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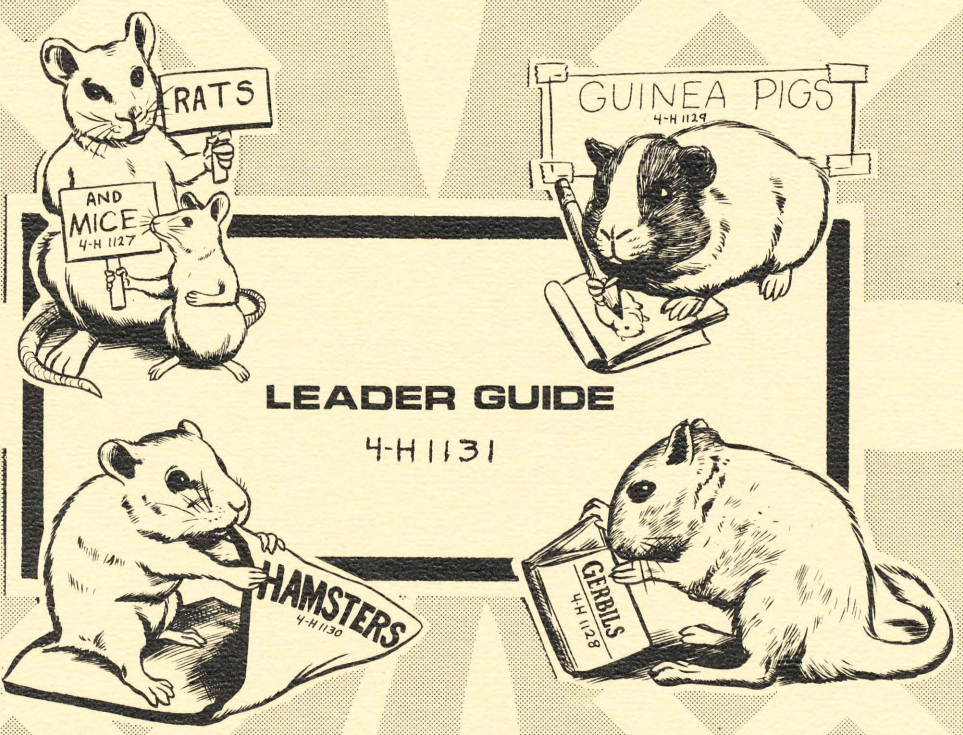
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POCKET PETS



LEADER GUIDE
4-H 1131

4-H-YOUTH PROGRAMS
COOPERATIVE EXTENSION SERVICE
COLLEGE OF VETERINARY MEDICINE
MICHIGAN STATE UNIVERSITY

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POCKET PETS - LEADER'S GUIDE

Welcome to the 4-H Pocket Pets project. The combination of kids and small animal pets is stimulating and amusing--you should find it enjoyable.

This project will provide a 4-H animal program for youths who are unable--for economic or environmental reasons--to own a cat, dog, horse, or farm animal. The requirements are that each member choose a pocket pet, learn about taking care of that pet, and then become involved with the pet.

Many pre-teens and young people in their early teens feel alienated, unnecessary, and often, unloved. The hope of this 4-H project is that, through owning and caring for a small, helpless pet, each youth will develop a sense of responsibility, a feeling of being needed, a sense of self-worth, and a loving bond with his/her animal. Animals are being used during therapy for emotionally disturbed youths, and studies have shown them to be very beneficial. So, the hope for this project is most likely valid.

As a leader, you will be guiding the members through the trials and joys of pet ownership. To do this you will want to be familiar with the member's guide and with the information given here. Some of the material is written in such a way that you appear to be the member. Please don't be insulted. This way, if a young person throws you a question, your material is already phrased as an answer! Also, you, the leader, may decide to own one of these "critters," and you will have a ready-made guide to its care and feeding.

Remember that the member's guide is not dogma. It is not necessary to go "by the book." Explain to your members that the main goal of the project is for them to become responsible pet owners. Enlist their aid in setting other goals and in planning meetings. Some groups will be more interested in some project aspects than in others. Be flexible. Spend extra time on an area they find interesting and skim through material they don't care much for.

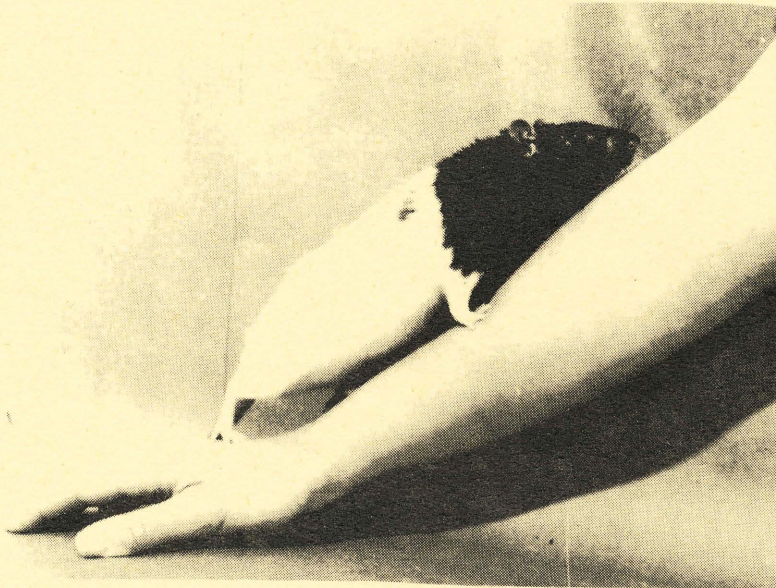
The first project your group will face will be choosing the pets and convincing their families that they will assume the care responsibilities. Remind them that nagging and whining are negative ways to gain parental permission. Instead, suggest they give an informative presentation and a firm promise of responsibility. The following steps offer a guide for becoming a responsible pet owner. You may wish to incorporate them into your first meeting.

1. Read the descriptions of each pet, and decide which one you could care for and enjoy the most.
2. Carefully study the information on the pet you choose. Become familiar with what you'll need to do, and decide how you'll do it.
3. Explain to your parent(s) about the pet you have chosen and how *you* plan to care for it. Convince them that the animal will be your responsibility and that it will *not* cause them any extra work.
4. Have everything (cage, food, and water) ready for the animal.
5. Take your pet home and get it settled in its new environment. Your pet may need a day or so to relax.

6. Start handling your pet. Handle it daily and attend to its needs.
7. Be aware of problems that can occur, watch for them, and be ready to correct them. The animal's health depends on you.
8. If you have to be away from home for some reason, find someone to care for your pet. Be sure they know what to do and how to handle your animal.

These guidelines may help you and the members through your first meeting. You might also bring up the potential sibling problem. Suggest to the members that they enlist parental help for convincing other family members to "keep their hands off" the pet. Also, they might want to let younger brothers or sisters occasionally "help" them care for or handle the pet to prevent hurt feelings. Or, they could help the youngsters get a pet of their own!

So, your first meeting will be for "getting to know each other" and explaining the goals. The members will receive their guides and discuss the merits and drawbacks of each animal. You may want to include a game or two (see pages 4 through 6) to help break the ice. The members may decide that the second meeting should consist of a trip to a pet store to look at cages, food, toys, and, of course, animals. Or, they may want the second meeting to be continued discussion on the animals. Or a cage-building session. Or a toy-making session. Be flexible and decide what would be best for your group. Offer suggestions and see how they respond.



Small animals can involve youths in loving relationships and help develop a sense of self-worth and responsibility. This rat is running up an arm to reach its favorite perch-- a shoulder.

By the third or fourth meeting, all the members will probably have their pets. They may want to talk about any problems they have or compare notes with each other on their progress in handling. Quite a few meetings may be devoted to this, depending on your group's needs. Hopefully, they will be filling out the question sections in their guides, and you may want to use these sections as discussion guides.

After this point is reached, you may want to offer some ideas for the group to consider. Some suggestions include:

1. A pet fair: to introduce their pets to each other. Members may want to invite parents and friends.
2. Science projects: psychological, genetic, or nutritional experiments
3. Pet art: drawing, sculpture, photography, or customized cages. Members could even consider entering art or craft fairs.
4. Breeding programs: to sell offspring to friends, stores, laboratories, or snake owners
5. Group reports: for members to report on what they are doing and what they've learned from their pets
6. Field trips: to pet stores, veterinary clinics, or laboratories. Field trips might provide career stimuli.
7. Speakers: Local experts could give talks on care, diseases, etc.

These ideas may interest your group or stimulate group members into coming up with ideas of their own. Or, some members might do one thing and others another and report back what they've discovered.

Some of their ideas may seem farfetched or too involved, but hear them out. They may have practical ideas for carrying out what at first might seem a wild scheme. Encourage creativity and discussion. If a group idea involves a deviation from your original plan, go ahead and deviate. You can always catch up at another meeting. For example, at one meeting a member might report a problem of possible disease that the group might want to discuss and investigate. Great. Refer to your guide or call the local library or veterinary contact if necessary. You can always get back on track later.

Don't feel that you have to carry the ball alone. Rely on and refer to local experts--veterinarians, scientists, carpenters, pet store owners, electricians, artists, Extension agents, or whomever. You don't have to be an expert on everything. Be willing to learn. Youths respect adults who can say, "I don't know but let's find out!" This helps them see that it can be alright not to know something and shows them how to go about finding it out. This in itself can be a very valuable experience.

Study each of your members. If members are having trouble, praise what they have done right, help them pinpoint their mistakes, and encourage correcting these mistakes. Some members may exhibit certain abilities or show an interest in areas not strictly related to pocket pets alone. You might suggest additional 4-H projects to these members that they may not be aware of. Examples would include veterinary science, communications, foods and nutrition, health, art, crafts, natural science, and photography. Members will appreciate your care and concern.

In conclusion:

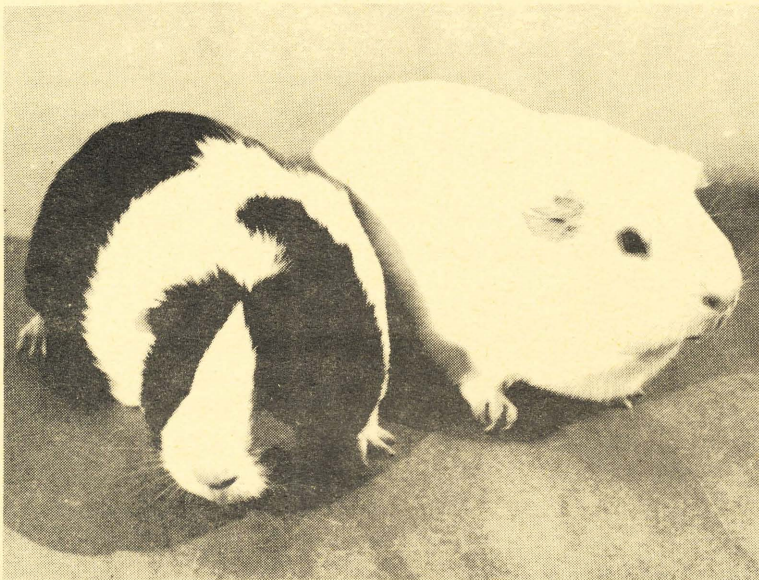
The Pocket Pet project goals are to help youths become responsible pet owners, to help them develop a sense of self-worth, and to make them feel needed and loved.

The members will be involved in decision making and planning.

The leader will guide the meeting plans but be flexible and sensitive to group needs at specific times.

The talents, skills, and services of different resource people in the community will be called upon.

Everyone concerned will most likely have a heck of a good time.



Caring for animals like these two guinea pigs can provide your group members opportunities for learning many new skills.

Games

These games can be used as "icebreakers" or tension relievers and to provide a recreation break at meetings.

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 the name of a different animal (dog, skunk, cow, cat, etc.) in the ear of each youngster. The players are not to tell anyone what kinds of animals 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 the names of two or more different animals. Players with those names 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 that person 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 kinds of animals 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)
tacs (cats)	sodg (dogs)
mestrahs (hamsters)	bsigler (gerbils)
bibstra (rabbits)	

Animal Rhythm - Group members sit cross-legged in a 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 right fingers first, then left. With the first snap, the leader names his/her animal and, with the second snap, another animal in the group. The person with that animal name continues with his/her animal on the first snap and another with the second.

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

Dogs and Dog Catchers - Number off into two teams. One team becomes the "dogs" and the other the "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.

All About Me - Have the youngsters interview each other to find out time, school activities, space in home, others in family, and other factors that would make a difference in whether a person could have a pet and the best type of pet for that member. Interviewers could jot down notes. After 10 minutes of interviewing, have the youngsters discuss their findings.

Role Play - The group may want to act out some of these situations:

- What happens when the wrong pet is selected
- What my family will think about the pet I would like
- What I should think about when picking out a pet
(Can you think of other topics?)

Debate - Divide the group into three sections. One group is "for," the second is "against," and the third is the audience.

Topic: Animals should be captured for zoos.

Give the first and second groups 10 minutes to gather their thoughts. Then give each side five minutes to state their case. Use a timer or an alarm clock with a buzzer to keep track of time. Limit the discussion to 15 minutes.

Once Upon a Time.... - Suggest the group make up a play about their dream animal--even one they could likely never own, like a horse or lion. They may want to perform the play for parents or split into smaller groups and perform for each other.

Pets Take Time - As a group or individually, have the youngsters list all the things that must be done daily and weekly for a pet (feeding, exercising, and cleaning).

Next, have the members estimate how much time each activity takes. Ask them to think whether they have that time and whether they want to spend their time that way.



Hamsters are so cute that it is easy to get carried away and take one home without much thought. So it is important that your group consider all the implications of pet ownership before purchasing an animal.

Pet Art - Have everyone sit around a table or in a circle on the floor. Give them each a piece of paper and a pencil or crayon. Blindfold all of them. Tell them to draw a picture of their favorite animal.

Leaders should blindfold themselves and try it, too. After about five minutes, all should remove their blindfolds to show their pictures to the group.

Leaders may want to start by showing their pictures so the kids will see it doesn't matter if the pictures are silly.

"Show How"

Your group may wish to assign members different "show how" topics about each type of pocket pet.

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

There are many more ideas for possible "show hows." Information may be gathered by checking out books on pocket pets at a library, 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.

Helpful Hints

- Tunnels for small animals can be made from empty toilet paper or paper towel rolls.
- Empty cottage cheese cartons, egg cartons, oat boxes, or small milk containers can be used for playground toys or nests.
- The pine-based disinfectants are good for cleaning cages.
- Remind your members to wash after handling their pets.
- Rodents need a wooden block to gnaw on; this keeps their teeth healthy.
- A squeaking exercise wheel should be greased with butter, lard, or vegetable oil; the animals will taste whatever is used and machine-type grease or oils can make them ill.
- A good procedure to follow if bitten by a small animal pet is:
 1. Carefully return the pet to its cage and fasten the lid.
 2. Bites on a finger (especially) will bleed a lot. This is normal and helps clean the wound, so don't panic.
 3. Wash the wound with soap and water.
 4. Apply an antiseptic and add a band-aid if necessary.
 5. Rats can bite very deeply--you may want to consult a doctor about the need for a tetanus shot. (Getting a tetanus shot every five to seven years is a precaution everyone should take.)

Word Lists and Other Specialized Vocabulary

- Anogenital distance: the distance from the anus to the genital opening. This is a tool for sexing many small animals. The distance is usually greater in males.
- Boar: male guinea pig
- Disinfect: treat to destroy infectious organisms
- Diurnal: animals that sleep at night and are active during the day
- Domestic: animals not in the wild state; "tamed" animals
- Eliminate: word for getting rid of body wastes
- Estrus: period of sexual heat (receptivity to breeding)
- Feces: an animal's solid waste products; the droppings
- Gestation: another term for pregnancy
- Hibernation: in hamsters, a death-like state induced by low environmental temperature
- Malocclusion: abnormal direction of growth in teeth so that they do not meet properly
- Monogamous: an animal that remains with one mate for life
- Nocturnal: animals that sleep during the day and are active at night
- Placenta: the organ that forms in the uterus to nourish and protect the young until birth. Most female small animals eat the placenta after delivery; this is normal.
- Pouches: in hamsters, the blind sacs in each cheek used to store food until it can be hidden
- Precautions: actions to be considered to prevent accidents
- Sanitary: relating to clean, healthy conditions
- Shred: tearing up of paper or other material into small pieces
- Sow: female guinea pig
- Weaning: changing from mother's milk to adult food

RATS

Domestic rats make excellent pocket pets. They are smart, easy to tame, take up little space, and don't cost much to feed. They can live for three to four years with good care. They learn to recognize familiar handlers and become very affectionate. Being curious creatures, they enjoy exploring and collecting and can learn to retrieve interesting toys.

Selecting Your Rat

The two main types of rats are the hooded rats and the white rats. Generally, hooded rats are black and white or brown and white. They are aggressive and can be hard to handle. White rats are more placid, easy to tame, and make a nicer pet.

Choose a young rat. Rats are weaned at three weeks, so get a rat between three and four weeks old. Look for a smooth coat, bright eyes, perky ears, and an active nature.

If you want more than one rat but don't want to breed them, get all one sex. Rats are sexed by anogenital distance. Turn the rat over and check the distance between the anus and the genital opening. The distance in males is twice as long as the distance in females. After comparing a few rats you'll be able to tell the difference.



This hooded rat, perhaps less aggressive than most, clambers peacefully over a friendly hand.

Shelter

You can house your rat in a metal, wire, or smooth plastic cage or in a glass aquarium. Or you can make a wooden cage for your rat. If you build a wooden cage, cover all the wood with hardware cloth, because rats love to chew and will escape a wooden cage that isn't protected. If the cage has a wire floor, provide a solid platform for your rat to rest its feet on. The cage should have a wire top that fastens down tight, since rats are strong and will try to push the lids off.

Rats like to explore, so the cage should be roomy--at least two feet long by one foot wide. Make ramps, ladders, and tunnels for play. Provide an exercise wheel and a wooden block for your rat to gnaw (to keep its front teeth from overgrowing).

Bedding can be sawdust, kitty litter, wood chips, or shavings. Do not use newspaper because the ink will stain fur. Change the bedding daily.

Wash out the cage twice a month. Make sure it is completely dry before putting the rat back.

Water and Food

Provide water in an inverted gravity bottle. Attach it to the cage side at a comfortable height for drinking. Change water daily.

Early evening is the best time to feed your rat. Use a commercial rat food or a puppy or kitty chow. For treats you can use *washed* raw fruits and vegetables, boiled eggs, nonsugared cereals, cheese, nuts, or whole wheat bread or toast. Remove all uneaten food the next morning.

Rats can continue growing all their lives. The more food and exercise, the bigger the rat. Remember to cut back some on food and increase exercise if rats start to get fat!

Handling

Rats are nocturnal, so the best playtime is evening. Like all small creatures, rats are nervous; if you surprise your rat, it may react by biting you. Talk softly and be gentle. You can scoop it up with both hands or grasp it around the chest with your thumb under its chin. If you have to, you can pick it up near the base of the tail; never use the tip because the skin may come off. Quickly transfer it to your other hand or your lap. Pet and stroke it gently, talk quietly, and let it explore your clothes and smell.

If you handle your rat daily, it will soon be tame. Many even learn to come when you call--especially for a treat.

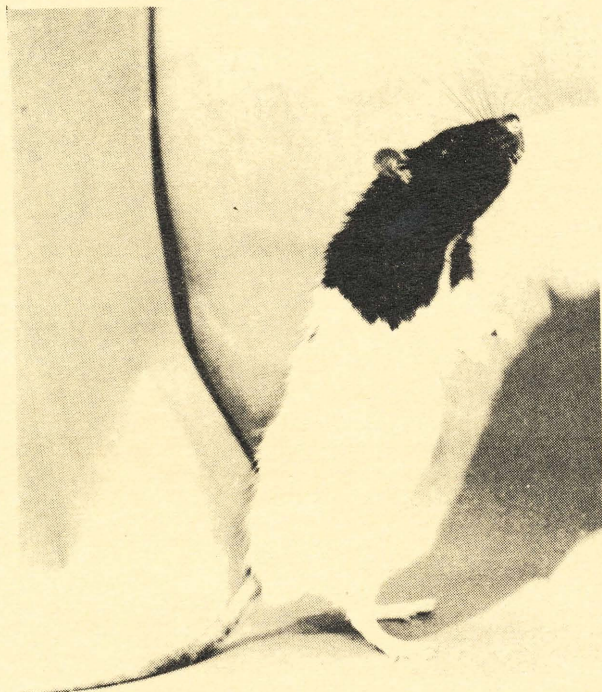
Remember that the domestic rat is not as agile as the wild rat. Don't let it play on tables or high furniture. If it fell it could be badly hurt.

Illness

If the cage is clean, dry, and kept in a draft-free place and if the food is good, your rat will rarely get sick. But you should know what to do if things go wrong, so study this list:

1. Lice, fleas, mites: Clean the cage completely. Dust your rat with a *cat* flea powder.
2. Diarrhea: If the droppings get runny, stop feeding your rat greens and fruits. If it continues, take your rat to a veterinarian.

3. Chronic respiratory disease: If your rat gets sniffles and sore eyes, take it to a veterinarian for antibiotics to put in its water.
4. Labyrinthitis: This means a swelling of the balancing organ in the ear. Your rat may twist its head to the side, or it may walk in circles. The rat can adapt to this problem and remain a good pet.
5. Viral eye infection: The rat's cheek will puff out and its eye will bulge. This goes away in two to three weeks, but get an eye ointment from a veterinarian to protect the eye in the meantime.
6. Mammary tumors: Rats have a great deal of mammary tissue, so tumors (lumps) may appear in unexpected places. They grow quickly. They are usually benign and can be removed by a veterinarian.
7. Chromodacryorrhea: This is a fancy way to say "red tears." It is caused by dyes called porphyrins that give the tears a reddish-brown color. The condition is common and *normal*, especially in older rats.
8. Coprophagia: This is another fancy word that means to eat feces--it is *also normal*. It is how your rat gets important nutrients.



This rat has learned to stand up for a treat.

Breeding

If you want to breed rats, wait until they are three months old before you put the male and female together. They can breed earlier, but it's not healthy for the female.

The gestation time is 21 to 23 days long. During this time, provide milk in another water bottle and change it daily. Near the end of the pregnancy, give the female some tissues to make a nest.

The average litter is six to 10 babies. Do *not* have another female in the cage. The babies' eyes open at 14 to 15 days, and they will nurse for three weeks. When the babies are weaned, separate them by sex, or the new rats will breed too young.

If you don't want another litter right away, remove the male when the babies are born. But if you don't mind another litter soon after the first batch is weaned, you can leave the male in; he makes an excellent father and helps the mother care for the young.

MICE

Domestic mice make inexpensive and hardy pets. They live one to two years, will respond to handling, and are very entertaining.

Selecting Your Mouse

Mice come in many colors. Choose a young, active mouse. Bright eyes, a smooth coat, and perky ears are signs of good health.

Females will live together in peace; however, if you have more than one male, they will fight. Also, male mice have a strong odor in their urine that many people find obnoxious. Like rats, mice are sexed by anogenital distance. The distance is twice as long in males.

Shelter

Mice can be housed in glass aquariums, wire or metal cages, or smooth plastic boxes. If you build a cage, cover all wood with hardware cloth to prevent escapes. Have a wire lid that fastens down securely.

Mice can and will scatter bedding, so if the cage has wire sides or is less than six inches high, spread newspaper around the cage to catch the mess.

Provide ramps, tunnels, ladders, and a wheel for exercise and play. Put in a wooden block for gnawing.

Bedding can be sawdust, kitty litter, or wood shavings and should be changed daily. Completely wash and dry the cage twice a month.

An empty cottage cheese carton with a hole cut in the side makes a nice "mouse house," and your mouse will happily shred tissues to line it.

Water and Food

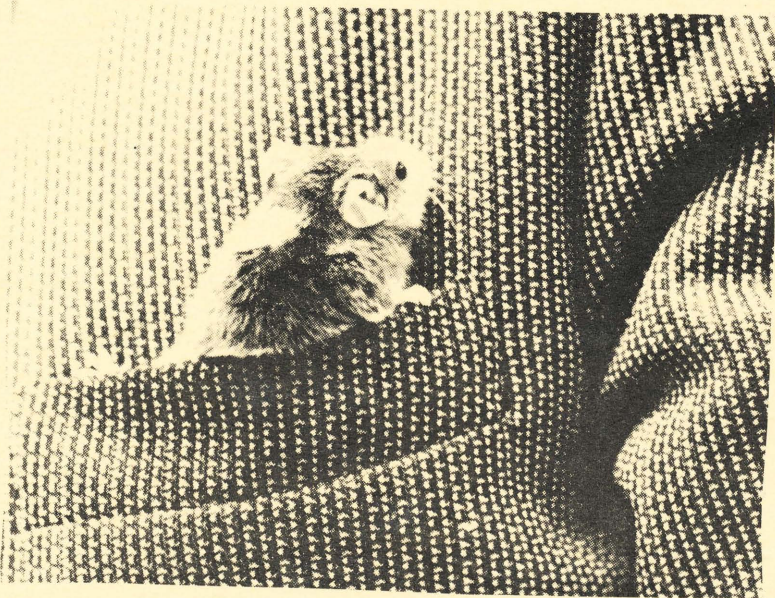
Provide water in an inverted gravity bottle. Attach it to the cage side so that your mouse can reach the spout. Change the water daily.

Early evening is the best feeding time. Feed a commercial mouse food or use puppy or cat chow. For treats, mice enjoy *washed* raw fruits and vegetables, nuts, cheese, nonsugared cereals, boiled eggs, or whole wheat bread or toast.

Remove all uneaten food the next morning.

Handling

Evening is the best playtime since mice are nocturnal. Your mouse is nervous and may bite if frightened, so be quiet and gentle. Scoop it up in both hands or pick it up by the loose skin over the shoulders. Handle it gently. Stroke its back and let it explore you. If you handle it daily, it will soon be tame. Don't drop your mouse or let it fall from high furniture.



This mouse is tame enough to enjoy a cozy ride in a pocket.

Illness

Mice are strong creatures and, if fed well and kept from drafts, rarely get sick. But you should be prepared if your mouse gets sick.

1. Lice, fleas, mites: Clean the cage completely. Add some cedar wood chips to the litter. Dust your mouse with *cat* flea powder.
2. Diarrhea: If the droppings get runny, stop feeding your mouse greens and fruits. If it continues, take your mouse to a veterinarian.
3. Respiratory disease: If your mouse hunches up, has ruffled fur, and makes a chattering noise, clean the cage and take the mouse to a veterinarian for antibiotics.

4. Mammary tumors: Mice have a great deal of mammary tissue, so you may notice tumors (lumps) in unexpected places. They can be removed by a veterinarian.

Breeding

If you wish to breed mice, wait until they are two months old to put your male and female together.

The gestation period is 19 to 21 days. During this time, provide milk in another water bottle and change daily. Toward the end of the pregnancy, provide an empty cottage cheese carton or a pint milk carton for a nest and tissues to line it.

Your mouse may have a litter of 10 or more babies that will be hairless and blind. The young will nurse for 21 days. Unlike rats, you can have other females in the cage; in fact, if more than one mouse has babies, they may nurse each other's offspring. Don't have more than one male in the cage, and remove him if you don't want more babies right away.

When cleaning the cage, lift out the nest container carefully and then clean the rest of the cage. Do *not* disturb the nest, especially during the babies' first week.

When the young are weaned, separate them by sex. Also, separate the males from one another to prevent fighting.

GUINEA PIGS

Another name for guinea pig is cavy. This plump animal with tiny legs originally came from South America. Guinea pigs are more expensive than rats or mice but have a life span of six to eight years. They are very social, seldom bite or scratch, and can be very vocal. They will whistle and chirp to you and each other, especially at feeding time.

One drawback to owning a guinea pig is allergy. If you or someone in your family has allergies, you better pick another pet. Guinea pigs are the worst animals for causing or aggravating allergies.

Selecting Your Guinea Pig

There are three types of guinea pigs:

1. American or English cavy--short hair, smooth coat
2. Abyssinian cavy--rosetted, whorled coat
3. Peruvian cavy--long-haired

All make good pets, but the Peruvian cavy requires more grooming.

Cavies do well when housed together. A good social unit is one male (boar) with three to four females (sows). Boars raised together from a young age get along well, but two strange adult males will fight. You can also have a single guinea pig.

Choose a young cavy with smooth, shiny hair, bright eyes, and an active manner.

Shelter

Cavies are sensitive animals that panic easily. They may lose weight during shipping or if their cages are moved, so find a warm, draft-free spot for the cage and leave it there.

Guinea pigs do not climb or jump, so you can keep them in a shallow bin with no lid. If you have a dog or cat, however, you better provide a lid to protect your cavy.

Solid floors are best because cavies can hurt their legs on wire mesh. Provide sawdust or wood shavings for litter and clean the cage daily. A small amount of hay is nice and seems to keep cavies from pulling their hair out.

Give your cavy a container to "hide" in and some small boxes or drainpipe segments in which to play. Don't give them ramps or ledges since they might fall.



This is how to hold a guinea pig to check the genital fold. This cavy is female.

Water and Food

Cavies are hard on water--you will probably have to change it several times a day. They will sit on the edge of water bowls and defecate in the water. They will chew inverted water bottles and play with the spout, causing water to leak in the cage, or they will blow food up the spouts and turn the water green and soupy.

Guinea pigs are different from other small animals because they can't make their own vitamin C; it has to be supplied in their food, or they will get sick and even die. Commercial guinea pig food has vitamin C in it, but the vitamin

is only good for three months after the food is made, so buy small amounts. Or you can feed a commercial rabbit pellet and daily amounts of washed raw cabbage, kale, or carrots. Remember to change the fresh foods daily so they don't spoil. Early evening is the best time for feeding.

Handling

Pick your cavy up with one hand around its chest and the other hand supporting its rear end. At first, it may squeal or wiggle, but if you are gentle and patient it will soon be tame. Pet it and brush it daily with a wire brush--especially if it's a long-hair.

Illness

Your cavy is a delicate animal and will not withstand illness very well. They are difficult to treat because the normal bacteria in their intestines are killed off by most antibiotics and then abnormal bacteria grow and will kill them. Try to prevent disease with clean, warm, dry housing and fresh wholesome food.

1. Flea, lice, and ticks: Clean the cage. Dust your cavy with *cat* flea powder.
2. Pneumonia: Your cavy will lose weight and may have trouble breathing. Take it to your veterinarian.
3. Broken tibia: This may be due to a fall or your cavy catching its leg in wire mesh. A simple, lightweight splint will help it mend.
4. Hair loss: If the hair loss is on the back, your cavy is probably pulling it out. Give it hay to play with. If you have a pregnant female, she may lose hair on her back and legs. This will grow back after delivery. If hair loss on the back is accompanied by scabs, it may be due to fighting, so separate your cavies. Scabby areas with no hair on the head may be due to ringworm. Wash your hands well and take your cavy to the veterinarian.

Breeding

Breed your female after three months of age but before six months to prevent delivery problems. The gestation time is 63 to 70 days. The average litter size is three babies that will be born with hair and open eyes. They can eat solid food right away, but the sow nurses them for three weeks. She stays in a normal sitting position while nursing.

When the babies are born, keep things quiet so the adults don't panic and trample the babies. The sow will eat the placenta and also the infants' droppings for the first four to five days. The babies may eat the adults' droppings--this is normal and necessary. The boar can remain with the sow and babies.

Separate the young by sex at six weeks of age to prevent early breeding. The females have a Y-shaped fold in the genital area, and the males have a slit-shaped fold.

HAMSTERS

Hamsters originally came from Syria. The name comes from the German word, *hamster*, which means "to hoard;" this is because they stuff food into their cheek pouches to take home for storage. Hamsters are quiet, playful animals that live two to three years.

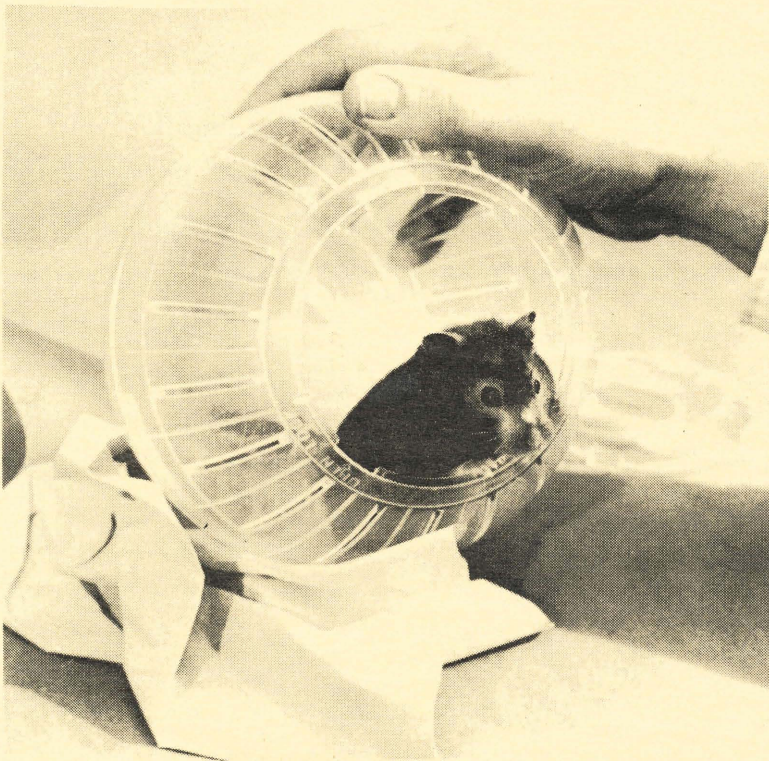
Selecting Your Hamster

Hamsters come in many colors and with short or long hair. The females are often larger than the males and are more aggressive, so males make better pets. It's best to house them separately except for breeding purposes.

Choose a hamster that is four to eight weeks old. Young hamsters have little white hairs inside their ears which gradually disappear. Look for soft, silky fur, bright eyes, and a plump body.

Shelter

Hamsters do well in all wire cages but will push and throw litter through the bars, making quite a mess. So you may want to use a glass or plastic



Hamsters are very energetic so a plastic exercise ball can be a good investment.

aquarium with a wire mesh lid. Hamsters chew through wood, so if you build a wooden cage, cover the wood with hardware cloth.

Use sawdust or wood shavings for litter. Add tissues or paper towels for the hamster to shred into a nest. Hamsters enjoy an empty cottage cheese carton or a small box as a "hideout."

Hamsters pick one area of a cage as a "bathroom," so clean this spot every few days. Don't clean daily since your hamster needs to eat its droppings to get vitamin B requirements. Clean all litter once a week, and scrub out the cage and dry it completely every two to three weeks.

Keep the cage out of drafts and direct sunlight.

Hamsters are very active so provide ladders, ramps, tunnels, and an exercise wheel. Provide a wooden block for chewing.

Water and Food

Provide water in an inverted gravity bottle. Change the water daily.

Feed your hamster in the early evening. Put food in a shallow container--a jar lid works well. Give your hamster two tablespoons of commercial hamster pellets. For treats, give it *washed* raw vegetables and fruits (especially apples), nuts, cheese, raisins, and boiled eggs. You can even give your hamster an occasional mealworm or earthworm. Remove any stored greens daily to prevent spoilage.

Handling

Hamsters are near-sighted and deep sleepers, so make sure they are awake before you try to touch them or they may bite you because of fear. Hamsters are nocturnal, so evening is the best time for play. Scoop them up in one or both hands. A hamster can be picked up by the loose skin on the back but doesn't enjoy this. Let it explore your clothes and smell. Stroke it gently. The more it is handled, the tamer it will be. Your hamster learns to prefer certain people for play, so handle it often to make sure you are the preferred person.

Hamsters are quick and are well-known escape artists. Don't allow it on the floor unless it's inside a clear, plastic hamster ball, or you'll have a hamster living in your floorboards.

Illness

Like guinea pigs, hamsters can be killed by certain antibiotics, so concentrate on keeping your hamster healthy. Problems to watch for include:

1. Lice, fleas, ticks: Clean the cage. Dust your hamster with *cat* flea powder.
2. "Wet-tail": This is a very serious problem. The hamster will be listless and won't eat well. It will have runny droppings and a wet rear end. Take it to your veterinarian, but remember that it's hard to treat.
3. Impacted cheek pouch: If a pouch looks full when you know it should be empty, take your hamster to the veterinarian to have it cleaned out and medicated.
4. Mange: This is caused by demodectic mites. There will be hair loss, scaly skin, and small scabs. Your veterinarian can give you a mite lotion.

5. "Vaginitis": A female hamster with a regular estrous cycle will have an opaque, white discharge every four days. This is *not* a disease, it's *normal*.
6. Hibernation: If your hamster looks dead, try warming it up slowly with a hot water bottle. If this wakes it up, move its cage to a warmer spot but not in direct sunlight.
7. White crystals in the cage: Hamster urine is very alkaline and forms white crystals when dry. This is *normal*.

Breeding

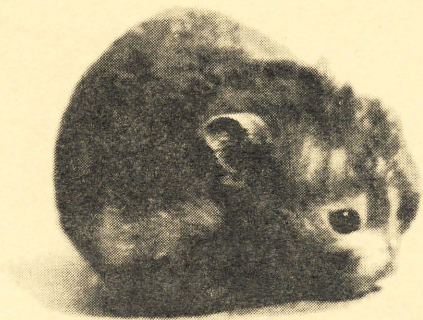
Hamsters can breed at six to seven weeks of age. The estrous cycle repeats every four days, and females are very aggressive toward males except when they are in heat. Put the female in the male's cage in the early evening and watch. If she picks a fight, remove her and try again the next night. If she's cycling normally, you should only have to try four times. When in heat, the female will raise her hind end when the male touches it. He may grab her neck in his teeth before or during mating. Remove the female after mating. Some females are very placid and can stay with the male without fighting, but this is rare.

The gestation period is 16 days. The female's abdomen will swell, and her teats will enlarge. For a few days before the babies are due and for at least one week after, do *not* handle the female or clean the cage. The only disturbance should be to change the water and food. Do not feed greens at this time, but a small apple slice every few days is good.

The litter will be five to 10 blind, hairless babies. DO NOT DISTURB. If the mother or young are disturbed during the first week, she may eat the babies.

You can clean the cage when the young are two weeks old. They will nurse for 24 days; then you should separate them by sex.

Weanlings are sexed by anogenital distance which is twice as long in the male. Adults are sexed by looking from above--females have blunt rear ends with the tail sticking out, and males have a rounded outline with the tale on top of the testicles and not sticking out much.



This pregnant hamster is grooming herself. She should not be disturbed right before birth or for one week after the birth.

GERBILS

Gerbils (pronounced jer'bul) came from the Mongolian deserts and are related to the jerboa--the desert rat. They are very curious animals and more docile than hamsters. Unfortunately, the dust clouds created by their digging can provoke allergies, so if someone in your home has allergy problems, it may be better to choose another pet.

Selecting Your Gerbil

Look for a playful animal with bright eyes, perky ears, and a slick hair coat. Gerbils like company so never get just one. If you don't plan on breeding gerbils, acquire two females since males are more aggressive and would probably fight.

Gerbils, like rats, are sexed by anogenital distance. The distance is greater in males. Also, males tend to be somewhat larger.

If you do plan to breed gerbils, have your male and female caged together by the time they are eight weeks old. If you wait until they are 12 weeks or older, they will live together happily but probably will never breed!



Gerbils are very social animals, so always get at least two.

Shelter

A glass or plastic aquarium makes a good cage. If you build a wooden cage, cover the wood with hardware cloth--gerbils are rodents and will chew their way to freedom if you don't. Have a secure wire top on the cage, since gerbils can leap quite high.

Gerbils love to dig, so provide at least one inch of litter--any clean absorbent material will do. Gerbils are fairly odorless so you can just add more litter once or twice a week and, then, clean the entire cage once a month. If the litter gets damp, you'll have to clean more often.

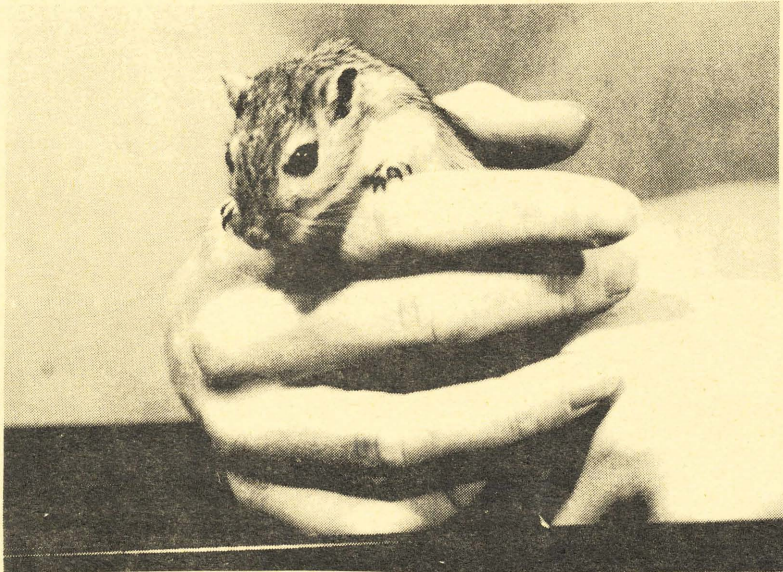
Water and Food

The gerbil is a desert animal and can live on small amounts of water, but you still should provide water in an inverted gravity bottle and change it daily.

Feed your gerbil at the same time each day. Allow one to two tablespoons of commercial rodent pellets for each gerbil. They love sunflower seeds, but save these for special treats; otherwise the gerbils won't eat anything else and will end up with skin problems from poor nutrition. *Washed*, fresh greens, apples, potato chips, and peanuts are also popular treats, but don't feed these too often.

Handling

Make sure the gerbil is aware of you to prevent fear-biting. Grasp its tail near the body (never near the tip) to stop the gerbil; then pick it up by the loose skin on the neck. Put it in your palm and cup it with your other hand. Gently scratch its back and ears. Gerbils are fast and can jump very far, so watch for escape attempts. Handle your gerbils daily, and they will soon be eating out of your hand.



When handling gerbils, always be ready for an escape attempt.

Illness

Things to watch for with gerbils include:

1. Lice, fleas, ticks: Clean the cage. Dust gerbils with *cat* flea powder.
2. Antibiotic toxicity: Penicillin and streptomycin have a direct poisonous action on gerbils. Remind your veterinarian of this when getting ointments.

3. Bald nose: Hair loss around the nose can result from too much digging with the nose or from pushing it through cage bars. Place the gerbil in a smooth-sided cage with paper bedding. If the area gets swollen and shiny or you see scabs and they spread to the tail, feet, or belly, get some dressing from your veterinarian and apply daily. Severe cases can be fatal.
4. Tail-chewing: This is a bad habit that can start if gerbils are bored or overcrowded. If you have many gergils, get a large cage and deeper litter. If you only have one poor, bored gerbil, buy it a friend.
5. Foot-drumming: This is *not* a disease but a sign of aggression--your gerbil is mad!
6. Chromodacryorrhea: If you see red crusts around the eyes and nose, don't worry. Like rats, gerbils have dyes called porphyrins in their tears that cause staining. This is *normal*.
7. Epileptiform fits: A gerbil may have a convulsion when handled, frightened, or suddenly stressed. It looks horrible and is rather scary at first, but it only lasts 15 to 30 seconds. It is normal in some (most) gerbils. Do not handle your pet during a fit.

Breeding

Get your male and female together by eight weeks of age. Gerbils are monogamous and once a pair is together, they won't breed with other gerbils. The male and female can stay together; he will not hurt the young.

The gestation period is 22 to 26 days. She will have four to 10 babies. Do not touch the female for the first week after birth, and do not touch the babies until their eyes open. The young will nurse for 21 days; then you can sex them and separate them from the mother. This is important since she may produce another litter 24 days after the last litter was born!

To keep your gerbils from breeding constantly, but still allow them to be together, place a half-inch wire mesh screen in the cage to divide it. Then they can see, smell, and touch each other but not breed.

References and Recommended Reading

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