather changes or time constraints, it is often up to the leader to initiate the unpleasant discussion before the situation becomes critical. (See Chapter 23, Safety.)

Anticipator. Leaders avoid trouble by anticipating it. Leaders should always be thinking ahead. In camp, they think of the climb; on the ascent, of the descent; on the descent, of the trip out. They look for early signs of fatigue in companions; mentally catalog bivouac sites and water sources; keep track of the time and progress; and note any changes in weather. By staying a step ahead they avoid problems or catch burgeoning ones before they become crises.

Planner. Many details need attention if a group of people is to be at the right place at the right time with the right equipment to mount a successful summit attempt. A leader does not have to do all the planning personally, but

he or she does bear responsibility for seeing that all necessary preparations are being attended to by someone in the group.

Expert. Giving advice when asked or when needed is an important leadership role. Training, experience, and judgment are the prerequisites for this role. A person does not have to be the party's best climber to be an effective leader but certainly needs enough experience to have developed "mountain sense." A range of skills is needed in addition to technical climbing knowledge. Leaders should know a lot about equipment, navigation, first aid, rescue techniques, weather—in fact, all the topics addressed in the various chapters of this book.

Teacher. When less-experienced climbers are along, teaching becomes part of the leadership role. Usually this involves nothing more than occasional advice and demonstrations. However, if some members lack techniques required for safe progress, it may be wise to halt and conduct a little hands-on learning right then and there, a teaching moment. Many seasoned mountaineers find that passing along their hard-won knowledge is a fulfilling experience—but it should be done with a careful touch. Novices may be embarrassed by their relative lack of skill or intimidated by the physical danger. There is no justification for browbeating. Instead of using the approach that says someone else is wrong, try saying, "Let me show you what works for me." The exception is when a student is doing something dangerous; then a more direct approach is needed.

Coach. This is a little different from the role of teacher. The coach helps people get past difficulties by adding encouragement and support to a base of knowledge. Often the real obstacle is lack of self-confidence. Assisting a companion through some difficulty helps that person and also keeps the entire party moving forward. Coaching effectively, helping people do their best and emerge smiling, can be one of the particular delights of leadership.

Initiator. A climb progresses by the party making a series of decisions: Where shall we make camp? Which route should we take? What time should we get up? When should we rope up? Often the decisions themselves are not hard to make, but they need to be made in a timely fashion. The function of leadership is not necessarily to dictate answers but to get the right issues on the table at the appropriate time.

Arbiter. Once a discussion is under way, differences of opinion will arise. It is good to collect opinions and get all viewpoints out into the open, but this can lead to indecision ("Which course do we select?") or argument ("You are

wrong!"). Anyone in a position of leadership, whether or not it was formally conferred, has some leverage that can be used to advantage in these instances. If the party seems to be making a technically incorrect or dangerous decision, if tempers are rising, or if the discussion is aimlessly wandering, the weight of the leader's opinion will often settle matters and get the climb moving again.

Guardian of the environment. Climbers must do their best to leave the alpine environment undisturbed so that future generations may sample the same pleasures. Leaders should set the example by always practicing minimum-impact techniques (see Chapters 3, Camping, Food, and Water and 7, Leave No Trace). If others fail to follow this example, they should be reminded, gently at first, insistently if necessary.

Delegator. A leader's responsibility is to get things done, but not necessarily to do them. Delegating tasks has a host of benefits. It allows the leader to maintain an overview of the entire trip, rather than being tied down by every little problem and decision. It builds team spirit by giving people a chance to get involved and be useful. Also, delegation fosters individual responsibility by clearly demonstrating that doing and deciding are not the tasks of the leader alone. If someone is having difficulty and needs special help, a strong, experienced climber might be delegated the role of personal coach. In a larger group, especially in a teaching situation, the leader should appoint an assistant who can help keep things moving and who can take over if the leader is incapacitated.

STYLES OF LEADERSHIP

Two broad categories characterize the style in which leaders perform their roles. Also see the "Tips for Becoming a Leader" sidebar.

Authoritative style. A goal-oriented leadership style has to do with process and structure—what to do, who will do it, and how they will do it. Goal-oriented leaders concentrate on making decisions and directing others.

Relationship-oriented style. A relationship-oriented leadership style has to do with showing consideration and helping a group of people become a supportive, cooperative team. Relationship-oriented leaders take a personal interest in people and their views, consulting with them on decisions and thereby building group cohesion and morale.

TIPS FOR BECOMING A LEADER

There is no simple formula for becoming a leader, but there are guidelines:

- A leader cannot be self-centered; decisions are made for the good of the party, not the leader.
- A leader's genuine interest in every party member influences the degree to which they care about each other and strengthens the group.
- A leader cannot pretend and cannot show off; the leader should be honest about personal limitations. Leaders should admit it when there is something they do not know—and get the group to help them figure it out.
- A sense of humor helps.

Most people lean toward one style or the other, but it is not an either-or choice. Neither style should be neglected, and effective leaders balance both styles. The proper balance depends on the nature of the party and the needs of the moment.

Each leader must develop a personal style through the process of learning the craft of mountaineering and discovering effective ways of relating to climbing companions to help them become a happy, effective team. Beyond that, leaders should be themselves. Some people are jolly and talkative; some are more reserved. Successful leaders are found among all types of people. It is more important to be genuine than to try copying some idealized style.

LEADING IN A CRISIS

Everyone hopes it will never happen, but sometimes things go wrong. Perhaps conditions turn dangerous or someone is injured. Then the group focus shifts from recreation to safety and survival. The leader's role also changes. If the group has a designated leader, this is the time for that person to switch to an authoritative style. A small, informal group may find that a leader emerges. When a clear need for coordination arises, people tend to look to the most experienced person or the one who, for whatever reason, inspires the most confidence.

When an accident occurs, there may not be time for lengthy debate. Prompt, effective action is needed, and it should be directed by someone with training and experience. Nevertheless, the leader should stay hands-off as much as possible, instead directing others, maintaining an overview, and thinking

ahead to the next steps. The safety of the rescuers comes first—even before that of the victim. Act promptly, but deliberately and calmly. Use procedures that have been learned and practiced; this is no time to experiment.

The outcome of an accident is usually determined by factors beyond the climbers' control. The climb leader will draw upon training and experience to devise an appropriate plan and then carry it out as safely and effectively as conditions permit.

Accidents are unexpected, but climbers can prepare for them by taking courses, reading on the subject, and mentally rehearsing accident scenarios. Take note of the information in Chapters 23, Safety, and 25, Alpine Rescue. First-aid training is a must. Chapter 24, First Aid, describes the prevention and treatment of medical conditions commonly experienced by mountaineers, but it is not a substitute for hands-on training. Public and private agencies offer wilderness-oriented first-aid courses, and some climbing clubs offer mountain-oriented rescue training.

ORGANIZING AND LEADING A CLIMB

Even a simple climb can be a complex undertaking. Once an objective is chosen, the leader has many tasks to complete before the climb. On the way to the trailhead and at the trailhead, last-minute checks and updates keep the outing organized. During the approach, the climb, the descent, and the way out, the leader helps keep the party organized until the outing is over. The checklist in Table 22-1 is a useful guide to this process.

The Ten Essentials are described in detail in Chapter 2, Clothing and Equipment. This section introduces two additional systems approaches for leaders: Nine Planning and Preparing Steps and Eleven Trip Checks. Using the 9-10-11 systems together helps improve the odds for a successful trip (Table 22-1).

BEFORE THE CLIMB: NINE PLANNING AND PREPARING STEPS

Once an objective is chosen, the leader needs to gather information on the approach and the climbing route itself. The leader must also select the party, decide what equipment is needed and who will bring it, make a schedule that includes enough time to complete the climb with a safety margin for contingencies, and coordinate transportation to the trailhead. And in the days

leading up to the climb, the leader will be monitoring weather trends (and snow conditions, if applicable). The Nine Planning and Preparing Steps help guide a leader through the process (see the sidebar).

NINE PLANNING AND PREPARING STEPS

Before the climb:
1. Leadership
2. Research
3. Planning
4. Safety Margin
5. Equipment
6. Party
7. Weather
8. Communications
9. Evaluation

Leadership

A leader must be capable and qualified. There may be a need for a competent assistant (or two) to whom tasks can be delegated and with whom the leader can consult on key decisions. Each rope team with inexperienced climbers needs a rope leader.

Research

Typically, climbers research the trip so they will know what to expect and can prepare accordingly. Guidebooks are available covering most popular climbing areas with written descriptions of approaches and routes, maps, drawings, and sometimes photos. Topographic maps are invaluable. Check road and trail conditions for the approach as well.

Some climbing clubs keep files of trip reports from their outings; these can be valuable both in themselves and because they often give the names of those who went on the climb. Firsthand experience from someone who has recently done the route can add significantly to data found in guidebooks. For peaks on public land, government agencies such as the National Park Service and US Forest Service can be good sources of information. For a full discussion of

researching a route, see “Gather Route Information” in Chapter 6, Wilderness Travel.

Permit, registration, and recreational fee requirements vary greatly from region to region. Many publicly owned parks, forests, and wilderness areas have some form of governmental regulation. Some may limit where the party can camp, which can affect the logistics of a climb. Typically, regulations are designed to preserve the ecology of an area or to increase the value of the wilderness experience. Some are created for the safety of visitors; others are in place to gather fees to maintain an area’s infrastructure and support recreation.

TABLE 22-1. CHECKLISTS FOR ORGANIZING AND LEADING A CLIMB

BEFORE THE CLIMB: NINE PLANNING AND PREPARING STEPS

1. Leadership
- Choose a leader.

2. Research
- Driving route: check to be sure backcountry roads are open.
- Hiking route: check trail conditions.
- Climbing route: review guidebooks and maps.
- Study trip reports.
- Determine the technical level and any special problems of the route.
- Determine whether wilderness permits or reservations are required.

3. Planning
- Estimate miles and/or hours of driving.
- Estimate miles and/or hours of hiking to high camp or start of climb.
- Estimate hours to summit.
- Estimate hours back to cars.
- Select maps.
- Set compass declination.
- Set GPS datum to match maps.
- Download any waypoints or route information to GPS device, tablet, or phone, as applicable.
- Leave trip itinerary with a responsible person.

4. Safety Margin
- Develop contingency options.

- Have “a little extra” for the unexpected.

5. Equipment

- Determine equipment needs and make arrangements for sharing equipment as needed.
- Personal equipment: Ten Essentials, food, camping equipment, and climbing gear.
- Group equipment: tents, stoves, cookware, ropes, water treatment, and climbing hardware.

6. Party

- Estimate the levels of climbing skill and physical condition required.
- Determine party size.

7. Weather

- Look into current route conditions, the weather forecast, and shifts in the weather window.
- Understand how a change in weather will affect the route and the party’s objectives.
- Look into a poor-weather-alternative trip.
- Consider a NOAA weather radio or other means for updated forecasts.

8. Communications

- Bring a PLB or other emergency communication device.
- Consider walkie-talkie two-way radioes.

9. Evaluation

- Critique the entirety of the planning effort.
- Does the plan add up favorably?
- Are there areas of weakness in the trip plan?
- Can the plan be improved?

UNDER WAY: ELEVEN TRIP CHECKS

1. Trailhead

- Register with park or forest agencies if required.
- Make sure everyone has enough food and equipment.
- Take an inventory of group equipment, including tents, stoves, water treatment, ropes, and hardware.
- Distribute group equipment to equalize loads.
- Share an overview of the plan: route, campsite, day’s schedule, hazards.

2. Navigation

- Orient early to the map rather than waiting until there is a concern. Set altimeters at a place where you are certain of your elevation, often at trailhead but perhaps at a junction.
- Check occasionally to ensure the party is on route.
- Note important route decision points.
- Create GPS waypoints and tracks helpful for returning in the dark or if visibility declines.

3. People

- Monitor party members for problems.
- Make sure that everyone is eating and drinking.
- Avoid letting anyone lag.

4. Time

- Start early—daylight is invaluable when dealing with the unexpected.
- Optimize the location, timing, and duration of breaks.
- Monitor progress to turnaround time.

5. Hazards

- Watch for anticipated hazards.
- Stay alert for unexpected hazards.
- Where hazards cannot be avoided, find a safe alternative, mitigate their outcome, or turn around.

6. Weather and Environment

- Watch for, and adjust to, adverse changes in weather and route hazards.

7. Perspective

- Stay alert to the big picture. Avoid fixating on a particular aspect of the trip to the detriment of others.
- Think ahead; anticipate.
- Try to catch problems early, when options for dealing with them are most numerous.
- Use the traffic-stoplight analogy to summarize concerns: green (OK), yellow (caution), red (danger; changes are mandatory).

8. Decisions

- Make clear-headed decisions.
- Guard against risk assessment and decision-making biases.
- Make decisions that maintain safety margins.
- Never let judgment be overruled by desire when you are choosing the route or deciding whether to turn back.

- Consider several solutions to a problem, and then choose the best alternative.
- Obey the leader or decisions made by majority rule.

9. Safety

- A leader's primary goal for any outing is to have the whole party return home safely.
- Practice well-reputed climbing techniques.
- Never climb beyond the party's ability and knowledge.
- Rope up on exposed places and glaciers. Have at least two rope teams on a glacier.
- Anchor all belays.
- Redundancy increases the safety of belay and rappel anchors as well as other important systems.
- Where hazards cannot be avoided or mitigated: consider an alternative, or turn around.

10. Team

- On the approach and on the climb, set a pace that is steady and maintainable, not necessarily fast.
- Take rest stops for the whole party.
- Keep the party reasonably together. Agree to regroup at specified times or places—especially at trail junctions.
- Keep rope teams close enough to be in communication with each other.
- Assign a responsible person to "trail sweep" and bring up the rear.
- Be sure that no one leaves the trailhead until everyone is back and all cars have been started.
- Consider a group meal on the trip home as an opportunity to review the trip.

11. Leadership

- Practice sound leadership techniques.
- Look for teaching moments: opportunities that impart knowledge, involve the party, and continue climbers' development.

Planning

Develop a trip itinerary and manage time spent en route with a trip plan. Time has to be carefully rationed on a climb, and the important thing is not how fast to go but how wisely to use the time the party has.

Establish a schedule before the climb. Estimate the length of each segment—driving time, approach time, ascent time, descent and/or return time—and allow some extra time for the unexpected. A typical estimate might be what is shown in Table 22-2.

In the estimate shown in Table 22-2, if it gets dark at 9:00 p.m. and the climbers want to be back at the trailhead by then, they must start at 6:30 a.m.

Setting a turnaround time is a good practice. In the example just given, the party estimates four and a half hours from summit to trailhead for the descent, with no margin for the unexpected. With an hour for unexpected delays, they might decide it is reasonable to allow five and a half hours. This means they must start descending by 3:30 p.m. or risk walking out in the dark. If the party is moving slowly, another good practice is to start a candid assessment of progress hours before the turnaround time.

Most guidebooks give times for popular climbs and sometimes for the approaches as well. Keep in mind, though, that times vary greatly from party to party. Also, the times may not include breaks. Experience with a particular guidebook will indicate whether its estimates tend to be faster or slower than your personal times; adjust accordingly. Another good source for time estimates is someone who has done the climb.

If no information is available, use rules of thumb based on experience. For example, many climbers have found that they can average 2 miles (3-plus kilometers) per hour on an easy trail and 1,000 vertical feet (300 vertical meters) per hour on a nontechnical approach with light packs. Be realistic when estimating how long the climb will take.

TABLE 22-2. ESTIMATING TRIP TIME

TRIP SEGMENT	ESTIMATED TIME
Drive to trailhead	2.0 hours
Hike up the trail	2.0 hours
Cross-country approach	1.0 hour
The climb itself	4.0 hours

Descent	2.0 hours
Return to the trail	1.0 hour
Hike out	1.5 hours
Total time estimate	**13.5 hours**
Contingencies	1.0 hour
Total time allowance	**14.5 hours**

Prepare and share with party members the overall trip plan, route, participants, equipment, assignments, meeting times, and other pertinent information to ensure all have the same expectations and understandings.

When developing a trip plan, include the following for each party member: name, emergency contact, and contact information. Leave a copy of the trip plan with a responsible person at home, specifying when the party expects to return and how long the person should wait before notifying authorities if the party is overdue. Specify which authorities are to be notified if the party is overdue. For example, in the United States, the National Park Service has responsibility for mountain rescue in national parks; in most other areas of the western United States, it is the county sheriff.

Avoid scheduling important business meetings, airplane flights, or social events for several hours after the scheduled end of a trip. Climbs frequently take significantly longer than expected.

Safety Margin

Plan for self-reliance and develop contingency options. When should climb organizers allow themselves to feel that their preparation is adequate? When is it enough? A good way to gauge is to ask whether the party has the people, proficiency, and equipment it needs to be self-reliant under normal circumstances.

Have "a little extra." It is common for climbs to run over their prescribed schedule. Any climbing party should be prepared to take care of itself in case of slowness, navigation errors, route conditions, a mishap, or a downturn in

the weather. In practice, this means having "a little extra" to provide a margin of safety: extra time, extra clothing, extra food, extra flashlight batteries, extra climbing hardware, and, above all, extra reserves of strength. As a general rule, climbers should plan to be self-sufficient for several hours in excess of the planned trip and understand that it may take that long to return to the trailhead. Balancing the benefit of extra supplies against the drag of their weight is an art every mountaineer must develop.

Equipment

The party needs to make decisions about equipment, both personal and shared. Personal equipment is what each climber must bring: ice axe, helmet, and harness, for example, in addition to the Ten Essentials (see "The Ten Essentials" in Chapter 2, Clothing and Equipment). Many personal items, such as harnesses, ice axes, crampons, and avalanche transceivers, are useful only if everybody brings them, so coordination is essential.

Group equipment is shared: tents, stoves and pots, food, ropes, rock and snow protection, snow shovels, some navigation and communication tools, GPS devices, and personal locator beacons (PLBs) are examples. Someone should determine what is needed, survey the climbers to see who owns what, and then decide who will bring which items. (See Chapter 21, Expedition Climbing, for more on personal and group gear.)

The party can give itself a margin of safety by planning to arrive at the trailhead with a little extra equipment for conditions more severe than anticipated during planning or in case someone forgets an item or fails to show up. If the party does not need the surplus gear, stash it out of view in vehicles.

Party

A climbing party must have adequate strength in order to have a safe, enjoyable, and successful trip. Strength refers to the group's ability to accomplish the climb and to cope with situations that may arise. The party's strength is determined by the mountaineering proficiency of the members, their physical condition, the size of the party, and their equipment. Intangibles such as morale, the members' degree of commitment to the climb, and the quality of leadership also affect party strength.

A strong party consists of several experienced, proficient climbers who are in good condition and well equipped. What constitutes weakness is not as

easy to define because a party is strong or weak only in relation to its goals. On a very challenging climb, the addition of a single ineffective member would make a party too weak. On easier trips, a party may be strong enough if it has only two strong climbers and several weaker ones; in fact, this is common on guided climbs. A party with no experienced members is weak in any situation.

Researching the route helps determine what party strength is needed for a particular climb. Is the route or the approach physically arduous? What level of technical challenge, routefinding, or decision making does it pose? Is the place so remote that the party will be completely reliant on its own resources, or are there likely to be other people in the vicinity?

Who should go? Every member of a climbing party must be up to the challenge, both physically and technically. Some climbers will go with only proven companions when they are attempting routes near the limit of their abilities. When a leader is considering inclusion of a climber whom the leader does not know, some questions should be asked.

Experience is the surest indicator of ability; someone who has climbed several times at a given level is probably capable of doing so again. Climbing skills should match the chosen route's requirements. For instance, experience gained from an indoor climbing gym will not translate to an alpine environment. Expedition leaders sometimes even request written résumés, but for a weekend climb, a bit of probing conversation is probably enough to ascertain a person's fitness. However, leaders should be aware that inexperienced people probably do not realize they are unprepared for the planned climb.

A party that includes novices, or even experienced people who have never before climbed at the route's required level of skill, will need to include veteran climbers who are willing and able to rope lead and coach. The climb almost surely will take longer, and the chance of success will be reduced. Be sure everyone in the party understands this situation and accepts it.

A leader must also consider *compatibility* when forming a climbing party, especially for a long or arduous trip. Fortunately, most people seem to be on good behavior while they are on climbs. The unspoken knowledge that climbing companions will soon be literally holding one another's lives in their hands does much to promote accommodation. Nevertheless, expedition literature is filled with engaging tales of squabbling parties. To say the least, dissension in a climbing party is no fun. It may reduce the party's chance of

success; it is guaranteed to eliminate much of the enjoyment; and it can even compromise safety.

People who are known to dislike each other should not be on the same climb. The tensions and close proximity of the climb situation will only exacerbate any animosity. If two people are not getting along during the climb, other party members should do their best to keep the situation from erupting into open conflict, which might possibly threaten the safety and well-being of the group.

How many should go? The size of the party must be appropriate to the objective. Both strength and speed should be considered—and sometimes these two factors are at odds.

The Climbing Code given in Chapter 1, First Steps, recommends that the *minimum party size* for safety is three climbers: if one climber is hurt, the second can go for help while the third stays with the injured person. The Climbing Code also recommends at least two rope teams for safe travel on a glacier: if one team is pinned down holding a colleague who has fallen into a crevasse, the second team is there to effect the rescue.

These rules are general guidelines for minimum party size, but the specifics of the proposed trip may introduce other considerations. A prolonged wilderness venture may require a larger group to carry equipment and supplies, as well as to provide better backup in case of emergency. Some rock climbs require double-rope rappels on the descent; this lends itself to a second team unless a single team is willing to carry two ropes. Technical rock and ice climbs are best done with just two climbers on each rope; for these climbs, whatever the size of the party, there should ideally be an even number of climbers so that the group is efficient.

Maximum party size is also determined by considerations of speed and efficiency, as well as by concerns about environmental impact and by land-use regulations. A large group can carry more gear and offer more helpers in case of emergency, but a bigger party is not necessarily a safer one. Sometimes speed is safety, and experienced alpinists know that a larger group always moves more slowly. On certain routes, for example, climbers must move quickly to ensure finishing before dark. A larger party tends to get more spread out and may kick down more loose rock.

As a general rule, the more difficult the route, the smaller the group should be. In the extreme case, some long technical climbs are done by parties of just two fast, experienced people, despite the general recommendation that three is

the minimum safe party size. With a party of two, carry an emergency communication device or make other arrangements for emergencies.

Large groups have the potential of damaging the fragile alpine environment. They also erode the wilderness experience. Park and wilderness areas typically have party size limits (often 12 people maximum) to reduce impact and preserve aesthetic values. At the very least, these limits must be respected. Responsible mountaineers may even choose to impose tighter restrictions on themselves in particularly fragile places.

Weather

The understanding of current and anticipated route conditions and weather remains as much an art as it is a science. However, mountaineers have ever-increasing access to weather and current route conditions, primarily via the internet. The amount of information available for a given area, mountain, or specific route will vary greatly, and for many ranges and mountains, little or no current information is readily available.

Useful internet sites include those of local and regional governments, national or regional parks, and private recreation areas, as well as those sites that detail weather and road conditions. Some of these sites include real-time weather and web cams for an up-to-the-minute view of conditions. Local climbing sites can also be useful for current route conditions, or the leader may be able to post a question.

However, the best source of information concerning current route conditions will be from a reliable individual who has recently been on the mountain and route the party is considering; a phone call to a park office, climbing shop, bush pilot, or friend in the area is a good idea. This is especially true if the climb involves a long drive or approach.

The “art” portion of understanding conditions and weather forecasting involves knowing how a change in weather will affect the route and the party’s climbing objectives. Forecasting is based on inexact models that may vary widely from actual conditions. Relying heavily on the forecast timing is risky. Note how the closing of a favorable weather window might impact the trip if it should run longer than expected. How will specific changes in temperature, wind, humidity, and precipitation affect the climb? Having alternate trips (in separated areas) in mind is a good idea that will help a party avoid “forcing” a climb—nearly always a bad decision.

Communications

Bringing emergency communication devices, such as radios, phones, satellite communicators, and PLBs, dramatically shortens the time it takes to summon rescuers. The devices are also useful for telling people back home that the party will be late but is not in trouble and, thus, can be used to avoid unnecessary rescue efforts. The devices may also be able to supply current weather or avalanche hazard updates. Inexpensive handheld radios may be useful to communicate between rope teams or the front and rear of the party on a trail when sorting out navigation options, to check in with an ill climber who stays at camp rather than head for the summit, to obtain current weather forecasts, and to coordinate during emergencies. Such devices may also allow communication with responding search and rescue authorities.

Understanding the limits of the devices is as important as understanding their usefulness. Phone batteries can be depleted, and in many mountain locations phones (other than satellite phones) are unable to transmit or receive. They should be viewed as an adjunct to, not a substitute for, self-reliance.

Evaluation

Seasoned climb leaders know that taking the time and effort to plan and prepare for the trip is the best practice for positioning the party for success. This step looks at the entirety of that effort. Does it add up favorably? Are there good safety margins? Are there areas of weakness? Can the trip plan be improved? Unfavorable elements foretell of problems that could occur later on, may suggest a hazard, could jeopardize the trip, or might increase the probability of an injury.

No party should set out ill prepared or inadequately equipped or attempt a route beyond the ability of its members; doing so imperils both the climbing party and the rescuers who may have to help them out.

UNDER WAY: ELEVEN TRIP CHECKS

How do you know a trip is on course for a successful summit or headed for a disaster? Careful planning and preparation go a long way in making sure the trip goes favorably; but once the trip gets under way, monitoring ongoing progress provides either further assurance or illuminates issues that may threaten safety or success. Even with the best-prepared plan and thorough

preparation, the unexpected can occur. The Eleven Trip Checks help the party stay on track and spot potential pitfalls.

Trailhead

Before the party leaves the trailhead, take a few minutes to check that all necessary equipment and supplies are in the climbers' packs. Pay particular attention to the packs of less experienced climbers. Anyone who has been a climber for very long has had a weekend ruined by a missing critical item. Distribute group equipment. Are pack weights appropriate, and is group gear fairly distributed?

Go over the itinerary one last time to make sure everyone is on the same timetable. Is there new information? Is there a need to make any changes to the plan? Are there any cautionary "yellow" flags? The leader should discuss the planned pace, breaks, hazards, and water sources with the party.

Navigation

Most experienced leaders can share several amusing (in hindsight) stories of navigation misadventures. Orient early to the map rather than waiting until there is a concern. Check now and then to ensure the party is on route. Involve the party; the more people actively navigating, the better to avoid costly mistakes. When you are unsure, take time and effort to regain confidence. Sometimes it may prove easier to eliminate a choice than to confirm which is the correct one. Photograph, make notes, or create a GPS waypoint of key junctions. Record a GPS track if there is concern about routefinding on the return at night or in a storm or whiteout.

ELEVEN TRIP CHECKS

At the trailhead and on the approach, the climb, and the descent:

1. Trailhead
2. Navigation
3. People
4. Time
5. Hazards
6. Weather and Environment
7. Perspective
8. Decisions

9. Safety
10. Team
11. Leadership

People

Team member skills and fitness may vary considerably. Monitor party members for problems. On the approach and on the climb, set a pace that is steady, not necessarily fast. In the long run, the party cannot move faster than its slowest member; progress may even be slower if that person is reduced to exhaustion. The important thing is to keep moving steadily. Watch newer climbers who may have less stamina or are carrying too much weight.

Take rest stops for the whole party, at specific intervals, rather than halting randomly whenever someone decides to stop, which is inefficient. Make sure that everyone is eating and drinking. Is anyone lagging? Lagging will worsen unless the pace, eating, hydration, or other problems are rectified. Try to catch potential problems early, when options for preventing the problem or dealing with it are most numerous.

Time

Manage time and progress. Optimize breaks, taking into account their location, timing, and duration, as well as the party's fatigue, water supplies, et cetera. Daylight can be priceless if the unexpected occurs—start early. Consider adjusting the campsite location to fit the party's progress and schedule. Failure to reach an intended camp may suggest the party will be slow the following day too. Choose a turnaround time that will accommodate some unexpected delay.

Hazards

Stay alert for climbing hazards. Some, such as falling, may have been anticipated, with ropes and equipment brought to mitigate any fall. Others, such as a swollen stream, might be unexpected, requiring impromptu measures. Always bear in mind that the outcome of exposure to a hazard is unpredictable. Avoid hazards; find a safer alternative, or mitigate the consequence.

One technique to help guard against bias in decision making about hazards is to come up with three responses to a hazard (see "Recognizing and Identifying Hazards" in Chapter 23, Safety), then choose the best alternative. Thinking up multiple options counters the tendency to go with an impulsive first solution, which may not be the best resolution. Working through the additional solutions forces a degree of objectivity and rational thought.

Weather and Environment

Watch for, and adjust to, adverse changes in weather and route hazards. Does the party have the means to obtain updated weather forecasts? See more about weather in Chapter 28, Mountain Weather.

Perspective

Stay alert to the big picture; avoid fixation on a particular aspect of the trip to the detriment of others. Think ahead; anticipate. Is the situation stressful? The more stressed you are, the harder it is to escape tunnel vision, keep your perspective and make clear-headed decisions.

One assessment tool uses a traffic-stoplight analogy (fig. 22-1). If the party is doing well, this signifies a green light ("OK"). If there are some tolerable bumps in the road to the progress or trip plan, this adds a yellow ("caution") light or lights (changes could be needed). When one or more serious impacts arise, or a number of minor things are going wrong, this signifies a red ("danger") light (changes are mandatory). This tool encourages a group to maintain objectivity and "big-picture" awareness, all while its members keep an eye on problems. In addition to assessing the overall trip, this tool can be applied to each element of the trip: weather, pace, route conditions, and the like.

A traffic signal is an easy mental image to conjure. Presented with several yellow lights or a single red signal, the party might decide to turn around. With extra time and a good safety margin, the party might continue with caution, monitoring their progress.

Decisions

Climbers must make decisions with incomplete information and sometimes when saddled with fatigue, hunger, dehydration, discomfort, or injury. Guard against risk assessment and decision-making biases. What are the facts? What

are the options? What do others think? Can the party's safety be ensured? Make decisions that maintain safety margins. Never let judgment be overruled by desire, such as the desire to summit, when you are choosing the route or deciding whether to turn back (see "A Climbing Code" in Chapter 1, First Steps). The outcome of exposing the party to a potentially lethal hazard is unpredictable. If the consequences cannot be mitigated, the party should find a safe alternative: that might mean turning around.

Safety

Remain ever vigilant for hazards. Practice well-reputed climbing techniques. Never climb beyond the party's ability and knowledge. Rope up on exposed places and glaciers. There should be two rope teams on a glacier. Anchor all belays. (See "A Climbing Code" in Chapter 1, First Steps.) Redundancy greatly increases the safety of belay and rappel anchors as well as many other systems (see "Equalizing the Anchor" in Chapter 10, Belaying). In a questionable situation, can you retreat later if conditions worsen? Sometimes the only safe solution is to withdraw rather than proceed so that you can come back another day when the hazards can be better controlled. Nothing on a climb is worth dying for.

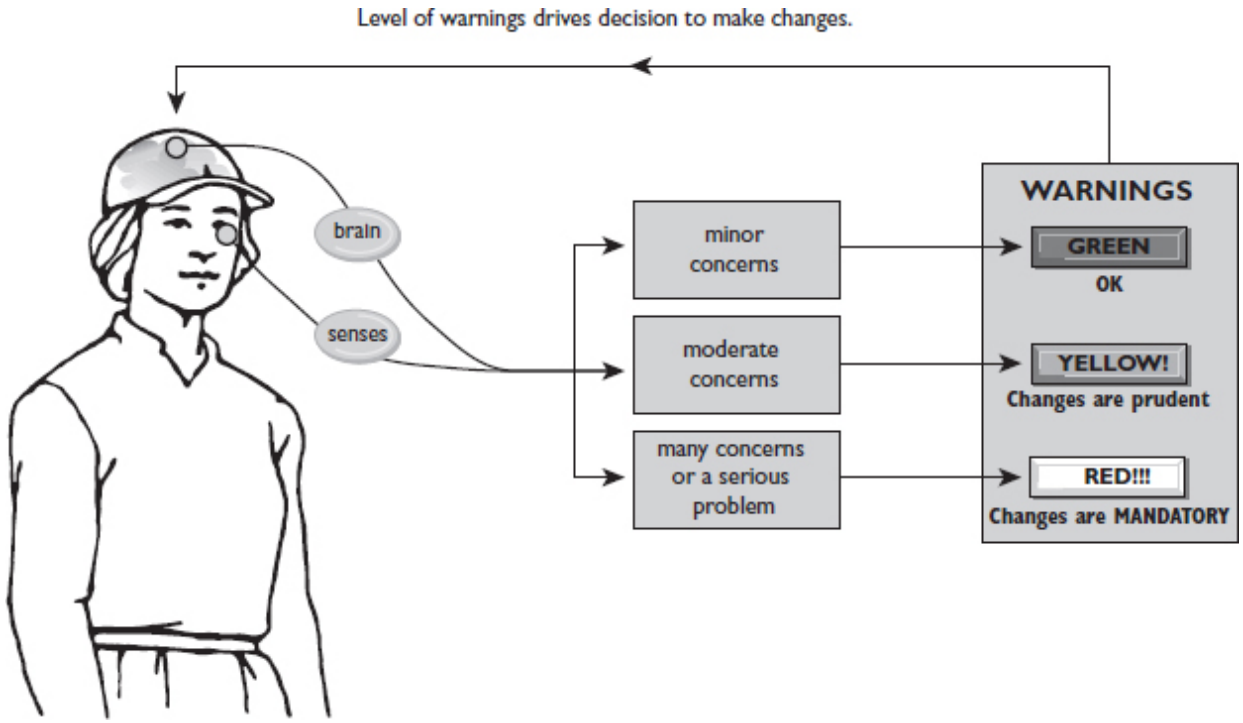

Fig. 22-1. Climbers must keep their senses alert for warnings and then make the necessary changes to stay safe.

Team

Generally, success reflects the degree to which the members of a party share common values and work cooperatively to reach their goal. A climbing party should stay together—not necessarily in a tight knot, but at least close enough to be in communication with one another. Safety is compromised when the party splits. A party that develops an interest in splitting up indicates serious underlying issues with fitness, speed, or trip objectives.

Typically the stronger members tend to want to forge ahead, leaving those most likely to need help isolated from those best able to give it. The danger of getting separated is greatest on the technical portions of a climb, where the more skilled climbers can move much faster, or on the descent, where some want to sprint while others drag due to fatigue. On a trail where the party becomes spread out, the last two persons should pair up.

A small party of friends will naturally tend to stick together. Problems are more likely with larger groups. A large party benefits from having a designated leader, and the leader should coordinate its movement and keep the party together or in communication. As a leader, give party members some flexibility to hike up the trail at their own pace but have them regroup at

designated rendezvous points, especially: trail junctions to make sure everyone goes the right way; danger spots, such as hazardous stream crossings—in case anyone needs help; and bottoms of glissades, which naturally tend to split the party.

Leadership

The leadership needs to be effective at pulling together the many elements of the trip to stay safe and keep on schedule. Other party members then have more freedom to contemplate various facets and possibly suggest actions to improve on the plan.

Party members should obey the leader or decisions made by majority rule (see "A Climbing Code" in Chapter 1, First Steps). A leader need not be at the front of the party. In fact, many prefer to lead from the middle or rear, to better keep an eye on the whole group. However, the leader should be ready to swing into the forefront when a difficulty arises, such as a routefinding puzzle or a patch of demanding technical terrain. It may be wise to appoint a strong member as trail sweep, especially on the descent, to ensure there are no stragglers. Give new climbers the benefit of your experience. Look for teaching moments. A leader's primary goal for any outing is to have the whole party return home safely.

BECOMING A LEADER

The responsibility of leadership is a burden, but the task can have great rewards. It gives the experienced alpinist an opportunity to pass along knowledge gained over the years. Mountaineers do not climb because they must; they climb because they love the mountains. Climb leaders help others enjoy the sport, and that can be deeply satisfying.

Some climbers may never want to take on the role of leader, but they will find that possessing a certain degree of leadership is almost inevitable as they gain experience. A party naturally tends to look to its more seasoned members for guidance, especially in a crisis. Therefore, all climbers should give some forethought to what they would do if they were suddenly called upon to take charge.

Climbers who do aspire to leadership should climb with people they regard as capable leaders. Study them; observe how they organize the trip, make decisions, and work with people. Offer to help in order to participate in

some of these activities. Veteran leaders report that they think ahead, anticipating problems that might arise and concocting possible solutions. This type of mental rehearsal is excellent training for future leaders. Climbers should develop the habit of thinking about the entire climb and the whole party, not just their part of it.

Studying respected leaders is always worthwhile, but it may be a mistake to model yourself on anyone too closely. A group must believe that its leader is genuine, and therefore all leaders must develop their own style. Exercising leadership is not always easy, but it should be done in a way that is natural for each person. For example, a reserved person should not strain to act outgoing. Anyone who has technical skill, confidence, and a sincere interest in the party's welfare can succeed as a leader.

On your first time out as a leader, choose a climb comfortably within your abilities. Perhaps invite a proficient friend, someone to rely on. Spend some extra time organizing, and seek input from the more experienced members of the party. Be sure to delegate in order to take advantage of their skills. Do not make an issue of the fact that this is your debut as a leader; that will only undermine the group's confidence.

The Climbing Code in Chapter 1, First Steps, is a time-tested set of guidelines for making leadership decisions. It is deliberately conservative. Following the code may cost you a summit but it is unlikely to cost a life. Seasoned leaders may draw on experience to safely modify some of the rules, but they are not likely to depart from it radically because the code embodies a commonsense approach to safe mountaineering.

EVERYONE A LEADER

Everyone on a climb needs to be a full partner in the twin tasks of moving the group safely toward its goal and of building group cohesion. In other words, each individual must share leadership responsibility. Individual leadership means, for example, being aware of the group and its progress: Is someone lagging behind? Ask whether there is a problem, offer encouragement, and look for ways to help. A group of climbers is weakened whenever the climbers become separated from each other. Work at being aware of where climbing companions are at all times, and help to keep the party together. When you are out front and moving fast, remember to look behind you from time to time. When you are too far ahead, stop and let the group catch up—then let them have a breather before you start off again.

Take part in routefinding. Study guidebooks and maps to become familiar with the approach and the climbing route. The climbing party is much less likely to get lost if everyone is actively involved in navigation. Use the map, compass, and route description frequently so you are always oriented and know where the party is. Everyone should participate in the group's decision making. Each person's experience is a resource for the party, but that resource goes untapped if that person fails to speak up.

Establishing a supportive atmosphere is one very important role of leadership. People need to know that their companions care about them and will help them. Be part of this effort: help set up a tent, fetch water, carry the rope, share a cookie. Morale is intangible, but it makes a party stronger. Morale can be the deciding factor in party success, and it is always the deciding factor in making the climb enjoyable. Morale is everybody's job.

Assume responsibility also for your own knowledge, skill, and preparedness. Research the climb before committing yourself to it; make sure it is within your abilities. Be properly supplied and equipped. If you have questions about whether the climb is appropriate for you, or about what gear to take, ask your companions in advance. If you ever think that you are getting in over your head, speak up. Better to get some help over a rough spot or even quit the climb than to create an emergency. Thinking about the party, its welfare, and how you can contribute is in itself preparation—perhaps the very best preparation—for leadership.