

The 10 Essentials are all about peace of mind. During a routine backcountry trip you may have no need for several of these items. But if something unexpected occurs, you don't want to be caught without them - they could even save your life. Here are the components of a one-stop emergency-preparedness kit every wilderness traveler should carry, even on short trips:

#### The 10-Plus Essentials List

- 1. Map (in a watertight case)
- 2. Compass (plus an optional GPS receiver)
- 3. Extra clothing (men's, women's, kids')
- 4. Extra food and water
- 5. First-aid kit
- 6. Headlamp or flashlight (with extra batteries)
- 7. Matches (storm proof, or in a watertight container)
- 8. Fire starter
- 9. Knife (or multi-use camp tool)
- 10. Sunglasses
- 11. Sunscreen
- 12. Water filter (or other method of water treatment)
- 13. Signaling Device Whistle / Mirror
- 14. Food storage device

The original "10 Essentials" list began appearing in mountaineering literature in the 1950s and '60s, but contemporary environmental factors have prompted the addition of sunscreen and a water filter. My list now also includes a GPS receiver as an option to consider. In recent years GPS units have emerged as worthwhile navigational tools that complement (though do not replace) a map and compass.

I have also added a signaling device, believing it is a crucial security item to keep handy when exploring unpredictable terrain. If you get in trouble (say you slide into a crevasse or ravine) and need to audibly signal someone, a whistle will last far longer than your vocal chords. The last item, a food-storage device (such as a bear canister), is now required in some western parks and wilderness areas and is very helpful in any area where animals are known to seek out human food.

Tip: Make a printout of this list and stash it with your gear. Use it as a checklist before you head out on any excursion on wild lands.

#### **MAP**

A topographic map should accompany you on any trip that involves anything more than an impossible-to-miss footpath or well-populated nature trail. Handout maps, the simplistic kind you pick up at visitor centers or entrance stations, do not show the kind of topographic details necessary for route finding. If you stray off the trail, or need to locate a water source, such one-dimensional maps are just about useless. In such situations, a topographic map is essential. You also need to understand how to interpret the information it presents.

## **COMPASS**

It's easy to get disoriented in the backcountry. A compass, combined with map-reading skills, can help you stay on course. Will GPS receivers make compasses obsolete? Not likely. Standard GPS units cannot indicate which direction is north, and while some high-end GPS receivers now include electronic compasses, a traditional compass weighs next to nothing and does not rely on batteries. If you travel regularly in the wilderness, you should seriously consider taking a class to learn navigation techniques in detail.

#### EXTRA CLOTHING

Conditions can abruptly turn wet, windy, or frigid in the backcountry. It's important to carry an additional layer (or two) of clothing in your pack. If you're lost, extra clothing may get you through the night. A wool or fleece cap weighs little and is a fine heat-retainer on cold nights. Extra socks are a true blessing if your original pair becomes soaked. Depending on the conditions, consider carrying a fleece jacket or pile sweater, a waterproof shell or even a compressible parka. Cotton items, which become useless when wet, make poor backup items. Another idea: Pack an ultra light space blanket for emergencies.

#### **EXTRA FOOD AND WATER**

Always pack at least one extra day's worth of food. It can be as simple as a freeze-dried meal, but it's even smarter to include no-cook items: extra energy bars, nuts, dried fruits and jerky. The process of digesting food helps keep your body warm, so on a cold night it's smart to munch some food before bunking down—but never leave animal-attracting leftovers in your tent.

#### **FIRST AID KIT**

Pre-assembled first-aid kits take the guesswork out of building a kit on your own, although most people "personalize" such kits to suit individual needs. Any kit should include moleskin (for blisters), adhesive bandages of various sizes, several gauze pads, adhesive tape, disinfecting ointment, over-the-counter pain medication, pen, and paper. Latex gloves also deserve consideration.

#### **HEADLAMP OR FLASHLIGHT**

A good light source is invaluable in the backcountry. Picture yourself trying to hustle off a mountain in dwindling light, or trying to set up camp as the last bit of blue drains from the sky. It's smart to carry replacement bulbs and batteries, even a backup lamp or flashlight. Headlamps allow you to keep your hands free during any activity and are usually a backpacker's first choice for a light source. Keep your light in an easily accessible section of your pack; check it once in a while to see if it has become inadvertently switched on.

#### **MATCHES**

Matches headed into the backcountry should be the waterproof variety, or they should be stored in a waterproof container. Take plenty and make an extra effort to keep them dry. Convenience-store matchbooks are often too flimsy and poorly constructed to be trusted for wilderness use. Save yourself some frustration and tote reliable matches on every trip. Don't rely only on mechanical lighters, which sometimes fail.

## FIRE STARTER

As the name implies, fire starter is an element that helps you jump-start a fire. The ideal fire starter ignites quickly and sustains heat for more than a few seconds. Possible candidates: dry tinder tucked away in a plastic bag; candles; priming paste; heat "nuggets" are convenient and reliable fire-starting products. Even lint trappings found in a clothes dryer can work.

# **KNIFE OR MULTI TOOL**

Knives or multi-tools are handy for gear repair, food preparation, first aid, making kindling or other emergency needs. A basic knife should have at least one foldout blade (more likely two), one or two flathead screwdrivers, a can-opener and (though some people will call this a luxury) a pair of foldout scissors. The more complex your needs (if, for example, you are leading an inexperienced group), the more options you may want in your knife or tool.

## **SUNGLASSES**

Indispensable. Some medical studies suggest that sunlight and ultraviolet (UV) rays may play a role in cataract development. Yet protection is so simple: Put on a pair of protective glasses when spending large amounts of time outdoors, particularly above the treeline, to reduce your exposure to UV light. Your goal: Select lenses that absorb 97-100% of UVA and UVB radiation. Wraparound lenses keep light from entering the corners of your eyes and are great choices for the high country. Glacier glasses are a must for mountaineers who run the risk of snow blindness on days of bright glare.

## **SUNSCREEN**

The Mayo Clinic recommends applying sunscreen with an SPF of 15 or higher 15 minutes before you go into the sun. The clinic also advises the use of sunscreen-fortified lip balm. If you swim or sweat a lot, use water-resistant sunscreens and reapply every 2 to 3 hours. Don't leave the trailhead without it.

## WATER FILTER / PURIFIER

Rushing streams and alpine lakes appear to contain the clearest, freshest water on earth. Yet sometimes they harbor microscopic pathogens that, if you ingest them, could leave you feeling nauseous for weeks. You have three defensive strategies: boiling, chemical treatment, or straining the water through a mechanical filter or purifier. Filters and purifiers do the job with minimal fuss.

## SIGNALING DEVICE – WHISTLE / MIRROR

The sound of a whistle travels farther than your voice. Plus, blowing a whistle in an emergency won't exhaust your vocal chords. It's smart to attach a lanyard to your whistle, then tie it to a D-ring or some other portion of a shoulder strap on your pack. Thus if you fall (and perhaps pin one of your arms) you won't have to dig far to get it up to your mouth. In normal sunlight, the flash from a good signal mirror can easily be seen for 10 miles and generally the flash will be visible up to 50 miles, depending upon atmospheric conditions. The record rescue from one is 105 miles, at sea. A mirror will even work on bright overcast days and with moonlight, though with much reduced range.

#### BEAR RESISTANT FOOD CONTAINER

Black bears in some regions of the western United States, particularly the Sierra Nevada range in California, search out human food with remarkable vigor and persistence. In some areas use of a bear resistant food container is mandatory. Even in areas where such containers are not required, wildlife managers often still recommend their use.

## **FINAL THOUGHT**

You need to bring one other item—knowledge—in order to benefit from the gear on this list. Just having a compass in your pack or a map in your pocket will be of no value to you unless you understand how to use them. As one veteran search-and-rescue leader put it, "People talk about the 10 Essentials, but the most important essential is between your ears."