Proper Camping/Hiking Gear, An Introduction

When joining the Boy Scouts, one of the first questions that come up for parents is what backpacking gear to outfit their son with and the second question is usually, what does it cost. Naturally, the parents really want to get their child the "right" gear. But there are differing opinions on what is right.

New Scouts range in age from 11 to 13 years, in height from 4'0" to 5'10", and in weight from 65 to 200 pounds. These new Scouts all want to be recognized as being able to hike and carry their share of the gear. They can easily lose their self-esteem if they are given a huge, heavy pack to carry and then they can't make it up the first hill they encounter. From my observations, what the boys can carry changes once they have seen a few years of testosterone and perhaps played sports; then it doesn't seem to matter how much weight is in their packs and they usually leave the adults behind on the trail.

But when they first become Scouts, it's a different matter. Leather hiking boots, big backpacks, Scout mess kits, heavy sleeping bags, and heavy tents might seem like the "right" gear, but can quickly become a discouraging liability for the young, new Scout. This paper is intended to introduce inexpensive, lightweight options for new additions to the Troop.

Before I go into the gear in detail, I'll offer some suggestions of places to look for inexpensive clothing and gear. For clothing, try thrift stores first (Goodwill, Salvation Army, local community, or church stores), the boys are growing and they're going to do their best to destroy their camping gear so there's no need to spend more than necessary. I've found great heavy duty olive green pants with cargo pockets for $2 at Goodwill, and my son recently picked up a name brand hiking shirt for around $5. Next stop, department stores, and last sports or outdoor stores. To find discount gear and clothing online, look at campmor.com, sierratradingpost.com, rei-outlet.com, especially at their sale/clearance items. Anyone in the troop will tell you that REI is my all-time favorite store but when I shop there I rarely pay full price. I shop their Scratch and Dent sales and always spend time at their clearance racks and boxes. Acquiring a high-quality set of gear does not happen over night and may take several years if you're on a shoestring budget, but it can be done.

The gear outlined below was selected for low weight and low cost as much as possible, and was compiled for new Boy Scouts backpacking in three-season, mild conditions (30 degrees and up.)

Clothing

Backpacking clothing has some unique requirements that must be met to keep the Scouts comfortable and safe. In no particular order, clothing should

- Provide protection from the elements
- Function equally well in cold or hot environments
- Breathe as the Scouts level of activity changes
- Dry as quickly as possible
- Be as lightweight as functionally possible
- Since we're talking about Scouts - be inexpensive

Base or Wicking Layer

This layer is in direct contact with the skin and is designed to keep the skin dry by moving moisture from the skin out to the surface of the fabric. If perspiration is removed quickly from the skin's surface, outer layers keep you warm more easily. Conversely, if the layer of clothing next to your skin becomes saturated and dries slowly, your other clothes, however good, have a hard time keeping you warm.

Technology has changed the face of clothing options from what they were 20 to 40 years ago when everything you wore was wool. Today there are ultralight fabrics that can keep you warm and dry and weigh a fraction of yesteryear's wool options. These new fabrics at times can be very expensive, so my recommendations are aimed at keeping it simple, functional, and cheap. As the boys get older, they may pursue more expensive options, but for our new Scouts the following suggestions will keep them comfortable and safe while not breaking your wallet.

One quick rule for clothing fabrics: NO COTTON! This includes sweat shirts, sweat pants, blue jeans, socks, boxers, briefs, t-shirts, etc. Cotton takes an extremely long time to dry, does not wick moisture away from the body but keeps it next to the skin, and when it is wet or damp from sweat it doesn't provide your Scout with any warmth, thus endangering them just when they need the warmth.

Most of the base or wicking layer clothes that I mention below can be purchased at sporting goods stores, discount web sites, or department stores.

Shirts

Your Scout should have either short sleeve shirts for hiking temperatures over 50 °F or long sleeve shirts for hiking in temperatures under 50 °F. These shirts are usually styled like a t-shirt. They are made of different types of new fabrics that wick moisture away from the skin. Two of the most common wicking fabrics are Coolmax and Capilene, but there are many others and most of the major sports manufacturers now have several options (Solomon, Nike, Champs, etc.). These shirts are very thin and lightweight. The Scout should usually pack two shirts, one for wearing during the day and one for sleeping in at night.

Boxers/Briefs/Shorts

When hiking, even in colder weather, many Scouts prefer shorts because of the heat that their legs generate. Cotton boxers/briefs trap perspiration and don't allow the skin to dry, which can lead to chaffing. A much better solution is to go to the running or the bathing suit department to purchase your hiking shorts. These shorts are made of materials that dry very quickly while having built-in liners of wicking fabrics that allow your skin to stay dry. A pair of lightweight running shorts can be worn under long pants as well, so by using these shorts the boys do not need to bring boxers/briefs at all, which is a definite weight savings. Only one pair of shorts is usually required for hikes and remember, the shorts double as a swimming/bathing suit. If your Scout decides to use boxers/briefs, the ones I would recommend are Patagonia's Capilene SW Boxers, Capilene LW Briefs, or at REI the ExOfficio brand or REI’s own brand of wicking boxers or briefs.

Socks

All new Scouts have lots of cotton socks at home. Guess what sock material causes the most blisters because it cannot transport water away from the skin? That’s right, cotton. Guess what sock material takes 12 to 24 hours to dry if it gets wet? Right again, cotton. Go to the running or outdoor store and purchase socks made out of wicking materials such as Coolmax or merino wool. With socks made out of these materials, you only have to wear a

single layer instead of a liner and regular layer to prevent blisters. The socks may come in different thicknesses. Choose thin for hiking in the hot climate, and thicker for colder weather. I prefer to have two pairs of hiking socks that I can switch off and on throughout the day as even a wicking sock will gather moisture when hiking. Since I sleep cold and my feet get cold easily, I sleep with a thick pair of socks on to keep my toes warm. I only carry three pairs of socks whether going on a weekend hike or a 7-day hike. One other thing to make note of, Wool is the ONLY natural material to provide insulation even when wet!

Sleepwear

The sleepwear you choose will depend on if your son sleeps hot or cold, how warm the sleeping bag is, and what the outside temperature is. I sleep cold so I tend to sleep in a long sleeve wicking t-shirt, light weight long fleece pants, and warm socks, while my son, who sleeps warm, is in boxers only. One additional sleeping item is a thin wool or fleece watch cap or hat. Since a majority of your body heat is lost through your head, a cap will keep your whole body much warmer.

Insulation Layer

This layer is basically designed to keep you warm, but it also has the task of dealing with the moisture brought up from the base or wicking layer. Far and away the most common fabric that is used is fleece. Technology has also developed some various fabrics that are a cross between an insulation layer and an outer layer that handle moisture exceedingly well while providing wind and mild rain protection.

Two different situations are usually presented to backpackers that concern their insulation layer. You're hiking or you're standing around camp just trying to stay warm, especially after sunset or in the early morning prior to sunrise. The requirements for the insulation layer are vastly different between these two situations.

While hiking, you really do not need to wear much in the way of insulation layers because your muscles are generating so much heat your body core doesn't need to conserve heat; it needs to get rid of it. That is why you may see people hiking in the snow with t-shirts and shorts. However, when you stop hiking, within 5 minutes your core temperature will start dropping. This is when you require additional insulation and even more will be needed when stopped for prolonged periods.

So, the requirements for the insulation layer change as your activities do, the easiest way to deal with this is to provide multiple layers. Layers can be different thicknesses and/or different materials. A thin fleece top will provide enough warmth while hiking in cold weather or when stopped for a short period in warmer weather. A heavier fleece vest/shirt may be needed when stopped for a prolonged period. A jacket (down or synthetic insulation) will be needed for camp wear after dark or in the early morning. Instead of packing multiple jackets of different thicknesses, we tend to wear multiple thinner layers. This means that at night or in the early morning your Scout is wearing all the hiking clothes he brought with him. This is a great way to save weight, don't pack any more clothing than can be worn at one time (socks being the exception).

For insulation while hiking, I bring a light fleece or a nylon thinly insulated windbreaker to put over my shirt or to wear when I have a short rest stop. When I am done hiking for the day, I immediately get out of my hiking clothes since they are damp and get into my dry sleep wear (warm socks, light weight fleece pants, wicking long sleeve t-shirt). I add my lightweight fleece top or windbreaker to this. As it gets colder, I could add a down vest or jacket, wool hat, fleece gloves, and then eventually I would add my rain jacket and rain pants if I am still not warm enough. If I am still cold, I get in my sleeping bag with some or all of these clothes on. Mummy style sleeping

bags typically unzip from top or bottom making them convenient to drape over your shoulders while still being able to move about the camp.

Thin Shirts/Jackets/Pants

100 weight fleece (Polartec, Microfleece, Expedition weight underwear), these can be purchased for under $20 - or a whole lot more. These are always on sale at some web location. Do not pay full retail.

Insulated windbreakers (water resistant/slight insulation): can be purchased for $60-$100 or for a few dollars at the thrift store. An example is the Marmot DriClime windshirt, which is lined with a very thin layer of tricot. ***Make sure the insulation does not contain cotton.***

Thicker Insulated Jackets/Vests/Pants:

200-300 weight fleece (heavier than down or synthetic insulation but usually the cheapest choice).

Synthetic fiber insulation (weight and cost are in-between fleece and down).

Down insulation (lightest, warmest, most expensive - usually): try google.com/froogle, type "down vests" and you will get a wide range of prices. In one important regard Down is the opposite of Wool, it provides almost no insulation capability when wet so be careful to keep yours dry!

Kuhl, Arcteryx, and Mountain Hardwear make excellent Insulation Layer clothing as well but it is pricey.

Outerwear and Rainwear

This layer is designed to protect you from wind, rain, and snow, and is sometimes called your shell. There are two main types of outerwear: ones that are windproof but not waterproof, and ones that are both windproof and waterproof.

Windproof but NOT Waterproof

Every Scout needs an outer layer to block the wind. If the wind can blow through your insulation layers unobstructed, you can lose a lot of body heat. Another way to think about this is if you have a good windproof layer, you need less insulation - less weight to carry - to stay warm. This layer in its simplest and lightest form is a very light nylon jacket and pants without many pockets or other bells and whistles. They are sometimes referred to as windbreakers or wind shirts. The unlined are lighter in weight, the lined are warmer, your choice. Just make sure there is no cotton in the lining.

Wind blocking clothing will really be appreciated when hiking in a buggy area since it also helps block mosquitoes. Some manufacturers are modifying the wind blocking fabrics to make them water resistant. For a mild rain shower, a water resistant jacket is the only jacket that you will need to wear while hiking.

Windproof and Waterproof

Many modern fabrics are waterproof and breathable and keep rain out, and also allow some moisture vapor from perspiration out. The most renowned of these fabrics is Gore-Tex but eVent by REI is beginning to receive similar acclaim. These fabrics tend to be very expensive and somewhat heavy. The place where they really shine is winter backpacking in the snow and ice. These jackets and pants really do a good job of keeping you dry but can

easily cost in the hundreds of dollars. Because of the high costs, I do not recommend these jackets for new Scouts. Once they have been backpacking for a few years and have stopped growing, this may be an option. Late Winter/Early Spring is the best time to find deals on eVent at REI, Gore-Tex rarely goes on sale.

A less expensive option is a Frogg Toggs rain suit for $60. This rain suit weighs about 15-16 ounces and is waterproof and breathable but can tear easily if not treated carefully.

With the rain jacket and pants option you should also consider a backpack rain cover

The cheapest rainwear option for new Scouts is the Campmor vinyl poncho for $3.99 and only a few ounces, which is hard to beat for cost and durability. A sturdier option is the Campmor silnylon Ultralite Poncho/Shelter that costs $50 and weighs only 8 ounces. Either one will work well while also continuing to fit the boy as he grows. The added advantage is that ponchos cover and protect the pack from the rain. Poncho fabric is wind blocking, but ponchos, by design, don't completely block the wind. If you wear a windbreaker jacket and pants under the poncho, this will block the wind while the poncho blocks most of the rain. The poncho can also serve as a ground cloth and, with practice, an overhead shelter.

Footwear

All new Scouts can use the sneakers that they wear for everyday use for backpacking. Since these boys are constantly growing out of shoes, I would not purchase specific shoes for hiking, especially not leather hiking boots. If you look at new sneakers, consider purchasing running, or even better, trail-running shoes instead of items like "skate" shoes. If your boy is prone to uncontrolled running and jumping (as many are), if he has experienced past ankle or knee injuries, or if he is somewhat overweight, then consider purchasing a lightweight hiking boot that covers the ankle and provides additional support and protection.

Personal Gear

Sleep Systems

Getting a good night's sleep is important and you don't need to carry a lot of weight to achieve it. Besides your shelter, you'll need a sleeping bag, a sleeping pad, and a ground cloth. The total weight for this sleep system should be at, or under, 8 pounds. The sleep system will be your most expensive area when it comes to buying gear. However, you should be able to find some very good equipment for under $250 and have plenty of options well below that. REI Scratch and Dents always have great variety in this area.

Sleeping Bags:

Most of our camping will be in fairly mild conditions, a 30 to 40 °F rated sleeping bag should be sufficient. I would not purchase a bag rated lower than 20 °F as a first bag. If your son sleeps hot, buy a 30-40 °F bag, but if he sleeps cold, then buy the 20 °F bag. The lower the temperature rating for the bag, the heavier it will be to carry. The sleeping bag you purchase should ideally weigh less than 3 pounds. Keep in mind that modern sleeping bag ratings systems assume you will be sleeping on a thermal mattress and in thermal underwear with socks and watch cap. If it’s rated at 30 °F and your son sleeps directly on the ground or just a ground cloth and in boxers then he will be cold even at 40 - 50 °F.

The next decision is whether to use a down or a synthetic fill bag. A down sleeping bag packs much smaller, is lighter, and tends to last longer, but usually costs a lot more and loses more warmth if it is allowed to get wet. The smaller packed size of a down bag is a real advantage for the very small boys who are carrying small packs. Conversely, synthetic fill bags tend to be bulkier and heavier but they will cost less and will retain more warming capability even when wet.

Some of the best places to look for these sleeping bags are campmor.com, sierratradingpost.com, rei-outlet.com, and REI Scratch and Dent. Some retail examples of sleeping bags that fit the above criteria are:

EXAMPLE SLEEPING BAGS	Size	Price	Weight
Campmor Goose Down 20 °F Mummy Sleeping Bag	Regular	$110	2 lb 6 oz
Kelty Light Year+25 Sleeping Bag	Regular	$129	2 lb

Sleeping Pads

Sleeping pads are used to provide insulation from the cold ground while also giving you a softer place to sleep. There are two main types of pads: closed cell foam, and self-inflating. The two most popular closed cell foam pads are the Z-rest and the Ridge Rest from Therm-a-Rest with prices under $35 and weights under 1 pound. The least expensive closed cell foam pads are the baby blue pads 3/8 inches thick that cost less than $20 and weigh 8 ounces for a full-length pad. The Campmor pad is called Pack-Lite Closed Cell Foam Pad.

Therm-a-Rest also makes the most popular self-inflating pads with prices from $50 to well over a $100 and weights ranging from just under a pound to over 5 pounds. For the boys I recommend the closed cell foam pads because they are lighter and less expensive while not being susceptible to punctures, as are the self-inflating pads. Another factor to consider is the weight of the Scout. A 65-pound Scout will not need as much padding as a 200-pound Scout. Unless you are camping in cold weather, a three-quarter length pad (48-51 inches) weighing 9-11 ounces and costing $16-30 will be adequate. To save even more weight, most boys do not need a 20-inch width closed cell foam pad so they can cut them down to a narrower width and/or even shorter length to save further weight.

Shelter Systems

Tarps

Tarps are a lightweight and inexpensive way to protect you from rain. Tarps come in various materials that range widely in price and weight. When I was a teenager, we used 10' x 10' tarps made out of canvas that weighed about 10 pounds. Today's Boy Scouts can use tarps made out of silnylon that weigh about a pound and under and cost under $85 (Campmor 8' x 10' Ultralight Backpacking Tarp, 13 ounces, $80), or out of spinnaker cloth that require more care than silnylon and cost more, but weighs less than half a pound (Bozeman Mountain Works Stealth 1 (7' x 9') Catenary Ridgeline Ultralight Backpacking Tarp), or made out of taffeta nylon that weigh about 2 pounds and cost less than $60. An 8' x 10' tarp will sleep two boys while a 10' x 12' tarp will sleep three boys. Along with the tarp, the boys will need eight to ten tent stakes and 25-50 feet of nylon line/rope to set up the tarp.

Aluminum or titanium tent stakes are the best and the nylon line/rope usually does not need to be heavier than 1/8-inch diameter. At a Boy Scout Camp they will also need hiking poles to use as ridge poles since they cannot tie around trees.

Because the tarp does not have a bottom, a ground cloth is needed to sleep on. This prevents rain or ground condensation from getting your sleeping bag wet. The ground cloth can be any waterproof material from plastic painters drop cloths to silnylon. It needs to be roughly 7' x 3-4' for two scouts. You want to keep this light, do not use a very heavy plastic, and realize that you will have to replace the plastic every few years as it will get holes in it. Buy the plastic ground cloth at Home Depot if you do not have any around the house.

Tents

If your son (or you) prefers a fully closed environment than he'll need to invest in a small tent or arrange to share one regularly. For the younger scouts we require that they sleep buddy style which means a minimum of two to a tent, more is acceptable if space allows so you may just hold off buying a tent for now if they can find a buddy who has one. On the topic of space, if you're not a camper you may be surprised by tent ratings, a "two-person" tent is designed with just enough floor space inside the tent for two sleeping bags. In other words it's a tight fit, and not designed for two boys and all their gear. Some tents do have a vestibule where gear can be stored, some do not. When hiking, my wife and I use a Big Agnes two-person backpacking tent which is fantastic for its lightweight design but requires that we hang our packs on a nearby tree in their own pack cover against possible rain (and that we're very comfortable around each other when getting ready for bed).

There is a tremendous variety of tent designs, construction, and material to choose from. They range from Wal-Mart specials of $32.88 for an Ozark 9 by 8 foot dome to Eureka Back Country dome (7.5 by 5 feet) for $189.97 to a Big Agnes Seedhouse SL2 (52 inches by 84 inches) for $319.95. Boys being boys, they don't need the Big Agnes quality or extreme lightweight design. However I certainly would not recommend a Wal-Mart special either. In general the higher the cost the higher the quality, lighter the weight, or both. Ozark and Coleman (two names I grew up with) are notorious for leaking and neither is known to be lightweight, neither will they hold up well in a heavy wind.

If you're buying a tent for the first time, go to a couple of stores and try them on for size, determine which ones fit best, do you need a vestibule, is it easy enough to set up and take down in the dark, is there enough air flow for you. Some questions to ask;

- Is it a 3 season or 4 season tent, 4 seasons are designed to be more flexible. You can set them up fully configured to hold out rain and most winds or in a minimal design either without the fly or with just the ground cover and fly to reduce weight or on hot summer nights.
- Are the seams factory tape sealed (water proofing accomplished at the factory), If not you'll want to buy some seam seal and accomplish that before the first trip. Seam seal is nothing more than a liquid silicone that will fill in the needle holes left by factory stitching in order to improve waterproofness.
- Is the floor of a "bathtub" design meaning a single piece that rises part way up the walls so you don't have seams at ground level.
- Are there any add on or expandable components to the tent; an additional vestibule, foot print (ground cover), gear loft, etc.

The example sleep system below consists of a down sleeping bag, a closed cell foam pad, tarp, tent stakes, rope, and ground pad, weighs approximately 5 pounds, and costs a little over $200. This is some very good gear that will last your Scout well past their 18th birthday.

EXAMPLE SLEEP SYSTEM	Size	Price	Weight
Campmor Goose Down 20 °F Mummy Sleeping Bag	Regular	$110	2 lb 6 oz
Therm-a-Rest Ridge Rest Closed-cell Foam Pad	3/4 length	$16	9 oz
Ultralight Backpacking Tarp	8' x 10'	$65	13 oz
The North Face V Stake	7 in, 10 pack	$8	6 oz
Nylon Backpacker Rope Black		$4	6 oz
Home Depot Nylon Drop Cloth		$2	3 oz

Packing Systems

Backpacks

Note: rei.com offers a lot of advice on different pieces of gear. Simply go to their site and click on Expert Advice. (To specifically understand torso length and fitting backpacks see torso length.)

You must pay attention to what the backpack weighs empty, many packs will have their weight listed right on them. Don't be fooled though, I carry one of the heavier packs on the market (when empty) because it has excellent padding and maneuverability which allows me to carry a heavier load without it feeling heavier on my body.

The pack is an item that you may have to replace as your Scout grows. For young, Scouts a youth sized backpack makes the most sense. (Example: Kelty Long Trail Junior, torso length 12-17 inches, 3 pounds, 7 ounces at $50.) It will be small enough for their body frame size and it can't be loaded too full as to be heavier than they can carry. Once they hit their growth spurt, a full sized backpack will be needed. There are multiple backpacks that can be adjusted over a growth range once they are out of the youth sized packs. There are some packs that come in small, medium, and large sizes. The size you choose depends on their torso length.

There are two main types of backpacks, external fame and internal frame. For Scouts, it does not matter which one is used. What I would suggest is borrowing or renting (local REI's rent at very reasonable rates) different types of backpacks to see which your Scout prefers. Keep in mind when shopping that most Scouts will want the type of pack that everyone else in the troop is using (for us that's Internal Frame). The size of the internal frame

packs should be no more than 4,000 to 5,000 cubic inches for the type of trips most Scouts go on. The costs can range greatly from $50 to multiple hundreds of dollars. I would not spend over $200, but you should be able to spend under $150 and get an excellent pack.

Buying the right backpack requires a store that has a good selection and knowledgeable sales people to fit them. When in the store, load the backpack with 30-40 pounds of weight and have your Scout wear it in the store to see how it feels on his body (side note; if the store you're in cannot load and fit the pack for you then you're probably not in a good place to buy a pack). If you have already purchased other gear, take it in a box to the store and pack the backpack with the gear and have your son try it on. Remember, he will be wearing that pack and gear for up to 6-8 hours some days so make 100 percent sure it is comfortable. Also, check out the discount web sites such as campmor.com because you can find some tremendous savings on packs, especially last year's models. Once you've tried several packs and found the right one in the right size for you then you can go bargain hunting to find the best deal.

EXAMPLE PACKS	Size (torso length, in)	Volume (ci)	Price	Weight
Granite Gear Virga Ultralight backpack	14-18	3,200	$110	1 lb 5 oz
Kelty Yukon 3500 external frame backpack	15-21	3,500	$65	4 lb 12 oz
Kelty 4500 Coyote internal frame backpack	13-19	4,500	$80	4 lb 3 oz
Kelty Long Trail Junior backpack	12-17	2,300	$50	3 lb 7 oz

Cooking and Water Systems

Cookware

This is one area that you should make as simple as possible. The Scout needs one pot to cook in. This pot should be lightweight and hold at least 1 quart/liter. Aluminum foil can be used as a lid if the pot does not have one. The Scout then needs something to eat and drink out of, the new disposable containers by Glad or Ziplock in the 8-12 fluid ounce size will hold cold as well as hot foods. A single Lexan spoon or Spork will be the only utensil he needs to eat with. If he needs a knife, use a pocketknife (if he has his Totin' Chip). Scouts generally drink water but if your boy wants a hot beverage then include a mug and carabineer to clip it to his pack (because it looks cool).

Backpacking Stoves

A backpacking stoves should be one of the last items acquired because the troop leaders already have multiple stoves for the boys to use. If you want to get a stove for young Scouts, stay away from white gas and alcohol stoves and instead look at solid fuel tabs or butane/propane fuel canister stoves.

Water Purification

Philmont Scout Ranch traditionally uses the Polar Pure Iodine Crystal Kit, $10, for water purification. One bottle of this should last your Scout the entire time he is in Scouting. Polar Pure has one really big advantage with new Scouts in that you can tell if it was added to the water (iodine color), as opposed to clear Aqua Mira. So often they can't remember if they treated the water or not and the color of the water is the surest clue. The Troop will teach him how to use this as well as other methods of water purification. Polar Pure can be found at most backpacking stores or at your local Scout store. This can be a multi-use item in that the iodine will sterilize cuts and scrapes.

Water Bottles

This is an item that you may have around the house. A wide mouth 1-quart Gatorade bottle will work well, just clean them out well before and after each hike, or just get new ones after each hike. There are many different types of backpacking water bottles you can purchase (Nalgene is a common name brand), but the recycled bottles work well and cost nothing. For most of your Scout's hiking, he will not need to carry more than 2-3 liters of water at a time, but he will need containers that are large enough to hold 3 liters of water or more for the hot summers. As the boys become more experienced, they may start wanting hydration systems like a Camelbak. These systems cost much more than empty recyclable bottles but will give the Scout easier access to water encouraging him to drink more often. These systems do not need to be purchased for new Scouts, but can be purchased for experienced Scouts. Hydration systems tend to get holes in them when in the hands of careless boys, so wait till they are a bit older and more responsible to buy them for your Scout.

Miscellaneous

Flashlight

With flashlights, the smaller and lighter, the better. Initially, use something you have around the house. Later on, your son will want to check out items like headlamps or Photon lights. The new technology uses LED lights, which allows the bulbs and batteries to last an extremely long time, so when looking for new flashlights look first at those with LED lights.

Knife

For knives, like flashlights, smaller and lighter is better but you'll want a decent blade that will hold an edge. ***A dull knife is worse than no knife – it's useless weight that can lead to injury as it needs more force to make it cut which leads to accidents.*** The only types of knives we allow are folding and/or multi-tool knives. We do not allow straight knives that require sheaths. About the only time the boys use a knife is for cutting rope or when cooking. The Wenger Esquire Swiss Knife is a 1-2 ounce knife that meets these requirements. Additional names synonymous with quality in the knife world are Buck, Gerber, Leatherman, Case, and SOG. There are others as well, a good rule of thumb for blades – if the price seems too cheap then the blade is probably too cheap as well.

Compass

Everyone should be carrying a compass; it is one of the 10 essentials. A beginner's compass costing $10 to $15 is adequate to start with. If the boys get very advanced, they will tell you what they need. The compasses last nearly forever, I still have my first compass from the 1980's and it was military surplus then. These can be found at all backpacking stores or at your Scout store.

Toiletries

The common items - not listed in order of importance - are tooth paste and tooth brush, dental floss, small soap and bandana to dry off with, toilet paper in waterproof zip-lock bag, hand sanitizer, sunscreen, mosquito head net (not necessary in a tent), very basic first aid kit (Band-Aids, Neosporin ointment in a small tube, moleskin), a very basic repair kit (duct tape - 2 feet rolled around something - and a sewing kit from a hotel), extra batteries for flashlight, a lighter and/or waterproof matches.

Conclusion

Technology has come a long way in providing today's Scouts with many lightweight options for gear and clothing. The information above coupled with the Troop 207 gear checklist will help the Boy Scout that is new to the Troop (and his parents) select gear that will keep him safe and comfortable and that he will be capable of carrying without wearing out.

Good Luck and Happy Camping!