

CHAPTER SEVENTEEN

HANDICRAFTS

Your Scouts like to make things, but more important they want to use the things they make. The types of handicraft programs you should encourage should therefore be useful to your Scouts and, if possible, help them to achieve some recognition either in the Achievement or Challenge Award schemes.

Through handicrafts, your Scouts, are able to satisfy their need to be creative. Handicrafts help in developing imagination, self-expression, patience, care, neatness, constructiveness, co-ordination and co-operation. Handicrafts also provide an ideal way to involve parents and other adults; fathers in particular, usually find great pleasure in working with their sons.

Materials may be secured from many sources: spools from drapery departments and sewing centres; cartons, bags, cigar boxes and large wooden boxes from neighbourhood stores; mill ends from lumber dealers; and any other disposable items that may be considered waste by industry and usable.

Here are some Handicraft subjects and projects that you might consider as suitable program items:

Basketry	Metalwork
Bead work	Miniature pioneer projects
Bird feeding stations	Moccasins
Bird Houses	Model making
Boat building	Mural
Book ends	Nature exhibits
Braiding	Neckerchief slides
Camp fire blankets	Pack boards
Candle holders	Paper crafts
Carving	Papier-Mâché

Christmas decoration	Plaiting
Clay modeling	Plaster casting
Drawings	Plastics
Driftwood craft	Posters
Flower pot decoration	Pottery

Sample Projects

To give you some examples of how handicrafts can be worked into your program here are some suggested handicraft projects:

- a) Silk-screen printing - This is an easy process and can stimulate your boys to make patrol flags, honour crests, or even put their patrol and troop identification on their T-Shirts for camp.
- b) Compact Stove - This handicraft item can be used for work in the Campcraft, Winter Scouting, and Exploring Badges.
- c) Bird Feeders - This project can be used for the Conservation Badge, and is a good one to get fathers involved with, as they can usually provide the necessary tools.
- d) Campfire Robes - This is a good handicraft project as it gives your Scouts a useful item for camp. The boys can sew any crests they may have on the robe, and this adds to campfire atmosphere.
- e) Snowshoes - A good exercise for Scouts; it can be used with an Indian theme as well as satisfy a requirement for the Winter Scouting Badge.

MAKE AND USE A

Making little paraffin stoves is a great project for the members of a patrol — fun to make, inexpensive, relatively easy and with a practical use. The finished product opens the door to other activities: a hike to test the stove; testing how long it will burn; testing the efficiency for boiling water or cooking. You could try different kinds of tins and compare one against another.

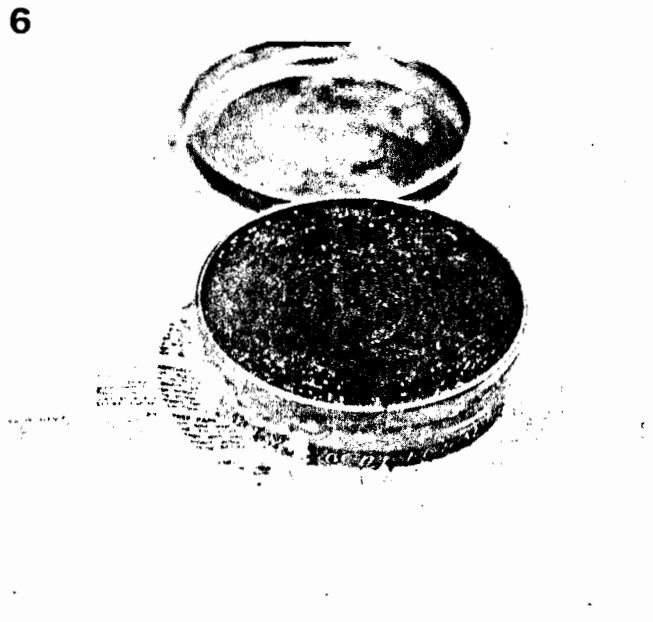
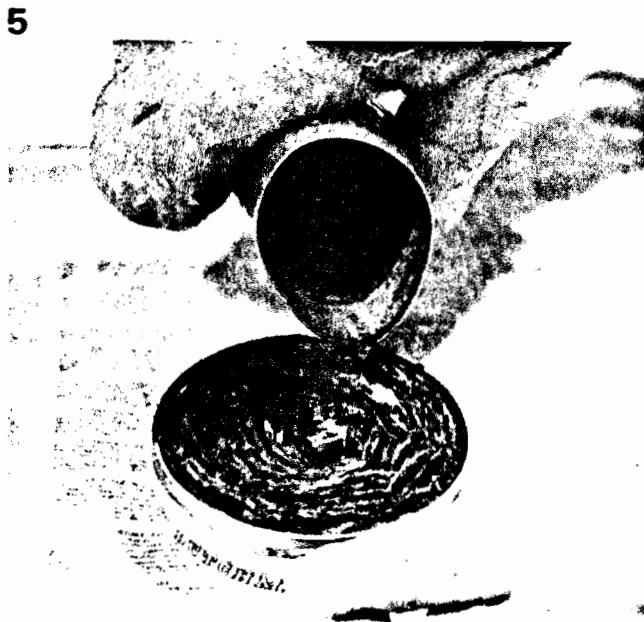
The materials used in making the stove shown in the step-by-step instructions consisted of a two-ounce tobacco tin, a piece of corrugated cardboard, just over a quarter pound of paraffin, and a soup can to melt the wax.

1. Tear the corrugated cardboard into strips just slightly narrower than the inside depth of the tin. Scissors may be used to trim the bottom edge of the strips but the top edge should be left jagged to help in lighting.

2. Now place the strips into the tin. Start at the outside edge and work toward the centre.

3. Don't pack too tightly as you want room for the melted wax.

4. It's next to impossible to clean the wax container when finished so an old pot or, as shown, a soup can



COMPACT STOVE

makes a good melting pot. The can holding the wax was placed inside the large pot which contained three or four inches of water. This double-boiler arrangement is important to ensure that the paraffin doesn't ignite while being melted.

5. Pour the melted wax into the crevices within the cardboard strips. Be sure to protect your hand with something like an oven mitt. Don't fill too full. Leave a little cardboard showing. This is the wick.

6. Charring the cardboard wick by lighting and then putting the fire out will make it easier to light on the

trail. The charring can be done immediately after pouring the wax or after letting the wax cool.

7. To use: simply remove the lid and light. One stove provides a compact means of cooking a one-pot-meal or heating a cup of coffee. Several placed together provide the means for a patrol to cook their meals.

8. To put the fire out, simply place the lid on the tin. Let the stove cool after replacing the lid or, if you're in a hurry, cool by dousing with water. This "cooling" is important even with the lid on as the wax surrounding the wick will have melted.

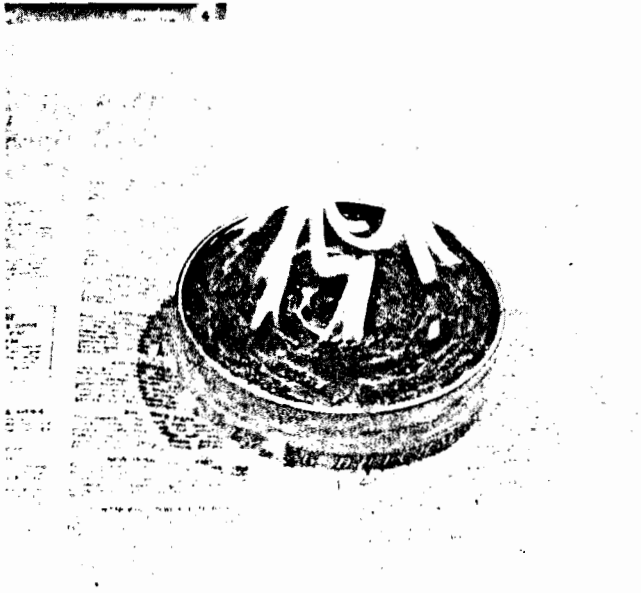
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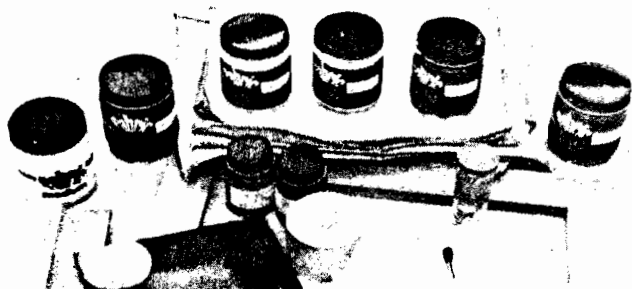


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SILK-SCREEN PRINTING

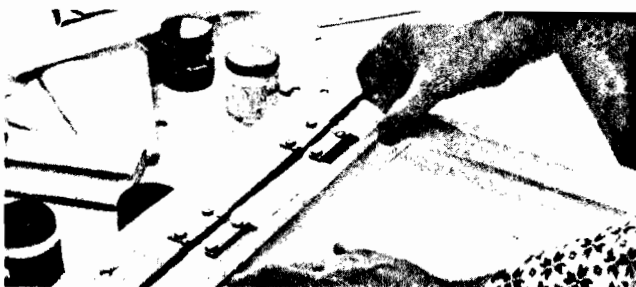
In an article entitled "Blazing the Trail of the Pathfinder" (*The Canadian Leader*, June/July 1973), silk-screen printing was suggested as a possible patrol project. There were some questions raised as to whether this could be done by Scouts.



1. We went to an art-supply store to purchase supplies and discovered there was a kit for silk-screen printing on cloth. Because of our inexperience, we decided to use the kit. The kit included a frame, dyes, organdy screening, a squeegee, cloth place mats to be decorated, a paint brush, thumb tacks, masking tape, a thin foam pad, screen filler and, most important to us, simple instructions.



3. The organdy tightened as it dried — at this stage we came close to the desired tightness. We cut off the excess cloth, leaving enough to cover half the upper surface of the frame.



5. Masking tape was used to make a seal between the organdy and the inner edges of the frame. This prevents ink from building up between the organdy and the frame. An extra width of tape was put on the organdy at each end as an ink shelf.

We decided to try it for ourselves to see if it was feasible. Neither of us had any previous experience with silk-screen printing and we approached the project with some concern.

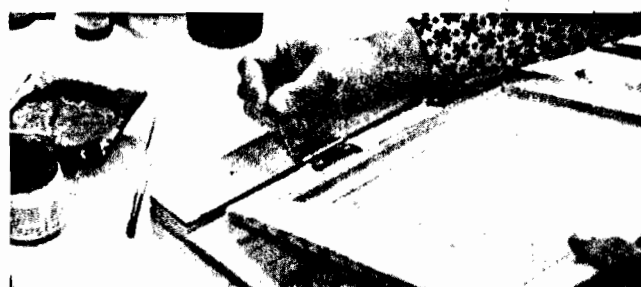
Now, having done this project, we both believe it is practical for Scouts. In fact, we have heard since of a number of Scout-age youngsters who are actively engaged in it — some do it to earn spending money.



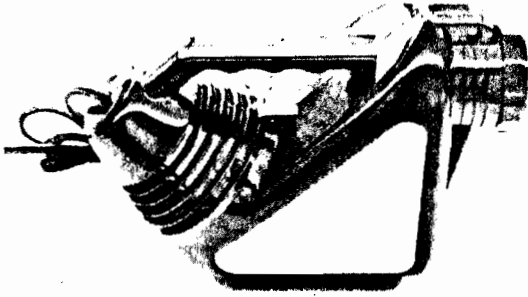
2. We dampened the organdy and carefully stretched it on the frame with threads running parallel to the frame. As recommended, we tacked the cloth to the outer side of the frame. To ensure the cloth is tight you start tacking the cloth to the frame in the middle of the sides and work to each end. The end is done in the same manner. The cloth is supposed to be "tight as a drum" — ours didn't quite meet this qualification.



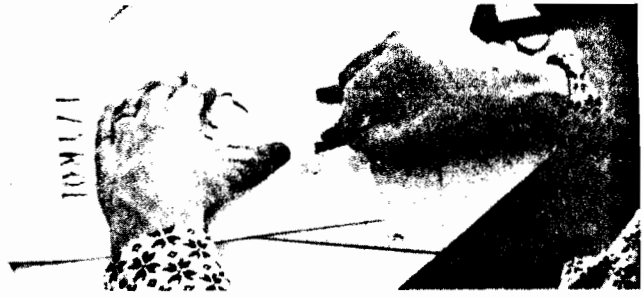
4. These edges of the cloth were sealed to the frame with masking tape — to make it neater and to prevent ink from accumulating under it.



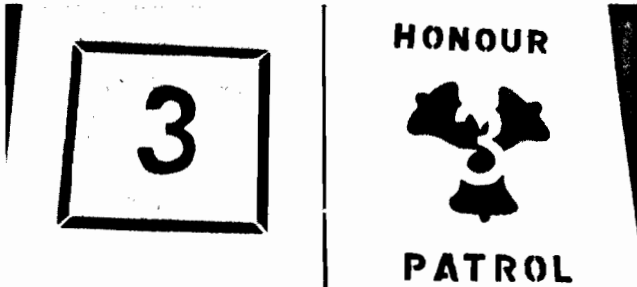
6. We mounted our silk-screen frame on some scrap half-inch plywood for two reasons — cleanliness and ease of register (when two or more stencils are used in a design, matching the stencils so that the design is printed accurately). We used two butt hinges with removable pins so we could raise the screen or remove it for cleaning.



7. Not being artists, we used a Magnajector (TM) to project the design from a badge onto paper taped on a wall. We used a good-quality paper and outlined the total design with a felt pen.



8. We used a razor knife to cut our stencils from bond paper. Clean edges on these cuts are a must as any rough edges on the stencil show up in the printed design.



9. Because we had a two-colour design, we had to cut out two stencils. To ensure that they matched, we copied the appropriate sections carefully from our original design and checked them by placing one on top of the other and holding them to a light.



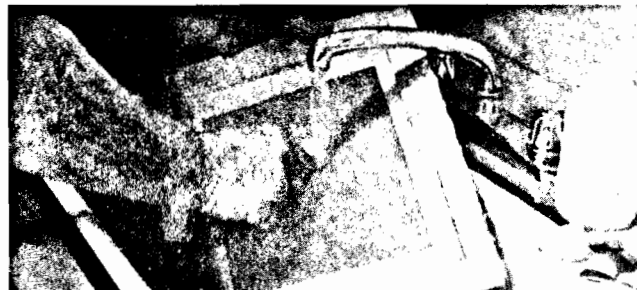
10. Registry was important to the design and we carefully positioned the first stencil on the underside of the frame with small pieces of masking tape. We then marked where the corners of the stencil were — so that we could easily line up the second stencil. The stencil can be seen in position through the organdy in the picture.



11. The frame was then attached to the base by replacing the hinge pins and the cloth centred under it. The foam pad was placed under the cloth. We placed about three teaspoons of dye on the masking-tape shelf.



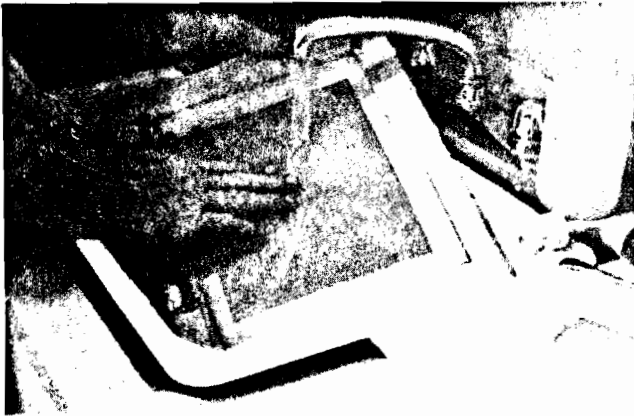
12. Using the squeegee, we spread the dye evenly across the stencil. After two wipes across and two back we could see that the ink had covered all parts of the stencil. Excess dye was returned to the ink shelf.



13. We removed the pins from the hinges, stripped off the stencil and rinsed off the surplus dye at the sink. We soaped the screen carefully as undue pressure would damage it. We recommend using a liquid detergent to prevent such damage.



14. We placed the screen on paper towelling on the counter and used the squeegee to get the soap through the stencil. We repeated this process — rinse, soap, squeegee — until all the holes in the cloth were clear of dye. We checked by holding it up to a light.



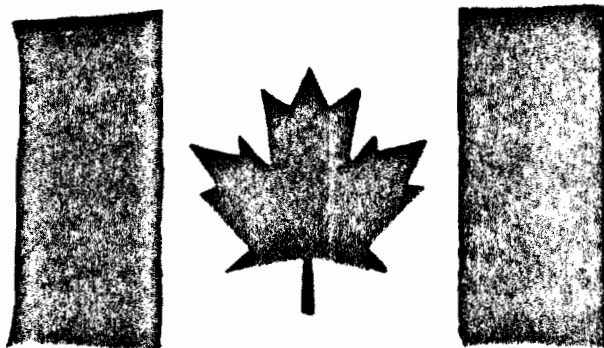
15. We carefully rinsed the screen under the tap and let the screen air dry while we cleaned the squeegee, the teaspoon and the dish we used for blending the dye to get the right colour.



16. We repeated steps 10 through 15 with the second stencil and compared the results with the original badge. Not bad for two rank amateurs! Note that the cloth was taped to the base to keep it flat and prevent it from moving. There is a thin sheet of foam under the cloth which provided the soft base required for printing on cloth.



17. Our 'Honour Patrol' pennant was almost ready. To set the water-soluble dyes we ironed the pennant for three minutes with an iron set at 284°F. (We could have baked the flag in an oven preheated to 284°F. for 3 minutes.) At the last stage, the pennant was trimmed with gold edging.

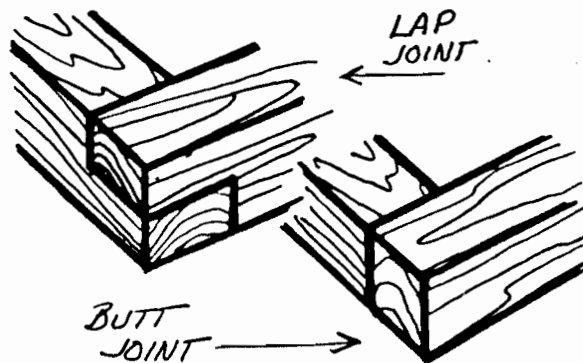


18. This flag was another item done on the same day. From start to finish the project took us three hours — assembling the screen, mounting it on the base, cutting the stencils and printing the designs.

Conclusion: Scouts could do silk-screen printing. They could use it for patrol emblems on T-shirts or create their own patrol flags or emblems. We found a number of books which helped us. *Practical Screen Printing*, a Studio Handbook by Stephen Russ, did much to remove the mystery and un-complicate the process for us.

To build a frame the same size as the one referred to in this article, you would need:

- Frame — 2 pieces $\frac{1}{2}$ " x $1\frac{1}{2}$ " x 14"
- 2 pieces $\frac{1}{2}$ " x $1\frac{1}{2}$ " x 12"
- Varnish
- Base — 1 piece $\frac{1}{2}$ " x 16" x 17"
- 1 piece $\frac{1}{2}$ " x 12" x 17"
- 2 hinges, butt type, with removable pins
- Screen — 52 (approximately) thumb tacks
- 1" masking tape (approx. 10 ft.)
- To Print — 1 squeegee
- dye



NOTE: The ends of the side pieces are lapped for strength. Deduct 3" from the length ($\frac{1}{2}$ " x $1\frac{1}{2}$ " x 9") if you plan to use a butt joint.

Bird Feeders

The building of bird feeders gives the builder an opportunity to learn to know one bird from another and to observe their habits and behaviour. And, in some cases, this pleasurable and educational activity may help birds to survive.

Birds are well fitted by nature to find their own foods under normal circumstances. They have a strong survival instinct and possess both abundant energy and the ability to catch their prey or glean very small morsels of food from hidden places. But storms, droughts and excessive cold sometimes threaten birds with serious food scarcities.

Efforts should be made to cater to the birdlife in country gardens or parks which are the natural resting places for migrating birds, and also in city and suburban gardens where birds often rest. Bird banding has shown that once a bird has found a good feeding place it is likely to return to it time and time again, year after year. Care should be taken, therefore, to visit the feeding stations periodically, and immediately after every storm, to replenish the food supply.

A feeding station can be put up anywhere, for birds of some kind will eventually find it and attract other birds to it. Feeding places high on the roofs and the balconies of apartment houses and other urban places are visited by an astonishing number and variety of birds. Ideally, however, a feeding place will have shelter from the weather and from bird-eating predators such as hawks and cats. Protection from squirrels is also important; otherwise they will take all the seed. And it is desirable to have trees somewhere in the vicinity providing a link between the birds and the feeders.

A feeding station built with

trees and shrubs, on a hill or house rising on its north and west sides best provides shelter from the weather. Some birds remain in a restricted area after winter descends, and they may not find food if it is not offered until after the snow has come. Winter feeding stations should therefore be established in sunny, sheltered positions early in the autumn.

Coping with predators is a more complicated affair. It is practical to distinguish between domestic predators, such as dogs and cats, and the wild ones, hawks and weasels. Domestic predators should, if possible, be trained not to touch the birds attracted to the feeding place or be otherwise prevented from doing so.

But wild predators are the birds, natural enemies and belong to the environment. To dispose of them is a mistaken conservation method, for their complete absence might dull the natural alertness of their prey. An unheeding bird is the victim; the alert one lives longest.

To protect birds from predators, thick cover is needed not far from the feeder into which the birds can dart quickly at the first sign of danger. A bushy tree, a tangle of shrubs, are places the birds can hide in. But first they need visibility if they are to discover the danger in time. Keen eyes and good vision allow the birds to sound a timely alarm and save many a one and its fellows from death lurking in the shadows or dashing at them out of nowhere.

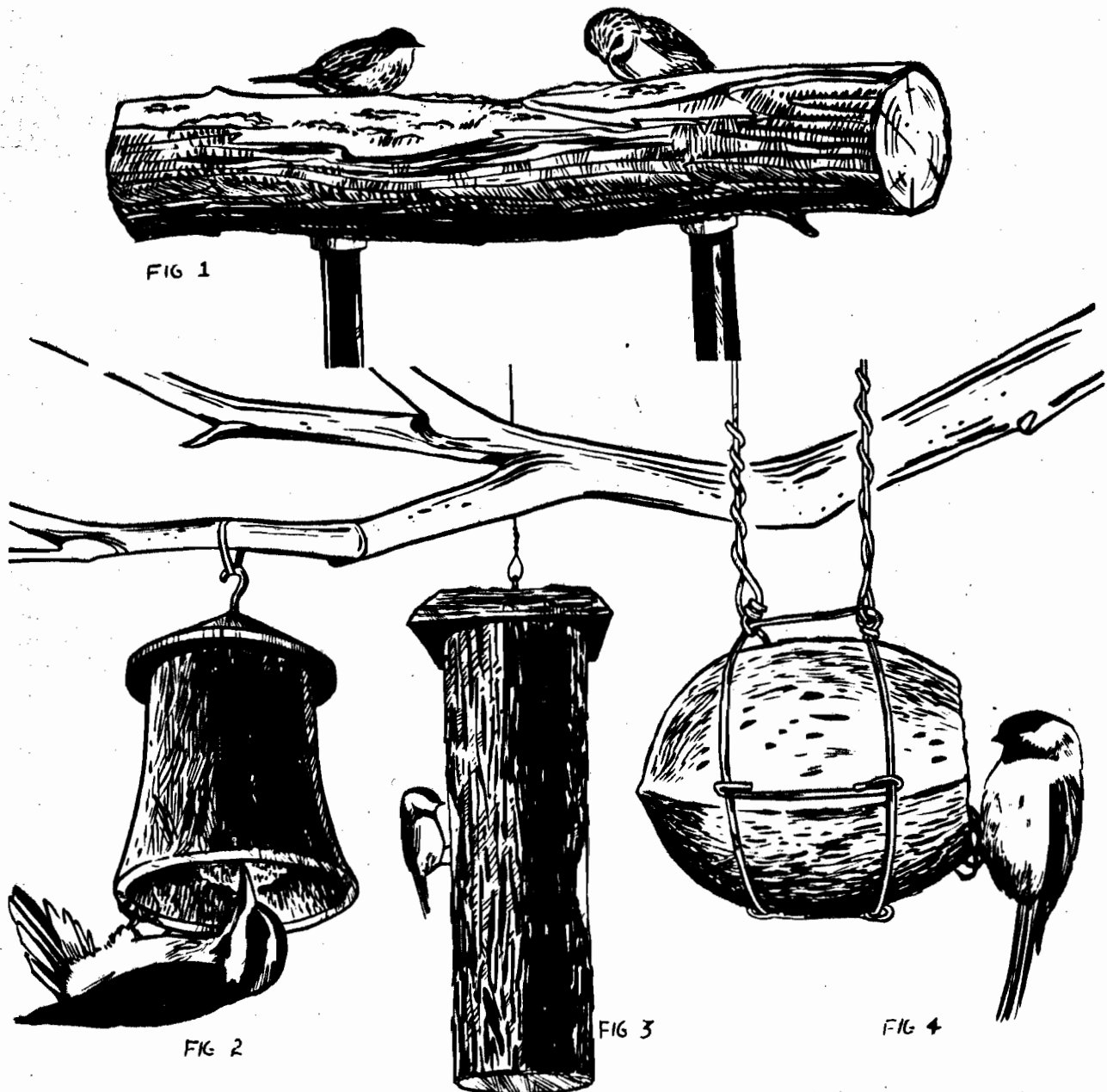
Sometimes, with ingenuity given full play, handmade as well as manufactured feeders become quite elaborate; some are fitted with hoppers that serve the food a little at a time and glass sides and weather-vanes that make the whole thing swing with the wind, thus providing constant shelter. The hopper type

feeder is useful in any feeding station since it cuts down on waste by feeding seeds to the birds little by little. But the other refinements are best avoided since birds that enter inside elaborate feeders may be trapped by predators.

The hopper type feeder is usually an inverted container, but can also be one filled from the top with one or more slots at the bottom, letting the seeds out onto a tray a few at a time. Let it be simple in construc-

tion and placed where the bird has equally free access and swift departure. It should be made of durable material, metal, wood or glass. Plastic is fine in the warm seasons but chips and cracks in cold weather.

A suspended feeder with a smooth sloping roof without moulding on the edge is a good protection, not only against rain and snow, but against the predator that might attack from above. It should have a cat or



squirrel shield. This looks like an inverted funnel, may indeed be one, about one or two feet in length, whose narrow end is clamped to the feeder support. The downward slope must not be rolled at the edge because the slightest unevenness is enough to provide an agile cat or squirrel sufficient grip to swing itself onto the feeder. It is also good management to provide special feeding places where squirrels and chipmunks can eat their fill and be less apt to interfere with the birds. But the simplest kind of handmade feeder is often the most successful. Birds are happier and safer in the most natural surroundings and, as a rule, gain nothing with artificiality. Let the feeder be a log (Fig 1), raised or lying on the ground, strewn with seeds where the birds can pick over the uneven places to find the coveted morsel. For ground-feeding species, the sparrows and others, the feeder can be the bare ground in some sheltered place or simply a platform among the shrubs.

For the woodpeckers, chickadees and nuthatches, a log with holes gouged out in suitable places can hold whatever food mixture is used (Fig 3). Suspend it at a good height from the ground on a thin wire stretched from one place to another away from overhanging branches. Half a coconut (Fig 4) or other receptacle can be suspended right side up or upside down or on its side. Woodpeckers, chickadees and nuthatches are adept at upside-down feeding and can thus be provided with a private feeder unusable by others. A mesh onion bag or other loosely crocheted bag is good for holding fat. They wear out from much pecking but are easily replaced.

A tree trunk is the most natural place for some birds to cling. A piece of fat clamped to the trunk by means of a rectangular piece of half-inch-mesh chicken or other wire

secured tightly with nails is an unbeatable, all-weather feeder for both birds and other animals.

Once the feeding station is set up, there are three main kinds of food to offer: dry foods, solids and mixtures, and liquids.

The sunflower seed is perhaps the most popular although expensive dry food. Highly nutritious, it is of utmost importance, especially in the winter. It is relished by woodpeckers, jays, chickadees, nuthatches, blackbirds and finches -- and also by chipmunks and squirrels. The woodpecker swallows it whole, as do the jay and the blackbird, or puts it in a crack and pecks it open, as does the nuthatch. The chickadee holds the seed with its feet against the twig and hammers it open before eating or storing it, and the blue jay often does this, too. The finches crack the seeds in their powerful bills and let the hulls fall away.

Cracked grain, corn, coarse rolled oats, cracked peanuts and bread appeal to all these species and to some sparrows as well, as do millet and other small grains. For the finches with the small bills, the pine siskins, redpolls, goldfinches, and the sparrows, nothing is quite so tasty as the lowly weed seeds from the plants such as the mullein and evening primrose. However, care should be taken not to spread them around. Most finches relish salt scattered on sand or gravel. In the winter all birds need grit of coarse gravel to aid digestion.

Fat is the most important of the solid and mixture group of foods. It is very high in calories which, transferred into energy, may keep the bird alive through the coldest winter night. The plain gob of fat clamped to the tree trunk or suspended in the mesh bag is a food on which all wintering birds feed with never-sated appetites. During cold springs even the small, insect-eat-

ing, migrating bird may find it.

Any kind of animal and kitchen fats will suffice. Rendered fat or lard serves well as the basis of mixtures cooked together into a rather stiff porridge with rolled oats, grains and weed seeds, and water. Keep in refrigerator without cover.

Fruits are an important addition to these solid foods. For days in winter a crabapple tree full of frozen fruit will attract large flocks of pine grosbeaks which belong to the finches. Cherries, junberries, red osier dogwood, sumach, elderberries, all are among the northern wild fruits that are essential for the survival of many birds. Plant them around the feeding station. These natural feeders will attract and serve a great variety of birds better than any artificial contraption, especially during the fall migration.

Water is a basic ingredient in any set-up for feeding wild birds. There is no need for an elaborate bird bath. A hollow lined with rocks and cement or a shallow container sunk into the ground are, in fact, preferred. Sometimes the birds take a long time to discover the water even when they fly over it many times a day. But get the water moving by a light drip through a small hole pierced into the bottom of a pail suspended over it, or from a hose and the birds will soon see it and make it a much-visited spot -- one of several feeding spots from which both birds and their watchers can derive enjoyment and benefits.

How does the Canadian Wildlife Service fit into the national wildlife picture?

The Canadian Wildlife Service conducts wildlife research and management for the federal government. Each province controls the natural resources, including wildlife, with-

in its boundaries. However, because of the Migratory Birds Treaty, signed in 1916 with the U.S.A., the federal government is responsible for management and protection of migratory birds. CWS administers the Migratory Birds Convention Act and Regulations but cooperates with provincial governments in doing so.

CWS studies migratory birds throughout Canada and conducts scientific research into other wildlife problems in the Northwest territories, the Yukon Territory and the national parks. The National Wildlife Policy and Program announced in April 1966, provided for expanded research and management by the service, in cooperation with provincial game agencies and other organizations.

The staff included mammalogists, ornithologists, limnologists, pathologists, a biometrician and a pesticides unit. The head office is in Ottawa; regional offices are located in Edmonton and Ottawa, with smaller offices across Canada, from Whitehorse, Yukon Territory, to St. John's, Newfoundland.

CWS administers over 90 migratory bird sanctuaries throughout Canada and participates with the provinces in a major program for preserving, by purchase and long-term lease, wetlands necessary to migratory birds for breeding and for resting during migration.

For further information on wildlife in your province, please contact the director of your provincial fish and wildlife department.

Reading list

Davidson, V.E. 1967. ATTRACTING BIRDS FROM THE PRAIRIES TO THE ATLANTIC. T.Y. Crowell, New York.
Hausman, Leon A. 1951. BEGINNER'S GUIDE TO ATTRACTING BIRDS. Affiliated Publishers Inc. New York.

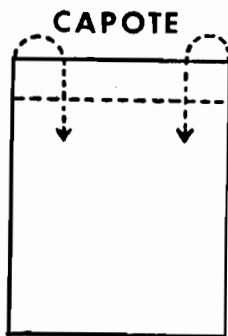
McElroy, Jr., Thomas P. 1960. THE NEW HANDBOOK OF ATTRACTING BIRDS. Alfred Knopf, New York.

Peterson, Roger T. 1963. A FIELD GUIDE TO THE BIRDS. Houghton Mifflin Company, Boston.

Terres, John K. 1968. SONGBIRDS IN YOUR GARDEN. National Audubon Society, New York.

Campfire Robes

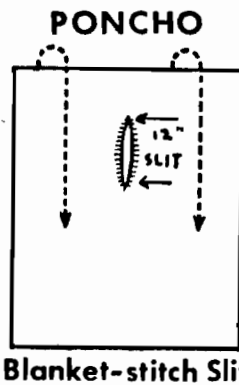
Campfire robes are good fun, romantic and useful and you'll be warmer around the fire. Here are some suggestions:



Capote (Indian)

Fold your blanket over about 60 centimeters from the top, and hold it over your back, cloakwise, the flap forming a kind of collar. Put the single fold of the blanket on each side to and around you and tie a girdle of some kind around the waist. The double fold of the blanket naturally falls across the shoulders and completes this picturesque Indian garment.

The depth of the fold is adjusted to the height of the boy so that the length, about 15 centimeters from the centre cut of the blanket, is, when folded, equivalent to the boy's height.

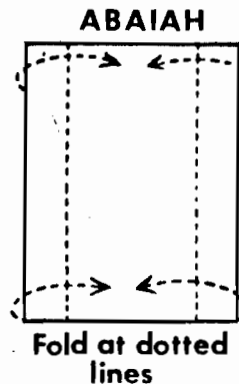


Blanket-stitch Slit



Poncho (Mexican)

Lay out your blanket and make a slit about 30 centimeters long, oversewing the raw edges. Slip your head through, short length in front. It may be worn loose or it may be brought from the back and the edges of the long length held together in front to keep warm. This is an adaptation of a Mexican garment.



2nd stage
Blanket-stitch



Abaiah (Arabian)

Lay out your blanket lengthwise, and fold each end over about 60 centimeters leaving a space of single blanket in the centre of the neck. Oversew or blanket-stitch the edges together along the top (ask for female advice here), then cut down the fold about 45 centimeters from the top on each side to make the armholes. Sew over the edges to prevent fraying.

Slip your arms through these holes, and there you have an Arabian garment. Measurements may be ad-

justed to suit the size of the boy. Put a scarf on your head with a head band and you'll be a regular sheik.

TOGA



Toga (Roman)

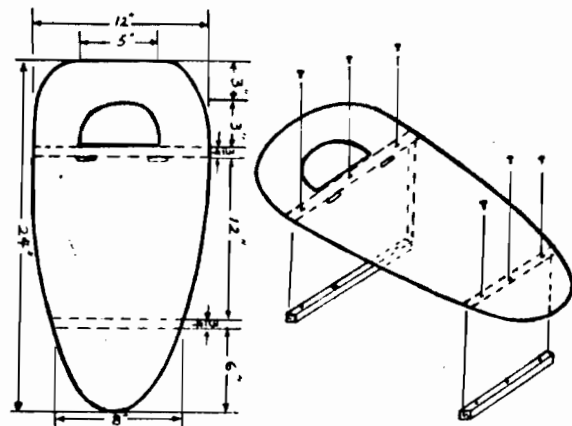
Holding your blanket across your back, arms outstretched, ends of the blanket held in either hand, bring the right hand and blanket over your shoulder. The left hand takes the blanket under the left arm and flings it across the chest and over the right shoulder, just like the villain in a play. Drop your right arm, make yourself a chaplet and you'll be a Roman emperor.

Panther Paws Snowshoes

The plans for these were received from Scouter John Purchase of Bracebridge, Ontario. "Panther Paws" are made from 10mm plywood and closely resemble the wooden-plank snowshoes made by the Naskapi Indians of northern Quebec.

John's Panther Patrol made their snowshoes of two pieces, measuring

30cm x 60mm, of 10mm fir plywood. The outline pattern and toe-hold were cut out with an electric sabre saw. Crossbars, 20mm square, were fastened to the bottom of the snowshoes with glue and screws. The crossbars help to prevent slipping on hills and crusty snow. The two slots for the harness were made by drilling a series of holes and finishing the slot with a chisel. After a light sanding, the snowshoes were waterproofed with two coats of urethane varnish. A simple harness may be made from one-inch lampwick, using about 150 centimeters for each snowshoe. To fit the snowshoes, loop the wicking over the toe of moccasin or boot, pass the two ends through the slots behind the toe hole, then pass the wicking diagonally across the toe.



Take the ends around the heel and back up to the toe, where they are tied together. These snowshoes will support 75 kilograms. For heavier people you may have to enlarge the snowshoe up to one meter long.