April 2015

4-h 277 Hamster: Part of the Nebraska 4-H Small Animal and Pet Series

Follow this and additional works at: http://digitalcommons.unl.edu/a4hhistory

"4-h 277 Hamster: Part of the Nebraska 4-H Small Animal and Pet Series" (2015). Nebraska 4-H Clubs: Historical Materials and Publications. 354.
http://digitalcommons.unl.edu/a4hhistory/354

This Article is brought to you for free and open access by the 4-H Youth Development at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Nebraska 4-H Clubs: Historical Materials and Publications by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.
Hamster

Part of the Nebraska 4-H Small Animal and Pet Series

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Leo E. Lucas, Director of Cooperative Extension Service, University of Nebraska, Institute of Agriculture and Natural Resources.

The Cooperative Extension Service provides information and educational programs to all people without regard to race, color, national origin, sex or handicap.
# WORD LIST

<table>
<thead>
<tr>
<th>Chapter I</th>
<th>Chapter V</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. rodent</td>
<td>1. commercial</td>
</tr>
<tr>
<td>2. hamster</td>
<td>2. pouches</td>
</tr>
<tr>
<td>3. 4-H pledge</td>
<td>3. essential</td>
</tr>
<tr>
<td>4. vitamins</td>
<td>4.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter II</th>
<th>Chapter VI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. burrowing</td>
<td>1. handled</td>
</tr>
<tr>
<td>2. hamstern</td>
<td>2. &quot;show how&quot;</td>
</tr>
<tr>
<td>3. Cricetus auratus</td>
<td>3. gestation</td>
</tr>
<tr>
<td>4. nocturnal</td>
<td>4. estrus cycle</td>
</tr>
<tr>
<td>5. domesticated</td>
<td></td>
</tr>
<tr>
<td>6. destructive</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter III</th>
<th>Chapter VII</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. prominent</td>
<td>1. symptoms</td>
</tr>
<tr>
<td>2. nicking</td>
<td>2. insecticides</td>
</tr>
<tr>
<td>3. temperament</td>
<td>3. vigorous</td>
</tr>
<tr>
<td>4. tendency</td>
<td>4. malocclusion</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter IV</th>
<th>Chapter VIII</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. hibernation</td>
<td>1. County Fair</td>
</tr>
<tr>
<td>2. rigid</td>
<td>2. demonstration</td>
</tr>
<tr>
<td>3. trough</td>
<td></td>
</tr>
<tr>
<td>4. excrement</td>
<td></td>
</tr>
<tr>
<td>5. creosol</td>
<td></td>
</tr>
<tr>
<td>6. ventilation</td>
<td></td>
</tr>
<tr>
<td>7. excelsior</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter IX</th>
<th>1. genetics</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. respiration</td>
<td></td>
</tr>
</tbody>
</table>
Raising hamsters is a marvelous project for a young boy or girl without facilities for large animals. A hamster project allows 4-H'ers to experience the joy of owning an animal with a minimum investment.

Your 4-H'ers will learn the principles of nutrition, care, grooming, and breeding if a litter is raised. All that is needed is a small cage, a place to keep them inside, feed to keep them growing, a willingness to make the project a success and your help as a parent.

References:
- Visit your local library.
- Visit your Extension Office and ask for U.S.D.A. Leaflet #250 Hamster Raising.
- Visit your local stores's pet departments and look at the various books about Hamsters.

This publication was prepared by James Marquand, assistant state leader, 4-H, University of Ohio.

The Cooperative Extension Service gratefully acknowledges the use of the following publications in the preparation of this circular: "PETS," The University of Minnesota, Agricultural Extension Service; "Active Ideas," Iowa State University, Cooperative Extension Service; and the many 4-H'ers throughout Ohio who helped to evaluate the pilot project. Our thanks also to Petland for cooperation in obtaining pictures for this publication.
CHAPTER 1—POCKET PET

When you're young and sort of lonesome, it's a good feeling to have a pet. Tiny animals, small enough to carry around in your pocket or on your shoulder, make especially good companions.

You can feed a "pocket" pet, talk to it, and feel you've got your very own, very special friend.

This "POCKET" pet, prized by so many children (and by some adults, particularly shut-ins) may be a white, hooded, or other variety of pet rat or mouse. Or it may be the most popular pet rodent, a hamster.

Forty years ago, hamsters were unknown. These soft, little animals have friendly and curious habits, golden brown fur, large black eyes, short legs, and even shorter tails. Hamsters are attractive, fast-growing, clean, easy to house, simple to feed, and interesting to watch as they mature and raise their families. Except for occasional squeaks when frightened, hamsters are quiet, odorless, and generally healthy.

By making hamsters a 4-H project, you will learn how to feed, water, and care for them. You will also have fun and make new friends by belonging to a 4-H club.

**You are a 4-H'er**

4-H club work is the youth arm of the Cooperative Extension Service. In Nebraska, 4-H is organized through the cooperation of the United States Department of Agriculture, The University of Nebraska-Lincoln, and your local Extension Service. 4-H programs and activities are open to all boys and girls between 9 (or in the 3rd grade) and 19 years of age, regardless of race, color, creed, or national origin.

One of the first things you will want to learn is the 4-H Club Pledge.

"I Pledge:

"My HEAD to clearer thinking
My HEART to greater loyalty
My HANDS to larger service
My HEALTH to better living
for My Club, My Community, My Country, and My World."

**Project Requirements**

The purpose of a 4-H hamster project is to give you an opportunity to learn and care for an animal. It will be your responsibility to feed, water, and care for your hamster. You may wish to obtain at least one female hamster and raise one litter during the year.

It is very important that you read and answer the questions in this book. Talk with your advisor about what you should exhibit at the fair.

As a 4-H member, you will want to try to attend all of the meetings of your club. Be on time for meetings and other club activities. Take an interest in your club and in any of the county activities, such as 4-H camp. A good 4-H member strives toward the 4-H motto: TO MAKE THE BEST BETTER!
QUESTIONS FOR CHAPTER I

What is the name of your 4-H Club? __ __ __

Who is your 4-H Advisor? __ __ __ __

Who is your Extension Agent? __ __ __ __

Have you met your Extension Agent? __ __ __ __

Where is his office located? __ __ __ __

Do you know the 4-H Pledge? __ __ __ __

4-H Camp is Fun!
CHAPTER II-FINDING OUT ABOUT YOUR PET!

In 1930, Professor Aronin, a scientist from Hebrew University, was studying and collecting small native animals of Syria. Syria is a country at the eastern end of the Mediterranean Sea located north of Israel. One day after watching a hamster playing and burrowing in the sand, the scientist decided to dig into the sand to find out more about the hamster's living habits.

Professor Aronin had to tunnel 8 feet before he found the mother and her nest. The hamster had 12 babies which were removed, caged and taken back to the Hebrew University. When the hamsters arrived in Jerusalem, all but three had either died or escaped. The three little babies were well cared for and grew rapidly. It was soon found that two were females and one was a male. Within 4 months, one of the females gave birth to a litter of eight.

More hamsters were raised. As the animals became more plentiful, they were used by scientists in the laboratory. Some were sent to England in 1931, and to the United States in 1938. All of the hamsters now used as pets or laboratory animals are offsprings of that one litter of eight.

The name "Hamster" is derived from the German word, *hamstern*, which means to hoard or to hide. This describes what hamsters are like, as they store large amounts of food in their cheek pouches. When cheek pouches are full, the animals appear to have mumps.

The golden or Syrian hamster (*Cricetus auratus*) is a rodent belonging to the family *Cricetidae*. Members of this rodent family are found in Europe, Asia, Africa, and America. The hamster is reddish gold in color, with the stomach area of the body nearly white, and with black markings on the head and cheeks. Eyes are black. The golden hamster has a short stubby tail and well-developed cheek pouches in which it transports grain and other food. The adult animal is about 6 inches long. A larger form, the black hamster, is about 9 inches long and black, except for the feet, tail, nose, upper lip, and margins of the ears, which are covered with white hair. Behind the ears and near the tail there is a reddish tinge. The black variety is found in Europe as far west as the Rhine River. It is more fierce than the Syrian hamster and has not been domesticated for laboratory use.

Hamsters in their native habitat burrow in the ground and make a main tunnel with numerous side chambers in which food is stored. They are one of the nocturnal animals, which means they sleep during the day and are active at night.

In Europe, hamsters often cause heavy damage to crops. The tiny rodent will stuff its cheek pouches full of grain and hurry to its burrow, where with a quick movement of its front paws, it empties the grain into a storage pile. Sometimes more than 100 pounds of...
grain have been found in the burrows. This is why the U.S. Department of Agriculture has issued the following warning:

CAUTION

Breeders of hamsters are cautioned to prevent the escape of any of these animals. Such release under favorable conditions might establish the hamster in the wild and thereby create a serious rodent problem, since they are destructive to growing crops, gardens, and other agricultural enterprises. Purchasers should be aware of the danger of escapes, and make every effort to prevent the establishment of a wild colony.

QUESTIONS FOR CHAPTER II

Hamsters are rodents. True False

What is the scientific name for hamster?

They originally came from

Who brought back the first hamsters to the Hebrew University? When?

List two (2) purposes for raising hamsters today:
CHAPTER III—CHOOSING YOUR HAMSTER

Try to purchase your hamster from a reliable source. The wisest thing to do is to select a healthy young animal and train it yourself. Older animals that have been mistreated are often ill-tempered and may be difficult to handle.

Look for an animal between 5 and 8 weeks old. The signs of good health are: soft, silken fur, plump body and prominent, bright eyes. Avoid selecting long or skinny hamsters. If at all possible, buy one that is kept in a separate cage. Many pet stores keep animals all together. In selecting one from a group, you may have a pregnant female. Take time in making your selection. Examine ears, nose, eyes and teeth. Sometimes hamsters bite so they should be handled carefully. The inside of the ears of a young hamster will be covered with tiny white hairs. As the animal becomes older, these hairs gradually disappear until the ears are hairless and shiny.

Be sure there are no patches of fur missing. This may be a sign of a disease called mange. Avoid animals with runny noses, watery eyes, or a wet tail.

Some breeders mark their hamsters by "nicking" the ears. Also, the ears may be nicked by the hamster being in a fight. Regardless of the cause, the marks have no ill effect. It is generally considered best to buy one hamster at a time for two may fight. These animals are used to living by themselves and do not need companionship. Therefore, if you only want a pet and do not plan on raising any litters, do not feel that more than one is necessary. If you give it lots of love, it will be perfectly happy to live by itself. However, if you do buy a pair, be sure that you have two cages so they can be separated after they are 8 weeks old.

Males seem to make nicer pets, due to their temperament. As they grow older, they still remain tame and in a good mood. Females often have a tendency to grow less friendly, especially if they become pregnant. During pregnancy they are often snappy.

Ask the dealer to take the hamster from the cage and place it on a table so you can watch it move around. Place your hand near the animal and see if he becomes nosy. Do not reach down from above and suddenly pick him up. He may become frightened and bite.

After making your final decision which one you will buy, carefully take him home in a wire cage or box. Be sure you have his new home ready for him.

QUESTIONS FOR CHAPTER III

Describe your hamster: ____________________________

Do you have a male or female? ________________

What did you name it? ________________

Did you take a picture of your Pet? If so, place it here:

Name ____________________

Date ____________________
Hamsters should be kept in a building with a temperature between 55° and 80° F. Adult animals can stand temperatures considerably lower, but the newborn hamster will die at lower temperatures. A drop of temperature to 45° causes the animals to go into a state of hibernation. They sleep, the body becomes rigid, and the body temperature falls below normal. If this should happen to your pet, do not become frightened and destroy him thinking he is dead. The hamster may feel cold to the touch and lie still in your hand. Warm him gently with your body heat. Carry him around with you, cupped in your hands. When he begins to move, feed him warm milk from a medicine dropper, one drop at a time. Pick him up from time to time, warming and rewarming him. When he revives and you return him to his cage, cover the cage with heavy cloth.

Check into the prices of metal cages. Compare the cost of materials; it may be cheaper to buy a ready-made cage than to make one. A bird cage makes an excellent cage.

Hamsters should be kept in metal cages, or in wooden cages protected on the inside with hardware cloth to prevent animals from gnawing through. A surplus aquarium makes a very satisfactory cage. Cages may vary in size according to the number of animals to be kept together. A cage 12 inches wide by 15 inches long and 12 inches high will comfortably house one hamster. A cage 35x25x15 inches will accommodate 8 to 10 animals. At least one side, or the door of the cage, should be of hardware cloth to admit light and provide a means of exercise by climbing. The floor of the cage may be either the self-cleaning type or solid. In the self-cleaning type, the floor is made of No. 6 hardware cloth to allow the droppings to fall through onto a sloping floor. Along the lower edge of the floor is a trough for catching the droppings and liquid excrement. The slope of the floor should be not less than 30 degrees to allow materials to slide from it into the trough. If the floor of the cage is solid, sawdust, wood shavings, ground corn cobs, peanut hulls, or other clean absorbent material should be used. Wood shavings often can be obtained from a local lumber company. The absorbent material should be about 1 inch thick on the floor. Place aluminum foil under cage to protect shelf or table.
Very likely the hamster will use one corner of his cage for his bathroom. This corner should be cleaned each day and new litter added. Once a week the cage should be scrubbed with soap and water. Wait until it's completely dry before putting pet back in. A wet cage can cause illness. Frequent disinfection with any of the standard creosol disinfectants will lessen danger of disease and help keep down odors. Good ventilation, plenty of sunlight, plenty of absorbent material to take up the liquid excrement, and regular and frequent cleaning all help to reduce odors. A gravity water bottle usually can be purchased at the store that sells hamsters. It should be provided with a \(\frac{1}{4}\) inch glass tube 4 to 5 inches long and hung on the outside of the cage. Be sure your pet always has plenty of fresh water.

If light enters the cage from the front only, nest boxes may not be necessary for the young. However, if the cage is more open, admitting considerable light, it may be advantageous to have nest boxes. These should not be less than 6 inches square with an opening large enough to admit the pregnant female. The edges of the opening should be tinned. Excelsior, straw, hay, or shredded paper may be used for nesting material.

Many purchased wire cages will come equipped with an exercise wheel. Your pet will spend a lot of time playing on the wheel.

Keep the cage on a shelf or table and out of drafts. Never place the cage in direct sunlight as the extreme heat in summer could kill your pet.

**QUESTIONS FOR CHAPTER IV**

Describe your cage

Where do you keep the cage

Describe your pet's waterer and feeder
CHAPTER V—FEEDING YOUR PET

The simplest food for your pet is commercial hamster food which can be purchased at most pet stores or in the pet department in your local store. An adult hamster will require about a half ounce of food each day.

The natural food of the hamster consists of grains, seeds, and vegetables. A diet of corn, oats, or wheat mixed with some of the prepared dog food is also satisfactory.

Feed the dry feed in a dish which can be removed for cleaning. When the hamster is active in the evening and you feed him he will begin to stuff the food into his cheek pouches. As soon as the pouches are full, he will disappear to hide his food, quickly returning to get another load. When you clean his cage you will find his stored-away food. Remove any that is spoiling, but otherwise replace it where you found it.

Small amounts of lettuce, carrots, celery and other vegetables and fruits, but no citrus fruit, may be fed also. Citrus may cause a stomach upset. Dry bread also may be used.

You may find your animal will prefer certain vegetables, just as you may prefer certain ones. When giving a new vegetable, be sure to give only a small amount until your pet becomes accustomed to it. Many of the above foods are used by your family and may be shared with your animal.

Always remove and throw away any of the green vegetables left at the end of the day. Your animal may become ill if he eats decayed vegetables.

The vitamin requirements of hamsters have had some study. Vitamins A, D, E, and K, and some of the B group are essential. Lack of vitamin E will result in death in 4 to 18 weeks. Most prepared hamster feed is well balanced containing the essential vitamins and minerals.

Just as you obtain yours, the hamster will obtain many of his vitamin and mineral requirements from the vegetables and fruit that he eats. Foods which are deep green, deep yellow, or orange in color are very rich
in vitamin A. The deeper the color, the more vitamin A. Lettuce, broccoli, spinach, and carrots are just a few of the vegetables which are good sources of vitamin A. This vitamin is needed for growth, normal vision, and healthy condition of the skin and other body surfaces.

The other vitamins listed are just as important to your pet as they are to you. It is just as necessary that your pet eat a balanced diet as it is for you.

Water is essential at all times. Lack of it will cause hamsters to lose weight and eventually die. However, when plenty of fresh greens are provided the animals can get along with less water.

Make sure the water bottle is freshly filled. The bottle should be washed, disinfected, and thoroughly rinsed at least once a week.

If you give fresh milk to a pregnant female be sure that you do not allow the milk to sour. Sour milk and spoiled food can cause your pet to have a "stomachache".

QUESTIONS FOR CHAPTER V

What do you feed your animal? ____________________

What vitamin is provided by green foods? ____________________

What vegetable does your animal like best? ____________________

What is your favorite vegetable? ____________________
Your hamster is really yours. He depends on you to feed and care for him. The more attention you give him, the more fun you can have with him.

You should have little trouble taming your hamster, but he must be handled frequently if he is to remain tame. Hamsters will usually bite anything if they are awakened suddenly. Therefore always be certain that your pet is awake before you reach for it. The best way to tame him is to stroke his back quietly without trying to pick him up. When he gets used to your touch, gently slide your hand under his body and lift him. Hold him firmly in your hand and offer him something to eat.

When your hamster learns to trust you, he will climb over your arms, legs, and shoulders and into your pockets. You will be able to lift him whenever you wish. Always remember, handle hamsters gently. If they are squeezed or grabbed too tightly they will struggle to escape. Never tease or frighten them. Also, always protect them from dogs and cats. Many times your friends will want to "Show How" to pick him up and carry him. Always treat animals with kindness. Move slowly around them so they do not become nervous.

Tricks

As you handle your pet, sometimes put a piece of his favorite food in your hand so that he will get in the habit of coming to you. Whenever he does something that you like, give him a special treat (peanut, cashew or other nuts.)

To get your pet to sit up—hold the "special treat" higher than his head. You may have to support him with one hand. Teaching hamsters tricks takes a lot of time and patience. Don't ever try to teach him more than one at a time. When the trick is finally learned, begin another one, but always repeat the trick he knows as you teach him new ones.

In time he may stand and walk on his hind feet, climb a ladder, go down a slide, turn in circles while standing (dancing). As you work with him think of various tricks you might wish to teach him. Read books about hamsters at your library and pet shop. Remember—take plenty of time and patience, always reward him with a special treat and never mistreat him.

Breeding

If you decide to raise hamsters be sure your female is at least 8 weeks old. Many owners do not breed them until they are 3 months old. At this age, the hamster will be better able to stand the strain of raising her family.

Remember, the gestation (pregnancy) period is only 16 days. A single female may give birth to from 30 to more than 100 young a year, and before the year is over many of these young will be having young of their own. Think of how many cages and how much feed you would need if you went into the business of raising hamsters. Unless you are well-equipped for the business, it is best to keep the male and female separate and only breed them when you have a market for their young.

The hamster will breed throughout the year, but the most litters are produced between May and November. A female rarely produces young after the age of 1 year.

The female's estrus cycle (period of sexual heat) repeats every 4 days. Hamsters usually mate in the evening. Since many times the female will fight the male the following directions should be followed: (1) For several days, place cages close together so the animals will see each other. (2) They are nocturnal animals and prefer to mate at night.
CHAPTER VI—CARE AND OTHER MANAGEMENT TIPS

Your hamster is really yours. He depends on you to feed and care for him. The more attention you give him, the more fun you can have with him.

You should have little trouble taming your hamster, but he must be handled frequently if he is to remain tame. Hamsters will usually bite anything if they are awakened suddenly. Therefore always be certain that your pet is awake before you reach for it. The best way to tame him is to stroke his back quietly without trying to pick him up. When he gets used to your touch, gently slide your hand under his body and lift him. Hold him firmly in your hand and offer him something to eat.

When your hamster learns to trust you, he will climb over your arms, legs, and shoulders and into your pockets. You will be able to lift him whenever you wish. Always remember, handle hamsters gently. If they are squeezed or grabbed too tightly they will struggle to escape. Never tease or frighten them. Also, always protect them from dogs and cats. Many times your friends will want to handle your hamster. You may want to "Show How" to pick him up and carry him. Always treat animals with kindness. Move slowly around them so they do not become nervous.

Tricks

As you handle your pet, sometimes put a piece of his favorite food in your hand so that he will get in the habit of coming to you. Whenever he does something that you like, give him a special treat (peanut, cashew or other nuts.)

To get your pet to sit up—hold the "special treat" higher than his head. You may have to support him with one hand. Teaching hamsters tricks takes a lot of time and patience. Don't ever try to teach him more than one at a time. When the trick is finally learned, begin another one, but always repeat the trick he knows as you teach him new ones.

In time he may stand and walk on his hind feet, climb a ladder, go down a slide, turn in circles while standing (dancing). As you work with him think of various tricks you might wish to teach him. Read books about hamsters at your library and pet shop. Remember—take plenty of time and patience, always reward him with a special treat and never mistreat him.

Breeding

If you decide to raise hamsters be sure your female is at least 8 weeks old. Many owners do not breed them until they are 3 months old. At this age, the hamster will be better able to stand the strain of raising her family.

Remember, the gestation (pregnancy) period is only 16 days. A single female may give birth to from 30 to more than 100 young a year, and before the year is over many of these young will be having young of their own. Think of how many cages and how much feed you would need if you went into the business of raising hamsters. Unless you are well-equipped for the business, it is best to keep the male and female separate and only breed them when you have a market for their young.

The hamster will breed throughout the year, but the most litters are produced between May and November. A female rarely produces young after the age of 1 year.

The female's estrus cycle (period of sexual heat) repeats every 4 days. Hamsters usually mate in the evening. Since many times the female will fight the male the following directions should be followed: (1) For several days, place cages close together so the animals will see each other. (2) They are nocturnal animals and prefer to mate at night.
Observations in laboratories have shown that most mating occurs between 9 and 10 p.m.

(3) One evening place the female into the male cage (NEVER put the male into the female's cage.) She may fight to protect her home and kill the male. When handling the animals at this time, it is best to wear gloves. In case of a fight you can separate the two easily and remove the female.

(4) Mating should follow soon after they are placed together and the female should be removed after an hour or two. If the pair fights and continues to fight, remove the female until the next evening. You should try each evening placing the female with the male until they mate. Since the heat cycle is 4 days, mating should occur within a week after the first attempt.

(6) Usually when the female is in heat, she will "freeze" as soon as she is placed in the male cage, with her tail and hind quarters slightly higher than her shoulders, and stare straight ahead. Make a record of the date when mating takes place. The young will be born 16 days later, usually at night. Mark the date on a calendar and check.

If you have a scale that will weigh your female accurately, weigh her daily and keep a record. Her weight may nearly double as the young develop within her body. The number of young per litter averages seven, although as many as 12-13 may be born.

During the time of pregnancy the female does not require special care. It is wise not to handle her too much after the 12th day and always be extra careful that you don't drop her. You may wish to give her a small dish of milk along with her regular food. Keep this up until after the young hamsters are able to take care of themselves.

The female will build her own nest. Give her scraps of cloth, tissues, paper, or cotton to line her nest. Don't handle or disturb the mother for several days after her babies are born. Don't even try to look at her nest, as the mother often resents the scent from your hands. Sometimes, a frightened mother may kill and eat her litter, especially if it is her first. The first 9 days after birth the family should be left alone except for feeding. After this you may resume cleaning the cage and caring for your hamster as you did before her family arrived.

The baby hamsters are born naked, blind, and very tiny. A litter of eight to twelve weighs less than one ounce. Hamsters grow rapidly and within 3 days, the skin begins to darken and hair begins to appear. Since hamsters are born with teeth, they will begin to nibble on solid food when they are 8 days old. At 2 weeks of age each one will weigh about an ounce and they can be weaned (taken from their mother). The mother should be allowed to rest at least a week before remating.

As the hamsters grow it will become easier to determine which are the males and females and the sexes should be separated before they are 35 days old. After weaning, handle the animals often so they will become tamed. Lift and hold them so you can examine the undersides. As they grow older you should begin to notice a difference in shape of the rear of the body. Around the 35th day, you should definitely see a difference. The testicles of the male, right at the base of the tail, give the body a tapering shape. The female is shorter and more rounded at the back, and not as brightly colored as the male.
QUESTIONS FOR CHAPTER VI

What tricks did you teach your pet?

Did you raise a litter?

If so, how many were in the litter?

The gestation period for hamsters is ___ days.

What did you do with your baby hamsters?

CHAPTER VII—YOUR PET’S HEALTH

Your pet must be kept in a dry cage and out of drafts. Hamsters can catch some human diseases such as the common cold. The animal’s symptoms may be like yours when you have a cold—runny nose, sniffles, and “just not active.”

If this happens, clean the cage, put in new dry bedding, and make sure the cage is in a warm spot. You may want to put a newspaper over the cage to be sure it is out of a draft. Be sure the water is fresh and give your pet a couple of drops of cod-liver oil on a piece of bread. Clean the cage after he has recovered.

Be sure that wild mice or birds cannot get near the hamster cage as they often carry diseases and parasites. If you ever notice parasites such as fleas, lice or other insects, use an insecticide that can be used on cats. Do not use insecticides that are used on dogs.
Always observe your pet in the evening. In the evening, a healthy hamster will run around his cage, play on his wheel, look for food, clean his fur, climb on the cage wall, and carry his short tail erect. Listlessness, no appetite, dull eyes, loss of weight will mean he is either sick or becoming ill. Check his teeth to be sure they are not too long or broken, causing him to be unable to eat. Remember, always give your pet some hard food such as rabbit pellets or dog biscuits or put a piece of hardwood such as oak in his cage.

Droppings also tell how your pet feels. Loose, watery droppings may mean too many fresh vegetables and fruits. Hard dry droppings indicate not enough.

Cage paralysis is due to improper feeding, mainly lack of vitamin D, and to lack of sufficient exercise. Symptoms are inactivity of the animal, inability to raise the head, and the manner in which it crawls along, pushing its nose along the floor of the cage. Falls from the cage when the door is open or from the hand while being handled may be fatal.

Females may die giving birth, due to malformation of the pelvis. This is common with runty females. Only well-developed vigorous animals should be used for breeders.

Broken teeth resulting from falls or from biting the wires of the cage may cause inability to eat and consequent starvation. Unbroken teeth may be clipped so that they will mesh evenly and enable the animal to eat. Malocclusion frequently prevents the teeth from meeting properly and wearing down evenly. It may be necessary to clip the teeth occasionally. Animals with this deformity should not be used for breeders, as the condition often is inherited. Too much growth of the teeth may be due to a lack of hard food and something upon which to gnaw.

Is your club planning a tour this year? Plan on visiting the local veterinarian. Find out what he does and how he likes his career.

TEN RULES TO FOLLOW

1. Clean cage and equipment at least once a week.
2. Disinfect cage and equipment.
3. Be sure cage is dry after cleaning.
4. Keep animals away from drafts.
5. Feed your animal a balanced diet of dry and green food.
6. Remove all uneaten green food.
7. Provide for clean fresh water.
8. Provide adequate light and ventilation.
9. Do not handle pregnant females too much and avoid disturbing the mother for at least 9 days after the babies are born.
10. Always check for parasites, such as lice and fleas; if found treat your pet immediately with an insecticide used for cats.

Give your hamster a piece of hardwood to gnaw on.
**QUESTIONS FOR CHAPTER VII**

How often do you clean and disinfect your animal pen and equipment? 

Did you have any disease problems this year? 

If so, what were they? 

How would you treat your animal if you found fleas on him? 

**Expenses**

<table>
<thead>
<tr>
<th>Kind of Feed Fed</th>
<th>Date of Purchase</th>
<th>Amount</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Feed Cost: 

**Income—Sale of animals during the year**

<table>
<thead>
<tr>
<th>Date</th>
<th>Total Income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CHAPTER VIII—GETTING READY FOR THE SHOW**

Since hamsters must be kept in a warm place, you need to check with your 4-H advisor as to the date of your County Fair and what you should exhibit. If the show is in September or October, find out where the hamster will be exhibited. Then you can decide whether or not you want to exhibit your pet. Perhaps in place of exhibiting your pet you may wish to make a poster telling about your project.

If you do exhibit your hamster, brush him often before the fair and keep the pen extra clean. Never exhibit tiny babies at the fair because of disease problems.

Be prepared to tell the judge about your pet. The judge may ask how old it is, whether it is female or male, whether you raised a litter, where hamsters came from, what the word hamster means? He may ask you to show him how you can handle your pet.

Your club may also decide to have a “Show and Tell” night. This is when all the members show their 4-H projects to Moms, Dads, Aunts, Uncles, Grandparents, and your friends. This can be a lot of fun. Talk it over with your advisors and perhaps you could have your show at a school, parking lot, bank building or community hall. Some of the club members may want to “Show How” to handle their animals, or tell something about their projects. Why not plan to have a good time by having some singing and plenty of refreshments.

At some of your 4-H meetings you may wish to help the recreation leader and lead some games. Here are a few:
Animal Upset

Arrange chairs in a circle. There should be enough chairs for all players except for the person who is "it". The group leader goes around the circle and whispers a different animal (dog, skunk, cow, cat, etc.) in the ear of each youngster. They are not to tell anyone else what kind they are. Then tell the whole group all the kinds of animals there are in the group. The person who is "it" stands in the middle of the circle and calls out two or more different animals. Those named try to exchange chairs before "it" grabs a seat.

The person left over is now "it".

What Animal?

Find pictures of many kinds of animals or write the names of animals on slips of paper. Pin a picture or name on the back of each member, but don't let him see it.

Now members go around to others in the group and ask questions which can be answered by only a "yes" or "no" until they guess what kind of animal they are. They might ask: Do I live in a house? Do I live in the jungle? Am I small?

Animal Scramble

Write the scrambled words on a blackboard or large sheet of paper for all members to see or give each youngster a sheet with the words.

Here are some you might try: letruts (turtles) disbr (birds) tacos (cats) sodg (dogs) mestrahs (hamsters) bsigler (gerbils) bibstra (rabbits)

Animal Rhythm

Group sits cross-legged in circle. Instead of counting off, each member selects an animal in alphabetical order: aardvark, buffalo, crow, dolphin, etc.

The beat is the same as in the regular game of "Rhythm": all slap both knees twice, clap twice, and snap first right fingers, then left. With the first snap, the leader names his animal and with the second snap, another animal in the group. The person with the named animal continues with his animal on the first snap and another with the second.

The rhythm picks up speed until someone forgets what animal he is, names an animal not in the group, or otherwise messes up the rhythm. That someone then drops out and his animal cannot be named again. Continue until the group drops to 4 or so in size.

Dogs and Dog Catchers

Number off into two teams. One team becomes the "Dogs," and the other "Dog catchers."

The "Dogs" huddle and decide what breed they will be: poodle, German shepherd, St. Bernard or whatever.

Then the "Dogs" line up about 20 paces from the "catchers." Slowly they walk toward the "Catchers" as the "Catchers" try to guess what they are.

When the "Catchers" hit the right name, the "dogs" turn and try to escape behind the home line. Any caught become "Catchers." Next the "Catchers" become "Dogs", pick a name, and the game continues.

QUESTIONS FOR CHAPTER VIII

When is your fair? ____________________________

What do you plan to exhibit? ____________________________

Did you have a "Show and Tell" night? ____________________________ . If so, what did you do to help with the program? ____________________________

______________________________________________________
CHAPTER IX—WHAT’S NEXT

You have found that the hamster is very easy to care for and is a very likeable animal. Some hamsters, with proper care will live 2 to 4 years.

It is important that you don't raise more animals than you can sell, either as pets to your friends, or to laboratories. Remember the warning that the U.S. Department of Agriculture has issued (page 5). DON'T TURN ANY EXTRA HAMSTERS LOOSE.

What to do Next—There are more than 170 different 4-H projects in which you can enroll. For example, one project might be Veterinary Science I. This project can be related to your hamster project. In Veterinary Science I, you will observe the behavior of your animal, take his heartbeat, the respiration rate, and make other such observations.

You may prefer to make up your own pilot project, such as learning more about breeding hamsters. The study of breeding is called Genetics and is very challenging. At times there have been various colors appearing in the Golden hamster. Today, you can find several colors for sale. Albino, Spotted, Cream, Amber Gold and White Belly, are only a few that have been introduced in the last 20 years.

Talk with your science teacher at school or visit the library to learn more about Genetics. If you are raising hamsters and an unusual color shows up in one of your litters, report it at once to someone who is interested or is raising hamsters.

As you continue in 4-H be sure and take part in the special activities, such as 4-H camp, “Show How”, or what is sometimes called Demonstration Day in the county. There is also the Safety Talk event, plus many others.

“SHOW HOW” IDEAS

- How to handle the hamster
- How to groom the hamster
- How to prepare the equipment necessary to care for this hamster
- How and what to feed the hamster
- How to examine and observe the hamster to tell whether it is healthy
- How to train the hamster
- How to determine the proper time for and how to place the hamster in a breeding situation
- How to prepare to care for a pregnant hamster and the offspring
- How to keep an expense record of caring for your hamster
- How to do research at the library so you may learn the life history of your hamster and what the life history includes
- How to exhibit the hamster for show
- How to prepare the pet and carry it when traveling

There are many more ideas for possible “show how’s”. Information may be gathered at a library by checking out books on hamsters, visiting a veterinarian at a small animal clinic, visiting someone else who raises or has your kind of pet, or checking with the Extension office.

Discuss what you would like to do with your parents, 4-H Advisor, and others.

—4-H IS FUN—
WELCOME TO 4-H

In 4-H, you will have fun as you learn. You will enjoy 4-H meetings, activities, and club work. You will learn to know more about many things; and you will learn how to do many things better and easier.

Four-H work is an important part of the Cooperative Extension Service, which helps Nebraska families through educational programs in these areas:

- Agricultural Industry
- 4-H and Youth
- Home Economics and Family Living
- Community and Natural Resources Development

Your local Extension agents are faculty members of the University of Nebraska. They bring the latest knowledge and research to the people of Nebraska.

Your advisors are volunteer leaders in the educational programs of the Cooperative Extension Service.

You and your family can get more information about Cooperative Extension work. You’ll find a friendly welcome there.

The 4-H Pledge

I pledge:
My Head to clearer thinking,
My Heart to greater loyalty,
My Hands to larger service,
My Health to better living, for
My Club, my Community, my Country, and my World.

4-H programs, projects and activities conducted by the Nebraska Cooperative Extension Service are available to boys and girls on a non-discriminatory basis without regard to race, color, creed or national origin.

The 4-H Motto

To Make the Best Better

The 4-H Colors

Green and White