Ministry of Agriculture Land and Marine Resources

EXTENSION TRAINING AND INFORMATION SERVICES DIVISION

RABBITS

A Producer's Manual

Produced in support of the Rabbit Extension Programme of
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Extension, Training and Information Services Division
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THE RABBIT

Rabbits have recently regained their popularity as meat producing animals in Trinidad and Tobago. In days gone by, rabbits together with yard fowl and indigenous root crops comprised a large part of our diet. Today the rabbit is more commonly viewed as a pet but holds immense potential to once again be the local meat of choice.

If you are getting into rabbit production you will first need to know the animal and be familiar with some common words associated with rabbits. There are over 25 different species of wild rabbits found throughout the world. The ancestor of all the present domestic breeds is the Old World rabbit *Oryctolagus cuniculus*. Internationally, rabbits have traditionally been valued for their fur and meat. In the tropics the rabbit is popular as both an affordable source of meat and as a source of additional income, for low income households. The popularity of wild meat and the more exotic tastes of the tourists, have resulted in rabbit meat making a return as a delicacy.

A female rabbit is called a **doe**, a male rabbit is called a **buck**. Baby rabbits are called **kits** and rabbits for market are commonly called **fatteners** or **fryers**. The rabbit can live in either a cage or a hutch. **A cage** is usually a structure made of wire and metal and requires a stand or other support system. A hutch is a small stand-alone structure with a roof, floor, and legs. Feed and water utensils are referred to as **feeders** and **waterers** respectively. Commercial rabbit ration is sometimes called concentrate.

So if you are really interested in rearing rabbits have a read and learn how you can contribute to your nation's food security.

MAKING MONEY BY REARING RABBITS

Pros and Cons of Rabbit Production

This manual will focus on getting into commercial rabbit production. Any farmer will tell you that farming is a risky business and requires a love and respect for the job. So if you are serious about getting into livestock production remember: ***You must love to work, since*** *livestock demands daily attention;* ***You must have patience****, because animals require personal attention and* ***you must be observant****, as this is essential to avoid losses.*

Pros

- ★ Rabbit meat is healthy, it is high in protein and low in cholesterol.
- ★ Rabbits are easy to rear and feed.
- ★ One female rabbit can have 3 - 4 litters per year.
- ★ One female can produce 5 - 6 kits per litter.
- ★ Compared to other forms of livestock, breeding stock is affordable.
- ★ Rabbits are small and manageable and can be kept almost anywhere.
- ★ There are very few religious restrictions concerning rabbits.
- ★ Rabbits can be grown naturally, without chemicals.
- ★ Rabbit has a high meat to bone ratio, with only 8% bone.
- ★ Rabbits in this country are relatively disease free.
- ★ Up to 98.7% of the rabbit can be used, e.g. meat, manure, fur, toys, novelties.

First time farmers, start small and learn the operation!

Cons

- People are reluctant to accept the meat
- People still think of rabbits as pets
- In this country the availability of rabbit breeding stock is limited
- Very little local information on rabbits is available
- A rabbitry requires a lot of time and energy to maintain it successfully

Five Steps for Success

Rabbit production is not a get-rich-quick business.
In order to succeed you must:

1. ***Plan your inputs carefully*** -You will need to consider land, regulations, structures, cost of equipment, labour and waste management

2. ***Educate yourself on rabbit production*** - Breeds, housing, equipment, feeds, reproduction , health, slaughter and sales

3. ***Learn your market*** - Speak with other farmers who have been successful

4. ***Purchase healthy rabbit stock*** - from reliable persons

5. ***Maintain strict records*** - To assess the performance of your stock and the profitability of your business

A successful rabbit farmer

Types of Systems

There are three types of systems.

1. Intensive (over 450 does)
2. Semi- Intensive (100 - 450 does)
3. Backyard (50 - 100 does)

Semi intensive rabbitry

Demand on time

A small rabbit unit in the United States of America with 100 does will require about 2.6 hours / day to maintain. This is possible if the farmer has automatic watering, proper feeding containers and "self cleaning floors" (mesh wire floors).

A full time working person with only 3 hrs a day available for the business should not increase the amount of does beyond 120.

The type of system you choose depends on several factors. If you answer NO to more than two of these you should consider a small operation.

Question	Yes	No
I have lots of money to spend on this business		
I have more than 5 hr per day to spend on labour		
I am knowledgeable on the subject		
I am very handy and skilled, I can build things		
I have a lot of space to build and expand my rabbitry		

Rabbit Production Parameters

Lets look at the performance of rabbits locally. These results should act as a guide. Your rabbits should do better NOT worse.

- **Mating age**: for medium breeds (female) 6 - 6.5 months, (males) 7 - 7.5 months
- **Mature weight**: 3.5 - 4.5 kg
- **Gestation period**: 31 - 33 days, this is the length of the pregnancy
- **Length of reproductive life**: 12 - 18 months after 1st mating
- **Kindlings per year**: 4 - 5, this is the amount of times the doe gives birth
- **Inter-kindling period**: 80 days, this is the time between kindling and mating
- **Kits born per litter**: 5 - 6
- **Pre-weaning mortality** - this is the percentage that dies before weaning 10 - 15%
- **Live kits born**: 4.5 - 5.5
- **Average birth weight**: 45g
- **Weaning weight at 28 days**: 330g
  weight at 12 weeks: 1600g
- **Average daily gain** from: birth - 5 weeks - 12g
  : 5 - 12 weeks - 20g
- **Live weight at 12 weeks:** 1.6 kg (4lbs)
- **Dressing percentage at 12 weeks**: 52%
- **Estimated weight of carcass**: 0.8kg (1.8lbs)

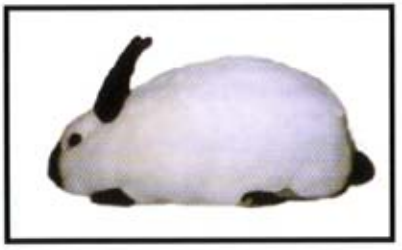
These values were obtained using 18% crude protein ration and mixed grass ad lib.

Rastogi, R.K. 1989. *Rabbit production in the Caribbean with special reference to Trinidad (West Indies)*, Department of Livestock Science, Faculty of Agriculture, University of the West Indies, Trinidad (W.I). Proceeding of the 6 Intl. Conf. of Inst. For Tropical Vet. Medicine, The Netherlands.

Choosing a Rabbit for Meat Production

Available meat breeds

New Zeland White



Californian

Flemish Giant

*When you choose an animal for meat production you need to look at both the **animal** and the **records** for that animal. Records act as a performance guide of what to expect from that animal. Here are some recommendations:*

- Choose animals that produce **large litters** and maintain them to **weaning** (4wks)
  - New Zealand White and Californian can have 6-8 kits per litter.
  - The Flemish Giant has less offspring per litter and are used in crossbreeding programmes.

- Animals should be **adaptable** to the local environment and have good disease tolerance
  - The Californian and New Zealand White show good tolerance to tropical conditions. When crossed their offspring shows tolerance to tropical conditions.

- Choose animals that show a **rapid growth rate**, during the first 12 wks after birth
  - Mixed breeds of New Zealand White and Californian can grow from 45g to 1600g in 12 wks.

Proper records allow you to make these decisions!

HOUSING RABBITS

Depending on the resources you have available housing designs may vary. Rabbitries should be easy to clean and maintain while allowing you to house an adequate number of animals.

Choosing the correct type of housing:

- Type of **system**
  - More intensive systems will require more cages.
- Amount of **space** available for future expansion of rabbitry
  - If there is no space for expansion you may need a two tier housing system
- How much **money** you have to invest in the business
  - If you do not have much money use available materials to build hutches
- How much available **time** you have
  - If you have to do all the work, invest in "labour saving devices" e.g. feed hoppers, automated waterers, and self cleaning floors
- Your **market** e.g. personal consumption, supermarket, sale of live animal
  - Different markets require different systems, slaughter procedures and investment requirements for your rabbitry.
  - Check the health department of your Regional Corporation for approval.

Backyard

Intensive

Site Layout

Now lets discuss the best place to house your rabbits. Good housing reduces stress to you and your rabbit. This improves productivity of your animals and allows you to function efficiently.

Site selection:

- Good **drainage** and adequate distance from rivers
  - Prevents the build up of bad odour, dampness, water-borne diseases, mosquitoes and flies.
  - Prevents loss of animals during the rainy season due to flooding.

- Adequate **space**
  - Additional space to store food, equipment and to house diseased animals

- **Location** in relation to other buildings
  - Rabbitries should be a suitable distance from other dwellings. They should be downwind to avoid fur and odour reaching homes and any contamination of drinking water supplies.

- Access to basic **utilities**
  - Access to clean potable water for drinking and cleaning
  - Electricity for lights and for systems to ward off predators and thieves .
  - Emergency services (health, veterinarians, police and fire)

- Good access **roads**
  - For delivery of feed and supplies
  - Access for customers, veterinarian and loading vans.

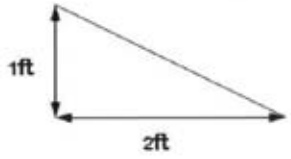
Designing a Rabbitry

The main features of the rabbitry are features that should be present no matter how small or large your operation. These features aid in management, production and sanitation.

Main design features of the rabbitry

★ **Suitable drainage and waste disposal**

- If you have a concrete floor, ensure there is a 2:1 gradient (for every 2 ft distance there is a 1 ft rise) allowing waste and water to run off and not settle beneath cages.



- If the floor is compacted dirt it absorbs the liquid waste. Regularly remove the solid waste and sprinkle dry dirt to reduce flies and odour.

- Waste can easily be removed or collected to keep the rabbitry dry and fly free e.g. manure boxes to collect waste for disposal or composting, galvanize and PVC pipes under cages to channel waste to containers.

Galvanize and PVC pipes

★ **Comfortable access to rows and cages**

- Walk ways should be at least 3 ft - 5 ft wide to accommodate wheelbarrows and other cleaning tools.

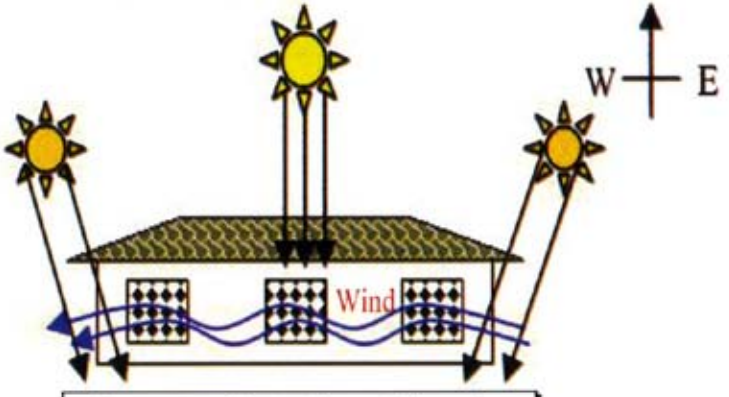
- Cages doors should be accessible and large enough to allow both hands to reach inside for cleaning and maintenance.

★ **Adequate ventilation and sunlight**

- Fresh air and sunlight should enter the rabbitry
- Direct exposure to the elements should be avoided e.g. wind, rain, sun

★ **Adequate heat control**

- Use over head fans to circulate air or build the rabbitry in an east to west direction. This will allow wind to blow freely through.
- Use shade trees around buildings to reduce heat and direct sunlight.



Correct orientation of housing

★ **Protection from excessive rain, sun, wind and predators**

- Rabbits may suffer from pneumonia, heatstroke and infant mortality if exposed to the elements.

★ **A quarantine area**

- There must be a space allocated for the temporary housing of sick and new rabbits being introduced to the rabbitry. This area should be located downwind of the other animals and have its own separate equipment.

★ **A storage area**

- Store food, nestboxes and medicine, in a dry, clean, rat free area.
- Contamination of food and water by rats can result in deaths of animals.

Always have sturdy locks on outdoor cages and your rabbitry

Cage Construction

Rabbit housing and equipment is dependant on cost, type of materials available, the climate and skill of the rabbit producer. Let's take a look at some of the material you will need and simple design ideas to get you started.

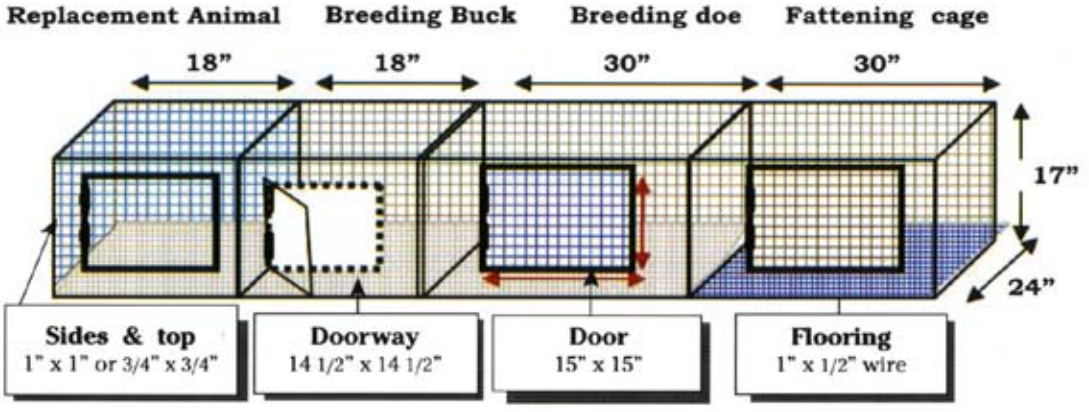
Materials for cage

- Square wire mesh & BRC
- Wire cutters or nippers
- J -clips & J -clip pliers
- Measuring tape
- Sheets of galvanize
- Metal or wooden stands

Cage dimensions (Length x Width x Height)

The following can be used as a guide:

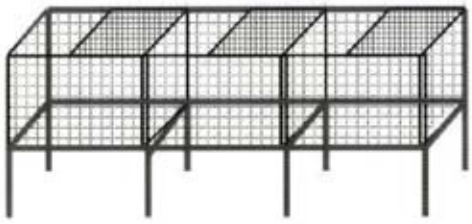
- **Breeding doe** - 30" x 24" x 17" (72.6 x 60.9 x 43.1 cm)
- **Breeding buck** - 18" x 24" x 17" (46 x 60.9 x 43.1 cm)
- **Replacement doe** - 18" x 24" x 17" (46 x 60.9 x 43.1 cm)
- **Fattening cage** - 30" x 24" x 17" (76.2 x 60.9 x 43.1 cm)
- **Flooring** - 1" x 1/2" square mesh (14 - 16 gauge)
- **Doors** - 15" x 15" (38.1 x 38.1 cm)
- **Side & top** - 1" x 1" or 3/4" x 3/4"wire mesh
- **Floor space** - (2" x 2" BRC for support)
  - 5 sq ft (0.46m²) Breeding doe
  - 2.5 sq ft (0.7m²) Breeding bucks
  - at least 1 sq ft/animal (0.3m²) Fatteners



Cage designs

Cages designs should be simple, easy to clean and functional. Cages can follow the design below with minor alterations.

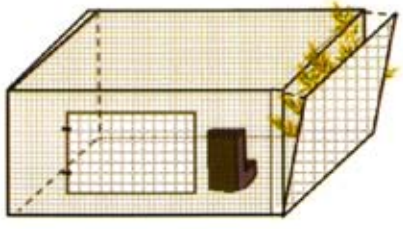
- ★ Use two tiered cages when you have limited space, but make sure the waste from the upper cage does not fall into the lower one.
- ★ Use "Baby saving wire" (mesh wire that gradually decreases in mesh size) for the does breeding cage.
- ★ Water containers should be opposite or adjacent to feeders and cage doors. This prevents leakage into feeders and nest boxes.



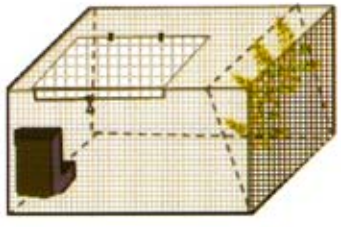
Single level cage

Two level cage

- ★ Openings can be on the top for easy access in one tiered (level) systems and in the front for two tiered systems
- ★ Grass racks must be accessible to animals and can be either on the inside or outside of cages



Single cage (grass rack outside)



Single cage (grass rack inside)

Construction and maintenance tips

Here are some useful guidelines to follow during construction.

- ★ Use the best quality materials you can afford. This will reduce the need for repairs, last longer and cause less damage to your animals.
- ★ Construct cages at a height (just below waist level) and depth (arm length) that allows for comfortable cleaning and movement between cages .
- ★ Do not leave open corners where animals may escape or fall out. Use strong thick wire (that rabbits cannot gnaw through) to mend damaged areas.
- ★ Have a secure latch or spring lock on cages that animals cannot push open.
- ★ Use "baby saving wire" and false bottoms, to reduce mortality of kits.
- ★ Use "self cleaning floor" made of wire mesh, that allow waste to pass through.
- ★ Do not leave corners where waste may accumulate.
- ★ Avoid loose wires and rough flooring. Breeding bucks have suffered from damaged feet, sore hocks and mangled scrotal sacks because of these.
- ★ Keep water lines well maintained to avoid excess dripping. Ensure collection tanks are free of moss build up.
- ★ Leave sufficient space for rabbits to stretch. (see page 13).
- ★ Allow adequate ventilation to reduce heat stress and respiratory problems.
- ★ Construct cages at least 3.2 feet (1m) height from ground level to deter predators.
- ★ Use oil or other non toxic insecticide in containers, around the legs of stands and hutches.
- ★ Do not place wood on the insides of cages as rabbits will chew on it.

Secure loose wires and nails. They can damage you or your animals

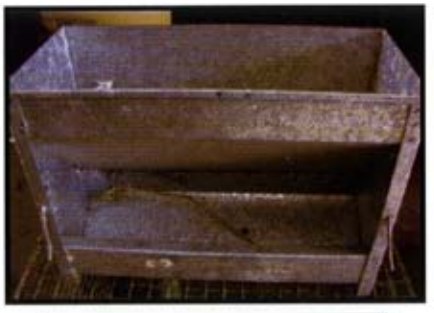
Feeding and Watering Equipment

Now that we have cages, let's see what you need for the inside of the cages. Items such as water containers and feed containers will ensure that your rabbit is comfortable in its cage. Nest boxes and false bottoms will ensure your baby rabbits and your investment are well protected.

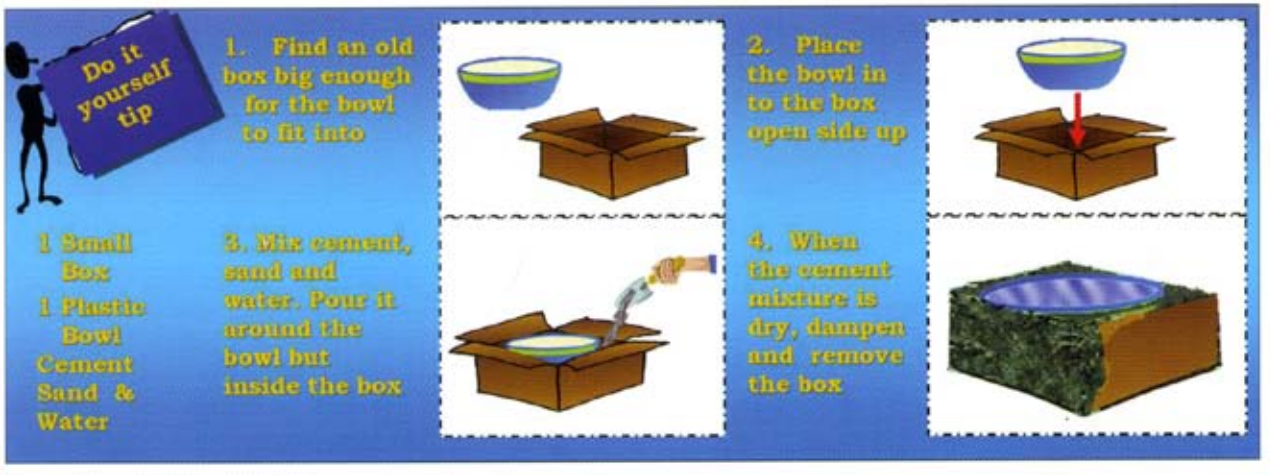
Feeders

Feeders can either be bought at agricultural supply stores or made with available materials. Here are some pointers to consider when choosing and placing feeders.

- They should be made of sturdy materials and secured to the base or sides of the cage.
- They should be accessible to rabbits (from 1 month old) but they should not be able to defecate or urinate in food containers
- The feeder edges should be bent inward to prevent the animals from scratching out the food.
- Feeders should be placed away from water so that feed does not get wet and mouldy



Commercial feeder



Grass racks

Grass racks hold the dry grass for the rabbit to eat. They can easily be constructed with wire or wood. Rabbits will not eat grass on which they have urinated or defecated.

- ★ Grass racks can be either on the inside or the outside of the cage
- ★ It should be off the floor of the cage and at a height the animal can reach at any age. Use wire with 2" (5.08 cm) squares which are large enough to allow the grass to pass through.
- ★ Grass racks can also be built on top, inside or outside of cages.

Grass rack on top of cage

Internal grass rack

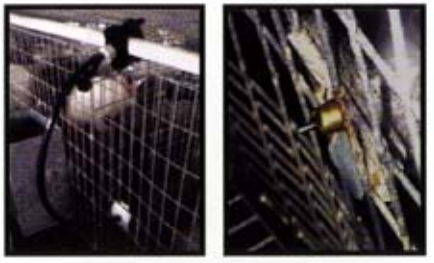
Side view of grass racks

Use durable materials, this will reduce the need for regular repairs

Waterers

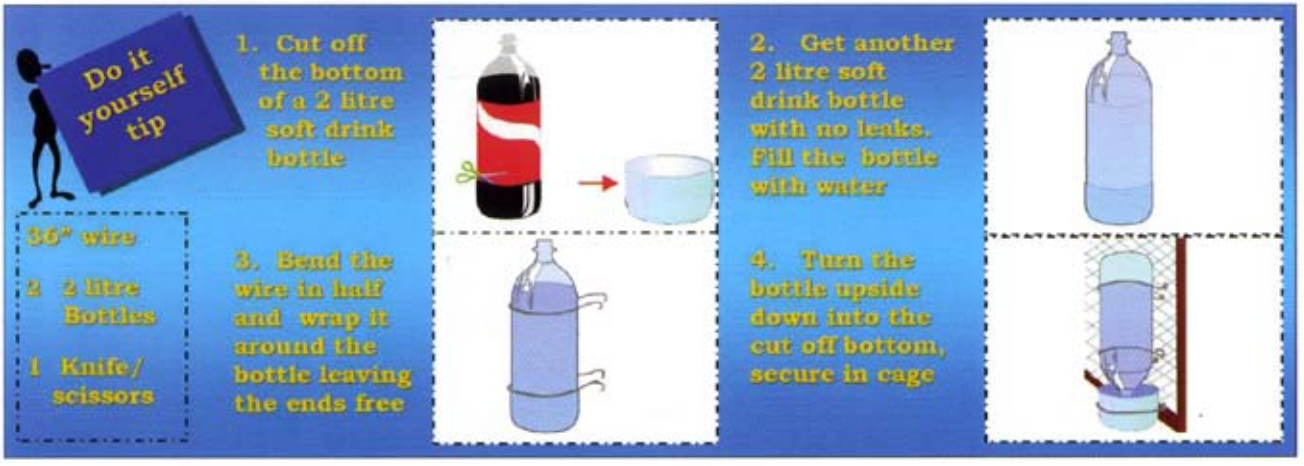
These are containers for water. They can be made with materials from around the house, like old cooking pots or plastic bottles. Automatic waterers consist of "nipples" mounted on to PVC piping. These parts can be bought at agricultural supply stores.

- ★ Containers should be easy to clean, durable and heavy enough not to be tossed around by the rabbit
- ★ Water containers should be weighed down (clean, heavy stone) or securely attached to the cages to avoid spillage as this causes wastage and encourages a damp environment
- ★ Place containers about 2 inches (5.08cm) above the floor to avoid babies falling in accidentally.



Flexible tube, nipple and PVC

Nipple and PVC



Nesting Equipment

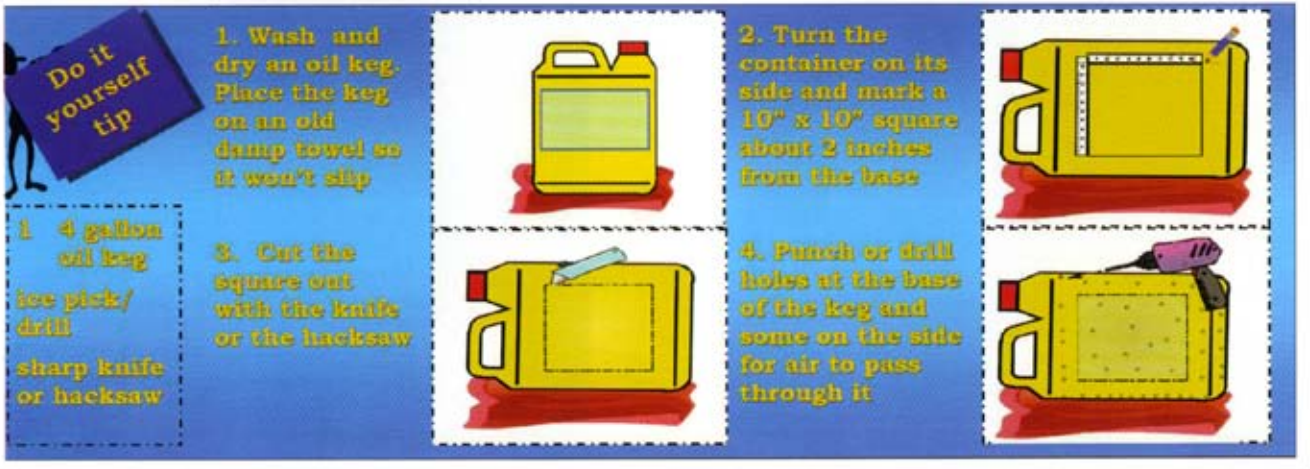
Nest boxes

These are boxes in which pregnant does **kindle** (have their babies). Nest boxes can be made from either clean, empty, 4 gallon oil kegs or wood and wire .

- ★ Have a nest box for each breeding doe. It should always be sanitized.
- ★ Nestboxes can either be open or closed. A 2 inch lip is necessary to prevent babies from accidentally rolling out onto the cage floor .
- ★ The general dimensions are 18" x 12" x 12" (45.7 cm x 30.3 cm x 30.3 cm), ensure the opening is large enough for the mother to enter and exit (see below).
- ★ Punch small holes at the bottom of the nest box, for drainage and ventilation.

Open nest box

Closed nest box

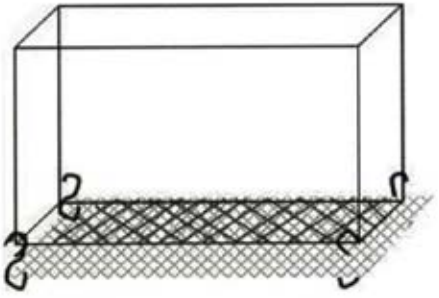


False Bottoms

This is a precaution only for cages with does about to kindle. A "false bottom" is a square sheet of mesh wire that is attached to the bottom of the cage to prevent animals from falling through or being pulled through by predators. "Baby saving wire" is a type of mesh wire that gradually decreases in mesh size.

★ Over time cages become rusted and damaged on the bottoms, this may result in babies having their legs damaged or even falling through the spaces. Use false bottoms to reduce losses.

★ False bottoms act as a second floor while allowing waste to pass through
- Cut a 30" x 24" (76.1 cm x 60.9 cm) piece of 1" x 1/2" (2.5 cm x 1.2 cm) wire mesh.
- Cut four 2 inch long pieces of sturdy wire. Bend the wire in the shape of an S.
- Use the wire to attach the piece of wire mesh to the outer base of the cage.



False bottom below cage

False bottoms prevent accidents like these from happening!

FEEDING RABBITS

All of the nutrients animals need come from the food they eat. These nutrients help them to stay alive (maintenance), grow, reproduce and remain healthy. Poor quality feeds and underfeeding are the downfall of many well planned rabbitries.

What you can Feed Rabbits

Pelleted Ration

Pelleted ration provides the rabbit with fiber, protein, fats, vitamins and minerals. These are blended so that the rabbits receive enough of the nutrients at feeding.

Dry Ration

Indigestible fiber

This is fiber that cannot be digested or broken down as it passes through the digestive tract. It keeps the digestive tract healthy by trapping waste materials.

Dry Coconut

Grass

Rabbits use grass to produce protein. They also use the fiber to aid in digestion.

White Grass

Water

Water is necessary for life. It also helps to keep the animal cool. Lactating females need extra water to produce milk.

Water

There are other sources of food for rabbits which provide nutrients and don't cost very much. Use these in small amounts, when available, to provide a varied diet for your rabbits.

Carbohydrates and Fats

- ★ Fruits - Mangoes, bananas (occasionally) ,oranges (without peel), pineapple cores
- ★ Vegetables - Tomatoes, carrots, carrot leaves, celery, sweet peppers, bhaji, (Cabbage and lettuce should only be fed occasionally and in small amounts.)
- ★ Cereal gains - corn grains, oats
- ★ Roots/Tubers - Boiled potatoes, cassava, sweet potato and yam
- ★ Table waste- Boiled rice, roti, bread
- ★ Vegetable oils/ animal oil - cod liver oil supplements

Protein

- ★ Processed cereal grain- brewers dried grains
- ★ Oil seed meals (never feed stale or rancid oil meals)
- ★ Legumes - Leaves from: Bodi, Pigeon pea, Acacia, Kudzu, Leucaena (occasionally)
- ★ Grasses/Leaves - Bermuda, Elephant, and Para grass, Vervain, Water hyacinth
- ★ Garden waste- Hibiscus clippings (soft green tips). Do not use lawn clippings.

Mineral and Vitamins

- ★ Common salt
- ★ Vitamin premix

} Use a commercial salt lick

Indigestible Fibre

- ★ Whole dry coconut, shredded banana plants and leaves, coconut and fig leaves, Pigeon pea pods, bodi pods.

Water

- ★ 2 - 3 litres daily (5 litres or more for a lactating doe)

How much to Feed Rabbits

When feeding rabbits commercial feed pellets they should be fed according to their stage of growth. Here are some recommended amounts.

Breeding buck.....80g /day (2.8 oz)
Pregnant doe .....80-100g /day (2.8 -3.5 oz) during 4 wks
Adult doe.....80g/day (2.8 oz) (non-breeding)
Lactating doe.....120+10g (4.2+0.4 oz) /day per young in the litter

Fatteners
1st wk after weaning .....30g (1oz) /day
2nd wk after weaning.....40g (1.4oz) /day
3rd wk after weaning.....50g (1.8oz) /day
4th wk after weaning.....60g (2.1oz) /day
5th wk after weaning.....70g (2.5oz) /day
6th wk after weaning.....80g (2.8oz) /day

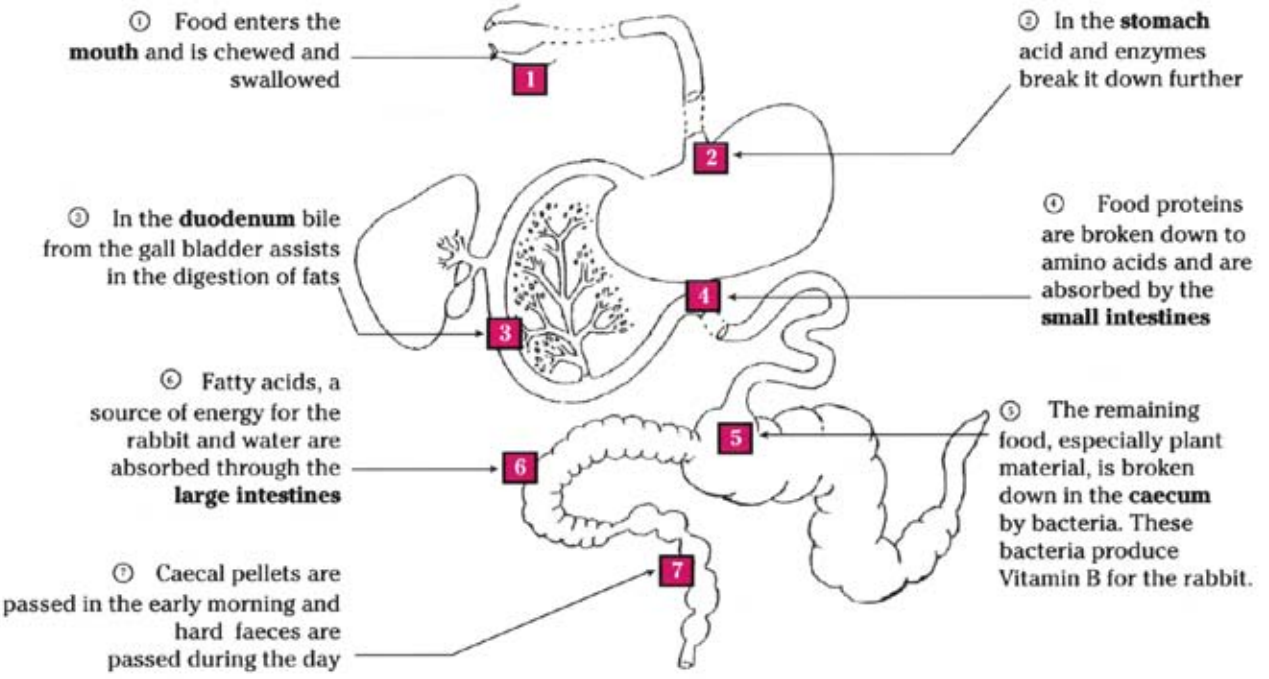
Tips on Feeding Rabbits

- ★ Feed rabbits during early mornings and late evenings when the weather is cooler
- ★ Avoid leaving bright lights on in your rabbitry at night. This reduces the amount your rabbit will eat in the night.
- ★ Poorly dried grass and lawn clipping are heated and can cause digestive problems for your rabbits. Feed rabbits wilted grass (wilt for 12 hrs), this reduces diarrhoea.
- ★ Provide the rabbit with fresh pellets everyday, do not leave pellets overnight they attract rats instead provide wilted grass at nights for the rabbit to eat.
- ★ Ensure rabbits have enough salt in their diet and a variety of suitable plant matter.
- ★ Ensure pellets are free of mould, rodent waste and chemical contaminants.
- ★ Do not change feeds suddenly. Gradually change feeds over a 2 week period.

Animals fed only on grass must be fed young healthy grass. Breeding animals (especially does) should have a mineral supplement. If you fail to do this you can have reduced litter size and a very high mortality among your kits.

How Rabbits Digest Food

Rabbits are non-ruminant herbivores. They eat only plants, but are non- ruminant so they do not break down food like cows. They have a unique system of digesting food .



Caecotrophy

This is a very important part of the rabbits digestive process. Rabbits cannot digest plant matter (cellulose). However, the rabbit has bacteria in its caecum (similar to the live bacteria in yogurt), which can break down plant matter. At the same time, the bacteria get energy to grow and reproduce.

These bacteria are made up of mainly protein and Vitamin B. When the bacteria die they are passed out of the rabbit in the form of **caecal pellets** or **soft faeces**. This is like the rabbits own little "protein burger" and the rabbit eats it. This provides the rabbit with protein it could not get from the plants. This is necessary for the health of the animal. The act of eating the caecal pellets is called **caecotrophy**.

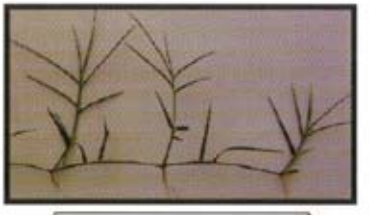
Plants You can Use

Kudzu

Para Grass

Banana

Pussley



Bermuda Grass

Vervain

Bhaji

Water Hyacinth

Pigeon Pea

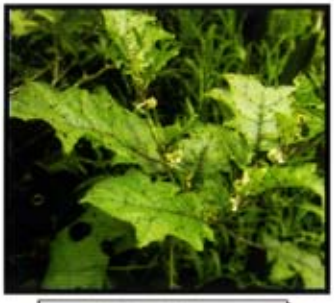
Water Grass

Never use plants with thorns or "pica" as feed for rabbits!

Plants to Avoid

Wild Sage/Lantana

Stinging Nettle



Bur Bur

Milk Weed

Milk Weed

Sensitive Plant

Never use plants that have milky sap or sharp hairs as forage!

IDENTIFICATION AND SIMPLE RECORD KEEPING

To keep accurate records you must be able to identify your animals. Identification means giving each rabbit a marker or number to distinguish it form the others. Some simple identification methods are:

1. Writing in the ear with a permanent marker
2. Ear notching, marking the ears by removing small pieces of the ear with a special tool
3. Tattooing using a special tool

Writing in ear

Ear notching

Tattooing tool

Tattoo

Record Keeping

Benefits of record keeping

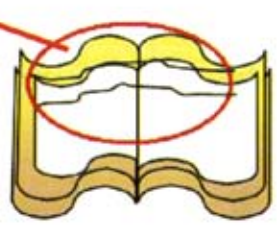
1. Better care and management of your animals
2. Better able to evaluate the performance of your does and bucks
3. Allows you to choose best stock to improve genetic potential
4. Better able to determine farm profitability
5. Improves your reliability as a breeder and producer.

Types of record keeping

★ Financial Records

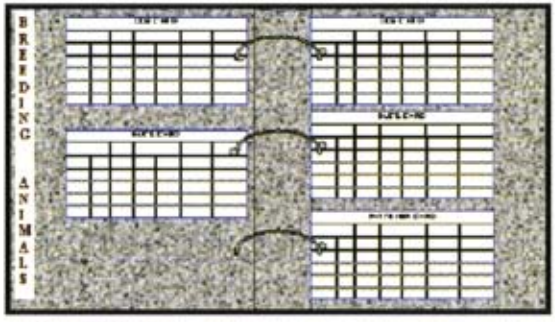
- These records should be kept in a durable hard cover note book.
- This book should show your expenditure and income.

Date			Expenditure		Income	
Year	Month	Date	Type	Amount $	Type	Amount $
2004	Oct	05	Feed	$ 100.00	Sales- Meat (10@$15/lb)	$150.00
		07	Maintenance	$ 20.00	Sales - Animal (x2@$60)	$120.00
		07	Housing	$ 9.00	Sale - Manure (x3@$15)	$45.00
		09	Death	$30.00	Sale - By products Furx10 @ $5.00	$50.00
		11	Home use	$30.00		
	Total			$189.00		$365.00



Write with a ball point pen and place card in a plastic bag to keep them dry

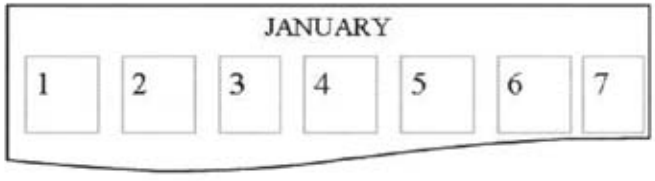
- Animal Records
  - Doe records
  - Buck records
  - Community or fattener cage records



These records should be written on flash cards (5" x 3") or bristol board and attached to the cages where the animals cannot damage them and copies should be kept safely in a box or in a three ring binder .

Recording Important Dates

- Another way to keep a record of important dates is with a calendar, with large enough squares to write in.
- Write in important dates e.g. mating, due dates or date of kindling.
- Also have a black board in the rabbitry where you can draw up your schedule and set days for certain activities.



Calendar

Notice Board

Doe Card

DOE RECORD CARD

origin:

Cage No.: Doe No.: Dam No.: Sire No.:

Birth date Age 1st mating: Mature weight:

MATING		preg Test	KINDLING					21 DAYS		28 DAYS		12 WKS		REMARKS
Date	Male #	+ / -	Date	No. Alive	No. Dead	Adopted	Removed	No.	Litter wt.	No.	Litter wt.	No.	Litter wt.	

Front of doe card

Definition of codes

Pregnancy diagnosis: + = positive
- = negative

Mature weight = 2.5kg

Breed 1= NZW
2= Flemish Giant
3= Mixed
4= Checkered Giant

Date– year /month/ day

Cause of Culling
1= old age
2= poor mothering ability
3= poor prolificacy
4=low fertility
5=difficult breeder
6=natural death
7=death by illness/ accident

Back of doe card

Buck Card

BUCK RECORD CARD

Origin:

Cage No. Buck No.: Dam No.: Sire No.:

Birth date Age 1st mating (mts):

MATING		Conception	BIRTHS		28 DAYS	12 WKS
Date mated	Doe No.	+ / -	No. Alive	No. Dead	Total Litter. Wt in kg	Total Litter. Wt in kg

Front of buck card

Photocopy these record cards, and use them in the rabbitry

HOW TO BREED RABBITS

What to Consider when Breeding Rabbits

Animals

- ★ Animals should have suitable traits e.g. rapid growth rate, good body type
- ★ Both animals should be healthy and of good temperament
- ★ Avoid breeding animals that are sick, stressed or underweight
- ★ Females should be at breeding age or have a suitable weight (2.5 kg/ 5.5 lbs)
- ★ Males should be at breeding age, have both testes and good hind legs
- ★ Both male and female should have good libido (willingness to mate)
- ★ Choose does with good maternal instinct and 6 - 8 functional teats (milk glands)
- ★ Never force a doe if she is unwilling to mate

Environment

- ★ Ensure conditions are suitable for a successful mating (cool times of day)
- ★ Clean, disease free environment
- ★ Have a secure cage and personnel to supervise mating

Records

- ★ Use records to determine the best performing livestock
- ★ Keep proper and accurate records to avoid inbreeding (mating related animals). Inbreeding depletes the quality of your stock.
- ★ Adequate records help you to avoid re-mating animals with poor performance or genetic problems

Choose animals carefully, you may not get your money back!

What you should know for Successful Breeding

Sign of estrus (heat)

- ★ Moist pink vulva (female genital) indicates oestrus, as compared to a pale dry one
- ★ A doe that is ready for mating will jump on other does and stay close to the buck

Moist pink vulva

Length of Estrus Cycle

- ★ Total length of 17days, made up of 14 days oestrus (heat) + 3 days anoestrus (non-heat)

Rabbits are induced ovulators

- ★ This means they release the ovum (egg) after the act of mating has occurred
- ★ The gestation period (length of pregnancy) is approximately 30 - 33 days

Buck usage

- ★ A buck in his prime can be used 1-2 times per day, followed by a day's rest
- ★ Do not use a buck if it shows sign of ill health or fatigue.

Effective buck to doe ratio

- ★ You may use one buck to 10 does

Palpation/ Pregnancy test

- ★ Do your first abdominal palpation 14 days after mating
  - ◆ Using your thumb and forefinger gently run you hand on the underside of the animal from the back to the front. Apply very little pressure. If the animal is pregnant, you will feel soft, marble sized sacs . These are foetuses, which indicates pregnancy.

How to Handle Rabbits

Poor handling of rabbits can lead to fractures and dislocations of the back, resulting in paralysis of both rear legs. A rabbit's spine is fairly lightweight and fragile. The lightning-fast movements of the rear legs cause the spine to dislocate or for the animal to "break it's back".

- One should not try to overpower a struggling rabbit.
- Speak softly, relax and approach the rabbit.
- Cover the eyes and lightly stroke the rabbit from the front to the rear, avoid sudden movements.
- If the animal tries to escape place your hand on the back of the animal and gently but firmly press down

- Gently hold the scruff (make sure you have short nails) get a good grip, place your hand below the rump (rear end) and lift the animal while supporting the rear of the animal.
- When carrying animals support the legs and body with the forearm and allow the head to be braced in the hollow of the arm pit.

- Rabbits should never be picked up only by the scruff (lose skin behind neck) or by the ears .
- If you are concerned about being scratched, place a towel over the rabbit's back and wrap it around the body to restrain all four feet before picking up the rabbit

Determining Sex

Identifying whether your rabbit is male of female is crucial. If this is not done properly you may purchase 20 does and no buck with which to service them. This would definitely cut the productivity of your rabbitry.

- When purchasing animals choose animals older than 12 weeks. At this time the reproductive parts become easily distinguished and there is less chance for mistakes.
  - Carefully restrain the animal. Turn the animal on its back, supporting the rump and exposing the underside
  - Gently press down on either side of the genitals with your thumb and forefinger and push them out
  - The female vulva is indented and fairly flat, the male has a penis that is short and upright

Female

Male

Mating Rabbits

Before Mating:

- Schedule mating for the cooler parts of the day (late evening and early morning)
- Breed rabbits for the first time by 6-7 months of age. The weight should be approximately (2.5kg or 5.5lbs) this should be the major factor when deciding if a rabbit is ready to breed.
- Examine both rabbits for any sign of disease. Do not mate unhealthy rabbits.
- Especially observe the genitals, ensure the both male and female are clean and have no sores, swellings or unusual discharges

Steps

1. Take the doe to the buck's cage and observe the mating.
2. Allow up to 5 minutes or two matings to occur before separating animals
3. In a successful mating, the buck makes a grunt, kick out his leg and rolls over on its side.
4. Return doe to cage and enter the necessary information on her record card.
5. If mating was unsuccessful re-mate the doe in 3 - 4 hrs. or next day
6. Forced mating should be tried only in exceptional circumstances.
   - Hold the doe from above, face her head towards the corner of the cage and leave her genitals accessible to the male.
   - If the doe still refuses to mate try a different buck.
7. At 14 days after mating it is wise to check for pregnancy.

It is natural for first time mating to be difficult. Do not be too concerned unless the doe regularly refuses the buck and miscarries the litter. If this happens let a veterinarian check the animal for reproductive problems.

Kindling

Once the does become pregnant, you must prepare for the kindling process. Rabbits kindle or give birth 30 - 33 days after mating.
Here are some steps to prepare for kindling.

1. Thoroughly clean the cage about 2 weeks into the pregnancy.
   - ★ This reduces the need to stress the animal later in the pregnancy.
   - ★ Ensure you disinfect and clean the nest box, allowing it to dry properly.
   - ★ Store the nest box in a safe rodent free area until needed.

2. Doe begins to pluck fur from her belly
   - ★ This occurs because hormones cause the fur to become loose. Do not panic.
   - ★ She will use this fur to line the nest box.
   - ★ Her teats will become large and swollen with milk.
   - ★ Keep cage clean and rust free to avoid infections.

3. Provide pregnant doe with nest box 28 days after the mating date
   - ★ This allows for at least 3 days for nest building.
   - ★ Provide her with clean strips of cloth, shredded banana leaves, dry grass or newspaper (non coloured).
   - ★ Allow her to prepare the nest box. Help only of she shows no signs of making a nest.

4. Birth should take a couple of hours with babies being born at 5 minute intervals
   - ★ After birthing remove wet bedding or any placenta.
   - ★ After giving birth, the doe will feed the babies only once a day for several minutes.
   - ★ Regularly check if babies are being fed, if there are too many babies remove excess and foster them with another doe.

Caring for Young Rabbits

Birth

- ★ Baby rabbits are born naked and blind.
- ★ Keep them warm and dry. Place the opening of the nest box away from the direct breeze.
- ★ When the doe has left the nest box, turn over the babies and look for a white "milk" line beneath the surface of the skin on the belly. This indicates the babies are being fed.
- ★ Remove dead babies, excess feed and waste from nest box.
- ★ During the first two weeks lactating does will nurse their young for only 3 - 5 minutes each day.

Day 6

- ★ Body weight is doubled and fur coat is produced.
- ★ Regularly check to ensure babies are in nest box.

Day 10

- ★ Eyes begin to open.
- ★ If they do not open, gently clean around the eyes with warm water and cotton, to remove saliva and milk which coat the eyes.

Day 14

- ★ Kits begins to crawl.
- ★ Ensure false bottoms are in place and that outer cage is clean and has no loose wires or holes in the floor.

Day 21

- This is the peak of the does milk production
- Kits will begin to consume some food

Day 28

- Milk production is declining and kits can eat solid food
- Keep containers high enough so young rabbits can not fall in or scrape food out, but can easily access food and water

1 - 2 Months

- Once animals can come in and out of nest box you may remove it. Sanitize it and put it away for later use.
- If rabbits show good growth they can be weaned from their mother at one month.
- If kits are too small and underweight, keep them with the doe a little longer.

2 - 3 Months

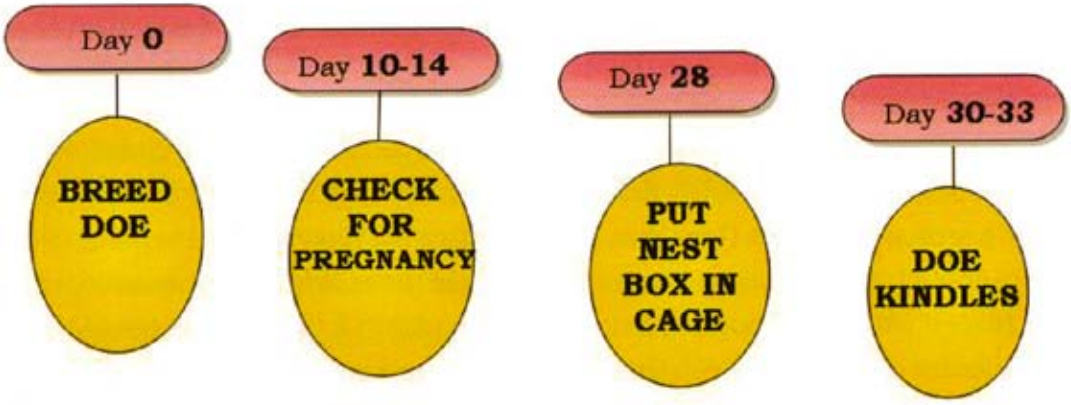
- Allow the doe a rest period of at least 2 weeks (after weaning) or until she regains her weight of 5.5 lbs (2.5kg).
- Move the doe to a clean cage of suitable size as you prepare her for re-breeding.

4 Months

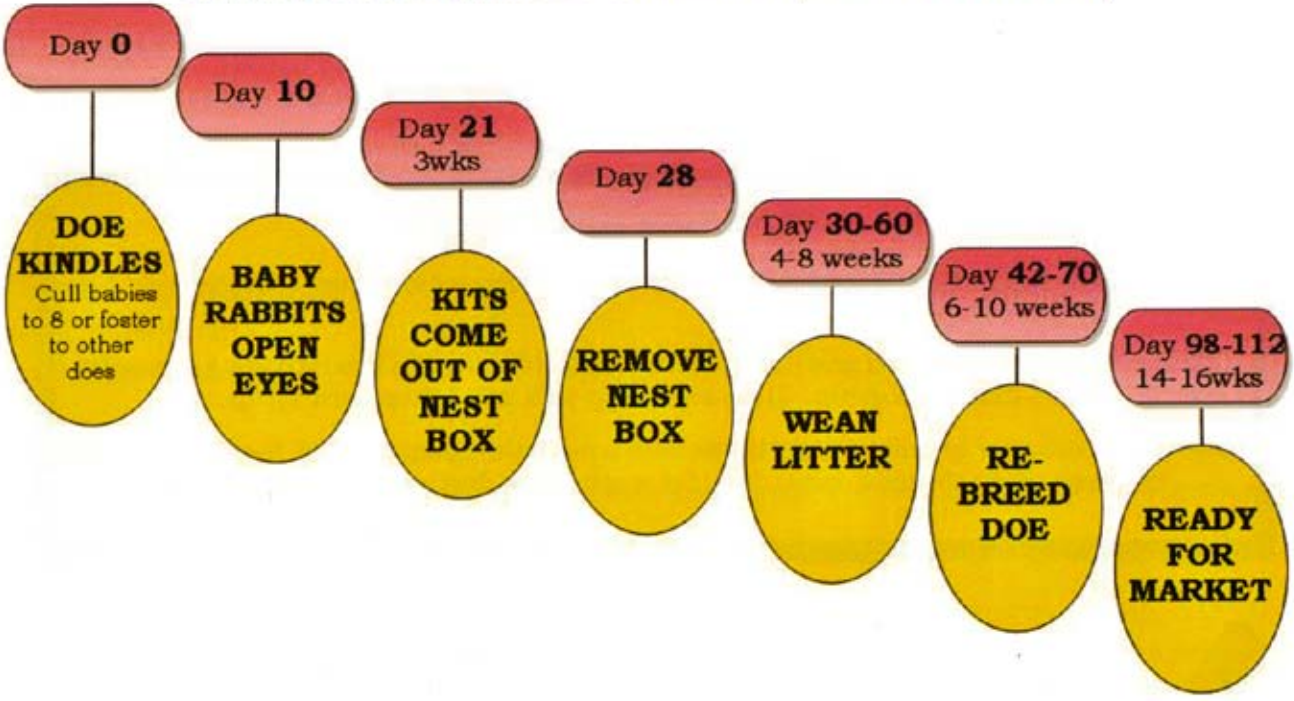
- Fryers are ready for slaughter
- Separate male and females even though they are to be slaughtered
- If slaughtering is delayed you may have inbreeding.

Avoid slaughtering pregnant does!

Rabbit Gestation Schedule



Rabbit Development Schedule (Semi Intensive)



Fostering

If the babies are not being fed you may place disadvantaged babies with a foster mother or feed them yourselves.

It is a good management practice to breed several does at the same time. Some does make good mothers but produce small healthy litters. These can be regularly used as foster mothers.

When placing orphaned babies (less than 2 weeks of age) with a foster doe, ensure she has enough milk and enough teats (mammary glands) to nurse them. Whenever possible, orphaned kits should be placed with a doe nursing her own litter (within 2 days of the age of the litter). Use fur from the foster doe to gently rub the newly introduced babies, this reduces the chance of rejection. In extreme circumstance a drop of perfume or a pine oil-type scent applied to the nose of the foster doe may help to prevent rejection. If you are feeding them remember to gently wipe the anal area with a cotton ball soaked in warm water. This stimulates the kit to defecate and urinate.

Here is a substitute milk formula that you can use to feed orphaned babies.

Substitute Milk Formula

You will need : **½ cup Evaporated milk, ½ cup water, 1 egg yolk, 1 tbsp corn syrup.**

Dilute evaporated milk "half and half "with warm water . Add to this mixture 1 egg yolk and 1 tbsp corn syrup. Then add 1 egg yolk and 1 tbsp corn syrup.

Use an eye dropper or animal baby bottle with a pin hole opening. This formula should be given slowly 3 times daily , 1tsp-1st week , 1tbs-2nd week, 1 oz-3rd week.

Sterilize all feeding equipment with boiling water after use

Problems Associated with Breeding

Age
Bucks can produce live sperm at an early age, but if you mate bucks that are immature they can become stunted. Immature, underweight does should not be bred.

False/Pseudo pregnancy
The presence or attempted mounting by a buck, results in hormonal changes in the doe. Although fertilization does not occur, the doe behaves as if she is pregnant and exhibits signs of pregnancy e.g. begin to pluck her fur. During this time the doe cannot conceive (17-19 days). After this period you can re-mate her.

Shedding/ Moulting
Young rabbits moult from 2 months to 6 months of age, while mature rabbits have a yearly moulting. Shedding may first appear on the side of the rump and the thighs. Moulting can be brought on by a rich diet, sudden change in diet, environmental stress or extremely high temperatures. These factors also affect breeding.

Sterility
In some bucks both testicles do not descend. Do not use these bucks for breeding.

Season
High temperature and humidity cause heat stress. This affects conception and libido.

Disease
Diseases of the reproductive organs in the buck or doe can lead to infertility. Poor flooring can cause wounds, that may lead to bacterial infections of the feet and genitals.

Management
Management includes feeding, breeding, sanitation, handling and maintenance. Poor management can lead to under productive animals that cannot be bred, increased mortality in litters, reduced market weight and higher production costs.

KEEPING RABBITS HEALTHY

Identifying and treating diseases in their early stages is the key to a healthy rabbit. Keen powers of observation, proper management and nutrition will help you alleviate any potential health problems in your rabbitry.

Signs of Diseases

If you think your animal is sick, use this list of questions to guide you. If you answer yes to any of these questions and the symptoms persist, call your county Vet office and have a veterinarian VISIT your farm!

- ★ Does the rabbit look unhealthy?
- ★ Is the animal eating less food and drinking less water?
- ★ Has the rabbit completely stopped eating?
- ★ Has the rabbit lost weight?
- ★ Is there diarrhoea or is the animal's rear end always dirty?
- ★ Has the doe stopped nursing her young?
- ★ Is the rabbit hanging its head to one side or shaking its head?
- ★ Is the rabbit's fur coat rough or is fur falling out?
- ★ Do you see cuts, sores or wounds?
- ★ Is the rabbit struggling to breathe or wheezing?
- ★ Is the rabbit inactive or sluggish?
- ★ Are there caecal pellets (soft faeces) in or under the cage?

A Healthy Rabbit

Rabbits will not survive more than one night if seriously SICK!!

Management Practices for Healthy Rabbits

Your main aim is not to cure the disease but to ensure that the disease DOES NOT occur.

1. **Quarantine facilities**

- ★ All sick rabbits and those that have been exposed to sick animals should be isolated.
- ★ All new rabbits to the rabbitry should be placed separately from the others for at least 2 weeks.
- ★ Sick animals should be kept downwind or separately from healthy rabbits until they are fully cured.
- ★ Quarantine areas must have its own equipment for feeding, watering and cleaning. This equipment should be disinfected after use to avoid the spread of diseases.
- ★ Ensure you use a footbath when moving between enclosures, and when entering and exiting quarantine areas.

2. **Proper sanitation**

- ★ Wash cages and feed containers with disinfectant (one part bleach to 10 parts water) or soapy water and allow to dry properly.
- ★ Sun dry cages to allow the Ultra-violet rays to help disinfection.
- ★ Use a foot bath of either black disinfectant, or any disinfectant.
- ★ Use a flame thrower to burn off excess fur from cages.
- ★ Remove waste. A build up of waste and dust can cause an ammonia build up in the rabbitry. This can cause respiratory problems to occur e.g. *Snuffles, Conjunctivitis.*
- ★ Poor maintenance of wire floor cages can also lead to incidents of sore and tender hocks and feet. These now become prone to bacterial infections e.g. *Sore Hocks*

Mark all quarantine equipment with red paint!

3. **Stress reduction** - Stress is any factor that challenges the animal's natural system.

- **Disturbance** - Predators, like thieves and animals, can cause rabbits to become frantic, crushing babies or even eating them. Fence areas around stand alone hutches. Use rat guards and oil in cans around the feet of cage stands to protect against rats and ants. Keep pets and young children a safe distance from rabbits.

- **Temperature** - Avoid **heat** stress by using wet bags and circulating fans to reduce the temperature in rabbitry to 15-26 °C . If rabbits are suffering from heat stress on hot days you may drench them in cool water and let them dry off . Rabbits can die from heat stress (above 40°C). **Cold** - On cold nights ensure young kits (pre-weaning) have enough dry grass, fur and protection from the elements, as they cannot control their body temperature.

- **Humidity** - Rabbits are sensitive to low humidity (below 55%). However, when high humidity (above 80%) accompanies high temperatures (above 32 °C) heat stress may occur.

- **Space** - Avoid overcrowding in hutches. Ensure animals have enough space to stretch length wise and to their full height.

Overcrowding

Poor sanitation

4. **Proper diets**

- Unbalanced diets lack the major minerals and vitamins that the rabbit needs and can cause nutritional deficiencies.
- Older animals generally recover, once too much time has not passed. Younger rabbits showing deficiencies rarely recover.

5. **Contaminants and poisons (food & water)**

- Spraying chemicals too close to your rabbitry can allow droplets to get into the water, food and on your animals.
- Moldy or old feeds contain mycotoxins which can poison rabbits.
- Chemicals, animal waste and insects on forages can poison, infect or bite your rabbits. Some bites can lead to infections and death.

6. **Prevention of inherited diseases**

- Genetic diseases can be controlled by not breeding diseased animals and reducing the chances of inbreeding in your rabbitry.

Paralysed animal

Wry neck

7. Parasites and micro-organisms

Parasites - These can be either internal or external.

★ **Internal** - worms, protozoa

- Internal parasites enter the animal via contaminated food or blood. Most animals will show signs of diarrhoea and weight loss e.g. *Coccidiosis*

★ **External** - mites, fleas

- Mites and fleas reach your animals either through the use of contaminated equipment or from contact with contaminated animals and people.
- Control this problem by ensuring contaminated humans and animals are kept out of your rabbitry.

Micro-organisms

★ **Bacterial** - Bacteria naturally occur in both humans and animals. Some are harmful and others are not. When your animals become stressed or exposed to the bacteria, bad bacteria take control and cause diseases e.g. *Pasteurella, Leptospirosis.*

★ **Fungal** - Fungal infections are cause by fungi (fungi causes your bread to go mouldy) e.g. *Ringworm*

★ **Viral** - Viral infections are caused by viruses. These can be transmitted by animals, people, insects, contaminated equipment, feed and water supplies. *Myoxamatosis*

Open wound

Death by Virus

What to do if your Rabbit is Sick

- ★ Observe the problem
- ★ Remove the problem if you can
- ★ Call your veterinarian or agricultural officer
- ★ Move the animal to a separate area down wind of the other animals
- ★ Disinfect the cage and 2 cages in each direction around the infected animal.

Disinfect Cages

Simple Ways to Prevent Diseases in your Rabbitry

★ **Daily**

- Observe rabbits, check for cuts and wounds and attend to newborns
- Clean food containers and rinse water containers properly
- Remove stale food and old grass from cages
- Ensure all animals have access to clean water and adequate food
- Remove waste from inside cages

★ **Weekly**

- Clean under hutches
- Disinfect equipment, dust and clean cages
- Check feed supplies for mouldy feed and rotting grass.
- Change foot baths

★ **Monthly**

- Torch cages to remove excess fur
- Remove rabbits and dust and disinfect cages
- Do any necessary repairs and maintenance e.g. replacement of cages

Table of Common Diseases

DISEASE	SYMPTOM
SORE HOCKS 	★ Bruised, infected or abscessed areas on hocks (bottom of feet) ★ Animal shift its weight off the affected foot to relieve the discomfort
CONJUNCTIVITIS 	★ A thin and watery or thick and purulent, discharge from the eyes, ★ Fur around eyes may become wet and matted.
HAIRBALLS 	★ Rabbit ingests abnormal amounts of its fur ★ Rabbit gradually eats less food eventually going off all food.
BUCKTEETH 	★ Rabbits show signs of overgrown incisor teeth ★ Mouth cannot close properly and animal cannot chew food.
ENCEPHALITHOZOONOSIS 	★ Animals have convulsions, tremors and even partial paralysis. The kidney may look shrunken or pitted (stabbed with a pen). Disease is identified during post-mortem.

Table of Common Diseases

CAUSE	CONTROL
★ Wet floors or irritation from rusty wire and rough areas on floor ★ Sores form, resulting in bacterial infection if not treated.	★ Clean the area around the wound with clean warm water. ★ Apply an antibiotic ointment as prescribed by your veterinarian. ★ Add a clean piece of ply board to cages for the animal to stand on.
★ Inflammation on the inside of eyelid. ★ This is due to either irritation of the eyes from smoke, dust, sprays, fumes or a bacterial infection of the eyelids.	★ Clean the area around the eye with clean warm water, remove any mucus. ★ Have a veterinarian recommend treatment.
★ Lack of indigestible fiber in the diet, causing the hair to clump together in the stomach. The rabbit eats more fur. ★ The hairball fills the stomach and the rabbit stops eating and eventually dies.	★ Feed a diet high in indigestible fiber e.g. dry coconuts. ★ If a small hairball is present (only at weaning) use mineral oil or pineapple juice, at 10 ml for three consecutive days.
★ Rabbits' teeth grow continuously throughout their life. ★ Due to genetics or injury, uppers curl back and lowers protrude.	★ Provide a dry coconut for the animal to chew on and regularly check the mouth for wounds caused by the overgrown teeth. ★ Do not breed this animal. Have an experienced veterinarian trim teeth.
★ A parasite *Encephalitozoon cuniculi* is shed from sick rabbits through the urine and taken up by other rabbits.	★ No known cure or treatment. Avoid contamination of forage with urine of sick or diseased rabbits. ★ Cull diseased rabbits and disinfect cages.

Table of Common Diseases

DISEASE	SYMPTOM
COCCIDIOSIS 	★ Diarrhoea with mucus, pot belied, loss of appetite, poor weight gain.
EARMITES 	★ Shaking of head, scratching of ears. Brown, scaly crusts at base of ear canal.
MANGE 	★ Scaly skin, scarf (dandruff) itching and scratching, loss of fur (clumps).
SNUFFLES 	★ Sneezing, watery eyes, white nasal discharge, breathing difficulty, rubbing nose. May develop into pneumonia.

Inform vets of diseases as soon as possible!

Table of Common Diseases

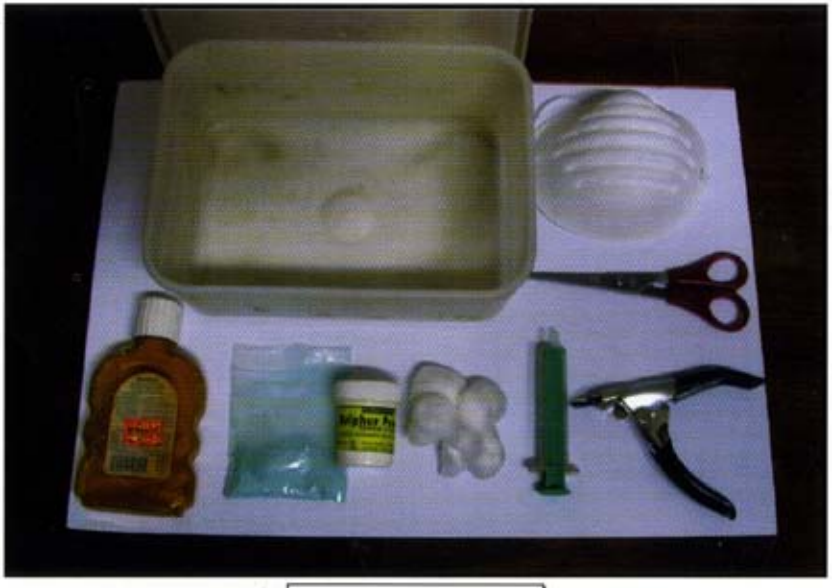
CAUSE	CONTROL
★ Parasitic infection of intestinal tract caused by coccidia ★ Spread through manure/ faecal contamination	★ Prevent faecal contamination of feed / water ★ Daily cleaning of waste from below cages ★ Administer a sulphonamide based drug as recommended by your veterinarian
★ Ear mite *Psoroptes cunuculi* (rabbit and goat ear mite) and *Nortoedress cati* (cat ear mite)	★ Remove scales and crusts from inner ear and swab with a mixture of 1tsp olive/ mineral oil and 3 drops iodine/paraffin, once per day for 3 days. Repeat at 10 - day intervals. ★ Flowers of sulphur lightly powdered into the ear daily ★ Ask your veterinarian for suitable medication.
★ A parasitic infection of the skin caused by the rabbit fur mite and Scabies or itch mite.	★ Veterinarian recommended shampoo. ★ Bathe animals with a sulphur soap or lightly dust with sulphur powder ★ 5% Malathion dip also works well. Avoid contact with eyes and mouth. ★ Treat entire rabbitry as the mange will spread rapidly.
★ Bacterial infection of the sinuses- *Pasteurella multocida* ★ Caused by dust inhalation and aggravated by ammonia.	★ Immediately inform veterinarian for prescribed antibiotic treatment. ★ Can result in clinical signs in infected rabbits. ★ This diseases spreads rapidly throughout rabbitry and can quickly destroy your stock

Remember it is wise to cull (kill) non-productive animals.

Essential Items for a First Aid Kit

You should not administer medication without first consulting a veterinarian. However, as an animal owner there are some essentials you should have in your First aid kit. Firstly, obtain a clean container with a strong cover- you can use an ice cream container or biscuit pan.
Store:

1. Clean cotton wool or strips of clean cloth (store in a water tight bag)
2. Sharp scissors
3. Disinfectant suitable for animals
4. Wound powder
5. Syringe / eyedropper
6. Sulphur powder
7. Face mask
8. Guillotine nail trimmer
9. Clean disposable gloves (optional)



First aid kit

HOW TO SLAUGHTER A RABBIT

Before you begin to slaughter you will need some basic tools and you should follow certain health and safety guidelines

Health and Safety Guidelines

Animal

- ★ Rabbits should receive water but **NO** food for 12 hours before slaughter.
- ★ Do not give the animal any drugs at least one week before slaughter.
- ★ Do not slaughter unhealthy animals for human consumption.

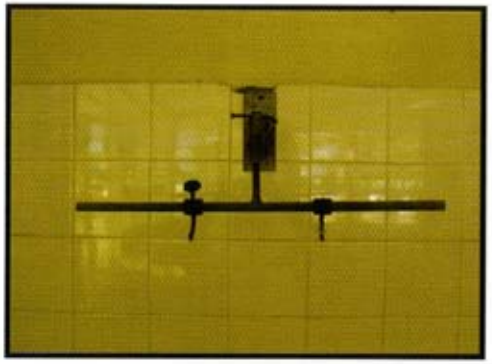
Slaughter

- ★ When doing backyard slaughter, contact your regional office and your public health inspectors for proper certification and adherence to county codes.
- ★ Slaughter area should be clean, free of flies, rodents, dust and garbage.
- ★ Ensure you have the correct clothes and tools. Tools must be sterilized before use.
- ★ Avoid moving between buildings with exposed carcass.

Proper attire for slaughtering

Materials for Slaughter and Carcass Preparation

- ★ Set of hooks or length of rope - to hang rabbit on
- ★ String or thin wire
- ★ Sharp knife and chopper
- ★ Cutting board
- ★ Bin/plastic bag for waste
- ★ Container with cover for meat
- ★ Clean cloth or paper towels



Hooks

Simple Steps to Slaughter a Rabbit

1. Stun and kill the rabbit
   - ★ Hold the rabbits upside down, head between you index finger and thumb, stretch the rabbit over the upper part of your leg, then push the neck down while bending the head backward - the neck will break and become loose.

     OR
   - ★ Hold the rabbit upside down, stun the rabbit with a sharp hard blow to the back of the neck (point at the base of the ears).


2. Immediately hang the rabbit upside down, with hooks or rope. Cut of the head and front feet to allow proper bleeding.


3. Cut the skin around both hocks (back feet) Then cut from the inside of one leg towards the tail and up the other leg.


4. Cut off the tail and start to peel the skin.


5. Slit open the belly from the anus to breast bone (take care not to cut the gut).

6. Remove the gut and leave the liver, heart and kidney intact

7. Cut of the rear hocks and wash the meat, inside and outside with clean Water.

8. Lay the carcass on a cutting board and cut into 6 pieces

9. Arrange the pieces in a container or package, freeze and label with the date of slaughter

Roasting a Rabbit

Roast rabbit has a different flavour due to the roasting process. This method cooks the meat with the natural oils and fats from the animal.

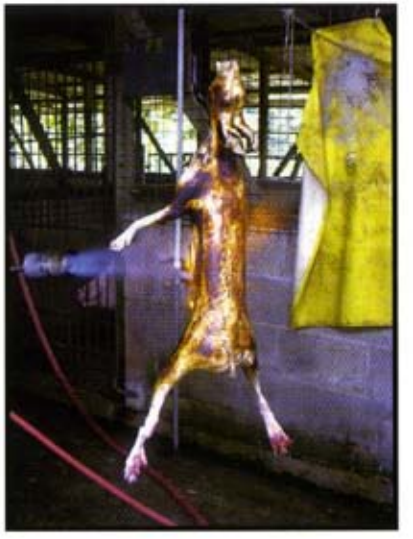
Materials for Roasting a Rabbit

- ★ Set of hooks, knife
- ★ Container for waste
- ★ Large boiling pot
- ★ Flame thrower

You have two options when roasting your rabbit:

1. Slaughter and gut the rabbit. Then burn the fur off the rabbit. This causes the fat under the skin to flavour the meat.

2. The second way is to slaughter and gut the rabbit. Place the rabbit in a boiling pot of water and scrape the fur off the rabbit and then roast it.



SIMPLE RABBIT RECIPIES

Trying a new dish can be an exciting experience that both, your taste buds and stomach can enjoy. Here are a few pointers and recipes for cooking rabbit. Rabbit does not have as much fat as beef and therefore cannot be over-cooked. In most recipes rabbit can be substituted for chicken.

All purpose seasoning

1 bundle chive (small)
1 bundle shadow beni (small)
1 bundle celery (small)
2 pieces thyme
3 sprigs parsley
3 cloves garlic
2 pimento peppers
Mince ingredients in about 1 cup of lukewarm water.

Bar-B-qued Rabbit

1 jointed rabbit
1 cup of minced seasoning
1 bottle of barbeque sauce
1 tsp salt
Bitters

Method

Season the piece of rabbit with the minced seasoning, bitters and salt
Allow it to marinate overnight or at least for 5 hrs
Mix the barbeque sauce with a dash of bitters, and some red butter for basting
Place pieces on barbeque pit and baste them with the above mixture.
Barbeque for 20 minutes or until done

For adults you may add some wine or rum to add a kick to the flavour

Use 12-16 wk. old animals for Bar-B-Que and older animals for curry or stew.

Rabbit lasagna

1 cup of minced rabbit meat
1 pack of lasagna
1 cup minced seasoning
1 onion
1 cup of sliced mushrooms
1 sweet pepper
1 cup of sweet corn
1 tin lasagna sauce
1 1/2 cups of grated cheese

Method

1. Cook the lasagna according to the directions on the packet
2. Season the piece of rabbit with the minced seasoning and salt.
3. Allow it to marinate for 2 hrs.
4. Cut the onion and sauté with butter then add meat without the marinade.
5. Cook until meat is grainy and then add cut sweet peppers, mushrooms and corn.
6. Add 3/4 tin of lasagna sauce and 1 cup of cheese to the meat mixture. Add salt to taste.
7. Grease the bottom of the baking dish and place single layer of lasagna strips.
8. Add a layer of the mixture, sprinkle with cheese and add another layer of lasagna.
9. Repeat layers until you are 1inch below the top of the dish, to avoid leaking in the oven. Sprinkle cheese on top. Bake at 350° F for approx. 45 - 50 minutes until firm.

Rabbit salad

1 cup of boiled rabbit meat
1 pack shell macaroni
2 tbs. minced seasoning
1 small onion
1 clove garlic
4 tbs. mayonnaise
1 tsp. mustard
1 small sweet pepper finely chopped
1/2 cup corn
1 cup grated carrots

Method

1. Cook the macaroni according to the directions on the packet and drain.
2. Strip the pieces of rabbit meat.
3. Mince onions and garlic.
4. Mix the onions, garlic, chopped sweet peppers, grated carrots and corn.
5. Toss lightly with mustard and minced seasoning.
6. Add stripped rabbit meat and macaroni
7. Mix in mayonnaise and sprinkle with dash of finely chopped celery to garnish and chill.

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