

Backpacking Basics
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Internal Frame Backpacks – Advantages:

1. Basically top-loading duffel bag, but are now starting to come with outside compartments plus front and bottom zipper access for organizing gear.
2. Weight is held close to the back with low center of gravity. Feels very comfortable.
3. Appropriate for climbing, scrambling, cross-country skiing or any activity that requires tight fitting of the pack to the back and lots of maneuvering.
4. Everything goes inside which provides protection from snow and rain.
5. Chances of items falling out and being lost are minimized.

Internal Frame Backpacks – Disadvantages:

1. The pack must be carefully adjusted, which can take a long time to achieve.
2. Because it hugs the lower back, it may be uncomfortable for some hikers in hot weather.
3. Few models come with external pockets, pouches, and compartments, which makes it difficult to get items in and out (e.g. snacks, water, etc.)
4. Are generally heavier and more expensive than external frame backpacks.

External Frame Backpacks – Advantages:

1. Generally have many external pockets and pouches. Makes it easy to get items in and out without having to unpack the entire assembly.
2. Sleeping gear (bags, tents, pads) is carried outside of the pack either above or below the frame. This means more gear can be carried, or larger items are possible to have without concerning oneself with trying to shove a sleeping bag inside a duffel bag configuration. One can strap on additional gear if things do not all fit inside the pack.
3. Weight is distributed over a larger area of the back, and tends to ride higher. On well-groomed trails this weight distribution is comfortable but can affect agility with a higher center of gravity.
4. Frames are generally adjustable which allows for growth or repair on the trail and are recommended for youth.

External Frame Backpacks – Disadvantages:

1. Items carried external to the pack are subject to weather conditions (and possible falling off) unless an external poncho or cover is used with the pack in severe weather conditions.
2. Pack cannot be customized for fit; however, padding for the back and belt can make the pack a tight fit, at a higher cost.
3. Not as popular as internal frame because they do not look “cool” in the eyes of the youth (old fashion gear).

Backpacking concerns:

1. Weight and volume. The most comfortable pack is the one with the least amount of weight. Most backpackers will fill the bag to capacity because there is room to do so. Do not get into this bad habit. For younger youth, pack should not be more than 20-25% of their weight; older youth and adults should have packs weighing 30-35% of their weight.
2. Everything must be repackaged to minimize volume. Zip-lock bags work great for food and clothing. In case the pack gets wet, the plastic bags keep items dry.
3. In National Parks, use of a bear canister is mandatory and will be looked for by rangers on the trail. Stiff fines exist if there is not a bear canister “per person”. Bear bagging is not permitted anymore (hanging food in a bag and suspending it from a rope in a tree).

4. Make sure there is easy access to frequently used items – water bottles, snacks, first aid kit, flashlight, rope, etc.
5. Always carry a 32-gallon trash bag to cover the pack at night to keep moisture from getting inside.
6. Make sure the hip belt fits properly and lumbar support. Hooks and fasteners can become loose.

Food and Cooking Gear:

1. Repackage everything! Weight and volume are important.
2. Use only items that require just water to cook.
3. Prepare meals ahead of time to be quick and easy. All trash goes into the original zip lock bag used to repackage it.
4. Pack it in; pack it out (Leave No Trace).
5. Stoves: Recommend white gas. Burns hotter than butane/propane. Uses less fuel to cook. Gas also provides high heat at higher elevations.
6. Provide windscreen protection of the fire.
7. Lighters are preferred over matches (even waterproof matches). Lighters are small in size and can provide many more strikes with a larger flame than matches.
8. Consider cleanup when preparing meals. No tomato based products or cream type meals. They may taste good but do not survive well without refrigeration and are more difficult (longer time) to clean up.
9. For a mess kit, use only one plastic bowl, one spoon, and one plastic cup. Nothing else needed. Takes up less space and weight.

Shelter:

1. Tents take up space and add a lot of weight. Recommend that a tent not be used unless it is designed to be a backpacking type and you are willing to carry the extra weight and have room to carry it.
2. Always use a ground cloth. A plastic tube tent makes an excellent shelter against the elements as well as a ground cloth. Weight is only a few ounces. Use of trekking poles or trees with rocks and rope to create an A-frame shelter.
3. A ThermoResttm or closed-cell foam sleeping pad is a valuable item and highly recommended. It provides comfort and insulation from the cold ground.
4. Enclose externally secured sleeping bag, sleeping pad, and tent in a 32-gallon trash bag to keep them dry should you slip when crossing water or bad weather occurs.

Trekking Poles:

1. Recommended for everyone, especially those with bad knees or physical limitations. Trekking poles are like adding two additional legs. Going uphill and downhill is super easy. Without poles, serious knee damage can occur, especially going downhill over rocky terrain.
2. Poles should be adjustable in length. The arm should be at a 90-degree angle to the pole in rest position on level terrain. For uphill trails, poles should be adjusted to be shorter and for downhill trails, poles should be adjusted to be longer – length depends on the slope, the steeper the slope the more length required to allow arm reach to be comfortable and maintain balance.
3. Ensure a wrist strap is present. You will lose poles when slipping down a trail. Straps will save the poles and give the arms a rest.
4. Ensure the tip is carbide based – will not chip or break when slammed into rocks.
5. Shock absorbing poles are available on higher price poles. They are used when going downhill (the arms absorb the entire body weight and not the knees).
6. Poles are to be used as tool. Expect to plant them all over the trail and not just by your feet.

7. Expect the biceps to increase significantly if doing a 50-miler. The arms do the majority of the work and not the knees.