This manual is a reprint, with minor changes, from an Ohio State University Cooperative Extension Service manual on this subject. We are indebted to Ohio State University for granting permission to reprint this material.

Michigan 4-H - Youth educational programs and all other Cooperative Extension programs are available to all without regard to race, color, or national origin. • Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Gordon E. Guyer, Director, Cooperative Extension Service, Michigan State University, East Lansing, MI 48824.

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POCKET PETS
Guinea Pigs

Guinea pigs can be good friends. They are not overly smart, but they are far from dumb. They will quickly learn to greet their owner’s footsteps with welcoming whistles. In return, you will need to keep the cage clean and provide fresh food and water daily. For such a small amount of work, you can have a healthy, active companion.

4-H

4-H projects are designed for youth groups by members of the Cooperative Extension Service. Information concerning projects is available to your group from your county Extension Service office.

The 4-H Pledge is:

I pledge:
My HEAD to clearer thinking,
My HEART to greater loyalty,
My HANDS to larger service, and
My HEALTH to better living, for
My club, my community,
my country, and my world.

Project Requirements

The purpose of the 4-H Pocket Pet project is to give you an opportunity to learn about and care for an animal. It will be your responsibility to feed, water, clean, and play with your pet.

To learn how to care for your guinea pig, it is important to read this book. To answer the questions in this book, you will need to read it thoroughly and talk with your fellow members, your group leader, and any local resource people available.

As a 4-H member, you will want to try to attend all of the meetings of your group; and you will want to take an interest in and help to plan activities for the group.

Questions

What is the name of your 4-H group?

Who is your 4-H leader?

Who is your Extension 4-H - Youth agent?

Have you met your Extension 4-H - Youth agent?

Where is the 4-H office located?

Do you know the 4-H Pledge?
For almost 100 years, guinea pigs have been used in laboratory work. They are used for special tests to learn about diseases, medicines, and drug effects. Many food companies keep guinea pigs for studying the vitamins in their products. The needs of their bodies are much like those of human beings.

The guinea pig is a rodent with a short, heavy body, short legs, and no tail. The male is called a boar and the female a sow.

A good joke about guinea pigs is to say to someone, "Pick up a guinea pig by the tail, and its eyes fall out." Upon attempting this, one quickly sees that there is no tail.

The scientific name of the guinea pig is *Cavia porcellus* or restless Cavy.

Guinea pigs are relatives of a South American animal which still lives wild in Peru. Although not a real pig, these animals were called pigs because they grunt and squeal. The South American Indians raised them for their meat. Sailors brought them back to Europe in the early 1500's. When they were brought back to England, they were sold for a guinea (an old English coin no longer made) and soon became known as guinea pigs.

No one knows for sure when guinea pigs were first used for scientific purposes. Before 1870, their main use in Europe and the United States was for pets. From 1870 to 1890, many guinea pigs were used by scientists like Louis Pasteur who studied rabies and by other scientists who studied the causes of diseases and ways to fight them.

In the early part of the 1900's, interested people in England began growing guinea pigs for show animals. Guinea pigs started in the United States as show animals at about the same time. Today there are many county, state, and national guinea pig shows held, usually with a rabbit association show.

At present, guinea pigs are popular as pets all over the world. They are good test animals and also very popular as show animals.

Questions

Guinea pigs are rodents? True____ False____

What is the scientific name for the guinea pig?__________________________________________

Where did they originally come from?____________________________________________________

____________________ introduced them in Europe in the 1500's.
List three reasons for raising guinea pigs today:

1. 
2. 
3. 

Selecting Your Guinea Pig

Choose an alert, active guinea pig with clear, bright eyes and a smooth, shiny hair coat. These are indications of good health. Also, as you inspect your animal before you buy it, make sure the underneath part of the rump is dry!

There are three major breeds of guinea pigs: the American, the Peruvian, and the Abyssinian. All three have a blunt nose, short ears, four toes on the front feet, three toes on the hind feet, and no tail.

If you are interested in raising guinea pigs for laboratory use, be sure to check with local hospitals and laboratories about the type, age, and size of animals they use. Find out if they will buy animals from you before you begin.

Best known and most widely raised of the three breeds is the American Cavy, which has a short-haired, smooth coat. It has been widely used by laboratories. You may choose the color you like, but white is the color used most for experiments. This should be kept in mind by the raiser, seller, or breeder.

The body of the Abyssinian Cavy and its standard weight are like those of the American Cavy. The biggest difference is the coat, which is short, harsh, and wiry in texture. The rough hair spreads out from a tiny center forming what are called rosettes. The rosettes should be very clear and well formed. A good animal should have at least four saddle rosettes—two on the rump and two on the hips.
Double or split rosettes are not desirable and are usually caused by soft hair mixed with the harsh, wiry hair.

**ABYSSINIAN CAVY**

Stiff, straight hairs, known as the ruff or collar, grow across the shoulders. Stiff, straight hairs across the hindquarters are known as the back ridge. The hair from the back of the head to the collar or ruff is called the mane. The hair between the collar or ruff and the back ridge is the ridge. A better understanding of these names (mane, ruff, ridge, back ridge, and rosettes) can be learned by a careful study of the Abyssinian Cavy.

**PERUVIAN CAVY**

As with the Abyssinian Cavy, the Peruvian Cavy has the same general body type and size as the American Cavy. Sometimes called the queen of the cavy world, it has hair at least six inches long and up to 18 inches long.

Even from a short distance, it is difficult to tell the front from the back of a Peruvian Cavy and whether it is "coming or going." This is just what breeders desire. The coat should be silky, very thick, and as long as possible. This breed is used very little for research work.

The Peruvian Cavy requires more attention than the other cavy breeds. The hair must be brushed carefully every day and when being shown, should be put in curlers or rollers. The amount of care needed is greater, but this itself is a challenge.
The Peruvian Cavy is only for those 4-H'ers who have the time to spend and are willing to take care of the proper grooming. Although they are different and present a pleasing appearance when cared for properly, neglect will cause a poor and ugly animal. This is a discredit to the owner.

Questions

What breed did you select?__________________________________________

Why?___________________________________________________________

Describe your cavy:______________________________________________

What breed has long, silky hair?____________________________________

Have you ever seen this breed?_____________________________________

Do you have a sow or boar?________________________________________

Did you take a picture of your pet(s)?_______________________________

If so, place it here.

Date____________________  Name_______________________________
Housing

Since the guinea pigs do not grow well when the temperature is below 65°F, you will need to keep the animals warm during the winter. It is also important that the animals be protected from extreme heat during the summer.

Guinea pigs do not require special pens because they usually do not climb or jump. Most pens have some sort of screen wire or hardware cloth across the top. The sides may also be made of screen.

A wooden box 24 inches by 12 inches by 12 inches high with a wire floor could be used. Each animal needs at least one square foot of floor space. One male and three females can comfortably live in a space of 36 inches by 24 inches. It is best if half the floor is solid so the animals can rest on it rather than on the wire.

If you use a solid floor, cover it with a thin layer of wood shavings, sawdust, or straw. This material will soak up the moisture. There are bedding materials for sale which are also very good. Be sure to select a material which is free of dust because dust is very bothersome to the animals' lungs and may lead to a breathing problem. Clean the pens at least once a week and more often if possible. After cleaning the cage, use a disinfectant to kill the odor.

This picture shows how a large plastic tub can be used as a simple guinea pig pen.

The guinea pig is not a fighter. You must build your cage so that dogs, cats, or other animals cannot reach your pet.

Describe your pen: ____________________________

__________________________________________
Feeding

Should guinea pigs be given water? All living animals need some water. A guinea pig which is eating all the greens it wants will drink very little water. However, it is always wise to have fresh, clean water for your animal.

Guinea pigs do not eat meat. They like all vegetables and very likely will eat anything put in front of them. They need many kinds of food. Following is a list of greens, fruits, and vegetables that guinea pigs like:

- Alfalfa (green)
- Apples
- Carrots
- Corn (green)
- Dandelions
- Lettuce
- Cauliflower
- Clover (green)
- Celery
- Lawn clippings
- Spinach
- Tomatoes

All of the above contain some vitamin C, sometimes called ascorbic acid. Since people, monkeys, and guinea pigs are the only animals that do not make their own vitamin C, it must be part of their food. Other animals can make vitamin C in their own bodies. A lack of this vitamin will cause an unhealthy animal.

Vitamin C is very important to us as well as to guinea pigs. Vitamin C helps us grow and helps build the cement that holds body cells together, such as in teeth and bones. It also keeps our blood vessels strong and does other things for us, like helping cuts heal quickly. In fact, it is at work nearly everywhere in our bodies. Because this vitamin is so important, we need to make a special effort to eat vitamin C-rich foods every day.

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

Always remove and throw away any of the green vegetables left at the end of the day. Your animal can easily become ill by eating rotted vegetables. A small, heavy rabbit feeder can be used to feed rabbit pellets. Feed should be available at all times. Do not keep too much dry feed in the feeder, especially if your guinea pig develops the habit of sitting in the crock and dirtying the food. You may wish to purchase a food cup from a pet or farm store. These can be hung from the cage wall and will keep the animal from ruining food. An adult pig may eat 20 to 30 grams of pellets daily. Store the pellets in a metal box or can, to protect them from wild mice, rats, or insects.

Guinea pigs, like human beings, will change in their likes and dislikes of foods. Some will eat all green foods, if available, and very few pellets. Others will eat some green food, some pellets, and drink water. You will need to experiment to see what your animal likes.

It is also important to keep a salt spool, like that used for rabbits, in your animal cage. These can be purchased at pet and feed stores. The spool should be hung so that your guinea pig can reach the salt easily. Salt, like water, is always needed by animals.
Questions
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?
Is this favorite vegetable a good source of vitamin C?
Why do we need vitamin C in our diet?
What vitamin C-rich foods or beverages do you eat or drink that you do not feed your guinea pig?
Make a list of good and fair food sources of vitamin C for people:

The lower spout in this picture is better for a cavy water bottle because the ball bearing in the tip helps discourage the bad habit some guinea pigs develop of blowing food into the water spout. It also prevents leaks.

Weather
As said before in this book, temperatures for guinea pigs must be kept above 65°F. Therefore, plan to keep them warm and away from drafts in the winter. Sun shining directly on the coat can cause it to become dull and washed out in appearance. Keep your animal in a cool, shady place in the summer.
Handling

Your animal may be small and need very little room in which to live; however, you need to spend time giving it care and attention to keep it healthy and happy.

When the animal is very small, it can fit into the palm of your hand. When picking up the animal, hold the animal with your thumb and forefinger just behind the head and in front of the front legs. The remaining fingers can hold gently, but firmly, behind the front legs and around the rib cage. Then as the animal is lifted from the floor of the cage the other hand should be placed under the rump of the pig to give support so that it will be comfortable. Guinea pigs do not often scratch, but they become very excited if they are not properly supported when handled.

When feeding your guinea pig, talk to it. Pet it as much as possible.

Breeding

The common belief that guinea pigs have many young is not true. Litters average from one to four, and two are usual. Five or six are born sometimes but not often. The mother guinea pig only has two teats for nursing the young but usually has enough milk for her litter regardless of litter size. However, you may wish to place a small dish of bread and milk in the pen for the mother during the first 10 days after birth. Feed only the amount that she will eat. Do not allow the milk to sour and always clean the dish well before each feeding.

Six litters is the most any sow can produce in one year. It is not recommended that the animal be bred this often because of the drain on the life of the sow and the weak litters that result. Four to five litters a year are recommended. After a sow is two to three years old, she usually will not have any more litters. A boar will be potent (able to reproduce), as a rule, until he is four years old.
The period of gestation, or length of time of pregnancy, of the guinea pig is between 63 and 72 days; the average is 68 days. The sow will usually mate within a few hours of bearing a litter; if not then, she will not mate until she has weaned her young. A young sow's first litter is usually born somewhat weaker than her later ones, and often a higher number of her first litter will die than of her following litters. The young are usually lively and can run about freely almost at once. They are born fully haired, with their eyes open, and with teeth. After the young are a day old, they can be handled and petted with care. After the first few days, they will begin to nibble at the food given them and soon are caring for themselves.

The weight of the newborn guinea pig will depend upon the number of animals per litter; but, usually, they will weigh from 90 to 120 grams each. There are 454 grams in a pound, so these babies weigh about a quarter pound or four ounces.

It is a good idea to wean the young when they are three weeks old. At the same time, the males should be placed away from the females because they can breed at a very early age. The female should not be bred until she is three to five months old. This allows time for the young sow to become fully ready for breeding. The female should be bred by the time she is six months old or the chances of mating are not so good.

Always put the boar into the sow's cage. Leave him there for three weeks. The sow will have her "heat period" every 14 to 15 days.

PARTS OF A GUINEA PIG

2. Eye    6. Rump 10. Shoulder
3. Ear    7. Thigh 11. Forepaw--four toes

Once an animal has been bred, other matings are not difficult. When the female becomes full-grown without having had a litter, the pelvic girdle (the bony arch supporting the skeleton of the hind limbs and vertebrae) may have closed so that birth of the litter is difficult.
People who raise guinea pigs to make money suggest keeping one boar with 10 or fewer sows. The boar and sows can be kept together as a family. However, most people will separate the sows and keep them in a quiet place before they give birth. Do not handle or play with your sow during the last two weeks of pregnancy as she can be hurt easily. Some mothers become upset when babies are born and will leave their young or sometimes even kill them. When two or more sows are left together, they will both nurse the young. Since the young nurse for about three weeks, this should not be overlooked in cases where several sows and litters are kept together. It is one of the causes for poor health and a high death rate in young pigs.

Choose big animals for the future breeding herd, but select them from large litters rather than from small ones. Large animals in small litters may be big because they received extra milk rather than because of good background.

The young boars can stay together until they are fully grown. After they are separated they should never be placed together again, for a fight will occur and they can easily hurt each other.

Questions

What do you call your guinea pig(s)?

Did you raise a litter this year?

If so, how many cavies were there in the litter?

Guinea pigs enjoy hay. It makes a pregnant cavy feel safe. It gives a bored cavy something to play with.

The gestation period for guinea pigs is about _______ days.

Describe your young animals:
What do you plan to do with the young cavies?

Health

Guinea pigs are very healthy animals. When they are properly housed and fed, they will remain healthy. Their homes should be well lighted. Keeping the air fresh but free from drafts is very important. The usual causes for sickness may be a sudden draft, a change in temperature, dampness, or any injury, such as a broken tooth. When a guinea pig is sick, it will have one of the following problems which are called symptoms.

- Sits perfectly still and all hunched up
- Hair coat ruffled and not neat
- Will not eat and loses weight quickly
- Droppings loose and watery

REMEMBER, guinea pigs can easily catch a disease called paratyphoid. Steps should be taken to keep wild mice and rats from getting into the guinea pig room or into their feed, since these animals may carry or spread the paratyphoid germs.

When you notice a sick pig, it is best to keep it separate from your other animals. You may wish to take it to your local veterinarian for treatment.

Make sure your pet's nails don't get too long. Nails like these can be painful and can get caught on a wire floor. Hold the nail toward a light and trim it, avoiding the darker area where the nerve and blood vessels are located.

If your pig is outside during the summer, it may pick up lice, mites, fleas, or ticks from other animals. These are called parasites. If you notice that your pig is scratching a lot, look at it carefully for the parasites. Parasites can be gotten rid of easily by dusting or rubbing on a
special powder for fleas, ticks, or other parasites. You can purchase this from your drug, feed, or pet store. Read the label to see which parasites the powder will kill. Use a powder which is made for cats rather than for dogs.

Ten Rules to Follow:

1. Clean cage and equipment at least once a week.
2. Disinfect (clean to kill germs) cage and equipment.
3. Keep the area around the pen clean and neat.
4. Feed your pigs a balanced diet of dry and green foods.
5. Remove all uneaten green food.
6. Keep clean, fresh water for animals.
7. Provide enough light and fresh air.
8. Keep other pets and rodents away from your pigs.
9. Do not overhandle pregnant females and keep boars away from them.
10. Always check for parasites such as lice and fleas. If you find any, treat your pet right away.

Questions

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 it?

__________________________________________________________

List five rules to prevent diseases:

1. ________________________________
2. ________________________________
3. ________________________________
4. ________________________________
5. ________________________________
### Expenses
1. Cost of pet
2. Cost of cage or building materials
3. Cost of feed:
   - Kind of Food
   - Date Purchased
4. Cost of reference books:
   - Title
5. Other expenses (toys, bedding, medicine, etc.):
   - Item

### Income
1. Sales of animals:
   - Number Sold
   - Date Sold
   - Amount Received

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**Difference between total expenses and total income**
MY PET

(Write a short story about your pet)