

Equipment & Supplies List Notes

Ultimate Hike Summer 2011

Hikers 10 Essentials: There are several versions of this list; this one fits our group training hikes during the warm SoCal weather. This list has 12 items, just for clarity. It will be modified for our Ultimate Hike in Big Bear, due to seasonal change, altitude, and having Aid Stations. Some traditional items have not been included because several assumptions have been made.

1. You won't be hiking alone.
2. We will be on well-established and marked trails.
3. Rain shouldn't be a factor.

1. Pack: there are many options available that will do the job; Daypacks, Rucksacks, or an old book pack. Whatever you choose, it needs to be big enough to carry up to a gallon of water and a few personal items on our list. Most hiking day packs have a built-in sleeve to put your hydration reservoir in and holes to route the tube or straw through to the outside. A word about Fanny packs, they just are not built to carry as much fluids as you are going to need in the warm weather on our all-day training hikes.
2. Water & Electrolytes: We will be hiking in the hot sun summer, which means we will be sweating and losing water very rapidly. You can't have enough! For most of our training hikes we will not be able to re-supply mid-way through the hike.

Reservoirs or bladders (Carmel Back, Platypus, Deuter) are very convenient for day hikes, they fit easily into your pack and you have a straw to suck on. Drawback is you can't see how much is left until you go dry. They are readily available in most sporting goods departments. Recommend getting the largest one you can, such as 96 oz (3 ltr).

There are collapsible re-usable bottles that work well for packing extra water. No problem throwing a gallon jug of water or Gatorade from the store in your pack.

For Electrolytes or Sports Drinks (NOT Energy drinks) a wide-mouth bottle works well. This type of container can be easily cleaned, which you will want to do because of the sugar in them sticks to the walls of the container and over time they get dirty and funky.

Like cold water? Try freezing your container. WARNING! Make sure it is only 2/3 full, ice expands. Depending on what your container is made out of, the ice might puncher it easily. Don't take it out of the freezer and start pounding on it to break up the block. Add more water to top it off.

See separate article about Hydration.

3. Food: We are going to burn a lot of calories, 300 to 400 per hour. You will need food to keep your body fueled. The suggested eating strategy is grazing, frequent small snacks. On our longer hikes we will stop for lunch, to eat and rest our feet. Good idea to have a snack in your pocket.

Safety tip: when sharing food, pour it out into your hand, don't reach in the bag and contaminate the rest of the food. Our hands aren't too clean; food-borne illnesses are no fun, especially 10 miles away from the nearest bathroom.

4. Shirt or top: wear whatever style you like; tank top, long sleeves, tee, just NO cotton. Like your socks, you need to get the sweat away from your body, and evaporated from your clothing, this is called wicking.

A layer, for our purposes is a light sweater, jacket, over shirt or hoody. At the beginning of our training you won't need one, unless the weather turns cold. It is a good idea to carry an extra shirt, not only for emergency warmth, but for something clean to wear on the ride home. As we move into fall, the mornings are going to be cool; a light layer may be needed during the wee morning hours. More important is having a layer for AFTER the hike, once you stop moving your bodies output of heat is going to drop rapidly, you need to wrap up quickly. This will be particularly important at the end of our Event day hike, we will be ending our adventure at 8000' in the mountains, in October, in the dark; it is going to be chilly. *More information when we get closer to the Event.*

5. Shorts or Pants? Again you want a light weight synthetic quick-drying fabric. Shorts on hot days maybe more comfortable, don't forget to apply sun screen to your exposed legs. There are 2 downsides of wearing shorts while hiking. First, your legs will not be protected from getting scraped and scratched by brushes, with all the rain we had this year the bushes are growing and overhanging the trails. Second, no sun protection for your bear legs. Check into convertible hiking pants that come with zip off legs, giving you the best of both worlds.
6. Hat: Your head is one of your body's major heat exhaust points; make sure the heat can escape by wearing a hat made of a breathable fabric and that has vent holes. If you are thinking nothing on your head, or maybe a visor so you have plenty of ventilation, consider the sun's rays beating on your head as an offsetting factor to keeping your head cool. On hot day's a light weight hat with a broad brim and bill, a shade drape wrapping your neck and shading your face will help to reduce the sun's heating effect.
7. Sunscreen & Lip Balm: you can't use too much. Find what brand and type works best for you. Here is some recent info:

Consumer Reports Sunscreen Rankings: May 24, 2011 (taken from WebMD.com)

Three sunscreens were given the *Consumer Reports* "Best Buy" rating:

- Up & Up Sport SPF 30
- No-Ad with Aloe and Vitamin E SPF 45
- Equate Baby SPF 50

Six others were recommended:

- Banana Boat Sport Performance SPF 30
- Coppertone Sport Ultra Sweatproof SPF 30
- CVS Fast Cover Sport SPF 30
- Walgreens Sport SPF 50
- Ocean Potion Kids Instant Dry Mist SPF 50
- Banana Boat Sport Performance SPF 100

Other products evaluated include: Soleo Organics All Natural SPF 30+, Badger SPF 30, Hawaiian Tropic Island Sport SPF 30, Avon Skin-So Soft Bug Guard plus IR3535 SPF 30, All Terrain AquaSport performance SPF 30, Burt's Bees Chemical-Free SPF 30, Coppertone Water Babies SPF 50, Bull Frog Marathon Mist with UV Extender SPF 50, LaRoche-Posay Anthelios SPF 40, Neutrogena Ultra Sheer Body Mist SPF 45, Aveeno Continuous Protection SPF 85, Coppertone UltraGuard SPF 70+, and Neutrogena Sensitive Skin SPF 60+. Despite not making the cut for "recommended" or "best buy," none of these got a poor rating on UVA or UVB protection or UVB protection after water immersion.

Footwear:

8. By far the MOST important item on your body, for your comfort and performance, and the one with the most opinions. It is very difficult to hike with aching and blistered feet. Fit and comfort are important, as well as the weight of the shoe. Listed below are some criteria to consider to help you make your selection.

High top Boots v. low light weight Shoes; the arguments are almost endless, it comes down to personal choice, what works best on your feet. Here are a few things to consider about the conditions we will be hiking in.

- Long distances, moving quickly
- Carrying Light loads
- Excellent trail conditions, no bush whacking or rock scrambling
- Single day hikes
- Fair weather; warm temperatures and no rain likely

Weight is your starting point; full leather high top backpacking boots are too heavy, feather weight running shoes are too light and don't have the correct sole for the dirt and rocky trail surfaces. There are two categories in between these extremes that are appropriate for us. One is generally called All-purpose Light Hikers, this being the heavier; simply put they are stripped down backpacking boots. The other fall into the Trail Runner category, and are more or less beefed up running shoes, with a wider sole for stability. Light Hikers have a thicker and more rigid sole than the Trail Runners, both have lugs (the knobs) for traction.

Military studies and research have shown that 1 lbs. of weight on your feet is equivalent to 5-6 lbs on your back. Why? Because it takes 5 to 6 times as much energy to lift and move weight on your feet as it does to carry that same weight on your back. The American Hiking Society says a pound on the feet is equivalent to carrying 7 pounds on your back. That's almost a gallon of water. Bottom line; the heavier your boot, the more work your body has to do, tiring you out quicker.

Water proofing (more accurately, resistant) is not necessary, and for the hot weather we will be dealing with, they become less comfortable because they don't breathe (let out the moisture). Typically, water resistant boots have a lining inside, Gore-Tex is a major brand, it keeps the water from coming in, but more importantly or its disadvantage, it restricts moisture (sweat) from escaping, leading to hot and damp feet. Like your head, your feet are major heat vent for your body, making breathability and wicking critical for your comfort and endurance.

High top or Low top: High tops add weight, but they do protect your ankles from rocks, sticks, and other environmental hazards. There is a traditional argument that High tops support and brace your ankles. Not necessarily so, if you have ankle problems, taping maybe far more effective. Ankle support has more to do with the fit. Don't get sold that High tops will give you enough support to prevent internal ankle injuries. If this is an issue for you, get professional sports medicine advice (the rest of us just have opinions).

Inserts and Insoles: This is the foamy rubbery removable piece in the bottom of the shoe. Some manufactures are okay and others are worthless. Consider replacing these with aftermarket ones such as Sole, Superfeet, or custom made ones from a foot specialist. An insert, for hiking, has a hard plastic base, topped with thicker foam for extra cushion. They are more contoured providing more arch support and cup your heel tighter. Watch out, they do take up more room in the shoe, so be careful about sizing. If you have a low volume foot, skinny and/or narrow, inserts will help to fill the shoe. Most stores that specialize in hiking footwear will let you try the insoles with the boots you are considering.

The best time to go shopping for shoes is late in the day when you feet have been in use and are swollen. Consider taking a 30 minute walk prior to fitting. Bring the socks you are going to wear. The toe box should have a little wiggle room so your toes can spread out and do their stabilizing job. Your toes should not touch the front, if they do, this will spell disaster on long downhill stretches as your toes will get crushed up against the front, causing a lot of pain and damaging the toes nails. Speaking of toes nails, keep them short.

Want help, need a fitting? We have 3 major hiking shoe retailers in our area that have knowledgeable staff and a good selection; Adventure 16, REI and Road Runner. If you are new to hiking, avoid online retailers and the large box sporting goods stores for your footwear.

9. Socks: Their primary purpose is to keep your feet dry. Dry feet reduce your chances of getting blisters. Recommended socks are made of primarily polyester or merino wool. Nylon and spandex tend to retain sweat. Thickness is a personal choice, the extra padding maybe more comfortable for you. Synthetic *liners*, are an extra layer for your feet, are very effective in wicking away moisture. Many new hikers are concerned about wearing thick socks in hot weather. Hot feet are directly related to humidity and ventilation, therefore no cotton socks, and water resistant boots are not recommended. Think Florida v. Arizona in the summer (it's a dry heat).

10. Toilet kit: When you got to go, you got to go. This "essential" item and function doesn't even make the top hiking 10 essentials. Proper hydration is going to cause you to pee a lot, if you aren't peeing, you may be heading towards dehydration. There are almost no bathrooms or even outhouses conveniently located along the trails, which means you will have to go in the bushes and bring your own sanitary supplies. Your kit should include toilet paper (travel size or grab that ¾ used roll from home), hand wraps or sanitizer and a disposal bag to carry out your trash. See *Hydration article*.

11. First Aid & Personal Meds: Your coaches and guides will be carrying well stocked First Aid kits, so you don't need to carry too much other than personal medications and prescriptions, including inhalers and Epipens. If you are susceptible to blisters, it would be advisable to bring your own remedies. Critical lifesaving drugs such as Epipens, should be in your pocket, there is no time to be digging them out of your pack.

Blister and hot spot treatment kit: Moleskin or Blist-o-Bans to place over and around the blister. Tape; either jock or duct (another great use, and very effective) to hold everything in place. A pin or knife to puncture the blister with it, to allow it to drain before covering. Tincture of benzoin, applied before covering, helps the tape stay in place. Benzoin hardens over the outer skin, adding more protection.

12. Headlamp and/or flashlight. You will need one or two by the end of September. Don't spend a fortune. Head lamps are preferred over hand held flashlights because they are hands free. However, there are some new very small LED flashlights that can be clipped to the bill of your hat or pack strap. Get a lamp that throws at least 30 lumens and is *flood*, rather than a spot or beam.

If you really want to light up the trail, and be able to see rocks and obstacles on the trail, hook a second lamp up on your belt around your waist. This will cast light out in front of your feet and onto the ground in front of you, and not reflect back into your eyes. This is similar to using fog lamps on a car, low to the ground and not overly bright like the high-beams.

Cotton

Ok, ok, what's the problem with Cotton, why can't I wear my cotton Pom-Pom socks and Levy's? Because, 100% cotton absorbs sweat, retains it, doesn't dry quickly creating friction with your skin, leading to chaffing and blisters. While your body is in motion and creating heat, the wet clothing is going to become very humid and you are going to be trapping extra heat around your body, increasing your risk of heat stroke. Think of Florida in the summer. At the end of a hike as the sun is going down and the temperature is dropping, and your body is not producing heat any more, wet clothing is going to have the opposite effect, by drawing too much heat away and chilling your skin causing hypothermia. Bottom line cotton does not wick or breathe well.

So for hiking "Cotton is Rotten", instead use wool or polyester. Nylon and spandex do retain moisture, but not as much as cotton, but do add durability to the fabric.

Your pack is going to be blocking ventilation of your back, if you wear a cotton shirt, you are going to compound to wetness problem. A wet shirt is going to increase the rubbing and friction against your skin from straps on your pack, leading to chaffing.

To be fair to our cotton producers; *Under Armor* used to have the mantra "Cotton is our Enemy", however during February 2011, they announced a new athletic product using cotton, but having wicking properties that they call "Charged Cotton".