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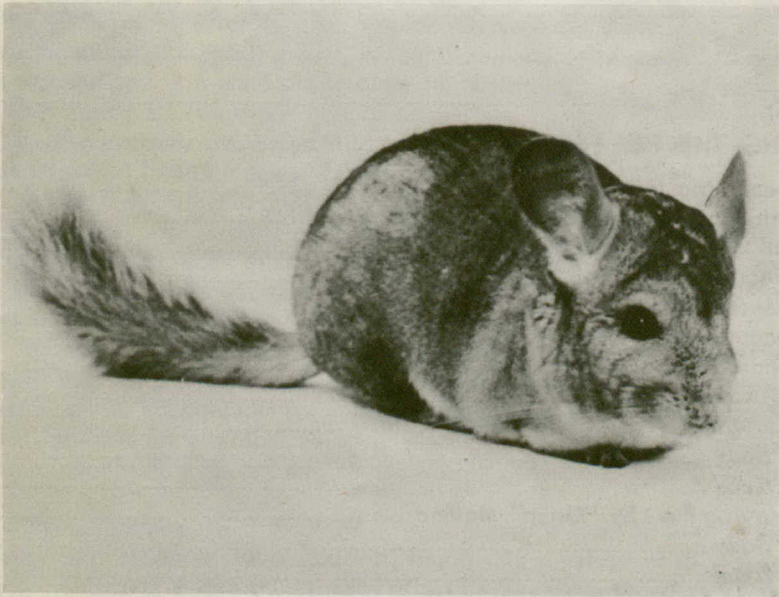
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# Raising Chinchillas

BY WM. M. RITCHIE

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FUR INSPECTION AND GRADING SERVICES  
MARKETING SERVICE • LIVESTOCK PRODUCTS DIVISION

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## CONTENTS

CHARACTERISTICS OF THE ANIMAL .....	1
BREEDING HABITS OF THE CHINCHILLA .....	2
THE CARE AND DEVELOPMENT OF CHINCHILLA KITS .....	3
Feeding.....	4
Diseases .....	4
Impaction .....	4
Slobbers .....	4
Skin disorders .....	4
Pneumonia.....	5
Other diseases .....	5
FUR .....	5
HOUSING .....	5
SELECTING STOCK .....	6
HARVESTING THE PELTS .....	6
Determining Primeness .....	6
Suggestions for Killing and Pelting Chinchillas .....	7
Some Points to Remember .....	7
Hypodermic Injection Method .....	7
Other Methods .....	8
Precautions in Pelting .....	8
Preparation .....	8
Initial Cut .....	8
Removing Pelt by the "Cased" Method .....	9
Body .....	9
Head .....	9
Removing Pelt by "Open" Method .....	9
Body .....	9
Head .....	10
Variations .....	10
Fleshing .....	10
Flesh Rump-to-Head .....	10
Cleaning and Shaping the Pelt .....	11
Hand Cleaning .....	11
Shaping and Drying .....	11
Arranging and Tacking the Pelt .....	11
Folding the Legs .....	12
Insect Damage .....	12
Final Trimming .....	12
PACKING FOR SHIPPING.....	12
REGISTRATION .....	13



# RAISING CHINCHILLAS

Wm. M. Ritchie<sup>1</sup>

Marketing Service

Canada Department of Agriculture

Chinchilla ranching apparently appeals to many because no extensive space or equipment is required to start a herd. Chinchillas are being raised in basements, in attics, and in open air pens in the yard. The fact that they are clean, vermin free, and practically odorless makes it feasible to keep them in the home. Only for the larger herds is construction of special housing usually required. Nor is climate so important a factor in chinchilla breeding as it is in mink and fox farming, since chinchillas can be raised successfully indoors where heat and humidity can be controlled. If properly housed, chinchillas can be raised anywhere throughout Canada.

Cold weather, including freezing temperatures, is not harmful to chinchillas, except, perhaps, at littering time. Hot weather, on the other hand, is undesirable. Where prolonged hot spells occur, chinchillas must be protected from excessive heat. Around 70° is a good temperature for their maintenance, at temperatures above 80° they suffer, and over 90° may be dangerous. In warm climates proper insulation and cooling systems can be used to control the temperature. High humidity, which is also harmful to chinchillas, can be regulated by humidifiers.

About 9 square feet of floor space is generally considered adequate for a chinchilla pen. Two or more pens may be stacked in layers, or the pens may be placed in rows on racks hung from walls or suspended from the ceiling. The quarters should be free of rats, mice, and flies, and also protected from any other animals that might interfere with the chinchillas.

Part of the basement of the home can be partitioned off to provide space for a small chinchilla herd. Basement temperatures are generally favorable to the animals and an adequate water supply is usually close at hand. The floor should be well drained for washing; painting it will help to eliminate dust. The chinchilla quarters should be kept dry and should also be protected against possible furnace fumes.

The conditions required for a basement unit should be kept in mind when housing chinchillas in other quarters, whether in a garage or in a specially constructed building. Where the climate is favorable, some breeders keep their animals in open-air pens. Here, some shelter from the weather should be provided, and care should be taken to protect them from the direct rays of the hot sun to prevent bleaching, singeing, or curling of the fur.

## CHARACTERISTICS OF THE ANIMAL

The chinchilla is a member of the rodent family native to the Andes Mountains in South America, where it ranges in the higher altitudes of the western slope in Peru, Chile and Bolivia. It is a small animal, the male weighing between 15 and 20 ounces, and the female between 18 and 25 ounces. It is full furred, medium haired with grayish blue top hair and dark steel blue underground. It somewhat resembles a large squirrel with its shiny black eyes, long bushy tail, strong back legs, and small front ones. In posture, too, it is not unlike a squirrel in that it sits on its

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<sup>1</sup> Chief, Fur Grading Service



haunches using its front paws for eating. It has numerous whiskers, some short and others very long, emanating from the areas on each side of its nose. There is reason to believe that its eyesight, particularly in the light, is none too good, and that it relies heavily on these whiskers, as well as its nose and its highly developed sense of hearing to warn it of obstructions in its path. Its ears are large for the size of the animal and are somewhat pear shaped, with no hair on them. The noises they make range from a high pitched alarm call down to the low, hiccupping sound given out by a male after a successful mating. Chinchillas are capable of short bursts of incredible speed but tire quickly. The chinchilla has a gland just inside the opening of the rectum and when the animal is disturbed or frightened, it emits an odor much in the same manner as a mink or skunk. The odor, however, is not strong nor unpleasant.

Chinchillas were once very numerous and prior to the first World War hundreds of thousands of pelts were exported annually while natural enemies reduced their number still further. They are no longer plentiful anywhere in South America and in many parts they have completely disappeared.

In 1918 the export of chinchilla pelts was banned, and about this time an American, M. F. Chapman, who was working in Chile, became interested in the idea of raising chinchillas in captivity. He obtained a licence to trap them and during subsequent years he brought a small herd of eleven animals down by easy steps from the high altitudes of the Andes, transported them to California, and there established his first breeding colony in 1923. It is to this small herd that the ancestry of the majority of the stock now being raised in the United States and Canada can be traced. There is of course, little likelihood of any appreciable number of wild chinchilla pelts reaching the fur markets to compete with the ranch-raised product.

### BREEDING HABITS OF THE CHINCHILLA

Chinchillas generally have two litters per year, one in the early spring and the other during the summer. Females do occasionally have three litters per year, but it is generally agreed that this is hard on them, and that the kits in the third litter are not so numerous nor so healthy. Chinchillas may have litters at any time of the year, but they are uncommon in the late fall and winter. It is recommended that only two litters per year be planned and the beginner would be well advised to keep the male separated from the females at whelping and until after weaning. As the gestation period for a female is 111 days, it is desirable to adopt such breeding.

This method of breeding resulted in the 'husband and wife' mating system, whereby two animals were mated for life, in the popular belief of a few years ago that the male chinchilla is monogamous. Actually a male is definitely polygamous and many breeders are now mating their better quality males with a number of females and hence are able to discard less desirable animals.

In spite of their being nervous and easily frightened by strange noises there is not much difficulty in mating chinchillas, as they generally are even tempered. Occasionally a female will attack a male, or vice versa, and severe mutilation or even death of the weaker animal may result. Where care is taken, however, to mate animals in a pen that is strange to both of them such occurrences are fairly rare. Fights that do develop are almost always between adult chinchillas; the mating of youngsters at eight months of age is accomplished in most instances without any difficulty.

Some females do become irritable during pregnancy and at the time a litter is born. In such cases it is desirable to remove the male from the pen as soon as



definite pregnancy has been determined. This can be ascertained or detected by a reddening of the breasts, or by feeling the abdomen at forty to fifty days.

Young chinchilla females will normally be ready for mating at around eight months, delivering their first litters at about a year. Females have bred and conceived as early as three months, but this is extremely rare. In some cases a female will not breed until she is fifteen or sixteen months old, but this, too, is exceptional. Young male chinchillas are generally ready for breeding at around six months of age. It is wise, however, not to allow them to breed more than one female until they are over two years of age as permanent damage may result if they are allowed too much breeding at an early age.

The usual number of kits to a litter is two, but litters of one and of three are not uncommon. Very occasionally litters of four, five, and six are born. Examinations by X-ray have shown five and six fetuses in pregnant females, but on whelping only two or three will be born, the remainder having died and been absorbed.

Chinchilla females normally have smaller litters at first, rising to their peak production at around three years of age. If they are not forced, this peak will last until they are around seven or eight, at which time they will start to have smaller litters again. By the time they are ten they will be having only occasional litters of one or possibly two kits. There are recorded cases of females twelve years old having litters.

Chinchilla males will remain vigorous long after the fur on the nose has turned pure white. There are good breeding sires in Canada that are still fertile at fourteen years of age.

### THE CARE AND DEVELOPMENT OF CHINCHILLA KITS

Chinchilla females make as good mothers as most animals, and only in exceptional cases do they not have enough milk to nourish their litters. A kit is very seldom crushed to death and only when the sire and dam are fighting. In spite of this the average mortality rate in kits runs at around 20 per cent on many ranches. Neglect to hand feed young that need extra help is one cause and another undoubtedly is lack of knowledge with respect to proper pre-natal feeding of females. Improper feeding may result in stillborn kits, kits born very weak, or kits improperly formed.

Many males, if left with the dam during and after whelping, will take good care of the young, keeping them warm while the mother is out eating. It is only in extremely rare cases that one will harm them in any way, but experience is required in determining which animals can be trusted in this respect.

Chinchilla kits are born fully furred, with their eyes open and with a full set of teeth. They are capable of moving around at birth and this presents a problem in cold weather, for a kit can easily stray from its mother into the open pen, become thoroughly chilled, and die of pneumonia shortly afterwards. Experienced females, however, appear to keep a close watch on their kits and seldom allow them out of the nest box during the first week or two if it is at all chilly. The mother seldom has any difficulty in delivering her young.

Kits appear to grow very slowly for the first ten days after birth, but from then until after they are weaned they gain weight rapidly. There is then another short period of readjustment when they are separated from their mothers, after which they continue to grow, but at a slower rate than previously. Full growth is not attained until they are at least 18 months of age and quite often 2 years old.

In most cases the mother is able to look after her litter with no help from the rancher, but in a few cases it is necessary to assist her with hand feeding. This



may occur in the case of young mothers with their first or second litters, or in the case of a litter of more than three. A female seems capable of raising three kits without difficulty but only rarely can she care for more than that number without help. Some young females seem completely at a loss to take care of their young, usually because of lack of milk. While an animal may make a complete failure of her first year of breeding activity, usually she will settle down from then on and raise her litters without difficulty.

Because kits can move about immediately after birth, it is advisable to raise them in heated quarters. Where heat is not used, a deep bed of hay or good oat straw should be provided in nest boxes deep enough to prevent kits from getting out into the pen proper for the first ten days. The female chinchilla shows no desire at all to provide a suitable nest and the rancher must make her one where necessary. Generally speaking, if a nest and a deep nest box are provided, a chinchilla can whelp and raise her young when temperatures outside the nest box are down to freezing. It is not recommended, though, that a rancher allow kits to be born in low temperatures.

### *Feeding*

Chinchillas are strict vegetarians, and do well on timothy or alfalfa hay and coarse grains such as wheat, oats, corn, and barley. Oil seeds, such as flax or peanuts, should be avoided as oils in any form are harmful. As 16 per cent protein in their diet appears to be the maximum, a steady diet of clover hay is not recommended. In addition to hay and coarse grains, prepared pellets, made by most feed companies, are fed. Greens, too, can be fed in considerable quantities, particularly in the spring when they are fresh and tender. Lettuce and cabbage should not be fed, but green grasses, such as timothy, alfalfa, Kentucky blue grass, twitch grass, and red clover, and weeds such as dandelion are satisfactory and are relished by the chinchilla. Grasses or plants that are old and going to seed should not be fed. While research on diets will eventually provide more information, it is now known, and cannot be emphasized too much, that chinchillas thrive on a simple diet. Feeding a complicated diet, like cooked foods such as cereals, may result in indigestible masses in the animal's stomach that in turn end in impaction.

### *Diseases*

The chinchilla is a hardy animal, which, if fed properly, can withstand rigorous conditions. A number of disorders affect them but the majority of these troubles are the direct result of faulty diet. As stated, oils or oil-bearing nuts, cooked foods, or foods having more than 16 per cent protein, should not be fed. If they are, intestinal trouble is bound to follow.

The following are the more important causes of sickness:

*Impaction* - This is the final result of many intestinal disorders, and the stoppage of the bowels by a heavy mass of undigested food. If recognized early enough, some cases can be cured by feeding sugar and water, only, for several days until the droppings return to normal.

*Slobbers* - This is a ranchers' term to describe a type of tooth trouble when the molars grow out of line and may partially or completely cover the tongue, preventing the animal from eating and resulting in starvation. Such individuals should be destroyed.

*Skin disorders* - These are seldom fatal, and do not appear to be contagious. It is thought that they are the result of incorrect feeding, somewhat akin to scurvy. The visible signs of this trouble are patches on the animal's body denuded of fur, with the exposed skin red and scaly. There are several preparations on the market



(drug stores, veterinaries) that will cure this effectively, but proper feeding is the only way to prevent its recurrence.

*Pneumonia* - This disease, while comparatively rare under proper housing conditions, is found more often in kits than in adults. While the kits are born with fur, the density and length is not sufficient to allow them to be away from their mothers for long in chilly weather. Chinchillas appear to be able to stand extremely cold weather without ill effects but they must be protected from drafts, particularly on raw, damp days. If recognized and treated early enough, pneumonia can be cured by penicillin or by one of the sulfa drugs.

*Other diseases* - If any unrecognized disorder should occur veterinary advice is recommended, although it is reported that no actually contagious diseases were known in chinchilla in the wild, nor are common to them in captivity. Their whole physical make-up is designed and equipped for hard living. If this is kept in mind when housing and feeding them in captivity, much less trouble will be encountered from illness than if the rancher ignores this fact and weakens their natural resistance to disease by too much pampering.

## FUR

Good chinchilla fur is bluish gray, free from yellow cast, and without any mottled effect or marked contrasts in color. There are three different shades, light, medium, and dark. The shade of the fur is controlled by the color of the underfur which is light blue in the light type, slate blue in the medium, and a dark slate blue in the darks. The blue underfur of the chinchilla has a silvery white bar three-sixteenths of an inch in width very close to the top. The tiny tip of the bar is blue-gray.

A well-furred chinchilla should have a thick neck with the fur so heavy that it almost appears to be "bull-necked". The fur should be dense and evenly distributed over the entire body. Guard hairs, too, should be fairly dense and evenly distributed so that the fur will have good resilience. The bar on the underfur should be of even width all over the body, and the underfur should be glossy, straight, and free of wooliness. The fur should be a definite blue-gray shade. Like other fur-bearing animals the chinchilla puts on a heavier coat of fur during the cold winter months. It, however, is later in priming than the fox or mink, coming to full prime about the end of January. The leather of a chinchilla pelt is very light and in pelting care should be taken not to tear it. When tanned the leather toughens up and becomes much stronger, and the pelt can then be easily worked without fear of damage.

## HOUSING

It is important in housing chinchillas, particularly during the early stages of building up a herd, to provide quarters heated to at least 40 degrees for the breeding herd. Chinchillas generally have their first litter of the year in February, March, or early April, and as the kits move around from birth, without heat many would perish from pneumonia during these months. For this reason, small herds are generally kept in heated quarters all winter. In larger herds it is often the practice to have unheated buildings for the main herd and a heated structure into which females are moved when litters are due. Adult chinchillas do not mind the cold and frequently are kept in temperatures down to zero and below. Young chinchillas three or four months old do not winter well by themselves, but if three or four are placed in the charge of an adult male they appear to be quite content and come through the cold satisfactorily.

Well-ventilated buildings are important. Chinchillas do not require a lot of sunlight, but it is advisable to provide sufficient windows to have a well-lighted



interior during daylight. Damp, poorly lit, and poorly ventilated quarters are not conducive to good health.

Chinchillas are generally kept in wire pens with attached nest box. Such pens can be either square or round, and are usually about 3 feet square or 3 feet in diameter. The pens may be arranged in two or more tiers, or can be placed in a single deck. The latter method obviously takes up more floor space, but has the advantages of easier cleaning and feeding, and also guarantees that there will be no overcrowding. In placing pens in tiers there is a tendency to put too many pens into too small an area. In either case trays are placed under each tier to catch droppings or other refuse. While many herds are started in the basements of homes, they should be moved to their own quarters as soon as practicable.

### SELECTING STOCK

Chinchillas should be selected with special attention to color, fur, ancestry, breeding record, health, and general appearance. Each animal should be examined carefully, preferably in a north light, outdoors, to ascertain the exact color, texture, density, and resilience of the fur. Only registered animals should be purchased and purchases made only from reputable breeders who can offer helpful advice to the novice. The best method of identification is by tattoo marks in the ears. Five pairs of breeders is the best minimum with which to start a ranch. A single pair will do but progress will be slower. Quality, not numbers, is what counts.

### HARVESTING THE PELTS

Pelting animals should be kept in scrupulously clean cages with no nest box. The floor area may be half the size of the normal breeding pen. Five operations are necessary to make the pelt ready for marketing — skinning, fleshing and cleaning, stretching, drying and packing, and shipping.

#### *Determining Primeness*

An animal in proper condition for pelting is well fleshed, with an absolute minimum of fat. In general, the animal being primed for pelting should be maintained on a low-fat diet, but one rich in minerals, proteins, and vitamins, for at least three months prior to reaching full prime. An abundance of sweet, well-cured hay, plus a level teaspoon of pellets per day, is the best and simplest diet to meet these requirements.

In younger animals, approach to primeness can be gauged in advance from birth dates. In general, a chinchilla will reach its first prime at about eight to nine months of age. With this as a guide, the rancher should segregate his young animals into age groups as they are weaned so that he can handle them more efficiently in uniform groups while bringing them to their peak of prime.

The priming of adult animals can be determined best by watching the seasons — whether they are early or late, mild or severe. Mature animals will shed in the late spring and summer, and will prime a new coat during winter or early spring. Discerning primeness in breeding animals is difficult because they tend to tear patches of fur from each other in fights, or by crowding into nest box openings together. Part of the natural defense mechanism of the chinchilla is its ability to release its fur easily and painlessly if it is pulled. Many a rancher has snatched at one of his animals and caught only a handful of gray fluff. Primeness should not be confused with fur quality. Even the poorest chinchilla primes up at least once a year, and will look his best at this time.

During shedding season a sizeable amount of loose fur may collect in corners of the unit, or in the cages. The fur of the animals will appear rough, flat, and



lusterless. Blowing into the pelt will reveal new fur sprouting through the skin. If the animal has a distinct bar, the white band of the bar can be seen deep in the fur, giving the illusion that there is more than one bar. As the old fur continues to shed out and the new to grow in, the coat will become smoother and more regular in appearance and will appear cleaner and more brilliant in color. The bar area will become more sharply defined and the skin lose its bluish appearance. The skin of the fully prime animal should be creamy white and free from scale or any discoloration. If the animal has been kept as a breeder with its mate, it probably will have lost small patches of fur through mating activity or crowding. If the unprime spots are few, it is better to pelt at the peak of overall prime rather than wait for another shedding season and the resultant coat of new fur. Chinchillas should be killed while they are still slightly under prime, provided the surface of the fur is smooth. If they are allowed to go over prime, there is a greater tendency for the fur to slip during the early stages of dressing.

### *Suggestions for Killing and Pelting Chinchillas*

The condition of the pelt and its preparation for market are two of the principal factors in determining sale value. Every rancher should know the common methods of killing and pelting chinchillas for a good skin can be ruined by lack of skill.

### *Some Points to Remember*

1. Whatever method is adopted, it is imperative that the animal should be killed quickly without struggling.
2. Do not kill more animals than each pelter can handle in one or two hours.
3. Do not allow dead animals to lie in piles.
4. Chill the carcass before pelting — this sets the fur and reduces slippage.
5. Carcasses of animals killed by poisonous injection or poisonous gas should be disposed of with extreme care.
6. The temperature of the room where pelting is being done should not be above 50 degrees.
7. Chinchillas killed by gassing or asphyxiation should always be kept off the floor by a screen because they urinate immediately after dying.

### *Hypodermic Injection Method*

Chinchillas can be quickly killed by a hypodermic injection of a saturated solution of epsom salts. To lukewarm water add epsom salts until the water has absorbed all it will hold. Lay the animal on its right side and with the fingers of the left hand locate the spot a short distance behind the front leg, where the heart can be felt beating. The needle should be quickly inserted between the ribs at this point and the contents of the syringe injected directly into the heart. If properly done, death is almost instantaneous, often occurring before the needle can be withdrawn.

Strychnine, nembutol, or similar poisons are also suitable for injection into the heart or chest cavity. The strychnine solution is made by adding six 1/30 grain, water-soluble tablets of strychnine sulphate to one ounce of water. This quantity is ordinarily sufficient to kill 30 animals, but the proportions may be reduced or increased slightly according to the experience of the user. A hypodermic syringe of the type used by doctors and veterinarians to administer "shots", is used. Those having a capacity of 2 cc. when fitted with a 20-gauge needle are the most practical. With this method of killing, there is always danger of the animal struggling while it is being held. Therefore, the animal should first be chloroformed. Simply saturate a small piece of cotton with chloroform and place it with the animal in a sealed box or container of sufficient size to comfortably admit the animal. As soon as the chloroform takes effect, the lethal injection can be made, using about



half the regular dose.

Chloroform may also be used for killing. A larger piece of cotton should be used saturated with chloroform, and the animal should be left in the box until it is dead, about 2 minutes should suffice.

#### *Other Methods*

For many years mink ranchers have used cyanide and this compound is satisfactory for chinchillas as well as being the fastest acting and the easiest to obtain. The most common method is to build an air-tight box about two feet square, with half of the top hinged and sealed tightly around its edges with rubber insulation. A  $\frac{1}{2}$  inch by  $\frac{1}{2}$  inch screen floor is installed, and below it a drawer about 1 inch deep, covering the full area of the bottom. This, too, is fitted so that it is air tight. The animal is placed in the box and the cyanide crystals, sold under the trade name "Cyanogas", in the drawer. Within a few minutes after it is closed tightly, the container will fill with the fumes given off by the crystals and the animal will be killed almost instantly. CAUTION: When using cyanide gas, the killing box should always be kept out-of-doors and the operator should always stand on the windward side, being particularly careful never to breath any of the gas. Children should be kept away from the killing box.

In another method carbon-monoxide is used. The chinchilla is placed in a box similar to the type used for cyanide, connected by a hose or pipe to the exhaust of a car. If the motor is left running for a short period the animal will soon be asphyxiated. Care should be taken to prevent residual gasoline or oil from working through and getting on the animals. A simple filter or baffle system can prevent this. Killing by this method is also best accomplished out-of-doors, and though the danger to children and bystanders is not so great as with cyanide gas, only those persons killing the animals should be allowed in the vicinity, and the same precautions against breathing the gas should be taken.

#### *Precautions in Pelting*

1. Keep fingers dry at all times by using sawdust freely.
2. Use fine sawdust (preferably hardwood) to absorb oil.
3. Fur at edges of pelt should never be handled. (Always grip the hide from the inside).
4. After a certain area of the pelt has been freed from the body, the flesh side should be covered with sawdust to absorb the oil. Use plenty of sawdust throughout the entire pelting operation, but see that no sawdust gets on the fur at this stage as it tends to become matted into the fur at the edges of the pelt.

#### *Preparation*

Arrange your equipment on a table or bench with a large enough working space and have all tools within easy reach. There should be wire cutting pliers, razor blades and holder, a dull knife, a spoon, a small stiff corn type whisk, dry sawdust, and rags. The table should be high enough to be comfortable and experience will show whether you prefer to use a stool or a chair, or to stand.

With the pliers, cut off the front paws immediately above the pads. In the "open" method, cut off the rear feet just above the knee joint; but, if the "cased" method is to be used, leave the rear feet on and cut through the pelt with a razor blade around the leg just above the knee joint. To avoid unnecessary cutting of the fur, use the whisk to part the fur along the lines where cuts are to be made.

#### *Initial Cut*

The initial cut should be the same in both the "open and the cased" method.



This cut must be correct, because upon it depends the final shape of the pelt, and to obtain the highest price it is imperative that pelts of uniform shape be offered.

With bandage scissors, or a razor blade, make the initial cut in the following manner, remembering that the cut should be just through the pelt and not into the flesh, or bleeding will result. Begin the incision on the inside of the leg at the knee joint; and continue the cut to a point about the center of the front of the leg and horizontally opposite the genital organs. Change the direction of the cut to reach the genital organs by the shortest line. A cut should also be made completely around the organs.

#### *Removing Pelt by the "Cased" Method*

When the animal has been killed, it should be hung up by the hind feet on two spikes or nails approximately 9 inches apart and at a height convenient for working.

*Body* - The initial cut is then made and the pelt worked away, from the hind legs. The next step is to work the pelt away from the base of the tail. The tail bone is then cut off with a pair of pliers leaving the tail connected to the pelt for the time being. It is later removed from the pelt, *after* the pelt is tacked out on the board. Having separated the pelt from the hind end of the chinchilla, douse plenty of sawdust around the exposed flesh to give traction for the next step in the operation, which is to place both hands around the so-far-removed pelt, and with a steady, downward motion, work the pelt down over the body until the front legs are reached.

Now free the right front leg and shoulder area by working the fingers of one hand around the leg and gently working the pelt away with the other until the leg slips out of the pelt. Remove the left front leg in a similar manner.

*Head* - The pelt should now be free from the body, and special care should be taken in removing the head. The skin of the ear can be worked away from the cartilage (muscular and fleshy part of the ear) in much the same manner that the pelt was removed from the legs. It is essential that the cartilage be removed completely from the part of the ears left on the pelt, otherwise this fleshy material will immediately begin to deteriorate and rot the pelt. It may be necessary to use the knife to cut the skin free from the skull. The pelt may adhere rather tightly to the skull since there is very little flesh and virtually a skin-to-bone attachment of the pelt in this area. Bit by bit the skin is crowded away from around each eye, and is then cut free at the juncture of the eye-lids and inner tissue of the eye. The natural openings of the eyes and ears should be left to form the border of necessary holes in the pelt. Advantage can then be taken of the increased strength of tissues at this point and the stress of shrinking that occurs in the drying process will not be exerted on raw, cut edges in the center section of the pelt.

The whisker pads of the jowls are next. The bristly whiskers have exceptionally deep roots that are embedded in thick tissue. These are cut loose and the skin is worked down towards the tip of the nose, and the edge of the upper lip. Again the knife is brought into use, to complete the removal of the pelt from the head.

#### *Removing Pelt by "Open" Method*

Place the dead animal on the table, on its back, and gently spread the legs apart for easier manipulation during the pelting operation. Having cut off all the feet as described under the heading "Preparation", proceed to make the initial cut. The next step is to cut the pelt in a straight line from the lower lip of the genital organs.

*Body* - Separate the pelt from the body on the right side. Always try to press the carcass away from the skin in a kneading action with the fingers rather than pull the skin off the carcass. REMEMBER - USE PLENTY OF SAWDUST. Pull the



carcass away from the skin, NOT the skin away from the carcass. Work the hand around the carcass.

Now free the right front leg and shoulder area by working the fingers of one hand around the leg and gently work the pelt away with the other until the leg slips out of the pelt. Next, withdraw the right rear leg in a similar manner. Remove the pelt from the left side of the body and legs in the same way. A portion of the pelt will usually still be adhering to the rump and this should be gently separated down to the tail. Work the pelt away from the base of the tail then cut off the tail bone with the pliers leaving the tail attached to the pelt. (The tail is removed from the pelt *after* the pelt is tacked out on the board).

*Head* - The pelt should be freed from the head in the manner already explained under the "Cased" method.

### *Variations*

Whether or not the pelt should be removed from the head area first or last is a matter of opinion. Practice will lead to many short-cuts and variations, consequently only the general principles of this pelting method have been outlined and the rest has been left to the pelter's own initiative. In the majority of cases for instance, it is possible after a little practice to pelt simply by freeing the head and front legs, placing the heel of one hand on the part of the pelt that is removed, and with the other hand grasping the head and gently pulling the carcass away from the remainder of the pelt.

### *Fleshing*

Prior to tacking the pelt down for drying, the skin side must be cleaned by a process known as "fleshing". In this operation, a blunt, scraping tool such as a table knife or large spoon is used to scrape away excess fat and tissue. The main idea is to start a ridge of loose tissue and push it or roll it off the skin.

If the pelt has been removed by the "cased" method, it is usually fleshed on a "fleshing beam". The fleshing beam is about 16 inches long and 3½ inches in diameter at the base. The cased pelt is slipped over the pointed end of the fleshing beam with the flesh side out. When the "open" method has been used, the pelt is laid flat on the table with the flesh side up.

### *Flesh Rump-to-Head*

It is difficult to produce a fleshing roll on a very fat animal because the roll continues to break. While lean animals flesh easily due to absence of fat, animals with white fat flesh more easily than those with yellow fat. Liberal quantities of sawdust should be used throughout the fleshing operation to absorb fats and oils as well as to reduce moisture.

Experience has shown that it is best to flesh from the rump toward the head. While this is not so easy as working from the head toward the rump, there is less possibility of fleshing too close and exposing the roots of the hairs. The tissues that cover the roots of the hair overlap like shingles from head to rump, and getting under one of these sheets of tissue up toward the head or shoulders starts a roll that will expose the root hairs down near the rump.

Tacking the pelt down and trying to flesh it is a hazardous practice since it frequently results in tears and excessive stretching at the nail holes. The best way is to lay the pelt on a smooth, hard surface, hold one end with the heel of the hand, and with a pushing and scraping movement start a roll of excess tissue. The fleshing board must be free from bumps, hard knots, or grainy ridges to prevent irregular pressure and possible snags. Particular care must be given to the areas around the head and the legs, since in the drying process, taint and resultant fur slippage can set in if all excess fat and tissue are not removed.



Loose tissue remaining on the pelt contains oil that will penetrate to the roots of the fur and decrease the value. The excess flesh can be removed when the pelt is tanned, but permanent damage has already been done to the fur. Fleshing is one of the most important factors in producing a fine quality pelt. Since the pelt commences to dry as soon as it is removed from the animal, it is advisable to flesh the most difficult areas first. A good fleshing job is not easy without using a dull knife or spoon as a scraper, but the fingers should be used as much as possible to minimize the ever-present danger of cutting. By working from the rump to the head the danger of cutting is greatly minimized. The accumulated roll is helpful in fleshing the rump area where the flesh clings firmly. As soon as the fleshed area enlarges in size, use the palm of the hand to apply holding pressure over an ever-expanding area. Moving the points of pressure as frequently as possible helps to avoid pulling as well as the development of stained spots on the finished pelt.

### *Cleaning and Shaping the Pelt*

Animals that have been primed properly on a low-fat diet will require little fleshing. Once the pelt is clean, it is ready for tacking and shaping on the pelting board. Preservatives of any kind should not be put on chinchilla pelts. On large ranches or in areas where groups of small ranchers maintain co-operative pelting equipment, large cleaning drums for finishing skins prior to shaping may be available. While still pliant, after fleshing, quantities of thirty or more pelts are placed in a large drum filled with hardwood sawdust. The drum tumbles the pelts and sawdust in a similar manner to that in which certain types of automatic washers tumble clothes to get them clean. In this instance the cleaning agent happens to be absorbent sawdust.

### *Hand Cleaning*

The small rancher may easily clean and fluff up a small number of fleshed pelts by processing them individually by hand. This is done by laying out each pelt, fur side up, and sprinkling with fine, hardwood sawdust, or the dusting compound (Fuller's earth or commercial preparation) regularly supplied to the animal. Care should be taken that adequate ventilation is at hand and that the operator does not breathe too much dust. These compounds (or a blend of them) are then brushed through the fur, using the hands and a coarse, blunt-toothed comb. After the fur is fluffy and free of oils or moisture, the residual cleaning material may be moved by shaking the pelt. When handling a pelt, always hold it by the nose, using the thumb and forefinger.

### *Shaping and Drying*

The first thing that all pelters should keep in mind is that chinchilla pelts are not stretched for drying; they are uniformly shaped and tacked down. This is done because uniform pelts are easier to handle for grading, shipping, and processing. The moist, "green" skins will dry quickly and evenly before decomposition can set in. If they were not spread flat, deep wrinkles or overlapping portions would begin to spoil.

Brass furriers' nails or aluminum push pins serve very well for tacking the pelt down to the board, and if Tentest or similar soft composition material is used, it is not even necessary to use a hammer, since the nails can be pushed into the board like push pins. If a harder surface is used, a small tack hammer and rust-proof tacks prove very satisfactory, but will take a little more time.

### *Arranging and Tacking the Pelt*

Before the pelt is tacked on the board, the ears should be cut at a point about  $\frac{1}{2}$  inch above the head. The ears are of no value to the pelt and are a source of spoilage. The two little protruding tabs on either side of the pelt should also be



snipped off.

The pelt should then be shaken gently to get all the fur fibers lying in the natural direction from head to rump, then it should be placed flesh side up with the nose two or three inches below the top of the drying board. It should be tacked at the nose and at the two other extreme corners. After the remainder of the pelt has been smoothed out so that there are no wrinkles, it should be tacked all the way around the edge, with the two sides symmetrical. Tacks should be spaced about a half-inch apart around the circumference of the pelt, and about three-sixteenth inches to one-quarter inches from the edge. When the pelt dries, the edge curls and thickens slightly, and decreases the chance of tearing the parchment-like skin.

#### *Folding the Legs*

Special attention should be given to the cased front legs so that they will not protrude awkwardly and thus increase the chances of snagging and tearing the pelt. The cased leg must not adhere to the main surface of the pelt or it will increase the chance of taint or spoilage in the resultant creases. Some ranchers have found it advantageous to place a slip of clean white blotting paper between the cased legs and the pelt. To help keep the legs folded inward they should be pressed flat between the thumb and forefinger. At this point the tail should be cut off since it becomes an all too convenient "handle" and during grading and marketing may easily result in a tear. It also makes packing and shipping a problem.

#### *Insect Damage*

After the pelt has dried for 24 to 48 hours (under normal conditions this is usually adequate), the nails may be removed and the finishing touches given each pelt prior to storage. If the pelts are left on the board too long, they become stiff and brittle, making it difficult not only to remove the nails, but also to clean the pelts further. The quicker they are placed in cold storage, the better. This is important not only to protect them from the ever-present chance of spoilage, but also from insect damage. Storage temperatures of 32 to 40 degrees are adequate, but precautions should be taken to shield the pelts from condensation.

#### *Final Trimming*

It is not advisable to trim the nail perforations from the dried pelt, since the slightly rolled edge that results from the drying adds much strength to the cured, but raw skin. A skin of this type will stand reasonably vigorous handling, but no creasing or jabbing with a sharp instrument. The cured skin is tough and durable and ordinarily will not rip easily. Once a tear is started, however, it is like cellophane and is very difficult to salvage. This delicateness is common among many types of raw pelts besides chinchilla, but is fully overcome when the pelt is tanned.

Additional cleansing may be necessary after the pelt has dried. This may be done by brushing some of the animal's dusting compound (Fuller's earth or commercial preparation) through the fur as it is laid flat, fur side up, on a table. A steel-toothed comb and whisk broom will prove helpful in improving the flow of the fur and in picking up stray tufts on the pelt.

### **PACKING FOR SHIPPING**

The raw skins should be placed in pairs, leather to leather or fur to fur, whichever is desired. Each pair should then be wrapped in absorbent tissue and packed snugly in a rigid shipping container. If the pelts do not fill the container completely, crumpled paper or other packing should be added to keep them from jostling in shipment. Wrap the shipping container in heavy Kraft paper and tie it



securely with stout twine.

### REGISTRATION

The National Chinchilla Breeders of Canada is an association of the Chinchilla breeders incorporated under the Live Stock Pedigree Act administered by the Federal Department of Agriculture. The Constitution of the Association provides for established standards of breeding, together with a system of pure-bred registration.

The recording and issuance of registration certificates is conducted on behalf of the Association by the Canadian National Live Stock Records, Ottawa, Canada.

The National Chinchilla Breeders of Canada have adopted within their Constitution, by-laws for the protection and assistance to breeders in the propagation of pure-bred Chinchillas.

For the purpose of registration, definite rules of eligibility are provided and applications are required to be made to the Canadian National Live Stock Records on forms supplied by that organization. All applications must be accompanied by grading certificates issued by an inspector appointed by the Association.



