

Guide To Personal Camping Gear

Equipment Reviewed

Equipment reviewed below includes:

- Backpacks
- Hiking Boots
- Tents
- Ground Cloth
- Sleeping Bags
- Sleeping Pads
- Cooking & Eating Gear
- Water Purification
- Rain Gear
- Hiking Clothing
- Miscellaneous Items

Preface

This document is **not** intended to act as a shopping guide to those new to Scouting or even backpacking. Some sections will be useful to those starting out while other parts will be more applicable to those who have been on the trail awhile and who know that they enjoy hiking with everything they need on their back.

This document is meant as a gift to the Scouts of Troop 876 and other Scouts and Scouters. It will continue to be enhanced as long as it is applicable and I get feedback. So, enjoy and I'll see you on the trail.

Backpacks

Summary

Troop 876 scouts will be using their backpack on almost all campouts (excluding summer camp, winter camp, military bases and canoe trips). Quality of fit and construction are critical. New scouts should not have to spend more than \$70 to \$110.



Key Features

Hip belt – The hip belt is one of the most important items when fitting a pack for either a Scout or adult. It must be capable of being tightened down to hold the weight of the pack (and contents) while at the same time maintaining comfort on the hip bones of the wearer.

Shoulder Straps – These should be adjustable inward and outward so that the straps run down the front of the shoulders without sliding off and without touching the neck. They should be sufficiently padded to provide comfort. The straps should also be adjustable so that they curl around the front top of the shoulder without bearing down on the shoulder and extend down below the armpit without curving back under the armpit.

Torso Adjustments – Different packs use different methods for changing the vertical size of the pack. The pack should be fit with the shoulder straps and hip belt fitting correctly without the straps being too high above the shoulder, nor holding the weight of the pack because of the frame being too short. Additional care should be taken to examine where the pack frame crossbars are in relation to the head and upper hip bone. If the a frame crossbar is directly behind the head, it will come in contact throughout the hike. The pack frame needs to be adjustable either up or down to move it away from the head.

Sternum Straps – Though this feature is optional, it assists in maintaining comfort to the wearer and helps maintain stability side-to-side. This strap connects the two shoulder straps in front of the chest. For women wearers they should put some weight in the pack, connect the sternum strap and see where it hits on the bust line. The strap should connect just below the collarbone.

Compression Straps – These straps are on the outside of the pack and after packing all your gear are used to cinch down the pack so that everything is held together tightly. They can also be used to connect loose light items to the outside of the pack.

Backpack Characteristics

Capacity – Packs for weekend use need not exceed 3,000-4,499 cubic inches. Packs for younger youth should be in the 3,000-3,300 cubic inch range. For longer distance trips such as Philmont, packs of 4,500-5,999 cubic inches may be more suitable. Women's packs are available which are between the youth and men's sizes. Their shoulder width is a couple of inches narrower and cargo capacity is slightly less than the men's pack.

Frame Type – Internal versus external is an ongoing debate. The long standing recommendation has been for camping in Texas, external frame packs are cooler since the pack is held an inch or two away from the back by a mesh screen on the frame. Hiking in cooler climates would not necessarily need this space. Internal frame packs hold the load tighter to the back which provides for more stability as the load "becomes one with the back". For younger scouts, the external frame packs usually (should) have more adjustments for vertical sizing. This means that a pack that is fit for an eleven year old who is 4' 6" can still fit when they are 5' 6" tall.

Frame Construction – Quality welded joints or uniframe construction is important for external frame packs. If the joints are not well joined, the pack can break and become useless on the trail. Packs carried by the scouts will suffer lots of rough treatment. The quality of the construction really matters. Packs from Kelty, REI, Camp Trails, JanSport have worked well.

Loading Type – There are three loading types: top-load, panel-load and hybrid. The top-load is good because there are no vertical zippers which have weight pushing against them when loading. They do however require more thought in packing because reaching something in the bottom of the pack usually requires removing everything from the pack. Panel-loading are convenient because usually the entire front of the pack can be opened in one or two panels to load and unload the gear. The disadvantage can be the zippers sticking or getting sprung from packing too much gear. The hybrid loading packs combine the top load opening along with the panel openings. These are quite common today and offer easy, flexible packing.

Hydration Bladders – These are very popular for drinking while hiking down the trail. Hydration bladders can be purchased with the pack or separately.

Spare parts – When buying your pack check to see if any spare parts such as pins and/or loops should be carried with you. Some packs become totally unstable if a single pin is lost.

Fitting The Pack

A pack that doesn't fit will make the load seem heavy, unbalanced and unstable. Effort should be made to correctly size the pack before taking any long distance (more than 1-2 miles) hikes. Load the prospective pack with twenty to thirty pounds of gear. Do not use simple weights such as bar bells, but gear such as bag, tent, clothes, water bottle, etc. Adjust the straps and hip belt to test:

1. the feel – does the pack feel well connected to your torso
2. the belt – does the hip belt tighten down sufficiently to hold the weight off your shoulders and how does it feel on the front of your hip bones when walking
3. the shoulders – can the straps be adjusted so that the shoulder straps do not run into the neck,

hold the pack to your back without holding the load vertically

Packs are sometimes fit based on torso size. This is the measurement from your 7th vertebra (largest bump at base of the neck) to the top of your hip bones. Don't rush the process! A pack that doesn't fit will mean that you only take one hike!!!

Popular Brands & Models

- Camp Trails - Adjustable II Med; for larger new Scouts
- Camp Trails - Skipper; for smaller Scouts
- Camp Trails - Small or Med; for most new Scouts
- Peak I Plastic Frame Pack; several models from which to choose
- Kelty Yukon Youth Pack; belt adjusts down to 22 inches - popular with the boys

Prices should range from \$70 to \$180 based on sales, features and brands.

Boots

Summary

Until scouts have stopped growing, expensive hiking boots should not



be purchased. Boots in the \$30 to \$50 range will satisfy all hiking needs done on monthly campouts. These boots can be found at local stores such as Target, Wal-Mart and Oshman's. Once the scouts feet have stopped growing (same size for 12 or more months) boots with fancier features such as Gore-Tex can be purchased. These boots will cost from \$100 to \$250.

Key Boot Features

Sole - Vibram soles are very popular and well constructed. Injection molded soles have a habit of cracking across the ball of the feet when they begin to wear. The lugs on the sole should be tapered so that mud and stones can be removed easily.

The stiffness of the sole should be based on the terrain that is to be hiked (only when boots are being purchased for a long trip). Stiffer soles are important when the ground will be rocky and uneven. Softer soles are better when the surface will be soft such as dirt, pine needles and sand. Stiffer soles are also better when the load to be carried will be heavier.

Uppers – Leather uppers last longer when properly cared for, but fabric uppers are becoming more popular due to breathability. Chose higher, stiffer uppers for more ankle support and shorter, softer uppers for shorter hikes.

Tongue – The tongue should have sufficient padding to provide the front of the foot with insulation from the laces. It should also be fully connected on the sides to the uppers so that moisture can be kept out better.

Lining – check the lining for quality of material. Once you are hiking, you do not want the lining of the boot to wear and disintegrate. Avoid linings with seams that will rub on the feet.

Sole Lining – Orthotics should be used in fitting the boot if the hiker suffers from foot conditions such as the need for extra arch support.

Sole-Upper Seam – The seam between the sole and upper should be well constructed to ensure that minimum water leakage is possible and that the boot will stay together. If external stitching is used, will the stitches be prone to direct wear that would break the stitches and open the seam. The two primary means of connecting the sole to the upper are cement or stitching with some boots combining both. There may also be an extra rubber guard to provide extra moisture protection.

Boot Treatments – Different types of boots require different treatments. Boots with Gore-Tex should not have products such as Snow Seal used on them. Check

with the manufacturer on what treatment products should be used. Leather uppers need some treatment to maintain their condition and surface water resistance. Over treatment can lead to boots that become floppy.

Weight – Make sure that the boots are not heavy to wear. Boots with rubber linings are great in the snow, but make for terrible hiking boots.

Fitting Boots

Get help! Get assistance from people who are familiar with fitting shoes and boots. If expensive boots are being purchased, make sure that the assistant has experience fitting hiking boots and preferably, experience hiking themselves. It may be necessary to make an appointment. It's worth it! Don't guess.

Don't buy boots based on your shoe size. Shoe sizes vary by brand. Just because your Nike's are size 8, your hiking boots may be size 6 ½. Measure every time. Foot sizes of adults change over time as the arch settles. Measure both length and width. A hiker with ill fitting boots has never had a good time on the trail.

Boots should be fitted to the maximum size your feet will be. That means combining the socks and sock liners you will be wearing (not from the bin in the store) and buying the boots at the end of the day when your feet are most likely to be swollen.

Fit the boots and then spend time in the store walking around to see how they fit and where they rub on your feet. Though the boots will "break-in", significant rub points indicate that the boot does not match your feet. Different brands of boots have different shapes. Some have more width in certain areas, others have a sharper inward curve above the heel below the ankle. If one boot brand hurts, try another.

Make sure that your foot does not slide around in the boot significantly. If your heel move up and down a ½ inch, your will be very prone to getting a blister.

Lastly, don't wait until the last minute. Take your time shopping event if it takes you a few weeks. Then watch for sales. Late fall and winter are frequently times for close out sales of last year's models. After buying your boots take time to break them in. Wear them for ever increasing periods of time. Start with just an hour or so around the house. Before your hiking tip you should find them comfortable enough to spend the day in them. But, hiking boots should not be your day-to-day shoes. They are backpacking tools and only have so many miles in them. The more you wear them day-to-day, the sooner they will be worn out.

Popular Brands & Models

For trips such as Philmont and other long distance hiking scouts and Scouters frequently wear

- Asolo
- Vasque
- Hi-Tec

Prices should range from \$100 to \$250 based on sales, features and brands. Remember, younger Scouts can use boots that cost \$24 to \$45.

Tents

Summary

Scouts use their tents monthly. Quality of design and construction



are critical. New scouts should not have to spend more than \$70 to \$110.

Key Tent Features

Rain Fly – The rain fly should cover the entire tent to within 6"-8" of the ground. It should be held above the tent with at

least two inches of gap for air circulation. Additionally, the fly should be capable of being secured so that it will not flap in the wind. Check the opening in the fly for entry into the tent. When the fly is unzipped and the door of the tent is unzipped, will rain be able to fall directly down and land on gear inside the tent? There should be some overhang so that you can enter the tent in the rain without allowing the rain to land on your gear.

Ventilation – there should be doors and windows made out of mesh that will allow air to move through and perspiration to move out without letting in bugs. Windows or doors on opposite sides will allow cross-ventilation during warm nights.

Vestibule(s) – Many backpacking tents have one or two vestibules for holding gear away from the rain/dew and outside the tent. They are also excellent places to take-off and put on your boots without getting dirt and mud in the tent. Many tents are not large enough for holding two sleepers along with two packs. If the pack does not have a vestibule, a good pack cover will be necessary and good planning to make sure that you don't find yourself needing something from your pack after getting into your warm sleeping bag!

Seams – Seams are where the rain will first come through. This includes both the fly and the tent itself. The nylon material is naturally water resistant, but the sewing process creates little holes where the needle pushes the thread through. Factory sealed seams with glue or tape are excellent.

Pole Connections – With the popular dome tents, poles are connected to the tent via either sleeves or clips. To put up the tent by yourself, sleeves are easier to use. Clips often offer more air circulation between the tent and the fly.

Poles – The material that the poles are made out of will affect weight and the ability to break the pole. Light weight

aluminum and fiberglass are the most common materials. Aluminum poles can be bent and the fiberglass poles can be broken. The best strength comes from high-strength aluminum poles. The most breakable are the tubular fiberglass poles. Solid fiberglass poles are the heaviest and less reliable.

Pole Repair Kit - Which ever pole material your tent comes with, you should have a repair sleeve for the poles. The repair kits consists of an aluminum sleeve just wider than the pole and typically 6"-8" long. This sleeve is slid down over the point in the break to maintain the usability of the tent until the pole can be replaced.

Ground Cloth Footprint – Many tents come with a ground cloth that is the size and shape of the bottom of the tent. These are wonderful, but if they increase the price more than \$10-\$15, a piece of plastic cut in the same shape will work just as well.

Seasons – Tents are rated as three or four season tents. Since the troop does most of our camping in the North Texas area, a three season tent is all that is needed.

Tent Type – Tents com in many different designs. The major tent types are A-frame, dome, and hoop. Here is a brief description of each design.

- A-frames are a simple design similar to the "pup-tents" many small children play in the back yard with, only with much better design and quality. Generally speaking, these tents require staking down. Popular models of this include the Eureka Timberline.



- Dome tents are the most popular tents in use today. They are relatively easy to setup by one person and typically have less parts. 2-3 poles, the tent,

fly and stakes. The most often mistake in the selection of dome tents is the rain fly. The umbrella fly is totally insufficient for protecting the tent from rain. The fly must extend down to within 6"-8" of the ground.



Good Dome Tent



Bad Dome Tent

- Hoop tents are made from two hoops, one at the head and another at the feet. The tent material is suspended between these two hoops. This tent is not recommended for younger scouts because it is not freestanding. It must be staked securely at both ends to stand up.



Freestanding tents are highly recommended. A freestanding tent is one which does not require tent stakes to remain standing. Ground surfaces such as sand, rock or parched clay may prevent the use of stakes. Tents such as the hoop style cannot be used without either stakes or tying the ends of the tent to trees or rocks.

Tent Capacity

Tent capacities should be followed for younger scouts and for tents used for long

distance backpacking. If a tent is rated as a 2 man size tent, it will snugly hold two adults or comfortably two youth scouts. For a better feel of the space inside of a prospective tent, open and set it up in the store (if there is room) and unroll two sleeping bags and enter the tent. See if there is sufficient space for you not to feel Claustrophobic.

Tent Weight

The weight supplied by the manufacturer is the minimum weight and does not usually include stuff sack or stakes. A good target maximum weight is 7 pounds for a 2 man tent. Balancing quality materials and construction with price, the lighter weight tent the better.

Tent Shape and Size

The tent shape and size should support two scouts ranging in height from 4 and ½ feet to around 6 feet tall and wide enough for two sleeping bags.

Other Tent Features

- Fastpacking – this is the ability to use the poles and rain fly as a shelter without the use of the tent itself.
- Taped Seams – Rather than simply sealing with a glue like liquid, taped seams provide more water protection. Use of liquid seam seal is still recommended if you know you are going to be out in serious rain.

Tent Care

Storage – Tents (like sleeping bags) should not be stored in their stuff sacks. This causes creases in the material that weaken them. The tent should be stored loosely hung over a wooden or plastic hanger in the back of an indoor closet. Storage in direct sunlight will also breakdown the material.

Cleaning – Tents should be swept or shaken clean of loose dirt after every use. Dirt which will not shake off should be

cleaned with mild soap, sponge and water. Washing machines are too rough on the material and seams.

Repair – There are repair kits for the tent material (patching). The seam around resewn seams will need extra care with the seam sealing liquid. Poles and screens generally need to be replaced when broken or torn. Check with the manufacturer, some offer extended warranties.

Mold Prevention & Removal – Hanging your tent after EVERY use in a dry environment will prevent mold and mildew. Never leave a tent in the stuff sack after returning from a trip (even for a couple of days). There are chemical treatments for removal of mold and mildew such as Mirazyme if the tent isn't too far gone.

Popular Brands & Models

- Eureka Timberline 2 Man
- Kelty Starlite 2 Man
- Similar REI tents

Prices should range from \$60 to \$190 based on sales, features and brands.

Ground Cloths

Key Ground Cloth Features

Expense – The second most important feature of the ground cloth is expense. It should not be expensive. Special footprints that come with tents are excellent if they don't add more than \$10-\$15 to the cost of the tent.

Size – Ground cloths should be measured to approximately 1 inch small on all sides than the size of the bottom of the tent. Ground cloths that stick out beyond the side of the tent will gather water that will be pulled back under the tent getting gear wet.

Material – Nylon or plastic are excellent ground cloths. The material should not be heavy to carry. The purpose of the cloth

is to provide a dirt and moisture barrier between the ground and the tent. 3 mil polyethylene plastic is excellent.

Sleeping Bags

Key Bag Features

Offset Stitching – A sleeping bag is like a quilt sack. When the material is quilted it can be more cheaply done if it is stitched through from one side to the other. This stitching through removes much of the loft (see below) and creates lines of stitches through which cold air can travel at night. The correct way for a bag to be stitched is off-set which means that stitches on one side of the material does not match



the stitch in the other side. To test a bag you are looking at, pick the bag up and place a finger on a seam on the inside and on the outside of the top of the bag. If your fingers line up, you don't want the bag. If your fingers are a few inches apart, it has the correct type of stitching.

Shell – The shell should be made from man made fibers. Nylon and like material is water resistant which helps if your back gets rained on or there is a leak in your tent. Darker fabrics are also helpful in warming quickly in sunshine to help them dry when wet.

Fill – The two primary choices are down and synthetic fill. Down is not recommended for scout backpacking. Its cost, care requirements and wetness issues make it less than ideal for scout camping. A down bag that gets wet loses almost all of its warmth potential. Many of the synthetic materials can be wet and still provide warmth. The most popular synthetic materials are Hollofil and Quallofil. Both of these materials provide good loft and wear well.

Loft & Temperature Rating – The loft of a bag is the amount of height that the bag has when it is laid out and fluffed-up. The more loft a bag has the more warmth it will provide. The loft is area within the material and inside of the shell that holds warmer air. The scouts in the North Texas area are recommended to purchase 15° bags. These will provide sufficient warmth for camping.

Shape – Mummy, Rectangular, and Semi-rectangular are the shapes that sleeping bags come in. Mummy bags are tapered around the head and have a hood which covers all but the



face of the sleeper (see picture on the left). The rectangular bag is equal width head to foot (see picture on right). The semi-rectangular is tapered at the feet, but does not have the mummy head covering. People who have not used a mummy bag before should get in one in the store and cinch up the bag around the face. Make sure that you are not Claustrophobic. Many people cannot handle the bag closing in that tight. It is important for women backpackers that there are specific sleeping bags for women which have a different taper cut. They are slightly narrower in the shoulders for better warmth and slight wider in the hips so that they can rollover without shifting the whole bag.

Zipper Tape – Zipper Tape is a strip of material that is slightly wider than the zipper and runs the length of the zipper to cover the zipper and prevent air from passing through into the bag. This is an important feature and should be found on all quality backpacking sleeping bags.

Weight – Bags with the needed temperature rating and loft, in adult sizes will range from 3 pounds to 4 ½ pounds generally. Youth bags should weigh about ½ pound less.

Size – The size of the bag matters. A bag that is too wide or long will contain extra cold air that must be warmed by the body.

A bag that is too small will have the body pressed up against the sides or ends of the bag compressing the loft. This too will diminish the warmth of the bag. For younger scouts, the bag can be purchased with an extra 6" to 8" of length. This will allow room for growth in height.

Bag Care

Just like tents, sleeping bags should be hung in a dry environment after EVERY campout. Direct sunlight should also be avoided. Even if there is no rain, the bag will have perspiration moisture in the fabric which needs to be dried out. After drying out the bag it should be stored in an old pillowcase in the back of a closet. Care should be taken so that the bag is not crimped or folded sharply as the loft at that point will be flattened out reducing the warmth characteristics.

Sleeping bags that have become soiled beyond what can be cleaned with a damp sponge can be washed. Check with the manufacturer's instructions on how it should be washed. If they cannot be found, use the delicate cycle in a commercial machine without an agitator. Do NOT dry the bag in a drier. Lay the bag out away from direct sunlight to allow the loft the "re-inflate" and the bag to dry.

Popular Brands & Models

- Slumberjack
- Kelty
- Peak 1
- North Face (usually more expensive)

Prices should range from \$50 to \$170 based on sales, features and brands.

Sleeping Pads

Key Pad Features

Material – The choices of sleeping pads are in two primary groups: air filled and foam pads. The primary trade-offs



between these two groups are cost and comfort. The air filled pads are more expensive, but provide more comfort, especially for adults.

Foam pads should only be purchased that are of "closed-cell" material. Open-celled foam pads are also known as sponges. That means that when they get near water they absorb it! Closed-cell pads will provide a moisture barrier against dampness that may be in the bottom of the tent from rain leakage.

Air pads come in different thicknesses and



with different features such as no-slip surfaces. 1 inch thickness is generally sufficient, but unroll and inflate the pad in the store. Then lay down and roll on your side checking to see if your shoulder or hip bone touch the floor underneath. Make sure that it is comfortable before leaving the store.

Size – The minimum size of the pad should be the width of the shoulders and the length from the shoulders to the bottom of the hips. This is truly a minimum and is not recommended except when weight is the primary concern. The sleeping pad will provide temperature insulation when the ground is cold. This means that the sleeping pad will provide warmth when supporting from head to foot. Air pads are available in many different sizes including wide, regular and narrow widths, short, $\frac{3}{4}$, regular and long lengths.

Weight – Closed-cell pads should weigh less than one pound. Air pads will range from approximately 1 to 3 pounds.

Pad Care

The sleeping pad should be aired out just like the tent and sleeping bag. A significant amount of moisture will collect on the sleeping pad from the ground and

perspiration. Air pads should also be stored inflated so that the fiber core that helps the self-inflation will not be crushed.

Popular Brands & Models

Self-Inflating Air Pads

- Therm-A-Rest from Cascade Designs
- Slumberjack

Prices should range from \$40 to \$80 based on sales, features and brands.

Closed-Cell Pads

- Ridge Rest from Cascade Designs

Prices should range from \$7 to \$20 based on sales, features and brands.

Cooking & Eating Gear

Eating Gear

Utensils – Each scout should have a fork, knife and spoon for patrol campouts. On backpacking (and canoeing)



campouts scouts should bring a spoon and their pocket knife. The fork, spoon and knife can be plastic or very light weight metal. Camping stores like REI and Oshman's have special non-breakable lightweight plastic utensils that work very well and last a long time. These typically cost \$2 to \$4.

Plate & Bowl – Scouts can purchase fancy plates, bowls or kits for eating, or they can use plastic 1 pound margarine bowls. Most backpacking food is re-hydrated on the trail with hot water. Most of the meals can be consumed in a bowl. The bowl needs to be capable of handling nearly boiling water without getting too soft. Test a bowl at home. When you need a plate, a plastic picnic plate or even a Frisbee can be used. Metal plates and bowls cool the food faster which can be very unfortunate on a cold morning.

Drinking Cup – A plastic drinking cup that is made to hold a 1 to 1½ cups of very hot water will be needed for that hot chocolate in the morning.

Cooking Gear

Pots & Pans – Every scout should have their own pot for cooking on backpacking trips, even if they do not bring a stove.



A single sauce pan that holds 1 pint of water is usually sufficient for backpacking. The pan should be made of lightweight metal such as aluminum or titanium (which is very expensive). The pan should have a lid. If the pan has a handle make sure that it is not too heavy. Lightweight pot tongs are available which may weigh less than the handle on the pan. If this is the case, remove the handle and take a set of pot tongs in your pack.

Stoves – Only Scouts who are 13 or older should spend the money for a backpacking stove.



On all troop backpacking trips sufficient stoves are available.



Generally, one stove can handle the cooking needs of 4 to 8 scouts. The stove should be lightweight, use one of the recommended fuels (see below) and be well made. The quality of workmanship is mostly a factor of the brand thought not exclusively. The configuration of the stove should be such that when it is connected to the fuel source with a pot of water weighing 2 pounds, the stove should be stable and not likely to tip over. Stoves which are just attachments that screw on the top of an 8 inch propane bottle are very unstable and risk dumping boiling water on the feet of a scout.



Fuels – Coleman White Gas is still one of the best fuels for backpacking stoves. This fuel burns well at all altitudes and when handled properly is relatively safe. Butane stoves are usually attachments which fit on 4 inch tall butane bottles. These generally work well and weight very

little. The disadvantage of these is the nature of the butane bottle. They are not refillable, and when in a pinch, extra fuel is more difficult to find than white gas. Propane generally burns well at lower altitudes, but can have trouble in higher elevations.

Popular Brands & Models

- Coleman Peak 1 Feather
- MSR Whisperlite Shaker

Prices should range from \$40 to \$80 based on sales, features and brands.

Water Purification

Options

Tablets – Purification tablets are typically based on iodine. A specified number of tablets per pint of water are used and allowed to stand for a minimum period of time. The water usually has a strong taste from the treatment. Many of the brands now contain a second tablet which neutralizes the iodine taste and is used **after** the treatment period.



Polar Pure – This brand is a bottle of Crystalline Iodine. You fill the bottle with water and allow it to stand to create your treatment solution. Then you add cap-full of the solution to your water.



Micro-Filters – These devices provide a filtration system and sometimes additional treatment by chemical or charcoal. There are several different brands. Some include features such as: easy pump lever, pressure valve, anti-clog filter, and active carbon inserts.



Popular Brands & Models

Treatment

- Potable Aqua with P.A. Plus
- Polar Pure

Prices should range from \$5 to \$10 based on sales, features and brands.

Micro-Filters

- PUR Hiker
- Sweetwater Guardian

Prices should range from \$5 to \$7 based on sales, features and brands.

Rain Gear

Options

Rain Suit – Jacket and pants rain suits are recommended by the Troop 876 leadership. Heavy North Texas rains exceed the rain protection provided by ponchos. The material chosen for the rain suit affects the weight, cost, warmth, breathe-ability and packing size. Though available, GORE-TEX is not necessary for scout use. Older scouts who have stopped growing may warrant nicer rain gear, but as long as scouts are still growing, the extra expense is not advisable.



Poncho – Ponchos are the traditional scouting rain cover. They are a piece of plastic with a hole and hood for the head that covers the front and back of the scout. When backpacking, the poncho can be extended over the pack to provide coverage for both the hiker and the pack. The unfortunate fact is however, that the poncho does a poor job of protecting the scout or the pack from rain. Most wearers find that they get substantially wet from mid-thigh through their feet. Though ponchos are less expensive, they should not be your first choice.

Popular Brands & Models

- Campmor
- REI
- Coleman

Prices should range from \$30 to \$70 based on sales, features and brands.

Hiking Clothes

Categories

Pants – Very popular these days are the zip-off pants. These pants convert from long pants to shorts via a zipper mid-thigh. Things to consider include:

1. Make sure that the pants don't have a substantial belt buckle that cannot be removed. This is very uncomfortable under the backpack belt.
2. Leg zippers are a must. These zippers run up the leg from the ankle for 6" – 8" and allow for removing the zipped-off pant leg without removing your boots.
3. The comfort of the zipper line must be checked. Some hikers cannot wear the zip-off pants because they notice the zipper line too much.



Shirts – Avoid regular t-shirts. They are made of cotton and hold moisture. Hiking shirts made of breathable man-made fibers are more comfortable and dry quickly if they get wet.



Socks – Layers! Good foot care requires that you have a thin pair of sock liners under a heavy pair of hiking socks. The liners are made of synthetic material that wicks away the moisture from your feet. They also provide a rub layer between the two layers of sock rather than between the sock and foot. This will help in preventing blisters. There are now special brands and models of socks which are specifically made for hiking.

Outerwear – Layers are much better than a parka in Texas cold weather. A hiker should have a synthetic undershirt, shirt, warmth layer such as fleece, and a

wind proof shell. In colder temperatures, a second or thicker fleece layer should provide all the warmth needed. Hikers generate a lot of heat. If you only have a shirt and parka, you will either freeze (jacket off) or cook (jacket on). By wearing layers you can layer up to start the morning and drop layers as your body temperature warms up along the trail.

Underwear – Though buying special underwear is not necessary for typical weekend backpacking, for longer distance hikes, synthetic underwear is preferable to cotton. Many hikers who have difficulty with their thighs rubbing together have found that wearing bicycling shorts (without the seat pad) under their hiking shorts or pants provides great comfort and savings problems with chafing.

Miscellaneous Personal Backpacking Gear

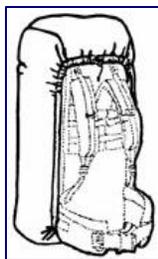


Compass & Map – Every scout should have a personal compass and each crew a map of the trail to be hiked. The type of compass that the author recommends is a rectangular housing. This allows the compass to easily be used to orient the map.

Water Bottles – Each hiker should carry 1½ to 2 liters of water. In a well known area that has water sources periodically, less water may be carried at any point, but you should have the capacity to carry about 2 liters for extended dry trail.



Pack Cover – Pack covers are protection for your backpack in the case of rain and for overnight protection against dew. Most pack covers are made for individual packs or for a range of pack sizes. They can be used while the pack is on your back. If you do not have a pack



cover, a couple of heavy duty plastic trash bags should be carried to provide pack protection in case of rain and for overnight.

First Aid Kit – A personal first aid kit should be carried by every hiker. It should contain a couple of bandages and mole skin. A more thorough first aid kit should be carried as crew gear.

Potty Shovel – This small plastic shovel should be carried in the pack with your “mountain-money” or “hockey-tickets” or toilet paper. It is used to dig a small cat hole for taking care of business. All scouts should have gone through outdoor sanitary training before taking to the trail.

Stuff Sacks – Experienced backpackers use stuff sacks to sub-pack their gear in stuff sacks in their backpack. Many use stuff sacks of different colors with each color known to hold a certain type of gear such as food, clothes, rain suit, or stove. These nylon sacks also provide additional dryness protection in case the pack gets wet. They should not be depended upon for complete wetness protection. Sleeping bags, clothes and paper items should be also stored in locking plastic bags.

Compression Sacks – A special kind of stuff sack that has straps for compressing the bag contents (usually sleeping bags) to a much smaller size.

Pack Straps – Most troops forbid the use of bungee cords for connecting gear to your backpack. Bungee cords continue stretching even after they seem tight. This allows gear to begin bouncing and loosening as you hike. Pack straps are nylon straps with plastic connectors that buckle. While in the store buckle the straps and tug hard on them. If the buckles won't hold in the store, they won't hold on the trail.

Whistle – A simple plastic whistle that is used if you are lost or need to signal others.



Head Gear – A sleeping hat if you don't have a mummy sleeping bag is very important. Amounts vary, but it is generally believed that you lose significant body heat through your head. During the day a ball cap or similar protection from the sun is mandatory in Texas.

Credits

Much of the material in this document comes from the experience of outstanding Scouters with hundreds of miles on the trail. They include:

- Dana Mackison
- Matt Walker
- Ben Ford
- Doug Day

Additionally, the help from years of reading and studying **Backpacker Magazine**, especially their annual Gear Guide issue.