

# Equipment

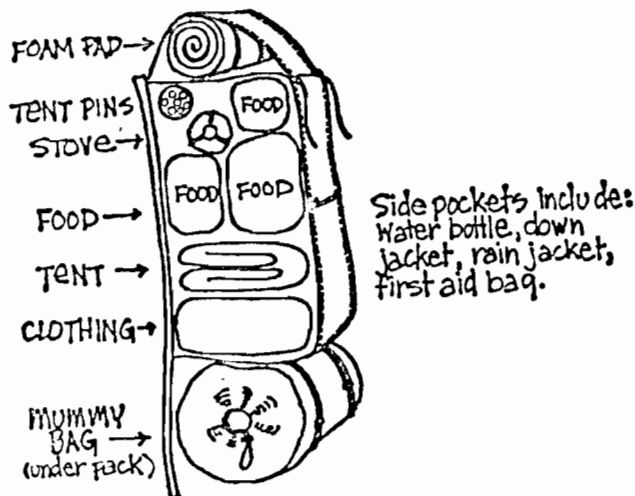
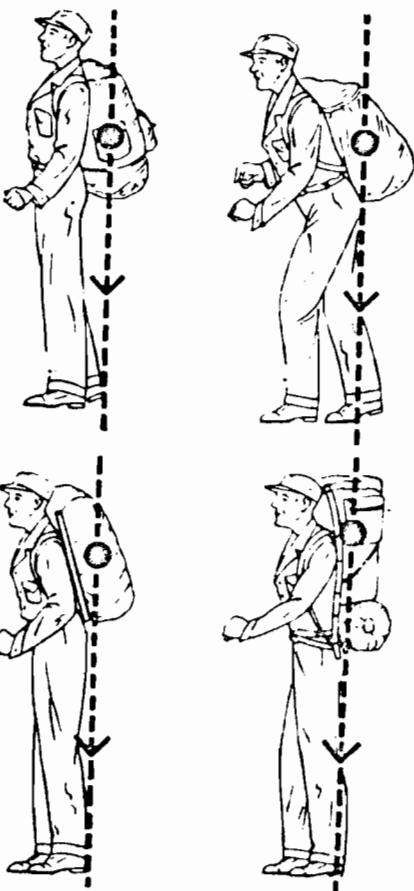
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# KNAPSACK EQUIPMENT CHECKLIST FOR TWO PEOPLE

| WOMAN  |                        | lbs.  | oz.   |       |                      |             |
|--------|------------------------|-------|-------|-------|----------------------|-------------|
| 1      | Knapsack               | 3     | 8     | 1     | Sleeping bag         | 3 10        |
| 1      | Sleeping bag           | 3     | 10    | 1     | Foam pad             | 1 5         |
| 1      | Foam pad               | 1     | 5     | 1     | Mountain tent        | 2 9         |
| 1      | Poncho                 | 1     | 2     | 1     | Poncho               | 1 2         |
| 1      | Change of underwear    | 10    | 2     | 1     | Change of underwear  | 10 10       |
| 2      | 2 Prs. wool socks      | 6     | 6     | 2     | Prs. wool socks      | 6 6         |
| 2      | Bandanna handkerchiefs | 2     | 2     | 2     | Handkerchiefs        | 2 2         |
| 1      | Hand towel             | 6     | 6     | 1     | Hand towel           | 6 6         |
| 1      | Pr. boot laces         | 1     | 1     | 1     | Pr. boot laces       | 1 1         |
| 1      | Pr. camp moccasins     | 14    | 14    | 1     | Pr. camp moccasins   | 1 1         |
| 1      | BSA pocket knife       | 2 1/2 | 2 1/2 | 1     | BSA pocket knife     | 2 1/2 2 1/2 |
| 1      | Flashlight, pen type   | 4     | 4     | 1     | Flashlight, pen type | 4 4         |
| 1      | Nested cook kit        | 1     | 1 1/2 | 1     | Nested cook kit      | 1 1 1/2     |
| 1      | Toilet kit             | 1     | 2     | 1     | Toilet kit           | 1 8         |
| 1      | Snakebite kit          | 1     | 1     | 1     | Snakebite kit        | 1 1         |
| 1      | Compass                | 2     | 2     | 1     | Compass              | 2 4         |
| 1      | Insect repellent       | 2     | 2     | 1     | Insect repellent     | 2 2         |
| 1      | Waterproof matches     | 2     | 2     | 1     | Waterproof matches   | 2 2         |
| 1      | First-aid kit, small   | 2 1/2 | 2 1/2 | 1     | Waterproof matches   | 14 14       |
| 1      | Wool sweater           | 12    | 12    | 1     | Wool sweater         | 12 12       |
| 1      | Windproof parka        | 12    | 12    | 1     | Windproof parka      | 12 12       |
| 1      | Army type sewing kit   | 4     | 4     | 1     | Map, topographic     | 1 1         |
| 2      | Large face cloths      | 4     | 4     | 1     | Camera               | 2 2         |
| 1      | Roll toilet tissue     | 6     | 6     | 1     | Fishing gear         | 1 8         |
|        | Food*                  | 5     | 5     |       | Food*                | 10 10       |
| Total: |                        | 22    | 9 1/2 | Total |                      | 33 7        |

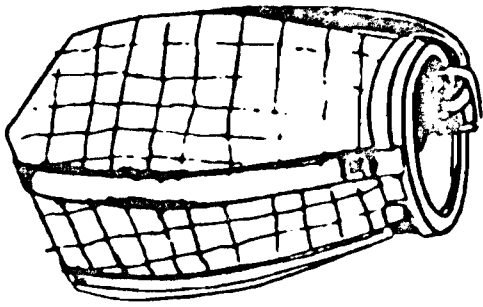
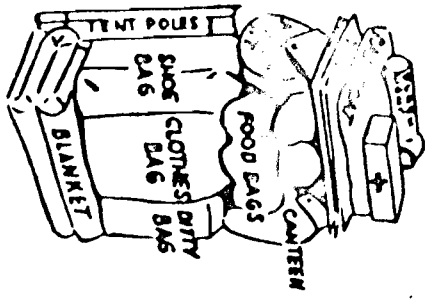
\*If dehydrated food is chosen carefully, 15 pounds should last a couple of hikers one week. The packs will, of course, weigh less and less as food is consumed each day along the trail.



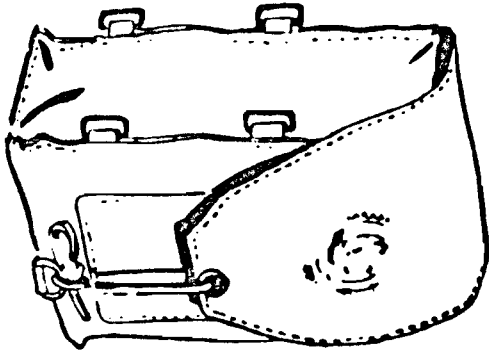
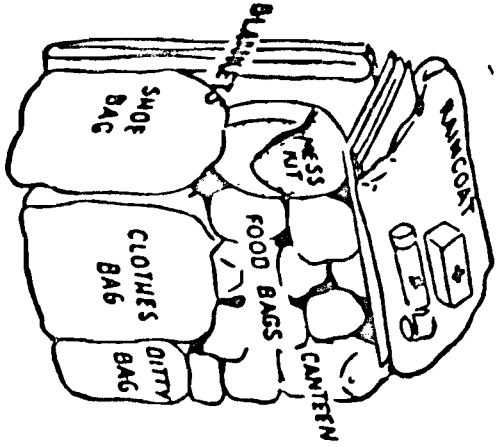
## PACKING A PACK

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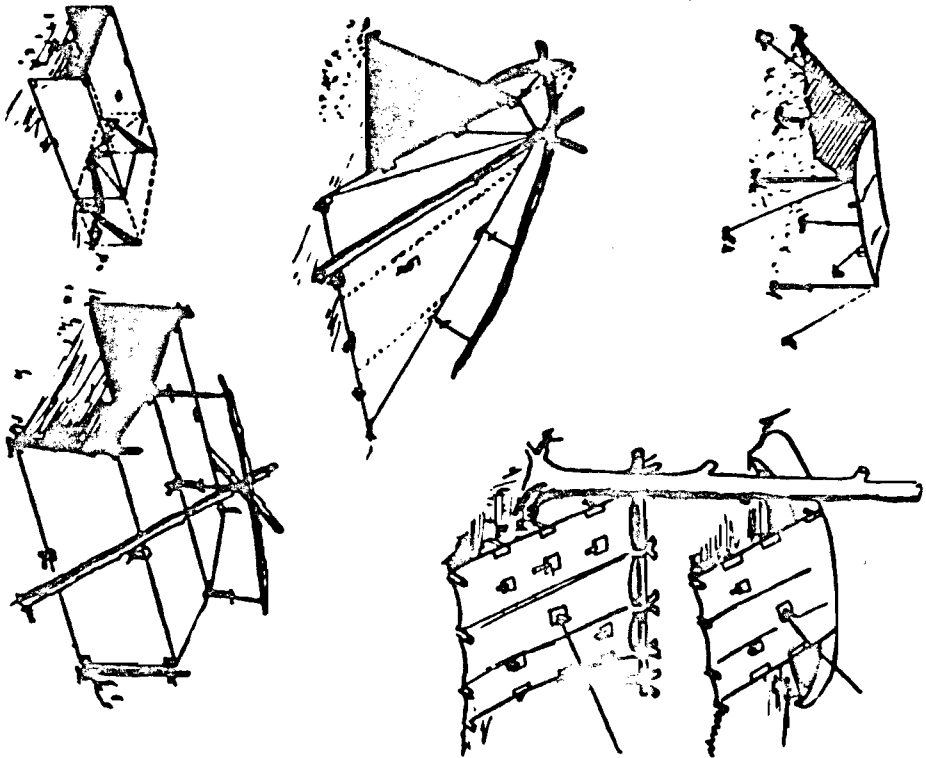
Top: Typical profile of the loaded knapsack and various rucksack-type packs. The weight of the short, bulky pack is concentrated low, away from the back. Its backward pull on the shoulders can only be overcome by an awkward leaning-forward position. Bottom: Usual packboard or packframe-type of pack. Weight is higher and closer to the back but still supported by the shoulders and back. Bottom: Long contoured frame brings pack weight still higher and closer to the back. Waist strap, anchoring frame to hips, transfers most of the weight to the hiker's hips and legs, where muscles are strong. Courtesy Kelty Manufacturing Co.



(b) How to pack a pack basket.



(a) How to pack a knapsack.



The trail tent may be pitched in many different ways.

SUGGESTED MENUES

\* PLEASE FOLLOW THIS  
\* LIST CAREFULLY.  
\* ALSO, PLEASE READ AND  
\* HEED THE NOTES.  
\*

\*\*\*\*\*

The following are suggested menus which are LIGHTWEIGHT, create little weight (which must be carried out) and which are easy to keep (no refrigeration required while on the trip). PLEASE USE THESE IDEAS.

Sunday Lunch

- a) bag lunch packed at home
- b) same as Sunday lunch below.
- c) powdered juice

Sunday Dinner

- a) Instant potatoes
- b) Pre-sliced potatoes & vegetables (cook in foil, fry or boil)
- c) Rice
- d) Soup (Lipton, Cup 'a Soup)
- e) Boil in bag meals (do not require refrigeration)
- f) Frozen meat (see note # 2 below)
- g) Small portion of frozen vegetables
- h) powdered juice (Tang)
- i) Kraft dinners (macaroni)

Sunday Snack

- a) Marshmallows
- b) Cookies
- c) Fruit
- d) Granola Bars (not chocolate bars -- they melt)
- e) Hot Chocolate (individual packages)

Monday Breakfast

- a) Instant oatmeal (individual packages)
- b) Toasted buns
- c) Single serving cereals
- d) Powdered milk or sealed sterilized milk
- e) Pancakes
- f) Powdered Juice

Monday Lunch

- a) Sandwiches made from canned meat (see note # 6)
- b) Jam and peanut butter on English muffins
- c) Powdered juice.

It is strongly suggested that you and your partner cook together and share meals. This will help lighten each of your packs. If possible, arrange to cook co-operatively and set up your menu in groups of four to six. This will further lighten your packs.

The menu ideas given on this sheet are suggestions only. We suggest that you pack into a smaller container some of the above items so that you will carry only the amount you will need and use. Containers, wherever possible, should be disposable by burning (plastic bags, cardboard etc.)

NOTES:

1. PLEASE TRY TO HAVE A SUGAR-FREE DIET AS POSSIBLE. NO JUNK FOOD PLEASE.
2. Instead of bread, use English Muffins, crusty buns, submarine rolls etc. They stand up much better when in your pack.
3. Meat items brought should be pre-cooked at home, wrapped in foil and placed in freezer for at least two days. Prior to trip, wrap in one entire newspaper, place in plastic bag. THIS MEAT MUST BE USED NO LATER THAN DINNER TIME ON THE FIRST DAY OUT. PLEASE -- DO NOT SEND COOLERS.
4. Drinks -- do NOT bring canned or bottled drinks or sugar-type drinks (Freshe, pop).
- 5) Water -- bring only a small amount in a canteen or jug from home. Many of the lakes we use are tested as safe for drinking or have approved water supplies on them. If there is need to treat water, the trip leaders will bring supplies to purify water for everyone.
- 6) Any leftover canned meat must be disposed of and MUST NOT be saved.
- 7) Food items should be suspended from a tree branch at night and not stored in tents.

SUGGESTED GEAR

Below are suggested items required for trips. They are arranged in such a way that you may use this list for several trips as a check list.

PLEASE FOLLOW THIS LIST CAREFULLY

PERSONAL GEAR

SHARED GEAR

|                     |  |                     |                                      |
|---------------------|--|---------------------|--------------------------------------|
| ( ) ( ) ( ) ( ) ( ) | 1 sleeping bag                                 | ( ) ( ) ( ) ( ) ( ) | 1 pot                                |
| ( ) ( ) ( ) ( ) ( ) | 1 ground sheet                                 | ( ) ( ) ( ) ( ) ( ) | 1 fry pan & flipper                  |
| ( ) ( ) ( ) ( ) ( ) | 1 plate, mug, bowl, knife, fork, spoon         | ( ) ( ) ( ) ( ) ( ) | 1 small <u>lightweight</u> tent      |
| ( ) ( ) ( ) ( ) ( ) | 1 bathing suit (WEAR)                          | ( ) ( ) ( ) ( ) ( ) | 1 small container dish soap          |
| ( ) ( ) ( ) ( ) ( ) | 1 towel  | ( ) ( ) ( ) ( ) ( ) | 2 scouring pads                      |
| ( ) ( ) ( ) ( ) ( ) | 2 T-shirts (WEAR ONE)                          | ( ) ( ) ( ) ( ) ( ) | 1 garbage bag                        |
| ( ) ( ) ( ) ( ) ( ) | 1 pr. long pants & underwear                   | ( ) ( ) ( ) ( ) ( ) | 1 container insect repellent         |
| ( ) ( ) ( ) ( ) ( ) | 1 jacket/sweater                               | ( ) ( ) ( ) ( ) ( ) | 1 canteen (or small jug for water)   |
| ( ) ( ) ( ) ( ) ( ) | 1 pr. dry shoes & socks                        | ( ) ( ) ( ) ( ) ( ) | 1 small roll twine (for clothesline) |
| ( ) ( ) ( ) ( ) ( ) | 1 pr. wet shoes (WEAR)                         | ( ) ( ) ( ) ( ) ( ) | 1 hatchet or ½ axe                   |
| ( ) ( ) ( ) ( ) ( ) | 1 pr. shorts (WEAR IF YOU WISH)                | ( ) ( ) ( ) ( ) ( ) | 1 pkg. matches                       |
| ( ) ( ) ( ) ( ) ( ) | 1 Hygiene kit                                  |                     |                                      |
| ( ) ( ) ( ) ( ) ( ) | 1 Flashlight (disconnect or reverse batteries) |                     |                                      |
| ( ) ( ) ( ) ( ) ( ) | 1 knife  |                     |                                      |
| ( ) ( ) ( ) ( ) ( ) | 1 Raincoat                                     |                     |                                      |
| ( ) ( ) ( ) ( ) ( ) | Fishing gear (if you wish)                     |                     |                                      |

WORK WITH YOUR PARTNER AND ARRANGE THE SHARED GEAR AND WHO WILL PACK IT. IF YOU ARRANGE CO-OPERATIVELY MEALS WITH OTHERS, ARRANGE FOR JUST THE NECESSARY EQUIPMENT (POTS ETC.) FOR THE GROUP.

- |       |             |                    |
|-------|-------------|--------------------|
|       | Winter Camp | February 2-3, 1985 |
| Check | Check List  | Brookwood          |
- ( )
- (✓) Warm winter coat or snowmobile suit
- ( ) Heavy sweater (wool preferred)
- ( ) Long underwear ( 2 pair)
- ( ) Flannel shirt (2)
- ( ) Insulated pants or snow pants
- ( ) Insulated winter boots
- ( ) Heavy thermal socks (wool preferred - 2 pair)
- ( ) Cotton T-shirt (2)
- ( ) Warm winter mitts ( 2 pair)
- ( ) Wool touque or balaclava type ski mask (2)
- ( ) Warmest sleeping bag you have
- ( ) Warm blanket (wool preferred to line bag)
- ( ) Foam pad - under sleeping bag
- Personal Pack
- ( ) Backpack
- ( ) Eating utensils
- ( ) Mess kit and cup
- ( ) Hygiene kit
- ( ) Emergency kit
- ( ) Knife (folding or straight)
- ( ) Compass
- ( ) Wooden matches
- ( ) Flashlight
- Snack Food
- ( ) Granola bars
- ( ) Cheeze-n-crackers
- ( ) 'Trail mix'
- ( ) 2 - 3 chocolate bars or home-made fudge
- Please do not bring - cheeze-puffs, potatochips, cold cereal, etc.
- NOTE: Food for meals and drinks will be brought by leaders  
for the whole troop.

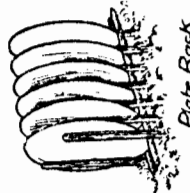
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First aid kit

year and so help you to profit from your own experience. In this way you will run better camps year by year.

2. Records.—Copies of all letters sent out, instructions, menus sheets, programmes, etc., should be carefully filed for future reference. A camp log should have been kept by the Patrol Leaders; this should be kept in the Troop archives with copies of any photographs taken. Their interest increases annually.

3. Thanks.—On return sit down and write letters of thanks to all who have helped you in any way. Some of this can be done in camp.



# APPENDICES

## APPENDIX A

### CHECKING LIST OF CAMP EQUIPMENT

- 1 Small carborundum stone.
- 2 Felling axes (2 extra handles).
- 1 First aid kit, large—(See Appendix E).
- 2 Hammers.
- 1 Hand Saws.
- 1 Swedish Saw
- 1 Shovel.
- 1 Pick axe.
- 1 Marquee, or large Wall Tent (for wet weather).
- 1 Tent for supplies.
- 1 Union flag and Troop Flag.
- Halyards.

#### For each Patrol.

- 1 Tent large enough to house the whole Patrol.
- 1 Packing box with cover (for storing food required by the Patrol for the day.
- 1 Rough table top, to be set up as a dining table (if there is plenty of timber available a table may be improvised as shown in the drawing on page 21).
- 1 Dining shelter.
- 1 Chopping block (this will be found useful for a number of things.)
- 1 dozen Candles.
- 1 lb. Nails, assorted sizes.
- 2 Water pails (mark the name of the Patrol on them).
- 1 Wash basin.
- 2 cakes Toilet soap.

- 1 Dish pan.
  - 1 Bar of laundry soap.
  - 4 Dish towels.
  - 4 Dish cloths.
  - 1 Can or pot for heating water.
  - 2 Small cooking pots.
  - 1 Large frying pan.
  - 2 Enamel bowls for mixing and dish washing.
  - 1 Enamelled jug.
  - 2 Kitchen spoons.
  - 2 Large forks.
  - 1 Butcher knife.
  - 1 Can opener.
  - 2 Salt shakers.
- One "hussif" PER PATROL, for repairs, con-  
taining: needles, thread, darning-wool, buttons,  
pins, safety pins.
- (One mirror, small metal, PER PATROL).
- (One small carborundum stone, per patrol).
- (One watch at least per patrol.)

## APPENDIX B

### PERSONAL EQUIPMENT

#### For each Scout

Everything should be clearly marked with owner's name.

1. Clothing: Complete Scout Uniform:
  - (a) Extra pair shorts.
  - (b) Extra pair stockings.
  - (c) Extra shirt.
  - (d) Extra underwear.
  - (e) Extra pair shoes, sneakers, sandals or moccasins.
  - (f) 1 pair pyjamas.

- (g) Sweater.
  - (h) 3 handkerchiefs.
  - (i) Bathing suit.
  - (j) Old suit.
2. Toilet Articles:
    - (a) Tooth-brush and tooth powder.
    - (b) Soap (floating is best) in container
    - (c) 2 Towels.
    - (d) Comb.
  3. Dishes:
    - (a) Knife, fork and spoon.
    - (b) Plate, (enamel).
    - (c) Cup or mug (enamel).
  4. Bedding:
    - (a) 2 blankets, woollen
    - (b) Waterproof-sheet or poncho.
  5. Miscellaneous:
    - (a) Notebook and pencil.
    - (b) Extra shoe laces.
    - (c) Pocket-knife with can-opener.
    - (d) Blanket pins (4 or 6).
    - (e) Cord lashing (16 ft. or so.)
    - (f) Compass.
    - (g) Candle and matches.
    - (h) Bible.
- Tenderfoot to King's Scout.  
(If desired, field glass and camera).
6. Cooking Utensils:
    - (a) Billy (1 qt. or 2 qt.)—2 nested is best.
    - (b) Frying-pan (8 in. or 9 in.)
  7. Handaxe (if qualified to use same).
  9. Lariat (or equivalent rope-lashing).
  9. Staff (not a "broomstick!").

## APPENDIX C

### SCOUTER'S EQUIPMENT

Complete Scouter's uniform, including hat.  
Tent.  
Personal gear.  
Lantern—a storm lantern or good battery type—is needed for emergencies.  
Flashlight with spare battery and bulb.  
Prayer book and Bible.  
Bag or case to contain paper, stamps, etc. etc.  
Map.  
Field Glasses.  
Camera.  
Coleman or other stove.  
Cash box.  
Repair outfit, mending materials.  
Pocket First Aid case.

## APPENDIX D

Blackboard and some chalk.  
1 Boat (2 if possible.)  
Supply of song sheets.  
Plaster of Paris for making casts of animal tracks.  
1 Copy "Scouting for Boys."  
1 Copy Gilcraft's Pioneering and 1 copy of Gilcraft's Training in Tracking.  
Necessary books on Scout Tests and nature.  
Miniature flags to be used as honour pennants for "perfect" tents.  
Rope.  
Sisal.  
Signalling flags.

6-inch maps for wide games.  
1-inch maps for First Class journeys, etc.  
Balls for games.  
Wool, etc., for "lives" in games.  
Other gear according to Programme arranged before camp.

## APPENDIX E

### MEDICAL BOX

Bandages:—  
Triangular, two or three for use as slings.  
Roller, 1 in., 1½ in., 2 in.—six of each;  
3 in.—three.  
Oiled silk.  
Absorbent Cotton.  
Adhesive tape, 2 spools ½ in.; 1 spool each 1 in. and 1½ in.  
Splints—can be made at home.  
Scissors—Blunt-nosed surgical. Never used for other purposes.  
Tweezers or clean Forceps for removing thorns, etc.  
Packet of safety-pins.  
Clinical Thermometer—learn how to use before going to camp.  
Camels Hair Brush.  
Antiseptic Gauze.  
  
DRUGS  
(Get all bottles marked by druggist with correct doses)  
*Outward Application*—  
The Canadian Red Cross Society recommends Iodine Swabs. These are hermetically sealed thin glass ampules



—completely enclosed in a waxed paper tube with an absorbent gauze swab at one end. Some people prefer mercurochrome for scratches and cuts.

**Pernanganate of Potash**—A few crystals in bowl of water to make pink solution is a good antiseptic for bathing wounds or for washing tired feet.

**Dettol**—1 teaspoonful in a bowl of water for antiseptic.

Small tin of baking soda.

**Oil of cloves**— $\frac{1}{2}$  oz. for toothache. Pack tooth with wool soaked in oil.

**Lanoline**—For painful sunburn, chapped hands, etc.

**Ammonia**—For stings.

#### *Internal Use.*—

**Sal Volatile**—A stimulant in cases of faintness.

**Castor Oil**—For constipation and diarrhoea.  $\frac{1}{2}$  to 1 oz. in early morning.

**Epsom Salts**—Small teaspoonful or more in tumbler of hot water before breakfast.

**Cascara Sagrada**—2 gr. tablets. One or two at night. The latter two should be used for habitual constipation.

Castor oil should not be given repeatedly.

**Bismuth and Soda, or Soda Mint Tablets**—For indigestion or heartburn. If persistent, send for doctor,  $\frac{1}{2}$  to 1 teaspoonful in half-cupful of water will check if taken early. Put boy to bed with plenty of warm blankets. Repeat in four hours if necessary.

Keep these in clean tin box marked with Red Cross. Have list of contents pasted inside lid of box. It is advisable to have also a candle and matches. A copy of Gilcraft's "Talks on Ambulance Work" or other good first aid text should be kept handy.

## APPENDIX F

### SUGGESTED LETTER TO BE SENT TO PARENTS OR GUARDIANS OF SCOUTS GOING TO CAMP.

Dear.....

#### RE SCOUT CAMP

The.....Troop intends holding a Scout Camp from.....to.....and I hope your boy will be able to attend in order that he may get the benefit of the outing with the rest of the Troop.

The camp will be held at.....under competent leadership. The greatest care will be exercised in order that the out-door life of the camp may result in your boy obtaining the maximum improvement in health and practice in those physical and intellectual activities which contribute to the development of good character and good citizenship.

#### Health.

It is only fair that those responsible for the running of the camp should know the exact state of your boy's health. Will you, therefore, kindly fill out carefully that portion of the attached sheet for the guidance of the Camp Leaders.

The Boy Scouts Association considers it inadvisable to allow boys to consume large quantities of candy and other such luxuries while in camp, or at other times. It may be necessary therefore, to limit the amount of candy and soft drinks which your boy may have per day. In this connection may we ask your kind co-operation; please do not send elaborate boxes of cake and candy to the Scouts in camp.

**Equipment.**

That your boy may be comfortable in camp and able to take part in its various activities, will you kindly see that he is supplied with the following articles of equipment (list will be found on pages 26 and 27 of this pamphlet).

Will you please fill out the attached sheet and return it to me not later than.....

Yours faithfully,

.....  
(Rank).....

**PARENT'S REPLY**

Mr.....  
Chairman of Troop Committee (or Scoutmaster  
.....Troop.  
Re Scout.....

Dear Mr.....  
I have read your circular letter of.....date,  
and I understand the points brought out by you. As  
requested by you, I am answering each of your questions  
in detail.

**Health.**  
(a) I know that my boy is in.....health.  
He was medically examined by a physician not longer  
than.....weeks ago.

(b) He is subject to the following physical defects or ailments:.....

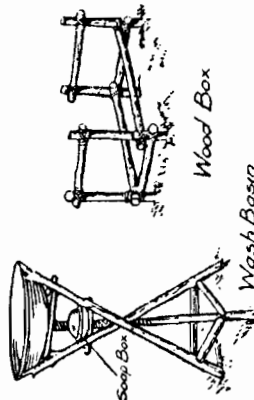
**Equipment.**

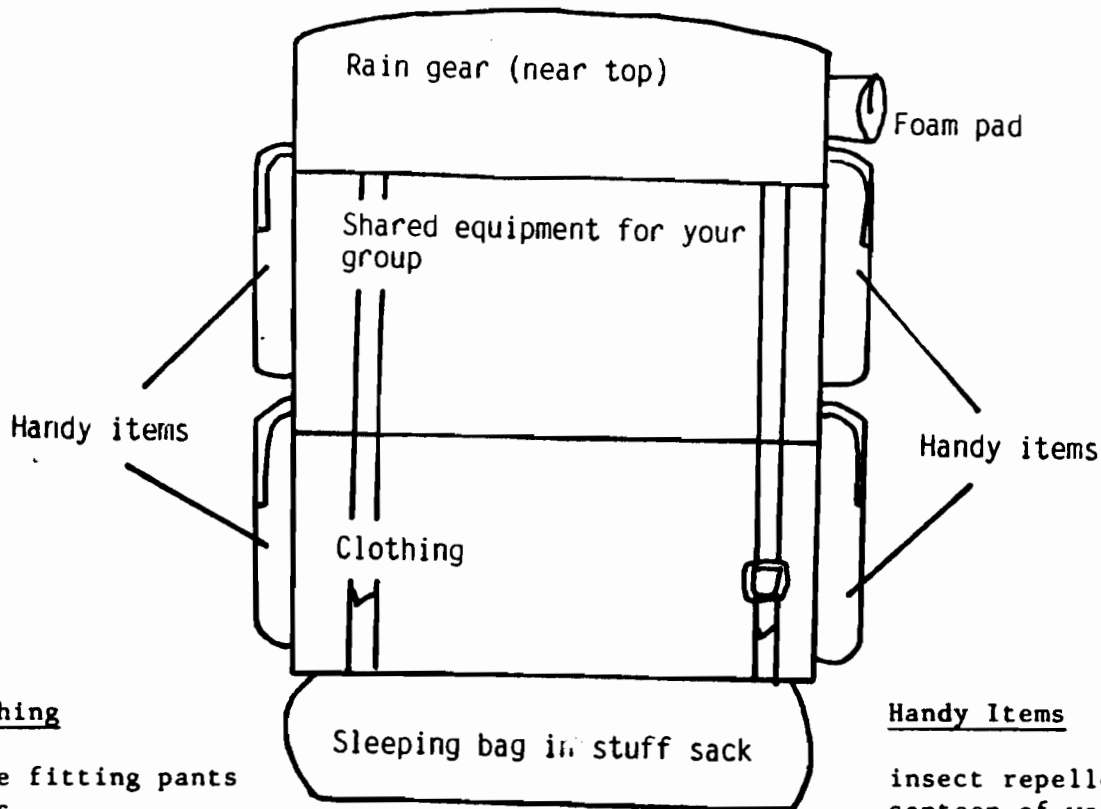
I have read carefully the list of equipment which you say my boy should take with him and he will be supplied with those articles when he goes to camp.

**OTHER REMARKS.**

Will you please note the following other points concerning my boy which I think you should know. (If necessary write on the back of this sheet.)

.....  
Signature.....  
Relationship to boy.....





Clothing

- loose fitting pants
- pants
- rain gear
- extra socks
- upper clothing  
should be in layers;  
T-shirts, sweater,  
windproof jacket
- extra boot laces
- warm pyjamas
- gloves (if weather uncertain)

Shared Equipment

- stove and fuel
- pots and pans
- cutlery
- dishes
- food
- foil
- water purifier tablets
- tent or plastic ground sheet

To Wear

- boots
- socks
- loose pants or shorts
- shirt
- sun hat
- windbreaker

Sleeping bag in stuff sack

- toilet kit
- mirror
- underwear
- bathing suit
- a warm hat
- a sun hat
- towel

Handy Items

- insect repellent
- canteen of water
- snacks
- extra socks
- matches
- cup
- first aid kit
- chap stick
- repair kit
- medication (if needed)
- flashlight
- sunglasses
- notebook and pencil
- identification
- money
- rope or cord
- compass
- knife
- camera
- sun screen
- whistle
- batteries
- maps

Choice of contents of back-pack will depend on the weather and the season of the year.

# USES OF SCOUT STAVE

ALL MARKS ARE BURNED ON STAVE WITH ELECTRIC BURNING TOOL.

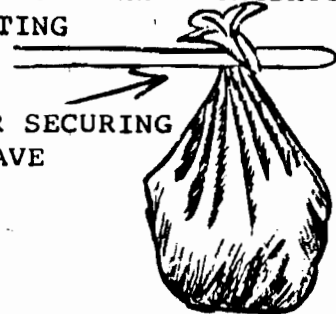
HOOK FOR VARIETY OF USES, INCLUDING PICKING FRUIT, WEIGHING FISH, AND RETRIEVING ARTICLES.



PEEPHOLES DRILLED AT RIGHT ANGLES TO EACH OTHER FOR MAPPING A 90 DEGREE ANGLE.

HEAVY RUBBER BAND TO MAKE SLINGSHOT FOR SURVIVAL HUNTING

LARGE HOLE FOR SECURING BUNDLES TO STAVE



PUT WATERPROOF WOODEN MATCHES IN HOLE AND COVER WITH TAPE

MARKS ON STAVE AT POINTS WHERE KNOWN WEIGHTS BALANCE. USE AS SCALE TO WEIGH OBJECTS ON HIKES

THIRTY TO FIFTY FEET OF FISHLINE WRAPPED TIGHTLY AND SECURED WITH CLOVE HITCH. FISH HOOK AND BAND AIDS UNDER LINE.

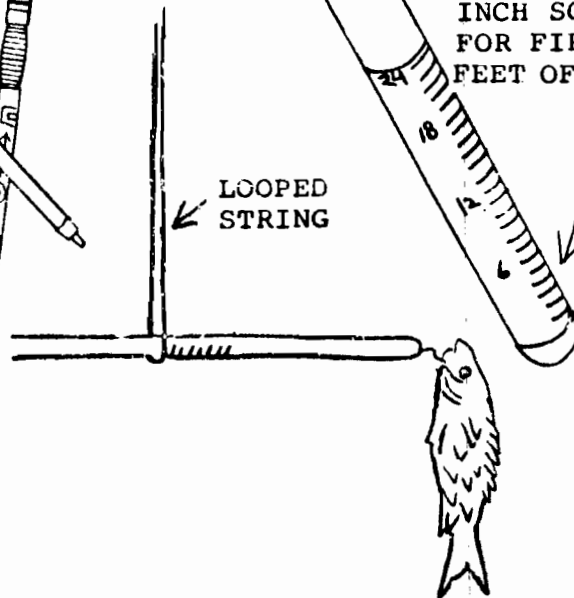
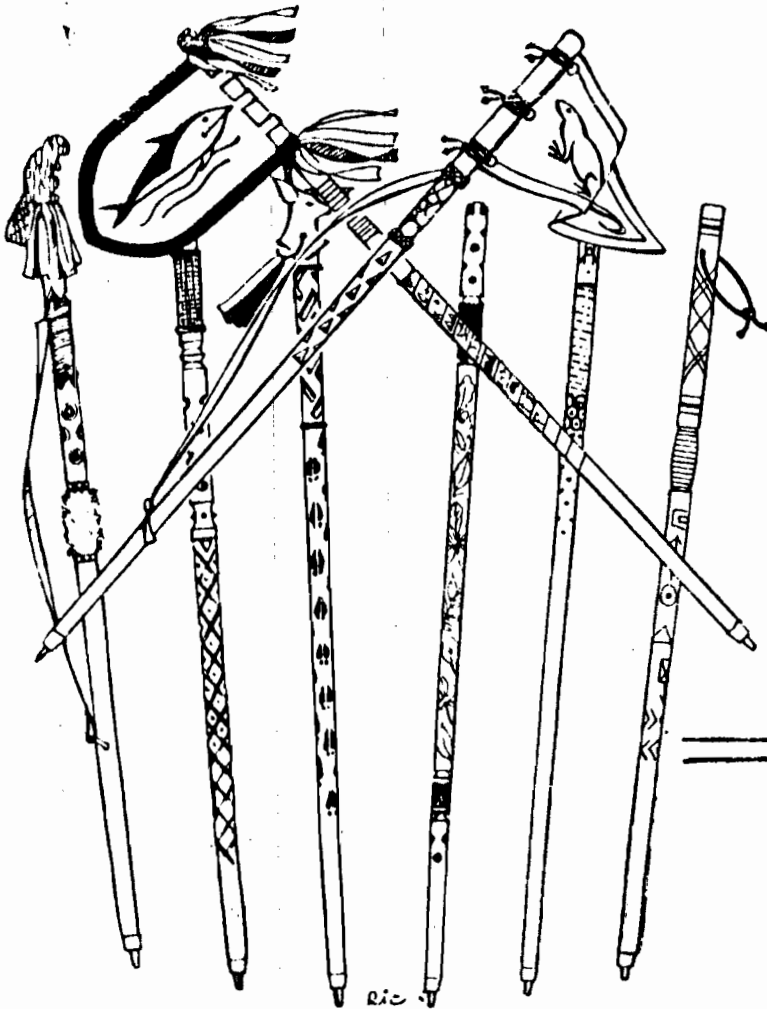
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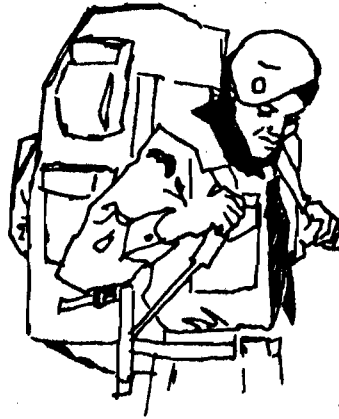
MORSE CODE

FOOT SCALE CONTINUED TO END OF STAVE

INCH SCALE FOR FIRST TWO FEET OF STAVE

LOOPED STRING





# CHOOSING YOUR BACKPACK

by Don Swanson

War surplus, army rucksack or trapper nelson, pack board—not much of a choice when compared to the mind-boggling array of packs available to today's camper. Making an intelligent choice from the variety available today can be an exercise in frustration unless you have a clear set of guidelines to help you make your selection.

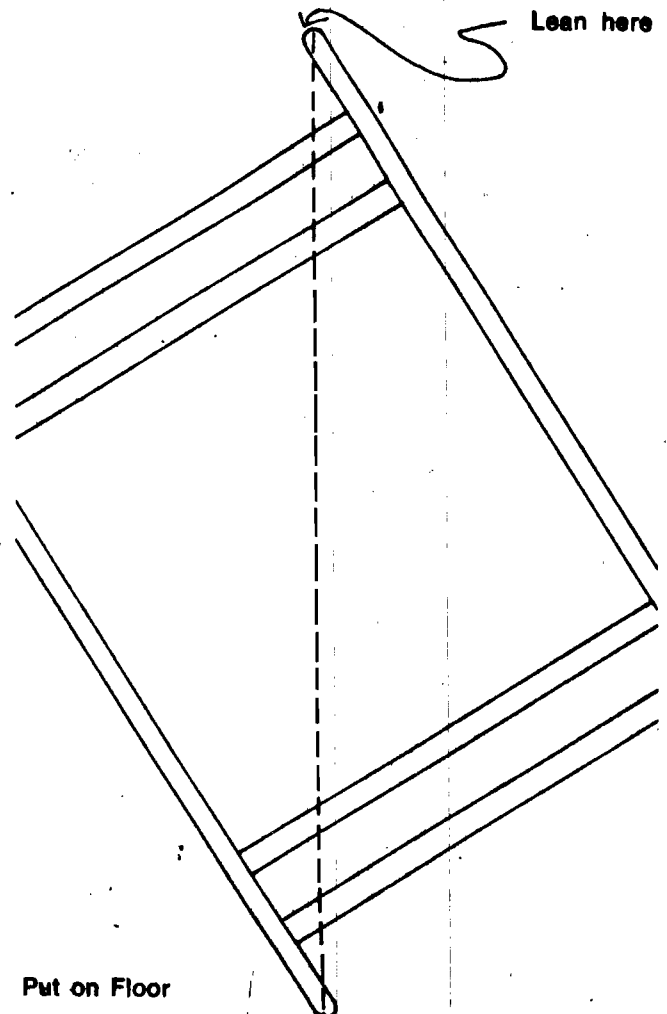
Various articles talk about the pack being the most important piece of equipment; the next most important to your boots, your sleeping bag or whatever strikes the fancy of the particular writer. The fact is that the pack is a key piece of equipment for any camper and backpacker. The following points or guidelines should help you in your selection of a pack. Keep in mind that selecting a pack will involve some compromise. No one pack will meet all the needs of an active hiker and camper. Cost will always be a major factor but a carefully selected pack is an investment in future adventure and enjoyment. It should and will last for years with just a little care.

## The Pack Frame

The pack frame provides the base for your pack and the only way to ensure that it will feel comfortable is to put it on. The waist belt should buckle just around the top of the pelvic girdle, the shoulder straps should form a wedge at the shoulder and not be too far apart where they attach at the top of the frame. Have a friend hang on to the pack to simulate a weighted pack. The weight should be on the hips through to the legs with the shoulder straps primarily holding the pack against the back.

Check the construction of the frame. A variety of approaches are used to attach the side and cross members ranging through heli-arc welding, epoxy, machine screws and nuts and a number of machined couplings. While any of these seem to work well on the better quality back frame, a good weld appears to be the best joint on less expensive frames (under \$30.00). Nothing can be more frustrating than having your pack frame "come apart" on the trail miles away from home.

A simple test will check the amount of stress the frame will withstand. Put the bottom end of one side member on the floor and lean on the top of the opposite side member.



Carefully increase the pressure until you have an idea as to what it will withstand. (Be careful you don't break it or you may be buying a "damaged" pack frame.) This test simulates putting the pack down on one side member with a full load. It isn't likely to have to withstand any stress potentially more damaging than this.

#### **Back Bands**

Back bands serve several purposes. They distribute the weight evenly, keep the pack frame and hard objects within the pack bag away from your back and may allow some circulation of air for cooler hiking. Back bands should be adjustable. Some use a cord or lace while others use a turnbuckle arrangement. The prime disadvantage to the turnbuckle is difficulty in making temporary repairs on the trail.

Back bands come in three varieties—padded, mesh and nylon fabric. The mesh back band allows for better air circulation but no one type seems more comfortable.

#### **Hip Belts**

An important development for carrying a load on your back is the addition of the hip belt. In a study conducted at Western Kentucky University, it was found that the use of a hip belt reduced fatigue. In fact, the longer the exertion, the more valuable the hip belt proved to be.

The test involved ten men and five women. Each person walked for 25 minutes on a treadmill with the incline increased during the test. Each was tested with and without a hip belt. Exertion was tested by monitoring the heart rate.

The test also showed that the most benefit is received by men and women who have weak backs and shoulders. It was reasoned that this would be the direct result of transferring the weight from the back and shoulders to the legs.

There are three basic belt designs: padded one-piece; padded two-piece and the unpadded one-piece.

To some, the padded is the better belt as it tends to be more comfortable. The one-piece belts allows the pack to move or "float" when you walk. The two-piece holds the pack firmly against your back. Which is better? Actually it's a matter of personal preference. One last item to remember: the belt should have a quick release buckle.

#### **Shoulder Straps**

The shoulder straps are our next consideration. They must be padded and wide enough to be comfortable. There should be a degree of firmness to the padding so that it doesn't "roll" when the pack is loaded and you've been on the trail for a period of time. The two points at which the straps attach to the top of the frame should not be too far apart. The straps should be long enough to allow for adjustment and should have a buckle which allows them to be adjusted.

#### **Pack Attachment**

Now let's take a look at the pack bag. The point where the pack attaches to the frame is as good a starting point as any. Look for at least three points of attachment or support along each side of the bag. While this is the minimum desired and is adequate, four points of attachment spread the strain on the bag better. The grommets used to attach the bag should be reinforced.

#### **Compartments**

The two most common packs are the single compartment and the divided, with two compartments. The two-compartment pack is the most popular. A nice feature found on some packs is a zippered bottom to the upper compartment. When considering one of these, be sure the zipper is heavy duty. There are some packs with a number of compartments. The prime advantage of compartments is helping to keep your packed gear in order. The major disadvantage is the compartments restrict the placement of large items.

#### **Stitching**

Check the way all seams are stitched. This includes straps, belts and bags.

Stitches should be small, the more to the inch the better. Thread should be nylon or one of the cotton wrap nylon type. Stitching should be straight, even and not run off the edge.

#### **Reinforcement**

Points of stress should be reinforced. This can take the form of extra stitches or reinforcing material such as leather or an extra layer of material. Look for this at the end of zippers, where straps attach, where the pack bag fastens to the frame and where buckles are attached.

#### **Waterproofing**

Don't be misled by the dealers' claims that the packsack is "waterproof." At best, the more expensive packbags will keep out a light rainfall but a heavy or long rainstorm will result in wet gear. Two steps help to keep gear dry. First, a rain cover for your pack and second, use plastic bags to pack gear before you put it into your packsack.

#### **Pockets**

Outside pockets can be handy or a nuisance depending on your point of view. They're great for holding those small items which you use frequently. The pockets do tend to catch on brush if you plan to do any bush-wacking.

Pockets should be well stitched with zipper closures protected by storm flaps.

#### **Zippers**

The key point to check is that the zippers are heavy enough to withstand the load you will be carrying. Nylon zippers are less likely to jam in cold weather and all zippers should be covered with a storm flap (look for reinforcement, particularly at ends).

#### **Storm Flap**

The top of the pack bag is usually covered with a storm flap. Be sure this is large enough to cover the top when the pack is loaded and to come down over the sides and front. The flap should have some means of securing it such as draw-strings or straps.

No one can tell you which pack is best for you. You know the amount of use it will get, the kind of use and how much you can afford. When deciding, try them on, use on a short trip if possible.

Last but not least, tell the parents of your Scouts (Venturers will probably decide for themselves) what kind of pack you recommend. Why not hold a "what to buy for your son, the Scout, for birthdays and Christmas" night?

## STOVES AND LANTERNS

- these items are becoming increasingly more popular due to their convenience and diminishing supplies of fire wood.
- they are accepted as commonplace, perhaps not so desirable an idea.
- they are the most dangerous items in the campsite if not maintained and properly used.
- the Coleman model 505 single burner stove holds about  $\frac{1}{2}$  litre of fuel, this has the explosive potential of 5 sticks of dynamite, use it with respect.
- do not let the above fact discourage your usage of these items, that is not the intent.
- safety and knowledge in the use of the stoves and lanterns is of prime concern so that we may better instruct our young people.
- there are many stoves on the market ranging from the expensive Optimus to the inexpensive fold-up sterno stoves.

Here are some guidelines for the safe use of stoves and lanterns.

- remember those 5 sticks of dynamite before you get into a situation where you have a 3 foot jet of flame coming out of a stove that won't shut off.
- most of you have probably been at camps where there is at least one stove that is cranky, unpredictable and at least 20 years past its prime
- know your stove and its operating procedures.
- test each boy(girl) to make sure they know their own stove's unique operating procedures before the stove goes to camp.
- use stoves away from tents, fuel supplies and fires.
- have a specific fuel storage area, also to be used for refuelling and in the shade.
- refuel only when the stove is cool enough to place one's hand on the burner.
- never light a stove in the refuelling area, allow time for spillage and fumes to dissipate - not so much of a problem with propane and butane stoves.
- remember you are responsible in the event of an accident, assume nothing and allow adequate time for instruction.

### MAINTAINANCE AND SAFETY TIPS

- there are many popular stoves, the most popular being the model 505 Coleman, single burner backpacking stove
- this is due to the relative ease in obtaining fuel, simple operation, heat output and it is a 4 season stove.
- propane stoves are next in popularity - again a Coleman model as well as Primus. The draw-back here is the used fuel cylinder.
- there are some butane stoves available but these are poor performers in the cold weather.
- kerosene stoves are coming back into the market through Primus, but these stoves require different starting techniques.
- there are also several makes of alcohol burning stoves mostly available with complete cook sets - heat output is quite low.
- there are a number of basic items that will make using a stove safer and less exasperating.....

- 1) read the instructions - try the manufacturer's way first!!!!
- 2) test the stove before a trip - don't wait until you're miles into the bush before you find out it will not work.
- 3) Make a check list of necessary parts and spares - stove fuel, matches, funnel, cleaning items, lubricants, generators.

- 4) use the right fuel - do not use leaded gasoline in a naphtha stove
- 5) prime the stove properly in cold weather - for coleman gas stoves, this means pre-heating the generator, this should always also be done in the damp.....
- 6) store fuel in a proper container - preferably a fuel bottle and not the one litre 'pop' top tins - these tops can come off if you are careless in handling them.
- 7) don't overheat your stove by enclosing it in rocks etc, some stoves are equiped with pressure relief valves which when they let go produce an impressive 3 to 4 foot jet of flame.
- 8) remember to release the tank pressure when the stove is cool, if left in the sun the tank could rupture..

#### FURTHER TIPS SPECIFICALLY FOR COLEMAN GAS STOVES

- 1) the Coleman dealer in this area is Leonard's Home Hardware, Lakefield, also, Canadian Tire carries some spare parts
- 2) clean the stove after using it - remove grease, matches, etc.
- 3) on stoves with pumps, lubricate the leather regularly to keep it from drying out - if the leather dries out you will not be able to pump up enough pressure to run the stove properly - use neatsfoot oil, motor oil or silicone oil, in a pinch you can use cooking oil or water, cooking oil hardens the leather and water destroys it so make sure the leather is properly looked after later.
- 4) keep the valve nuts tight to avoid leaks.
- 5) if the tank won't hold pressure, the 'O' ring in the cap may need replacing or replace the whole cap.
- 6) a continuing yellow flame after the stove should have warmed up usually means that the generator is carbon clogged and must be replace
- 7) carry spares - especially mantles for the lamps
- 8) in the winter add 1oz. of alcohol or gasline antifreeze to the tank.
- 9) prime and preheat your stove in the damp and when it is cold - the manufacturer suggestions are almost always right - the stove has to burn the vapour not the raw gas. Coleman suggests putting a small amout of fuel - the amount that the filling tank cap holds on the center of the burner. When this is ignited, it pre-warms the generator and the stove will start easily. You cut-in the gas just as the flame is ready to extinguish.
- 10) most of these ideas apply to the gas burning lanterns as well - - when replacing a mantle clean all the ash, debris, etc out of the lamp and be sure to clean around the flange you are putting the new mantle on.
- 11) always carry the lantern upright.
- 12) when used indoors, remember that the gas appliances consume oxygen and give off carbon monoxide - a deadly combination - provide proper ventilation - about 6 sq. in. per appliance.

#### THE FIVE COMMANDMENTS

- 1) KNOW THY STOVE AND YEA VERILY KNOW THAT THY BOYS KNOW ALSO THEIR STOVE
- 2) LIGHT NOT YOUR STOVE IN A FOOLISH PLACE, NOR SUFFER ONE TO BE LIT THER
- 3) LET THERE BE CREATED A SAFE STORAGE AREA AND SYFFER ALL TO USE IT
- 4) FOLLOWEST THOU SAFE REFUELLING PRACTICES
- 5) ASSUME NOT THAT THINGS ARE WELL FOR KNOW THAT MURPHY WALKS AMONGST US. EXERCISE THOU VIGILANCE ALWAYS.



## CAMP STOVES AND FIRES

There are quite a number of camp stoves on the market these days. To go along with the number, there is also a considerable price range involved. The stoves are liquid filled, (naptha), propane, butane, as well as solid fuelled, sterno and homemade parafin stoves. The type of stove you select will depend on convenience, budget and the use to which it is intended. Some units that work well in the summer do not function well in extreme cold - ie. butane and propane stoves. Also if you do not know how to use it, the Coleman naptha stove can cause cold weather problems. Regardless of which type of stove you select, read the instructions, familiarise yourself with the use of your stove under all conditions. Talk to someone whom you know has experience with one or more of these units and get an opinion. It does not hurt to get more than one opinion. In most cases the person who sells you the stove will know very little about it - there are some exceptions.

➔ For safety reasons I feel it is important here to mention a familiar product that has undergone some engineering changes. The Coleman single burner naptha stove number 505B the newest in the line is in my opinion a dangerous product. The control system has been modified in that there is no light or warm-up position. It is also recommended to start the stove with the control up full. Under these conditions with even a cool day the stove flares noticeably. On one occasion at least a 2 foot flame was being produced. Whether this unit can be better controlled or not I am not certain and caution should be exercised if contemplating the purchase of one of these units.

A quick reminder about safe storage of fuel - store well away from tents, firepits and cooking areas in a cool place. Fill units only at the storage area. Use a funnel - watch for spillage. Do not light near tent or fueling sites and keep lighted units out of tents. Watch out for holes in mantles and think about carrying spare generators

Fires can be roughly divided up into three categories. Cooking, warmth and ceremonial. All three are different but the same considerations apply to all three.

Cooking fires are probably the most used and the most abused. There is no need to have a huge roaring fire to roast hot dogs or boil water for soup etc. Use a Hunters fire, a Rock fire or depending where you are a trench fire and remember keep it small. Have a good supply of fuel on hand(wood) and replenish only when necessary. Remember what you occasionally hear in western movies, the indians could always tell where the whiteman was because of his cook fire. Big fires are not necessary. Another consideration is not to let the youngsters or oldsters for that matter be poking sticks into the fire. The reasons are obvious.

To get started the rules are quite simple for fires - clear a 10' or so diameter circle of all combustables, set up your rock fireplace, hunters fire logs or dig your small trench<sup>note</sup> - only where there is no danger of a root fire) or your fire pot. Gather tinder, kindling and fuel wood and have same close by to start the fire. Light the tinder from the windward side and add to same from the leeward side. You should also have made your food preparations prior to starting your fire so you should be all ready to start cooking. Remember to be careful where you pile your fuel wood.

Pay strict attention to fire regulations in the area where you are going camping - there may be times of year when there is a total fire ban. Be extremely careful where you set your fire. Don't strip bark off live birch trees for tinder. Keep water near-by to douse the fire - you can also use sand. Don't leave non-burnables around and clean-up the mess. Make sure the fire is out by putting your hand into the dead ashes. Try to supervise the cooking periods especially when dealing with youngsters that are new to you as will usually be the case at Brownsea. Handouts and the Scout book material will give you

# TIPS ON TENTS



by Don Swanson

At first glance, selecting a tent doesn't appear to be any big deal. After all, a tent is just a tent — a cloth form to keep the rain off and bugs away. Right? But after a few minutes of sober reflection, the thinking Scout section (be it Venturers, Scouts or Cubs) will realize there is much more to consider when buying a tent.

First things first. Just what kind of camping will your group be doing? Above the treeline at high altitudes? Winter conditions with below freezing temperatures and heavy snow? Or three season camping (spring, summer and fall) below the timberline in the forest, lowland and valley?

The first two kinds require special tents designed for those specific conditions. However, the majority of camping fits into the 'three season' category, so we'll focus our attention here.

Practically every camper has his or her own opinion of what is best or ideal, making it very difficult to describe the ideal lightweight tent. But despite this, most campers will agree on the essential features to look for when selecting a tent. The actual selection usually involves compromise when dealing with products on the market, the desirable features, and cost.

Weight is a critical factor when looking at lightweight tents. This leads to the question of material because the type of material used affects the weight of the tent. The use of cotton has two major advantages:

- a) the ability to breathe or let moist air pass from the inside, out;
- b) the tendency to shrink when wet thus closing thread holes in seams.

The major disadvantages of cotton fabrics are:

- a) low tear strength in the lightweight fabrics;
- b) weight;
- c) tendency to mildew or rot if not carefully dried before storing.

While there are a number of weaves of nylon fabric, the two most common in the better tents are nylon taffeta and ripstop nylon. Ripstop is the term used to describe the result of weaving heavy threads at approximately quarter-inch intervals to prevent a tear from running. Ripstop nylon is the lighter of the two weaves, usually weighing around 1.9 ounces versus 2.5 to 3.5 ounces for taffeta.

The main advantages of nylon are:

- a) lightweight

- b) strength
- c) won't mildew

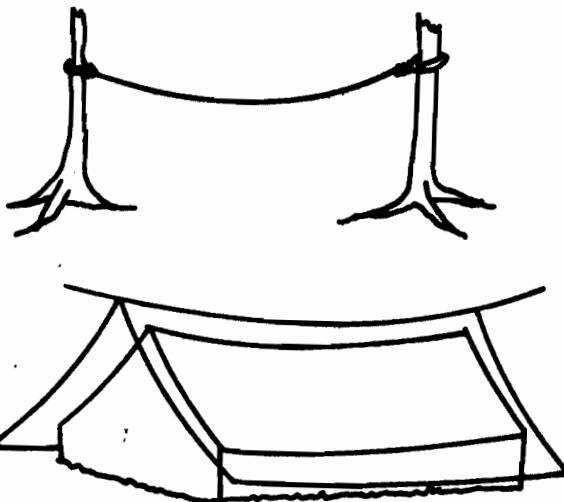
The major disadvantages are:

- a) doesn't breathe or let warm, moist air pass through from the inside to the outside;
- b) difficulty in waterproofing.

Because of the structure of nylon thread, the only way nylon fabric can be waterproofed is by coating the material with polyurethane or vinyl. This coating can crack or peel off over a period of time and may require a second coating later. The waterproofing coat adds to the weight of the fabric.

Tents made from nylon require good ventilation to minimize the problem of condensation. Manufacturers use a variety of approaches to vent their particular tent. Some of the vents run along the underside of the eaves where the tent wall and roof meet; some tents are vented simply by a rear window and others have vents near the ridge on each end of the tent. In any case, all vents must be covered with screen and some form of storm cover.

To assist the ventilation and minimize condensation avoid nylon tents with waterproofed (coated) roofs. Look for a roof of 'breathable' fabric and cover your tent with a coated, waterproof fly.



The fly should have enough overhang at the ends to ensure protection of any vents, deflect rain from the tent roof and provide a porch effect for stowing gear. The sides of the fly should come to within four

to six inches from the ground and be well out from the sides of the tent.

A well-made tent and fly are usually designed to allow for the catenary. This term simply means the natural curve in a cord when the cord is hung between two points. A catenary cut allows for the sag or curve of the ridge line of the tent and reduces the sags and wrinkles in the tent walls. In a wind storm this can be very important as the wild flapping of sagging tent fabric will not only keep you awake but puts a severe strain on the tent's fabric and seams.

The floor of the tent should be waterproof and come up the side several inches. Ideally, there should be no seam but this is impossible to avoid in order to form the corners. A tent with this type of floor is said to have a tub floor.

In order to minimize wear, the waterproof coating should be on the inside of the tent.

Earlier, it was mentioned that vents should be screened. All tents should have sewn-in insect netting at all openings whether they are vents or entrances. Entrance netting should open and close with an easy sliding zipper. Depending on the shape of the tent, the zipper may open down the centre with another zipper across the bottom. The entrance netting should have a waterproofed fabric door which zippers the same way as the netting.

Tent poles are made of a variety of materials — aluminum, magnesium and fiberglass. These are usually in sections with the better tent poles having an elastic cord running up the centre. The cord keeps the various pieces together and prevents separation and possible loss when dismantled.

Poles should be sturdy but light and portable with a minimum of pieces.

All points of stress on the tent, such as peg loops where guy lines and poles are attached, should be reinforced. The methods of reinforcement vary from hemming and extra stitching, sewing an extra piece of fabric and attaching straps through the double layer or use of strips of nylon webbing. All of these methods are intended to spread the strain over a larger area than just the focal point of the stress.

Check seams and stitching closely. Better tents usually have flat fell seams. Stitches should be even and straight with no run-offs, puckers or dangling

loose ends of thread. As nylon doesn't swell when wet, seams will require sealing. Special tubes of seam sealant can be purchased (some tents come equipped with sealant). Airplane glue or rubber cement can be used to seal the seams also.

One last factor which is more of a caution when considering different tents. NYLON IS VERY VULNERABLE TO FIRE! Don't let the flames of a fire come near your nylon tent. Sparks from an open fire will burn holes even if the surface of the fabric is wet from rain. Stoves and lanterns should never be brought inside a nylon tent. Stress the use of flashlights for illumination. It's safer.

Size is obviously another important factor when choosing your tent. The length of your camping trip should be taken into account. When it is an overnight trip, a smaller tent is acceptable. But when the trip extends to two, three or more nights, a larger tent will provide a more comfortable camp.

There are a number of tents on the market designated 'three-man tents.' These usually measure 7' X 7' While three can sleep in them, they are better used as two-man tents. This provides room for gear.

Let's summarize the features to be considered when choosing a tent:

- a) lightweight — shouldn't exceed six pounds for two people;
- b) fabric — nylon taffeta or nylon (ripstop preferred);
- c) uncoated, breathable roof;
- d) fly — waterproofed (coated) cut large enough to protect;
- e) catenary cut (both tent and fly);
- f) tub floor — 3" to 4" minimum height on both sides;
- g) poles — light in weight, compact with sections attached together with an elastic cord;
- h) venting — with insect screens and storm covers;
- i) insect netting indoors with a zipper opening;
- j) zippered doors — zipper on door and screens opening in the same direction;
- k) reinforced points of stress;
- l) fell seams;
- m) stitching — neat, straight, no loose threads;
- n) size — 5' X 7' (crowded two-man) or 7' X 7' (crowded three-man or roomy two-man).

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DISTRICT  
BADGES  
CAMPORE  
CRESTS  
UNIFORM  
BADGES  
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BADGES  
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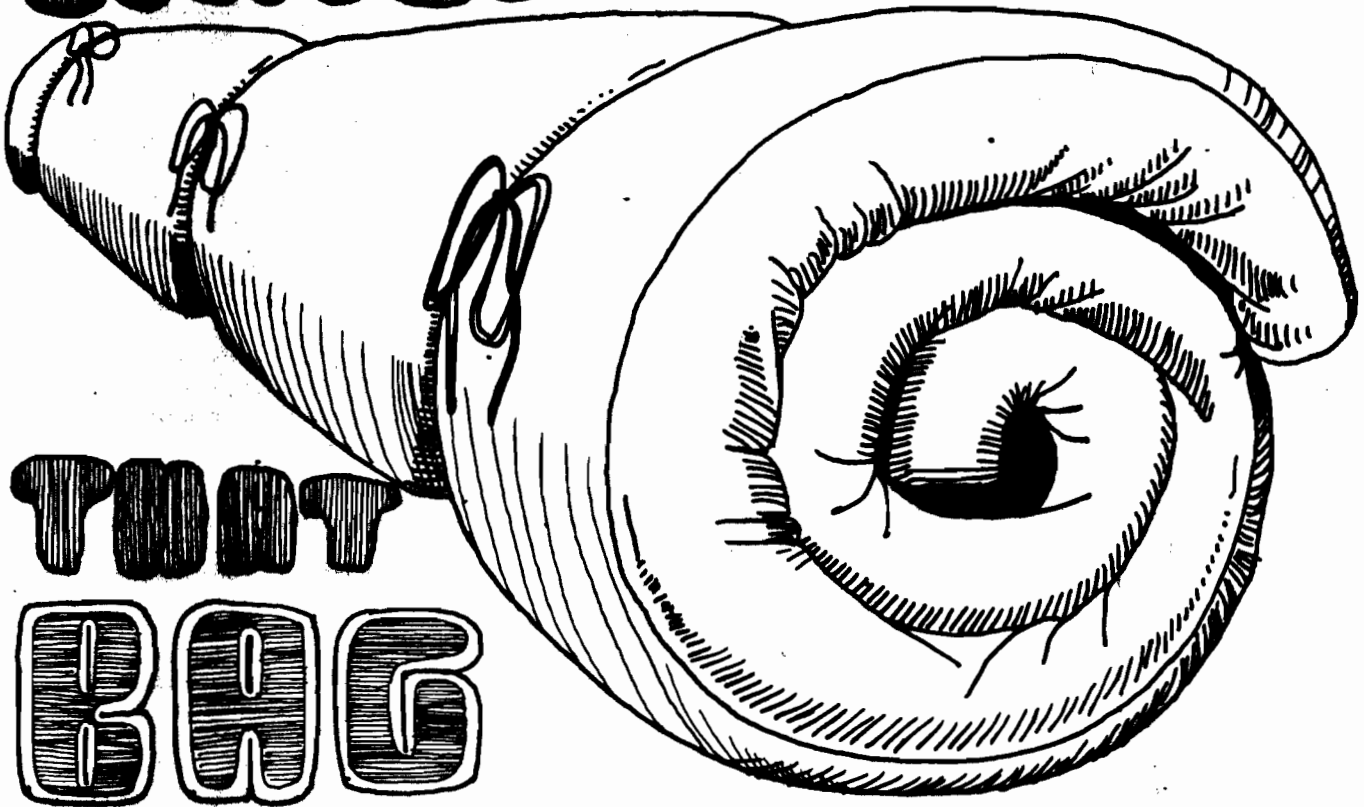
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# WATCH OUT FOR



# TRIP BAG

By Don Swanson

Getting a good night's rest is important to a camper — nothing will spoil the day's activities faster than if you're too tired to participate due to lack of sleep the night before. A well chosen sleeping bag will contribute to a good night's sleep if the bag is the right type for your needs and if it has been looked after properly. Last summer (*Canadian Leader*, Aug./Sept. 1975), we looked at choosing the right kind of sleeping bag, now let's look at taking care of it.

A sleeping bag should be stored, folded, loosely rolled, or if possible — laid out flat. The storage place should be clean and dry and allow circulation of air. Your sleeping bag should not be stored stuffed. This is particularly true for down bags. Each time your sleeping bag is compressed into the stuff sack, the down is forced to bend. Stuff sacks are small bags into which you stuff your sleeping bag. When the bag is removed from the stuff sack the down must straighten or unbend to restore the loft. Over a period of time this will effect the amount of loft and thus the warmth.

Protect your sleeping bag from snags and dirt. If it didn't come with a stuff sack, it's a good idea to get one. Stuff your sleeping bag into the sack by pushing the bottom corner of the sleeping bag down to the bottom of the stuff sack. Now work back along the sleeping bag, stuffing it firmly down into the stuff sack. If your sleeping bag doesn't seem to fit — assuming the stuff sack is large enough for your sleeping bag — start over; you haven't pressed the sleeping bag in hard enough. By the way, those tie tabs which have been sewn onto the foot of your bag

tend to encourage easy rolling of the sleeping bag. Continual rolling tends to permanently compress the down with a resulting loss of loft.

Keep your sleeping bag away from fire of any kind. A spark, a lit cigarette, hot ashes from a pipe — all will burn a hole in the nylon fabric instantly. Never dry a down-filled bag or a synthetic filled bag near an open fire. And don't use your stuff sack containing your sleeping bag as a seat or cushion.

During camp and upon returning home, air your bag. The air circulation will remove the body moisture. Important while on the trail, this is even more important when you're back home and ready to put your sleeping bag into storage.

Protect the fabric of your bag by putting a ground sheet between you and the ground if your sleeping bag is without a mattress of some kind. Sleeping bag fabric is pretty sturdy but sharp twigs, roots and rocks are tougher. A piece of four or six 'mil' polyethylene sheeting makes a good ground sheet and is inexpensive.

No matter how hard you try, eventually the combination of camp life, oils and moisture from your body and dust will make it necessary to clean your sleeping bag.

You have two options: clean it yourself or have it done by a commercial dry cleaning establishment.

Let's talk about dry cleaning first. Down has a natural oil which provides the resiliency to recover from being compacted. Improper cleaning will strip away these natural oils and destroy your sleeping bag's usefulness. If your cleaner uses a cleaning

agent made up of chlorinated hydrocarbons such as perchloroethylene (known in the trade as "perk"). don't let him even breathe on your bag. Perk will remove the natural oils and leave you with a useless sack of ruined down not worthy of being referred to as a sleeping bag.

Dry cleaning carried out with mild petroleum distillates such as Stoddard Fluid shouldn't harm your down-filled bag. Sleeping bags containing synthetic fillings such as Dacron Fiberfill II or Polar Guard can be dry cleaned but check the manufacturer's label to ensure advisability.

Thorough airing is important if you have your bag dry cleaned. While dry cleaners do take precautions to ensure the bag has been adequately aired — don't take chances. It's your life you're playing with. Improperly aired sleeping bags can, at least, result in a skin rash and at most, result in serious brain damage or death from inhalation of the fumes.

Some manufacturers recommend hand washing — no small task — but it is your other option. First a few cautions. Don't use detergents as most will remove the natural oils. Don't use a top loading agitation type of machine. Remember, your down-filled bag keeps the down in place with baffles (see "Selecting A Sleeping Bag" — *Canadian Leader* Aug./Sept., 1975). Rough handling of the bag with the water-soaked down will tear out the baffles leaving you with a useless envelope of down. Even though one manufacturer recommends using a double load tumble machine, this can be risky and may ruin your sleeping bag.

Remember not to pick up a water soaked bag. The weight of the water will remove those baffles faster than you can say "whoops — I forgot!!"

Now that we've eliminated the machines, let's get back to hand washing. You'll need a large tub — the bathtub is perfect (even if you have to kneel). Just put in enough water to cover the bag. The water should be lukewarm. Use Ivory Flakes (remember — no detergent). Work the suds through the bag with a gentle kneading motion. Do not twist or wring. Drain and rinse — repeating the process until dirt no longer appears in the suds.

Rinse several times in clear water. This is important to ensure that all the soap is removed. Soap will clump the down and cause synthetic filling to mat. When you have rinsed the bag, gently press out as much water as possible. **DO NOT WRING OUT and DON'T PICK UP THE BAG WHILE WATER SOAKED.** After gently pressing out the water, gather the bag into your arms.

There are two options for drying a down bag. One is to use a mesh hammock. The difficulty here is the time it will take — three or more days of sun and breeze with the problem of down clumps. These will have to be broken up by hand or you'll have a permanently lumpy sleeping bag.

The second option is to use a tumble dryer such as the large commercial types. It must have adjustable heat. You'll be using a low heat or just fluff-tumble cycle. (Heat melts nylon). Put the sleeping bag into the dryer and include a pair of clean sneakers (no laces). The tumbling of the sneakers will break up the clumps of down. Run the dryer as long as necessary to thoroughly dry the bag and then air outside if possible.

Most bags with polyester filling can be hand or machine washed. Because their construction is different than down-filled bags there is less chance of tearing internal baffles. However, it would be foolish to conclude that it's okay to just pick up a soaking wet polyester bag. The water-logged batting would place a great deal of strain on the construction and the seams with the possibility of tearing. Avoid the use of the top load agitator machine if using a machine — play it safe and use a front load tumble washer. Stick to a mild soap like Ivory Flakes and be sure to rinse well.

One last caution — don't leave your down bag out in the direct rays of the sun for extended periods of time. Prolonged exposure to the heat of the sun will likely result in the oils being dried out of the down near the surface. End result — less loft which means less warmth.

With a little care, your bag will last for years. Even with frequent use, you shouldn't have to undertake the task of cleaning your bag more than once a year.

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# Tips for Patrol Leaders **GREEN BAR BILL**

**SAYS:**

## "Scout Staffs Are Back!"

ALL OUT FOR SCOUTING! has brought the Scout staff back into Scouting. Patrol leaders are discovering that the Scout staff can be used for fun and any number of helpful tricks.

The Scout staff has many uses in camp. The most obvious is for pitching a tent. Three staffs lashed together into a tripod can hold packs and clothing off the ground, or suspend a pot over a fire.

The staff will support you when you hike steep hillsides, and will help you jump a brook. It will protect you as you use it to push underbrush aside. It will keep the patrol together on a night hike, as each Scout holds on to the staff of the Scout in front of him.

In first aid, staffs can be used for splinting a broken leg and making a Scout-shirt stretcher. For quick stretcher making, have one Scout undo the top buttons of his shirt. His buddy slides the two staffs up his sleeves, and he grabs hold of them. His buddy then peels his shirt over his head. After refastening the buttons, the second Scout does the same.

In physical fitness games, you can use a Scout staff for a staff pull, staff fight, staff push. In fun games, staffs go into "circus horse" racing and jousting. In pioneering competitions, you lash them together for raising your patrol flag, or for making a "Roman chariot."

And there are still more uses for the Scout staff. By marking your staff in centimeters and decimeters, you can use it for measuring the depth of a stream and the height of a tree. By providing it with a hook at the top and markings where weights balance, you can use it for weighing anything from the fish you catch to the pack you carry.

And we haven't even considered the fun you can have carving your staff into a personalized totem pole or turning it into a record of your Scout advancement.



THREE SCOUT STAFFS LASHED TOGETHER WILL MAKE A TRIPOD FOR HANGING YOUR COOKING POT. ADJUST THE HEIGHT OF THE POT BY SHORTENING OR LENGTHENING THE ROPE.

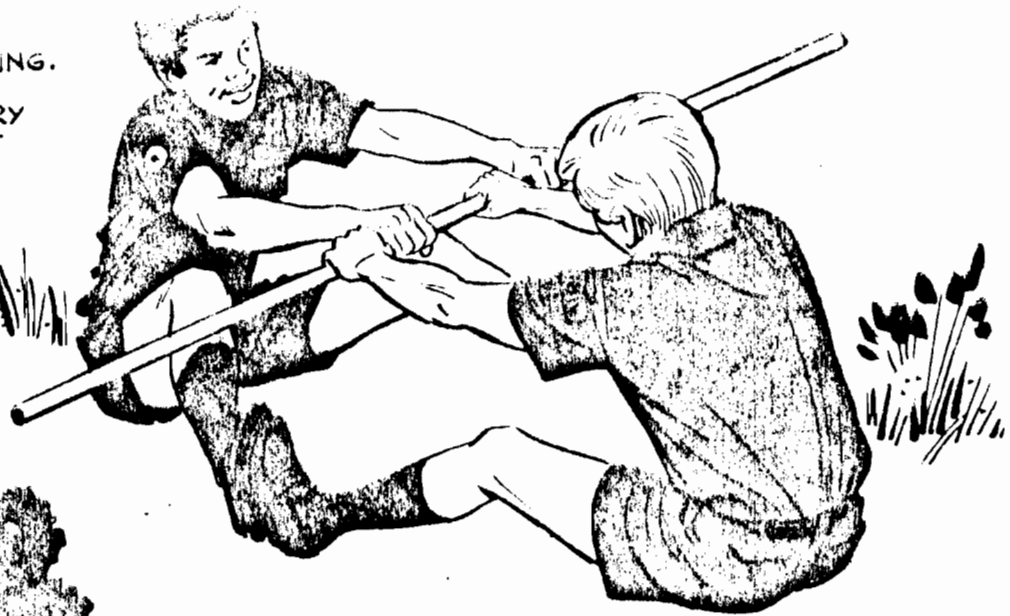


ON A HIKE, STAFFS WILL HELP YOUR PATROL WHEN YOU WANT TO CLIMB A CLIFF.

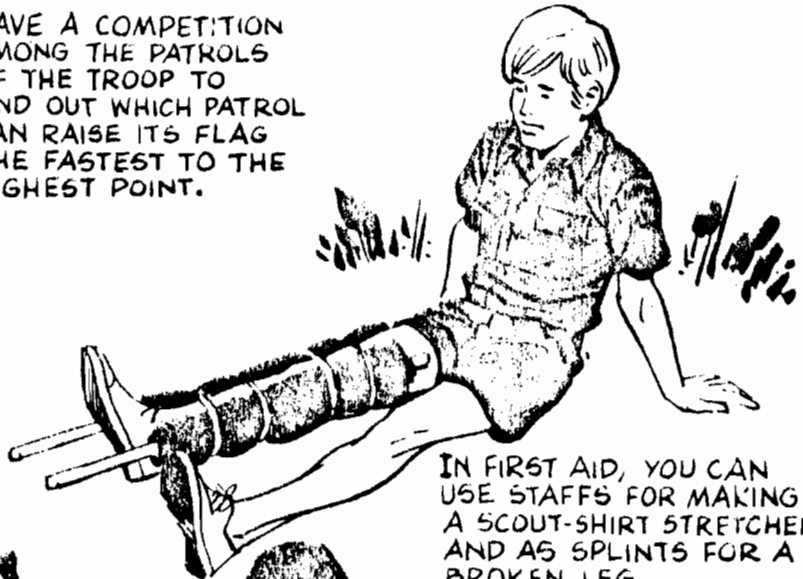
THE SCOUTS IN YOUR PATROL WILL KEEP TOGETHER EASILY ON A NIGHT HIKE IF YOU HAVE BROUGHT STAFFS ALONG.



WRESTLERS SIT ON THE GROUND WITH FEET TOUCHING. THEY HOLD ONTO A STAFF WITH BOTH HANDS AND TRY TO RAISE THEIR OPPONENT OFF THE GROUND.

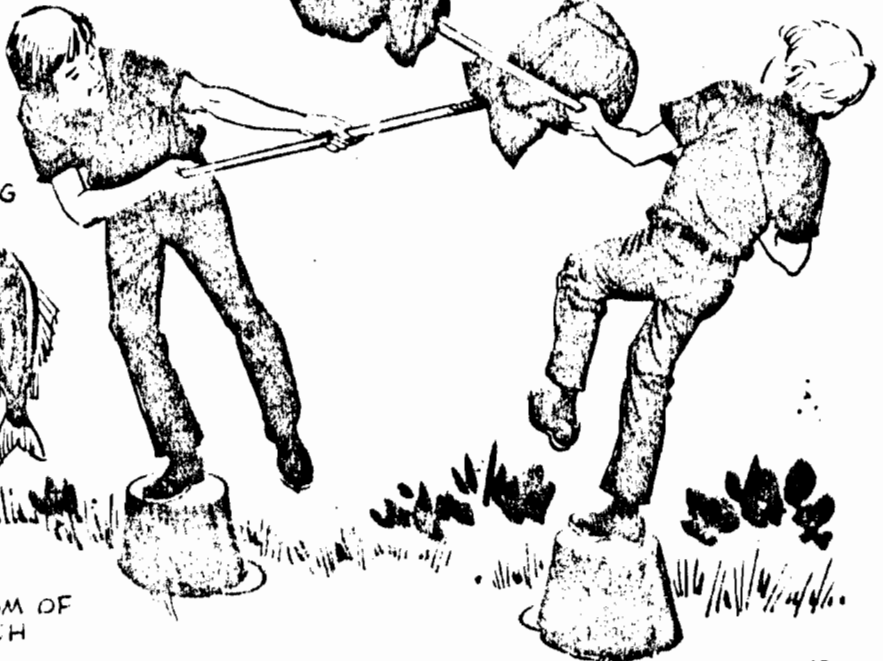
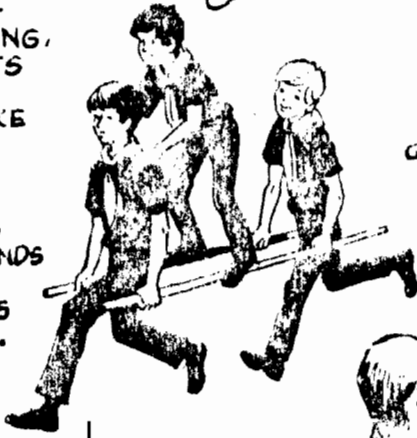


HAVE A COMPETITION AMONG THE PATROLS OF THE TROOP TO FIND OUT WHICH PATROL CAN RAISE ITS FLAG THE FASTEST TO THE HIGHEST POINT.



IN FIRST AID, YOU CAN USE STAFFS FOR MAKING A SCOUT-SHIRT STRETCHER AND AS SPLINTS FOR A BROKEN LEG.

IN CIRCUS-HORSE RACING, TWO SCOUTS WITH TWO STAFFS MAKE THE HORSE. THE RIDER STANDS ON THE STAFFS WITH HIS HANDS ON THE FRONTMAN'S SHOULDERS.



FOR WEIGHING THINGS, PROVIDE THE STAFF WITH A HOOK AND WITH MARKINGS WHERE WEIGHTS BALANCE.

FOR JOUJING, TIE PILLOWS ONTO THE ENDS OF TWO STAFFS. THE COMBATANTS STAND ON THE BOTTOM OF TWO DUCKETS AND TRY TO PUSH EACH OTHER OFF.