

BIBLIOGRAPHIC DATA SHEET

1. CONTROL NUMBER

2. SUBJECT CLASSIFICATION (695)

PN-PAK-715

AL00-5600-0000

3. TITLE AND SUBTITLE (240) Scouts can grow rabbits

4. PERSONAL AUTHORS (100)

5. CORPORATE AUTHORS (101)

World Scout Bureau, Community Development Service

6. DOCUMENT DATE (110)

1979

7. NUMBER OF PAGES (120)

21 p.

8. ARC NUMBER (170)

9. REFERENCE ORGANIZATION (130)

WSB

10. SUPPLEMENTARY NOTES (500)

(In Scouting and community development series)

11. ABSTRACT (950)

12. DESCRIPTORS (920)

Scouting
Community development
Rabbits
Animal husbandry
Animal products
Animal production

13. PROJECT NUMBER (150)

unknown

14. CONTRACT NO.(140)

AID/PHA-6-1150

15. CONTRACT TYPE (140)

16. TYPE OF DOCUMENT (160)

SCOUTS CAN GROW RABBITS



SCOUTING AND COMMUNITY DEVELOPMENT

SCOUTS CAN GROW RABBITS

C O N T E N T S

	<u>PAGE</u>
WORD DEFINITIONS / SOME TERMS	2
YOUR RABBITS' HOME/HUTCHES	3 - 4
HUTCH FURNITURE	4 - 6
BUILDING HUTCHES	7 - 11
FEEDING THE FAMILY	11 - 13
BREEDING RABBITS	13 - 14
THE HEALTH OF YOUR RABBITS	14 - 17
HANDLING RABBITS	17
MARKETING	17 - 18
SLAUGHTERING AND SKINNING	18 - 19

CREDIT

The World Scout Bureau expresses appreciation for extracts and illustrations adapted from publications of :

- American Rabbit Breeders Association, Bloomington, Illinois
- Cooperative Extension Service, Colorado State University of Fort Collins, Colorado
- United States Department of Agriculture
- Zaïre Republic Agricultural Development Service

THIS MATERIAL MAY BE FREELY ADAPTED, TRANSLATED OR REPRODUCED FOR NON-PROFIT MAKING PURPOSES. APPROPRIATE CREDIT WOULD BE APPRECIATED.

All inquiries should be sent to:

WORLD SCOUT BUREAU
COMMUNITY DEVELOPMENT SERVICE
P.O. Box 78
CH-1211 GENEVA 4
Switzerland

RABBIT RAISING

The raising of rabbits is an easy and economical way to provide healthy and tasty food for the Scouter's family or for augmenting Scout income.

Up to 93 % of the rabbit can be used and it is the only animal which will produce 10 times its own weight in a year. Over 40,000,000 pounds are consumed each year in the United States of America.

The meat is delicious and has a smooth texture. It is very high in protein. Rabbits eat large quantities of herbs and convert low cost locally available feed into meat.

In some places income is gotten from rabbit skins, or from the valuable rabbit manure or from use of rabbits in scientific laboratories.

Rabbits reproduce rapidly and a doe can bear young at the age of eight months and remain productive for three years. They require little space, but proper sanitation is vital. Successful rabbit raising depends on proper housing which is easily built from locally available materials.

SOME TERMS

Talking about rabbits, you will hear the following words :

- breed - a race or class; there are 60 in the world; there may be as many as a dozen varieties, or different types, in the breed
- buck - an unaltered male rabbit
- doe - an unspayed female rabbit
- ears - a rabbit enjoys being picked up by the ears just as much as you would
- herd - the group of rabbits
- hock - middle section of hind leg
- hutch - the rabbit's home
- kindle - to give birth to young rabbits
- litter - the several babies of a doe born at one time
- moult - the act of changing the fur twice a year
- nest box - special box inside the hutch where the young are kindled and the doe finds seclusion
- palpitation - a hand method used to determine if the doe will have babies soon
- pellet - small ball of rolled up meal ration
- pelt - skin or fur of the rabbit
- wean - to remove babies from the mother

YOUR RABBIT'S HOME

For successfully raising rabbits, the way you build your rabbit house is important. Starting out with a well built house will save you problems later. Such a house will last for years and, in the long run, costs less than one that needs repair.

Hutches can and do look very different from one area to the next. We have seen Scout-built hutches, and have draft plans for them, made of wood and metal, of crate and barrel material or of bamboo and thatch. The climate must be considered in providing your rabbits protection from wind, rain and sun. There are no critical measurements, although there are size ranges which are better suited to certain breeds.

The rabbit needs a quiet home (undisturbed by dogs, rats, snakes, ants or the noise of children) and if possible with shade. In warmer climates the hutch can have four sides either wholly or partially of wire netting or other open material. In addition, some cooling measure must be provided (coarse sacking dipped in water) when you see the rabbits are under heat stress since heat kills rabbits. In cooler climates, the cage has three sides closed and only one side is open wire. Housing rabbits in commercial quantities is best done by wire cages, hung from the roof or ceiling, inside a well-ventilated building. In any case, protection from rain, chill and wind is important yet with plenty of air to avoid high humidity. An all-weather roof with plenty of overhang is used.

Most often the hutch is single decked about 75cm or waist-high to the operator from the ground (floor). Some are even double or triple decked, but this makes sanitation more difficult.

There should be a cage for each adult rabbit (the young are left with the mother until weaning) of the breeding stock. Up to six months of age, there can be two rabbits of the same sex per cage.

For your initial Scout rabbit raising, it is suggested that you have a 3 cage hutch; one male and two females. For medium breed rabbits the cage is about 77cm wide by 1 meter deep by 60cm high. If you have room the cage could be 1.2 meter wide and, for easier cleaning, only 75cm deep.

Most important is that the floor be correct - preferably self-cleaning. In these there is no place for manure or dirt to remain since it will all fall through. Ideal is to use square wire netting (1cm x 2.5cm), 1.5mm diameter welded wire. From our sketches you will note how every wood support is either outside the floor or covered with sloping metal. If you have wire but cannot get the preferred wire netting, you can weave your own net. Galvanized, slow-rusting wire is best.

The rabbit's health is safer, and the cleaning work is far less with the wire net floor. But if it is absolutely not obtainable there are alternatives. Metal with many perforated holes can be used, but tends to become soggy, dirty and disease is likely. Or wooden slats (3cm wide, spaced at 1.5cm) which require much cleaning. Or a slatted floor of split bamboo which is loosely tied or woven together to leave space for the manure to fall, with the hard side up so it cannot be easily chewed (but it still is unsatisfactory for small rabbits which slip and have leg troubles). Solid floors can even be used, with a sawdust-filled box (30cm square x 5cm walls) where most rabbits will drop their manure.

When weaving or tying materials together to make ventilated walls or tops of cages you must use anti-termite and anti-rot cord or vine, and the knots should be outside so that rabbits cannot gnaw on them. Fresh greens available at all times will provide a preferred chewing choice.

You need easy access to clean the inside of the cage, and also to handle the nest box. A hinged front (leather, rubber, chain or metal hinges) door swinging up on the inside of cage, or a flexible (fold back, or roll back) top may be used.

HUTCH FURNITURE

The happy hutch needs arrangements for feed, water, salt and baby care.

Feeders:

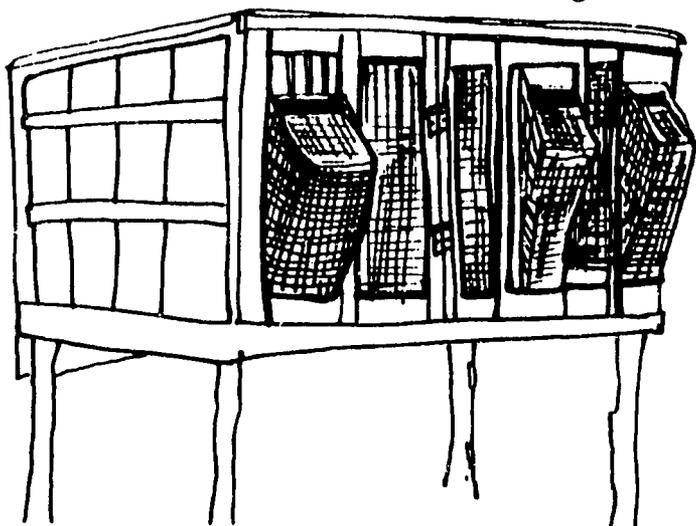
One type of feeder is needed for grains, another type for greens. You will note later in the health section how easy it is for rabbits to have respiratory diseases. They are quickly made ill by the dust residue found in grains or pellets; it is called "fines". Some small operators still use crockery bowls to feed grains but dust is then inevitable. Sick rabbits are likely even though time consuming daily care is devoted to cleaning bowls and discarding food mixed with fines.

Many have found tin cans adequate for feeding grains. Home made feeders from cans or commercially bought feeders should have screened bottoms or many 3mm holes to allow fines to sift out. One feed hopper for pellets is shown in our sketch. Feed cans must not be so deep that rabbits cannot reach the bottom. They must either be hooked to the side of the cage or fastened to a small plank of wood to keep them from turning over. Often the rabbits like to scratch the feed out of the cans. You can prevent this by bending the top 1cm straight in to form a lip on the can. The side of the can should be about 8cm high, be sure there are no sharp edges. Or a section of bamboo can be used with an opening cut into the side. Outside metal feeders attached to each hutch come in various sizes, and avoid opening the hutch door to feed.

The feeding of greens is usually by a manger. When rabbits are fed solely by pellets it is well nevertheless - provide gnaw material occasionally, such as alfalfa hay cubes.

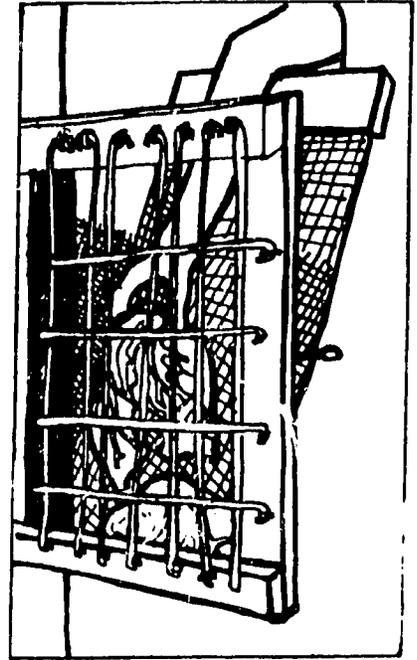
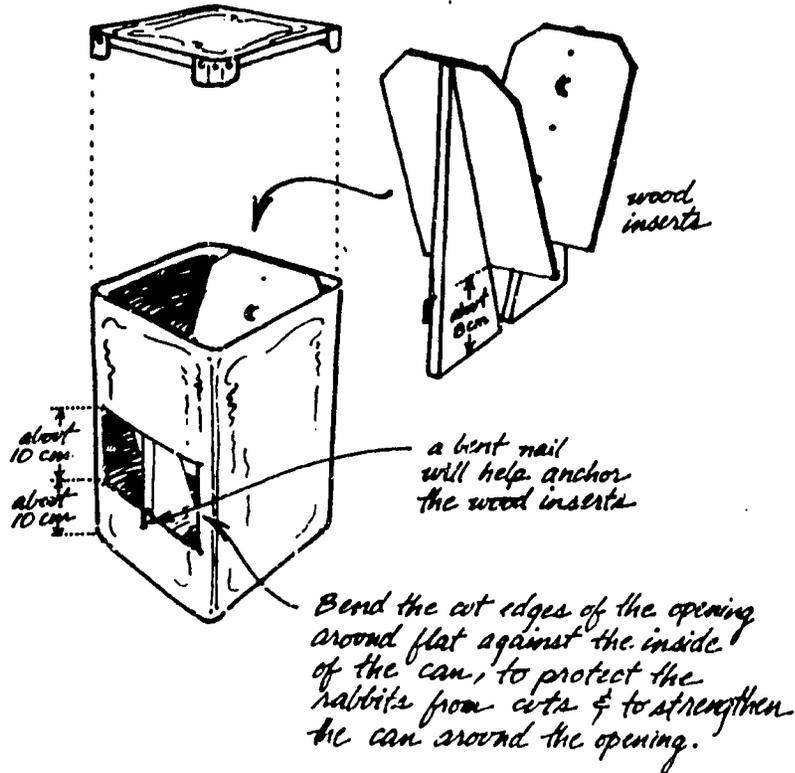
One of our sketches shows a V-shaped hayrack built in between two adjoining hutches for self-feeding. Other sketches show the outside mangers, made from wire or slatted material, which keep the grass/hay/leaves/or other greens always available yet clean. Another way is to tie the greens in bundles and hang them inside the hutch near the door.

Whatever kind of container is used, young rabbits will climb into them. Droppings may then contaminate the food or water. There should be a cover on the manger to prevent their falling to the ground.



A good hutch for two females and one male. Perfect for the small and medium breeds.

A feed hopper made from a square, metal 20-liter tin and a few pieces of wood. Feed sits between the sides of the "V" shape and flows down toward the side opening.



Food being placed into a manger. Note the mesh which has been made by crossing pieces of wire. The holes are large enough for the rabbit to pull the food through, but small enough to keep all but the tiniest rabbits from crawling into the manger.



A cover for a manger, made by fastening a piece of wood to some wire mesh, which can drop or fasten into place.

Waterers:

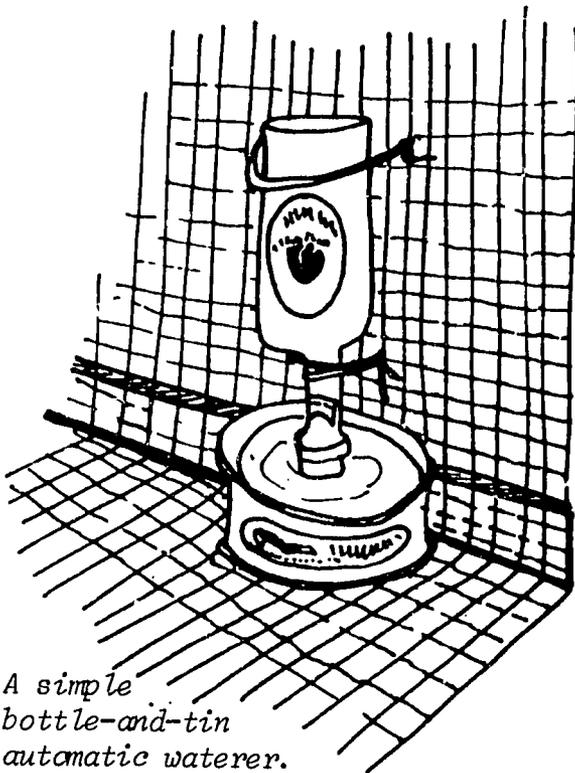
Clean fresh water is just as important as any other part of the rabbit ration. Always keep it available. Rabbits require large quantities of water. A doe and her young will drink about four liters of water each 24 hours. Our sketch shows the bottle and tin can waterer; both must be fixed so that they cannot be upset. Can edges must be bent around flat against the inside so that the rabbits will not be cut. With the lip of the bottle inside the small can, about 1 cm below the top rim of the can, the water level will be replenished as the rabbits drink.

When raising many rabbits it is economical to install an automatic pipe and nipple system. In freezing climates this must include controlled heat to prevent stoppage.

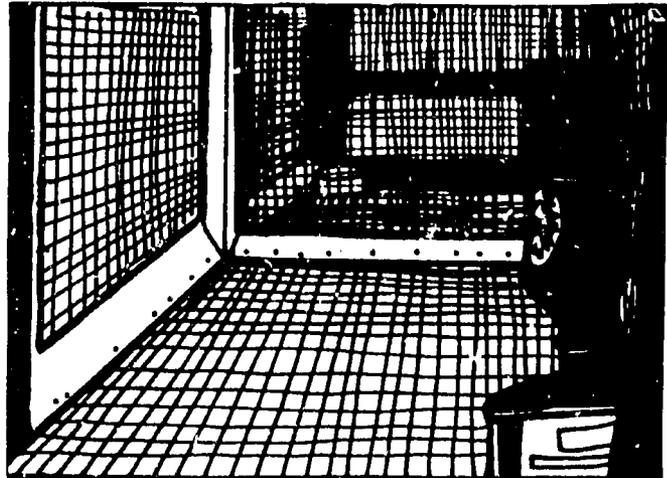
All water equipment must be cleaned daily. A stick wrapped with burlap is useful.

Salt:

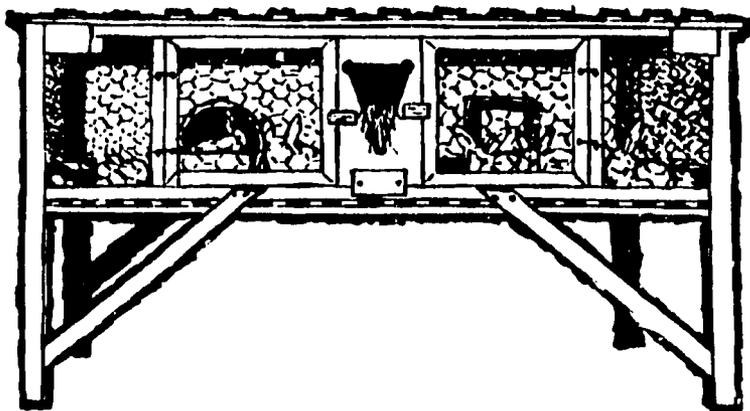
If you have salt blocks they should be in cans so that the floor will not rust.



A simple
bottle-and-tin
automatic waterer.

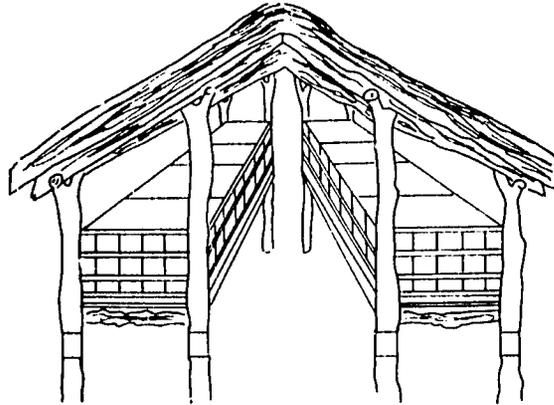


Hutch floors must be "self-cleaning"
to prevent disease. No manure will
collect in this hutch. Every wood
support is covered with sheet metal.



The two-compartment
hutch above can be made
economically by using
scrap materials. Light
and easy to move. Hay
is kept in the center
manger.

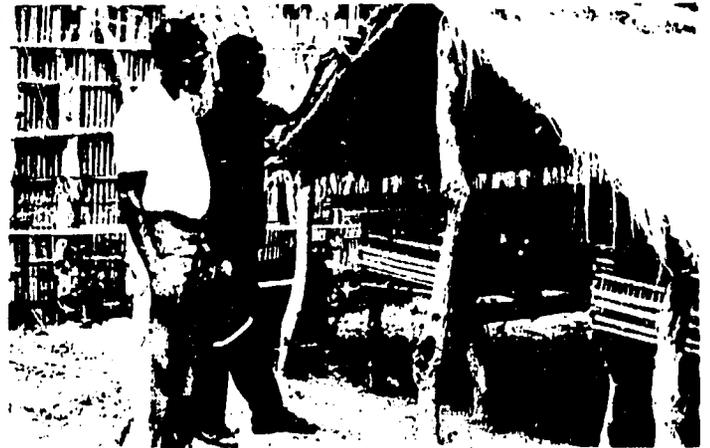
BUILDING HUTCHES



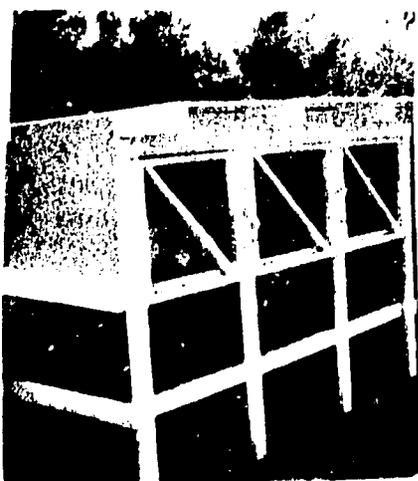
As this drawing shows, the roof can be made of thatch, the main supports of wood, and the rest of the hutch made of bamboo.



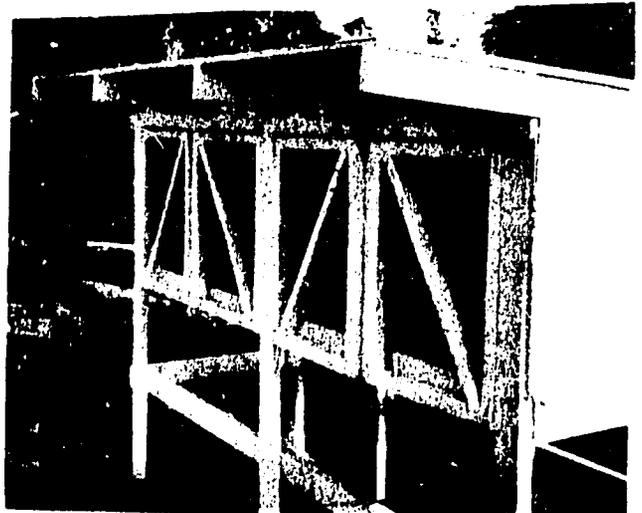
The hutches can be made of split bamboo which is tied together. This same technique can be used for hutch floors.



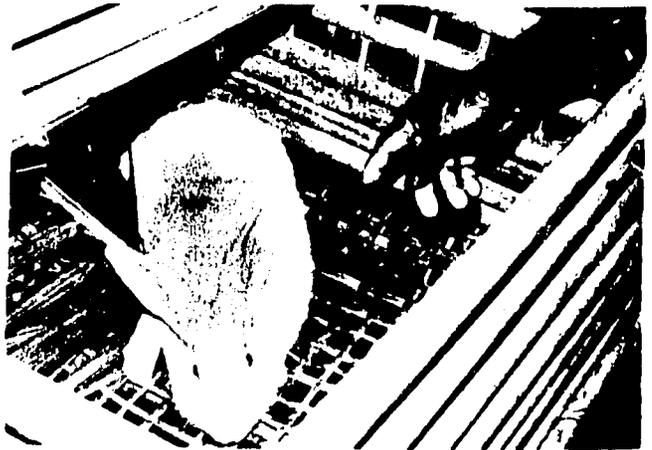
Rabbit hutches can be made out of local materials. It is best to build them near the home and surround them with a fence.



Three-hole hutch made out of wood and wire.

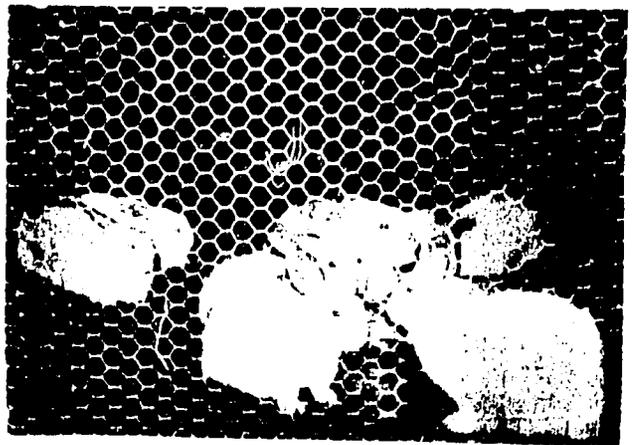


Four-hole hutch made out of wood and wire. Each cage being 55cm x 70 cm.



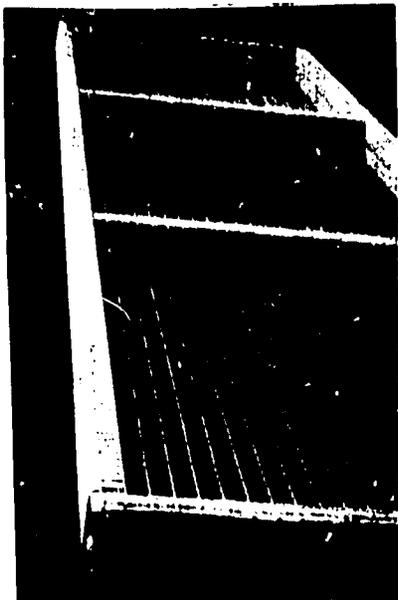
The simplest access for rabbit hutches is a bamboo roll-back top. This roll-back top makes it easy to put in feed, water and the litter or nest box. When building this type of hutch you must be careful that you do not build the hutches too high.

Bamboo which has been split can be woven loosely in mats. These mats make an excellent flooring for the hutches.

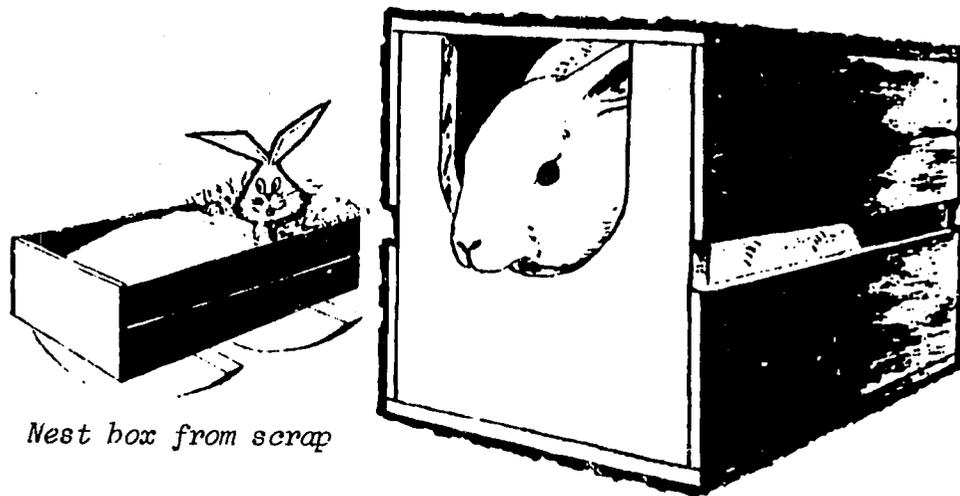


An advantage of using the more expensive wire flooring is that the manure falls through it easily, and the wire is easy to clean.

Some farmers prefer to use wire rather than bamboo, but it is more expensive. A disadvantage is that it rusts easily.



Cage Floor for Rabbits



Nest box from scrap

Cradle for junior:

For kindling the doe needs a place offering her a feeling of protection. Scouts have used apple boxes, date crates, bamboo trays, nail kegs and other items. The type of nest box depends on the climate (or if indoors it could be merely of wire net).

Our sketches show several types. Some are wire floored but a sanitary insert of aluminium foil and easily changeable is also found.

Outdoor hutch nests have a top in many climates, hinged so it can be opened. There is a 15 cm \emptyset square hole in the end, 10 cm from the bottom so that the young cannot get out too early. Such a top prevents the doe from jumping into nest onto the young. Ventilation holes or a slot near the top since the body is considerable.

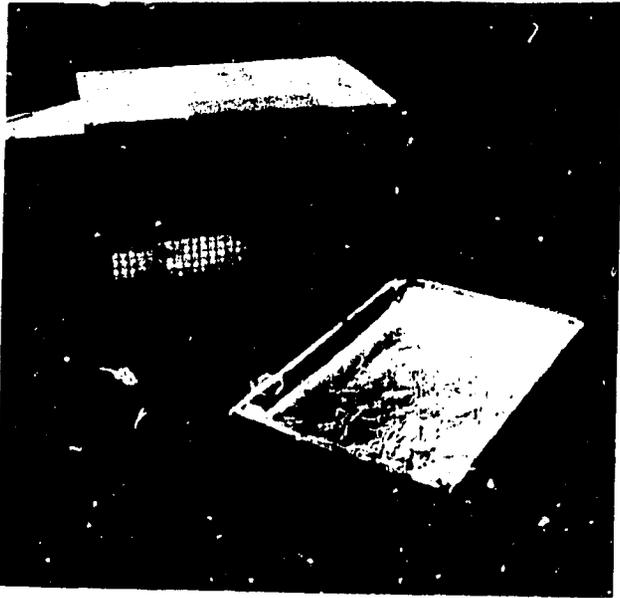
The semi-open type have only a part top and the doe can thus rest on this ledge. A ramp is built up to the edge so that young rabbits can return to the nest more easily.

Nest size depends on the breed but a good average is 30 cm wide x 30 cm high x 40 cm long. 1 cm plywood is good.

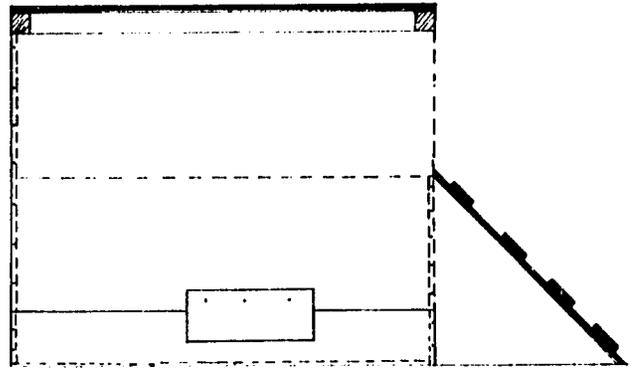
After use the nest must be thoroughly washed with weak creoline solution, boiled water wash or disinfectant; then left in sun for several days before reuse.

Other equipment:

Our series of photos suggest the cleaning equipment needed. Stiff bristle brushes for washing items. A flame torch is useful for burning loose hair and sanitizing nests or hutches. Gunnysack type material is needed to cover hutches in cold wind, or to be dampened for cooling in hot weather.



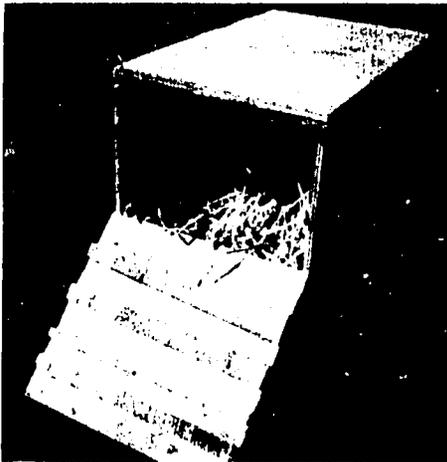
Kindling box with ram, open slot between top and side, 1cm X 1cm wire nest floor and 6cm high foil-lined bottom for nest box.



Side view diagram of kindling (nest) box.



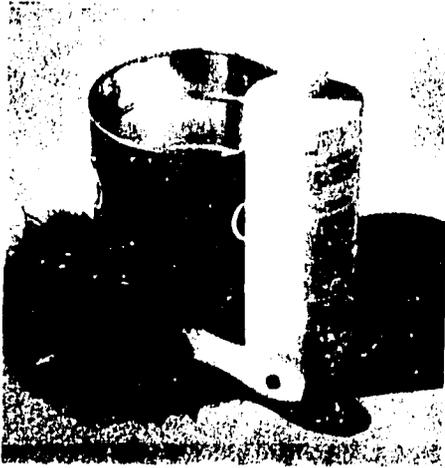
The nest box is 30 cm wide and 40 cm long. An open or closed box can be used.



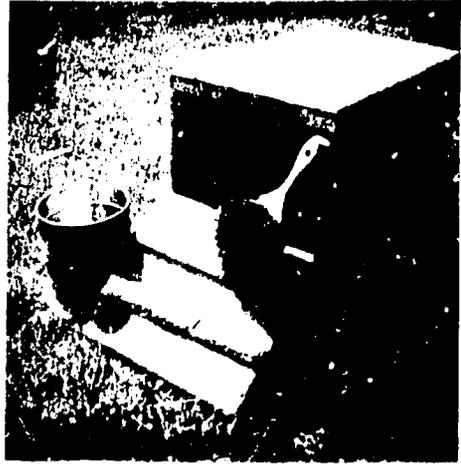
A completed nest box ready to go into the does cage on the 27 to 28 day after breeding.



One day old litter of bunnies doing fine.



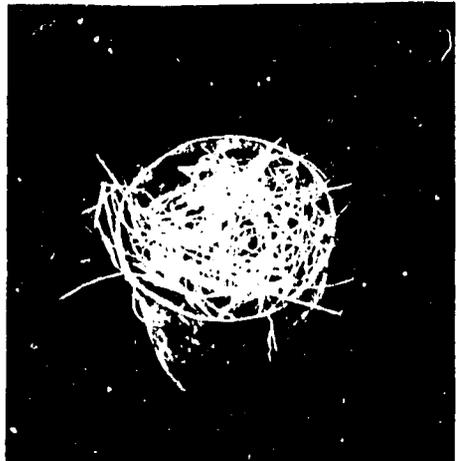
Follow directions for use of disinfectant for fur bearing animals.



Use warm water disinfectant and scrub brush; clean the entire box.



Two pounds of wood shavings below the nest bottom wire will absorb urine and keep down ammonia odors.



Use plenty of clean straw in the nest box and add new straw if needed.

FEEDING THE FAMILY



Rabbits need some of each of the above foods and fresh water and salt every day.

Rabbits are not hard to feed because they can live on plants and other foods which are easy to find. They need enough vitamins, minerals and fiber. Yet not so much as to become fat for this leads to disease ! Good growth at low cost is thus achieved.

The does you retain for breeding must be especially carefully fed to produce healthy young rabbits and the milk to feed them. During the period that the doe is nursing her young the percentage of protein supplement should be increased to 20 and the grain to 39.5.

Young rabbits, bucks and dry does may be maintained on alfalfa hay alone, or hay plus a few grammes of grain daily. For the best health the ration recommended is:

protein supplement	8 %
grain	31.5%
roughage	60 %
salt	0.5%

A number of ingredients can be used to meet these nutritive requirements. Linseed meal, soyabean meal, or peanut meal provide protein. Useful grains are millet, kafir, darso, corn, oats, barley, wheat or milo. Roughage comes from alfalfa, clover or other good-quality hay. Rabbits will eat almost any plant. This includes stylosanthesis, palm branches, vines, turnips, other garden vegetables and some wild plants. Yet it is recommended that greens not be available until about seven months of age, and then only in limited quantities lest diarrhoea kills your rabbits.

Salt is vital and if available mineral salt should be used. Salt blocks or spoons are placed in a feed can to protect the hutch floor. Or else a small amount of loose-salt (maximum 1 %) is mixed with the feed.

Should a complete pellet ration be economical for you, then this is the only food needed. Between 100 and 150 grammes per day is normal.

Rabbits prefer to eat at night. Use feeding devices so that the food is not walked on or otherwise contaminated. Remember to remove the dust or fines from food. Some waste of hay can be prevented by cutting it into 7cm or 10cm lengths. Corn, peanut and soya are easier to eat when ground into a meal.

One grain mix you can make for a small number of rabbits is :

1 kg whole oats, 1 kg wheat, 1 kg. soyabean meal and $\frac{1}{2}$ kg crushed soft corn.

Dust can be reduced by slightly dampening the mash with water just before feeding.

Some other ways of expressing the feed requirement for rabbits are :

- herd bucks and dry does need only $\frac{1}{2}$ cup of mash a day,
- pregnant and nursing does need $\frac{3}{4}$ or 1 cup a day,
- in the above two cases the feed time is limited to 20 - 30 minutes per day,
- good quality dried hay can be placed before the rabbits at all times and the daily consumption will be 55 - 85 grammes,
- herd bucks are more lively when fed a maximum of 125 - 185 grammes of concentrate (depends on weight) plus 15 minute feeding of greens,
- or as an alternative ration daily 85 grammes of grains and all the hay or greens accepted,

- a doe at six months of age will eat daily 3.8% of her weight,
- thus a 4.5kg doe needs 170 grammes daily (for instance: 70 grammes of grain mixture plus 100 grammes of hay, or alternatively: 125 - 140 grammes of concentrate plus 45 grammes of greens),
- while a doe is pregnant or nursing let her have all the concentrates she will eat.

The importance of having water always available has been mentioned in the paragraphs describing how to make waterers.

BREEDING RABBITS

The quality of your rabbits will depend on the quality of the breeding bucks and does you keep.

One buck and three does can furnish the meat to strengthen your family's diet. But a serious rabbit-farm effort with 50 to 150 does can mean a business with part-time employment and perhaps extra income.

A buck should be eight months old and the does 7 to 8 months old before breeding, and the does can produce four litters a year for two or three years. One buck can be used with 8 to 10 does, although commercial raisers of rabbits use up to 20 does. The buck should be used only every third or fourth day.

The doe should always be taken to the buck's cage, never the reverse. The cooler part of the day is the best time; rabbits breed all year round although Spring is best. Take the doe back to her cage after the buck has finished (fallen over on his side once or twice).

Make an accurate record of the date bred. Place a small card on her cage.

Commercial breeders often remate the doe a day or two later to assure the maximum production of bunnies. They also rebreed the doe when her litter is five or six weeks old. Initially you can breed seven or eight weeks apart.

The litter is usually 4 to 8 bunnies, but may be as high as sixteen. Since seven is the ideal number it is a good idea to breed 2 or 3 does within a few days of each other. The young can then be placed with the does in an equal number since the mothers do not mind switching of bunnies in the first 2 days.

Kindling will be on the 31st or 32nd day (or rarely between 29th to 35th).

On the 27th day after breeding put the nest box into the doe's cage. We have described how to make this and how it must be perfectly clean. In cooler periods you should line the nest with 7cm of clean straw. The doe will also pull her fur for lining.

14 to 16 days after breeding you should check to see if the doe is pregnant since your care of her depends on being sure. When you palpate the doe you gently hold her ears and the fold of skin over her shoulders in your right hand; then move your left hand back and forth gently under her body - you will be able to feel the embryos as they slip between your thumb and fingers.

Does usually kindle at night. Be sure that nothing frightens the mother or she may kill the babies. One or two days after birth carefully check the nest (you can entice the doe with a little special greens) and remove any dead babies.

Young rabbits open their eyes 10-11 days after birth. They will come out of the nest box at about three weeks age and then start taking food other than the mother's milk. You can then remove the nest box and clean it.

Weaning should be at eight weeks. Put the young in another cage for fattening. Unless you market them at this time the rabbits should soon be separated with two (of the same sex) per cage. The doe and the young now go on the same feeding schedule as the rest of the herd.



The young should stay with the doe until they are six to eight weeks old. At this time they are ready to be weaned.

THE HEALTH OF YOUR RABBITS

Good feeding and cleanliness are the best disease preventatives for your rabbits. Disease is often difficult to treat and sickness is expensive.

The hutch and all equipment must be kept clean since the loss of rabbits increases the cost of your product. Remove soiled bedding, manure and unused food from the hutch every day. Inspect the watering and feeding equipment daily. Wash the equipment frequently in hot, soapy water; then rinse in clean water, drain well and dry in the sun. A water-disinfectant solution can be used, rinsing it with clean water. When a hutch has been disinfected, allow it to dry and air out before replacing the rabbits. An extra hutch facilitates this. Nest boxes must be thoroughly cleaned and disinfected before re-use.

Always be on the lookout for symptoms of sickness and when one rabbit seems to be ill, put the animal in an isolation hutch for 2 or 3 weeks.

COMMON AILMENTS AND DISEASES OF RABBITS

a) Symptoms

Boils or Abscess - A hard swelling or isolated collection of pus or purulent matter occurring in the skin, accompanied by localized fever and heat.

b) Treatment

Use disinfectant and antiseptic.

a) Symptoms

Caked Teats or Caked Udder - Inflamed and feverish condition of the teats arising from superabundant milk supply in a doe rabbit. Easily noted by the teats distended with hardened milk. Pink at first, later dark and crack.

Coccidiosis - Protozoa type organisms which infect the intestinal tract resulting in poor growth and may lead the way for secondary diseases. Diarrhoea, swollen belly. Attacks between 2 and 10 weeks and rabbit sits hunched up, refuses to eat, may stagger. The rabbit has eaten a microscopic parasite, or licked it from hair or hutch.

Cold - A respiratorial infection in rabbits, characterized by sneezing; a thin watery nasal discharge, and slightly matted fur on the inside front feet.

Conjunctivitis - (Weepy Eye) Bacterial infection of eyelids causing a discharge. Due to flies or injury.

Ear Canker - An inflamed, swollen, scabby condition of the lower inside ear of rabbits, caused by colonies of rabbit earmites. Also "ear-mange". Rabbit shakes head or scratches at the pain. Incurable after rabbit loses sense of balance.

Enteritis - Nonspecific and mucoid types - Causes are unknown, but considered to be of bacterial origin; stomach and intestines may fill up with water, droppings being poorly formed and appear soft and jellylike. Usually at 6 weeks age. Rabbits drink but stop eating. Sit hunched, squint eyes, grind teeth. Fur turns dull.

Eye Infection - Pus under eye lids in baby rabbits; eyes may stick shut caused by bacteria coupled with stress like cold drafts.

Fur Block - Developing does are most susceptible, yet other animals may also pull fur, consuming it in large quantities, then the rabbit goes off feed and the blockage may occur in the intestine.

b) Treatment

Do not wean all the young rabbits at once. Rub with oil or skin-softening agent. Breed doe since this reduces milk.

If breasts look blue, give antibiotic injections. Isolate doe. Disinfect your hands.

Can cause death. Clean and disinfect everywhere except the feed and rabbits. Follow the medication directions. Use wire net floor so that droppings are not left in the cage.

Reduce the concentrates in food, allow unlimited grass and green leaves. Avoid overcrowded, damp, dirty hutches. Protect rabbits from rain.

Apply antiseptic, boric acid and water. Can be contagious: isolate.

Remove the crust and swab ear with a solution. Repeat after one week. Watch other rabbits' ears. Use 0.25% Lindane in vegetable oil.

Take away food and water for 48 hours, then give small amount of green food for a few days. A little water.

Obtain medication.

Obtain medication.

a) Symptoms

- Heat Prostration* - (Heat Stroke) Rapid respiration rate, mouth open due to extremely high environmental temperature.
- Ketosis* - A condition associated with kindling time when overfat does go off feed and may starve themselves to death.
- Mastitis* - (Blue Breast) Bacterial infection causing red to purplish and/or black nipples.
- Metritis* - (White Discharge) Bacterial infection of the uterus causing a white sticky discharge which may affect either or both uteri; infected does become sterile.
- Parasites* - Rabbits occasionally harbor manges, lice or fleas, but such parasites are very uncommon.
- Pasteurellosis* - (Hemorrhagic Septicemia) Bacterial infection coupled with stress factors causing loss of appetite, a nasal discharge and followed by pneumonia.
- Pneumonia* - Infectious bacterial organisms causing labored breathing due to congestion in the lungs.
- Pot Belly* - A distended condition of the stomach and intestines usually found in young rabbits.
- Ringworm* - A fungus causing a loss of fur usually in circular patches on the head with red, scaly skin showing.
- Snuffles* - A virulent contagious infection of the nasal passages and respiratory organs, usually terminating in chronic illness. Indicated by fever, heavy breathing, sneezing and discharge of thick creamy naso-pus from the nostrils.
- Sore Hocks* - An ulcerated condition of the foot pads or soles of either fore or hind feet of the rabbit (a misnomer - not actually pertaining to the hock).

b) Treatment

- Cool hutch by shade, ventilation, damp materials as mentioned in housing section.
- Avoid does becoming fat.
- Infectious, see "caked...".
- Remove doe from herd.
- Use disinfectant.
- Protect from drafts, isolate, use medicine.
- Protect from drafts, isolate, use medicine.
- Check food, feeding conditions.
- Use disinfectant.
- Isolate, protect from drafts.
- Hind feet show sores on bottom; rabbit rocks forward on front feet. Caused by wet or rough floor, also floors that sag or are dirty; or sharp. Soak affected parts in warm, soapy water until crusts come off. Rinse and dry thoroughly. Use little ointment (avoid sticky feet), petroleum jelly, zinc ointment or sulfthiazole.

a) Symptoms

Urine or Hutch Burn - Bacterial infection of external sex organs and anus - to avoid, use all wire cages.

Vent Disease - Venereal diseases in rabbits of both sexes. Indicated by scabby, reddened male or female organs, usually exuding pus.

Warbles - Infection under skin as flies lay eggs on rabbit and the larva digs under skin. Flies come from nearby filth.

b) Treatment

Thoroughly clean all the floor or ground.

Isolate and remove from herd.

Squeeze out. Wash with clean, soapy water, use household antiseptic. Remove filthy conditions.

HANDLING RABBITS

Small rabbits may be lifted and carried by holding them between the hips and the ribs with the heel of your hand toward the tail and the head pointing toward the ground.

Always use both hands to carry an adult rabbit. With one hand you grasp the loose skin over the rabbit's shoulders, with the other hand you lift up under the rump.

How to hold an adult rabbit



How to hold a small rabbit



MARKETING

Even if you raise rabbits just for a family meat supply, a financial record is important. It is doubly important if you expect to earn money from rabbit breeding. You must keep a complete listing of all your expenses and earnings. Be sure to list the market price for each rabbit sold or eaten by your own family.

You must keep complete records of everything connected with your rabbitry if you expect to keep the animals well or if you expect them to keep you in pocket money.

The basic records must include a breeding record. Each animal must be numbered (normally the ear is tattooed).

The doe record shows her number, date of birth, breed, father (sire), and mother (dam). Then, in 8 columns show :

- | | |
|----------------------------|-----------------------------------|
| 1. Date of breeding | 5. Number born alive |
| 2. Number of the buck used | 6. Number born dead |
| 3. Expected date of kindle | 7. Date weaned |
| 4. Actual date of kindle | 8. Number weaned and total weight |

The buck record shows his number, date of birth, breed, father (sire) and mother (dam). Then in six columns show :

- | | |
|----------------------|---------------------------------|
| 1. Doe used | 4. Number born dead |
| 2. Date of breeding | 5. Number weaned |
| 3. Number born alive | 6. Notes on the buck's activity |

A feeding record is useful so that you can make adjustments when the rabbits have digestive troubles.

Complete record keeping is necessary if you want to raise rabbits in quantity and to obtain good income. These records can still be simple and easy to post if you do this daily.

The same information mentioned above is kept with more detail on the elapsed days and the weights. The bucks' performances are evaluated as to the mortality and marketability of their offspring. Thus your breeding stock can be correctly identified as to those which are most economical.

Depending on where you live there are several different markets for your work with rabbits :

- the most important in size and income potential is the rabbit meat, which you may prepare, or even package, yourself;
- you may sell the rabbit skins, especially if they are all white; but in general your volume has to be thousands for any profit;
- you may sell live animals to laboratories and medical centers;
- some persons are proud to breed prize-winning high-quality rabbits;
- you might provide breeding rabbits to other Scouters;
- the rabbit manure is of much value as fertilizer when sold in packages;
- earthworms may be grown under your hutches. They turn the droppings into a saleable humus, and the worms themselves may be sold to fishermen for bait and to gardeners for soil improvement;
- the wool of Angora rabbits is saleable but its handling will not be described here.

SLAUGHTERING AND SKINNING

Rabbits are easier to kill and clean than any other farm animals. With experience, the whole job can be done in two or three minutes.

Kill the rabbit quickly and painlessly. Hold it by the hind legs, head pointing down. In a few seconds it will stop struggling and hang quietly. With the edge of the palm of your hand (or with a pipe or stick), give a quick "chopping" blow to the back of its neck.

A faster way and well suited to the commercial rabbit raiser is to dislocate the neck. With your free hand place the thumb on the neck just behind the ears, with the fingers grasping the neck under its chin. Pressing firmly down on the thumb while quickly raising the head provides instant death.

Next, hang the dead rabbit by one of the hind legs using a piece of twine or rope, or a hook between the tendon and bone just above the hock. Cut the head off immediately and allow it to bleed. Remove the tail, the free rear leg at the hock and the front feet.

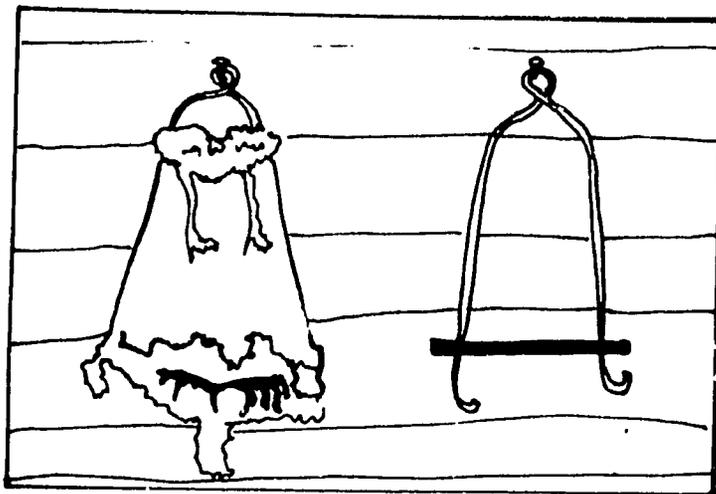
Cut the skin of the attached leg just below the hock, all the way around and extend the cut on the inside of the leg to the root of the tail, continuing on to the hock of the free leg. Carefully separate the edges of the skin from the body by peeling the skin down over the animal and off the body. Be sure to leave all fat on the animal. A clean skin, free of fat, is easier to dry and the meat looks firm and attractive.

As soon as the skin is removed, place it on a form and hang to dry.

With a knife slit the belly, starting at the tail, but do not cut the intestines. Remove everything inside except the kidneys, liver and heart. Remove the remaining foot. Care should be taken not to get hairs on the carcass since they are hard to remove. Rinse the body in cold water but do not soak for more than 15 minutes.

A rabbit for frying may be cut into pieces and wrapped.

Skin tanning is not difficult but will not be described here. The skins can be kept for several months before tanning. Once they are dry pack in loose bundles of 50 and hang in a cool dry place. Never use salt on rabbit skins. In a warm climate sprinkle them with naphtha flakes.



Rabbit skins can be stretched over wire, flesh side out, and kept dry for several months before tanning.