

# Making Emergency Ration Packs

## Greybeard

**The Leader, January 1987**

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Over the past 10 years, Calgary area Scouts have successfully made and tested two different emergency ration packs, spending a couple of weeks collecting supplies and a couple of patrol meetings building each pack. Younger Scouts find it easier to make a simple Tobacco Tin Pot, while older boys are ready to tackle the Cook Ring. Constructed from readily available materials, both are compact, self-contained packages that include everything necessary for cooking, eating and drinking in an emergency situation. And a look at the new Field Book shows that, with the addition of some items and substitution of others, a ration pack easily converts into a survival kit.

I believe it's important to augment the kit-making exercise with training in the recognition, collection, and preparation of wild edibles. A patrol or troop might like to take on the additional project of preparing a small pamphlet about wilderness survival to include in the emergency ration packs. For yet another related project, they could hunt up the caloric and nutritional value of each food item included in the pack and, from these findings, calculate the absolute maximum to which they can stretch things while still providing enough nutrients to maintain life.

A ration pack is a good Christmas gift for an active person. Given appropriate troop or patrol labels, the kits might also make decent fundraisers.

### Food & Drink List

For either ration pack, an individual or patrol selects food and beverage items from this suggested list, taking into account the availability of the items, their own preferences, and space/weight considerations. Depending on their contents, packs will cost up to \$5 to put together. Scouts likely can bring most of the items from home and, if they ask at local restaurants or stores, may be able to collect other things as well.

- Dehydrated individual soup mixes. Prepared versions like Cup-a-Soup work well but are bulky. You can make your own compact lightweight packets by wrapping powdered mixes in heavyduty foil or two layers of light foil.
- Bouillon cubes
- Protein bars
- Beef jerky
- Tropical chocolate bars (high melting point)
- Semisweet baking chocolate (not suitable for warm weather)
- Salt tablets
- Glucose tablets
- Hard candy
- Sesame snaps
- Various seeds and nuts
- Raisins
- Individual hot chocolate mix (bulky and heavy)
- Teabags. Use the kind wrapped in paper envelopes because uncovered bags tear easily and scatter tea

all through the ration pack.

- Freeze-dried coffee or tea in single serve packets
- Instant fruit juice. Hand wrap in single serve foil packets.
- Sugar cubes
- Sugar in individual packets
- Cream substitute in individual packets
- Powdered milk, hand wrapped in foil

After the Scouts have packed a kit and convinced themselves that nothing else will go in, challenge them to repack it and then fill all the crannies and cracks with raisins, currants, sesame seeds, or shelled sunflower seeds. Believe it or not, they can fit a whole handful of these high energy foods into the spaces.

## **Tobacco Tin Pot**

The Cheetah Patrol of the 21st Calgary first field-tested the tobacco tin pot a decade ago and I recently uncovered a box containing some of these packs. Aside from a faint hint of tobacco odour, everything seemed okay. The fuel worked and the soup tasted fine.

This ration pack is fun to make and a worthwhile project that fits some badge requirements. The completed pack stows handily in cottage, boat, recreational vehicle, or car, and Scouts can slip lightweight versions into a pocket to carry on snowmobile outings or day hikes.

The cooking unit consists of pot, wire handle, matches, optional fuel or fire starter, a plastic spoon, and vinyl electrical tape. Make the pot from a tin with a tight-sealing lid. Our prototypes used round 4 ounce tobacco tins, which are flat enough to put into a pocket. Although cans from jam, beverage powders, yeast, and the like are bulkier, they also work fine. Whatever you use, wash it out thoroughly before starting.

Make the handle from 20 to 30 cm of wire coiled to fit inside the pot. Flexible wire such as picture wire is suitable only for making your pot a billy. Stiffer wire (e.g. soft iron wire) can be used as a billy handle, a fry-pan handle, or a stand. Punch or drill small holes next to the rim where needed for the alternative you choose.

When you've made the pot, it's time to fill it:- Small sealed packages of fuel tablets are available from armed forces surplus stores and shops specializing in lightweight camping. Solid barbecue starter cubes or a small candle will also work but both get carbon all over the cooker (and hands and clothing). Barbecue cubes are toxic and must not be packed with food. Once you unseal fuel tablets, use them up as well. Never store them with food.

If necessary, fold the handle of the plastic spoon to fit it into the pot, then add matches, food, and beverages. After closing the cover, seal with electrical tape.

## **Tobacco Tin Pot**

The tin pot is its own storage unit, and you can keep and carry handle, fuel, food, and beverage in it until you need to use it. It's a good idea, however, to check the seal from time to time. When you use the unit, remove the tape and empty. Fill the pot with water to within a centimetre of the brim and heat. Be careful if you've made a fry-pan with a handle from too soft wire because the pot will tip and douse your fire. That's when you'll know you should have made a billy!

When the water is hot or boiling, add soup or beverage. Your tin provides both pot and cup, but remember to let it cool down before you drink.

## The Cook Ring

The cooking unit in this ration pack consists of a cook ring, heavy duty aluminum foil (about 100 cm), matches (book or waterproofed), fuel tablets or other fire starter, and a plastic spoon.

Scouts can construct the cook ring from any stiff wire. A coathanger works very well. They'll need a pair of compasses for the first step - drawing a circle 10 cm in diameter on a piece of paper. Use the drawing as a template and form the wire into a ring. With pliers, bend the ends into hooks as shown, allowing a 2.5 cm overlap. Trim off the ends and pull the ring apart slightly.

To make the handle, bend about 22 cm of straight wire into a hairpin shape with 2 or 2.5 cm space between the arms. Bend the end of each arm back on itself to form a hook of about 1 cm, and then spread the arms slightly.

Attach handle to ring by holding the ring closed with one hand, compressing the arms of the handle slightly, and slipping the hooks of the handle over the two crossed pieces of the ring. With pliers, pinch the hooks of the handle together, but not so tightly that you can't fold down the handle over the ring for storage.

The collapsible cook ring was designed specifically to fit into a plastic refrigerator sandwich container, the single most expensive item in the pack. The containers come in various sizes from various manufacturers and we simply picked the cheapest. Each holds the cook ring, fuel, matches, spoon, food and drink items, and heavy duty foil.

For a lightweight version, a ziplok sandwich bag does nicely, especially if you insert a square of cardboard (cut from a cereal box) to keep everything flat. The bag version slips handily into a jacket pocket.

To use the cook ring, fold out the handle. Carefully shape a 20 cm square of heavy foil into a cup and fold the edges securely around the ring. Fill foil to within about 2 cm of the rim with water, heat and, when water is very hot, add soup or drink powder. Our field tests firmly established the need to use heavy aluminum foil. The patrol leader and assistant patrol leader of the test group doused no fewer than four fuel pellets through thin, leaky pots!

Use the remaining foil as a hearth for the burning fuel tablets or your twig fire. This prevents scorch marks and provides a convenient "ash tray" for clean up. When it's time to move out, simply ball it up and pocket it to carry with you.

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**Greybeard is the Scouting name of Troop Scouter T. Gray, Sunnybrook, Alberta.**

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