POCKET PETS

Small Animals

MA455050

COLORADO STATE UNIVERSITY
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INTRODUCTION

In this unit of study, we hope to have you increase your knowledge of small animals, reptiles, and birds.

The unit consists of general information regarding choosing a pet, housing requirements, care and feeding guidelines.

Medical information is minimal due to space limitations and the belief that only a veterinarian can accurately diagnose your pet's health conditions and needs. It is imperative that you consult a veterinarian who specializes in exotic or small pets if your pet becomes ill. Time is important as an illness can rapidly overcome your pet.

This manual does not contain breeding information. The rodents discussed are prolific breeders and in a very short time an overpopulation problem will occur. Breeding, when done, should always be done by a reputable breeder, as they make every attempt to enhance the quality of the breed or species and they do not over breed which would lead to an overpopulation problem. Your veterinarian can perhaps provide you with the names of such breeders.

Please remember your pet relies on you to provide them with food, water, and proper living conditions. If you cannot afford to provide for them, DO NOT purchase them, or if you have them and can no longer provide for them, find them a caring home. Many times, veterinarians, pet shops. or humane societies can provide you with leads. If you have purchased your pet from a reputable breeder or pet shop, they might be willing to re-purchase them. NEVER TURN THEM LOOSE IN THE WILD! Do your part in being a responsible pet owner.

ACKNOWLEDGMENT: Thank you to Dr. Randy McCarty, D.V.M. for his technical assistance.

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GUIDELINES FOR ALL PETS

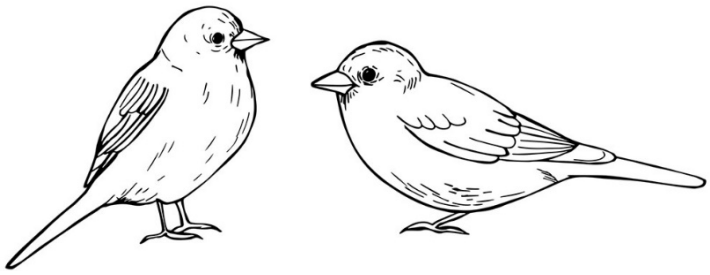
1. Never grab or pick up a sleeping animal or you may get bitten.
2. Your pet needs lots of sleep; try to leave them alone when they are napping.
3. Thoroughly wash all fruits or vegetables before feeding your pet.
4. Avoid sudden loud noises.
5. Give your pet lots of attention and TLC.
6. Be sure to follow feeding instructions.
7. Replace any leaking water bottles, immediately, and if the bottle has wet the litter replace it immediately to ensure the health and happiness of your pet.
8. Protect your pet from other animals, wild or domestic.
9. Consult a veterinarian immediately if health or dental problems occur.
10. If you are bitten and the bite breaks the skin, wash thoroughly with soap and water. Apply an antiseptic ointment and consult a physician about the need for additional care.
11. Never leave your pet in the wild and be sure an outside pet cannot escape from their enclosure. If you can no longer care for the pet, find another home for it. Consult a pet shop or take it to humane society.
12. If your pet becomes sick, isolate it from the others.
13. After you have disinfected your pet's cage, thoroughly rinse, and dry the cage. NEVER place the animal back in the cage when it is wet.
14. Keep cages out of the cold, drafts, and dampness.
15. Keep the different varieties of pets separate. Rats, hamsters, mice, and guinea pigs may be related but they are also enemies to each other.
16. When bringing new animals into the home, isolate them from the others for several days to be sure they are healthy, or take them to the vet before bringing them home to have it checked out thoroughly.
17. Always follow ALL label directions for medications and consult an expert before using anything on your pet.

BIRDS

HISTORY: As a hobby, bird-keeping dates back more than 4000 years and throughout history, all kinds of birds have been depicted; some have even been considered "sacred." In ancient Greece, tame birds figured prominently in early art and culture.

CHOOSING A BIRD: Birds, when healthy, are, by nature, lively and alert. Young birds tend to be less active than adults and will perch with slightly ruffled feathers. In a young bird this is not a cause for concern, but in an older bird, it may indicate illness.

Before purchasing a bird, check the following:



Head - Check the nostrils to see if they are clear and of even size. A nostril that is blocked could indicate an infection caused by mycoplasma. These micro-organisms are present in the upper respiratory tract and usually cause no problems unless the bird is stressed, at which time they can cause breathing difficulties. If an infection is in the chronic stages, the affected nostril can erode and the entrance hole is likely to become enlarged, or the infection can spread into the sinuses and cause eye swelling.

Eyes - Should be checked for discharge and cataracts. Amazon parrots with eye swelling could have a Vitamin A deficiency or an eye infection.

Breathing - Listen closely for signs of wheezing, which could indicate a large range of problems. A bird's breathing can be assessed by watching tail movements. When the bird is resting, tail movement should be barely perceptible.

The beak, both upper and lower bills, should be checked to see if they are growing properly. It is most common to see overgrowth of the top bill, but some birds will have an undershot upper bill.

Scaly face mites may be on the bills of the Budgerigars. They spread very rapidly, so it's important to be aware of the early signs of infection There will be small snail-like tracks which scar the area. In severe cases there will be small areas of swelling at the sides of the bill, and around the eyes. This infection can spread to the legs, resulting in swelling under the rings. This condition is treatable, but any affected bird needs to be isolated for a month or more.

Plumage - Recently imported birds will have tattered feathers. However, there are some diseases which do affect the plumage of parrots, cockatoos, and Budgerigars. These diseases can be

fatal (PBFD) or less severe (French Molt). Self-mutilation may also be the cause, and it is advisable to avoid birds with this habit, as it is difficult to break.

Leg Rings - Canaries and Budgerigars will often have aluminum rings. If this band is closed, it guarantees the bird's age, because it can only be applied to very small chicks. Parrots will have stainless steel bands, as they can cut through aluminum.

Canaries and finches may have split celluloid rings for identification purposes. These are clipped on and there is no guarantee of age.

Toes and Claws - It is always important to check for slipped claws, since this can lead to perching problems. This occurs when the hind claw is not positioned correctly and allows the claw to slide over the top. Claws, if overgrown, can be cut back with a pair of nail clippers.

Breastbone - If a bird is in poor condition, muscle wasting will be apparent here. This causes the breastbone to be very prominent.

Weight loss - If you are able to place your fingers on either side of the keel, this is a clear sign of weight loss. You then need to determine the cause.

INTRODUCING A NEW BIRD: Before bringing a new bird home, prepare for their arrival by equipping their cage with all the essentials. It is also helpful to find out what the bird has been fed, so you can continue the same feeding program.

Isolation - Any new bird should be put into isolation for a period of at least two weeks. This will prevent any transmission of diseases to other birds, and you will have an opportunity to watch it closely to see that it is eating properly and is free of all internal and external parasites. Even though a bird looks healthy there is a chance that it has a disease which may materialize during the incubation period.

Australian parakeets, lories, and lorikeets should have a fecal sample examined by a veterinarian for worms.

Introducing the New Bird to Other Birds - This should always be done when you will be able to observe the birds for several days. Bullying can be a problem, particularly with, but not limited to, parrots. The breeding period is a bad time to introduce new members, as birds will tend to be more aggressive.

TAMING YOUR BIRD:

1. Win your pet's confidence by offering it fruit to eat from your hand.
2. Wear gloves initially with parrots, as they may nip or use their claws.
3. Make a point to carry out the training at a regular time.
4. Persevere with training sessions for five minutes at a time before allowing the bird to rest.

SPEECH:

1. Surroundings must be quiet and free of distractions.
2. Have several teaching sessions a day. Greet your bird each morning using the same phrase.
3. Encourage the bird to know its name, address, and telephone number. This is important in the event your pet is lost or stolen.

4. Repeat words or phrases constantly and clearly, while sitting close to the cage. Sessions should last five minutes.
5. DO NOT rush the bird.
6. Play a cassette when you are not able to be there to reinforce the training.

EXERCISING YOUR BIRD: Parrots, in particular, need regular exercise outside their cages to remain happy. You must ensure their safety to avoid loss or injury to the bird. Before you release the bird be sure all windows are closed, or that they have screens. Close the curtains to avoid having the bird fly into the glass. Fireplaces should have full screens to avoid not only burns but escape up the chimney. Be especially cautious of plants that you may have in your home; many are poisonous to pets. Aquariums can also be deadly to your bird, so be sure they are covered to avoid having the bird drink from the tank and to prevent drowning.

Hot drinks and alcohol should never be left unattended. Alcohol, even in a very small amount, can be fatal.

Birds, especially parrots, enjoy exercise and companionship. A bird with too much time alone becomes bored and develops bad habits.

HANDLING:

Small Birds - Remove perches and seed pots that could get in the way. Place your right hand in the cage, covering the door with your left, to prevent an escape. After the bird is at rest, place your hand over it, taking care to restrain the neck GENTLY. Close your hand around the bird, as soon as the wings close. Slowly withdraw through the cage door. Ideally, you want to hold the neck between your first and second fingers, while the palm of the hand restrains the wings. By holding them in this manner you can cut claws, administer medication, or examine your bird.

Large Birds - Adopt a similar approach, but if you are inexperienced, wear gloves. If you are wearing gloves, be extremely careful you do not grasp too tightly. A bird generally will not struggle once it is restrained.

If a parrot bites the glove and will not let go, loosen your grip slightly.

POSITIONING THE CAGE: Keep your bird in the living area of your home, as this area has minimal risks. The bird must be secure with their surroundings, so position the cage in the corner where it can see everything yet not be approached from the back. The height should be just low eye-level. The bird will feel secure at this height, and you can talk directly to the bird and easily feed it from your hand. Support the cage on a stand or piece of furniture.

Birds are messy, so place a plastic sheet on the floor for easy cleanup. Screening the back and sides of the cage with clear acrylic will also help reduce the mess.

Do not position the cage in a sunny window or close to a radiator.

FEEDING: Due to the wide variety of birds, their food preferences, and nutritional requirements, it is best to discuss diets with the person whom you get the bird from or a veterinarian. Almost all birds will eat a variety of nuts, fresh fruits and vegetables, and insects.

A few common rules to note are: Never feed any food that is moldy or has rotten spots. Wash all fruits and vegetables thoroughly to remove any insecticides. Seeds should be kept dry and free of all debris. Be sure you have plenty of fresh clean water available at all times. Water should not be put in an open container as it will get soiled. When placing the water container in the cage, place it away from the feeding site to avoid wet seed, which will mold quickly.

SPRAYING AND BATHING: In order to keep an indoor bird happy and healthy, regular bathing is important. Without bathing, the feathers become dry and ruffled. This can cause feather plucking, especially in parrots. Once again, it is important to discuss this information with someone who is familiar with your species of bird. Some birds will bathe in a standing bowl of water, while others, like the parrot, will prefer a spray bath. There are special bird baths that can be attached to the cage.

PEDICARE: It is extremely important to keep a bird's feet free of fecal deposits and food. This material is hard to remove once it has dried, but soaking the foot in a clean, smooth container with tepid water will help. The deposits can then be removed once they are softened. DO NOT rush this process, as you may cause damage to the skin, increasing the chances of infection. Pay particular attention to the toes. Dirt could cut off the blood supply, resulting in the loss of the toe. Once cleaning is complete, rub gently with a germicidal ointment, and watch closely.

HEALTH: Contact your veterinarian concerning health problems. Some problems you will be able to treat yourself. Others will need professional help. Each species has certain health problems that affect it, so please do not assume that you can use the same treatment on one as you would on another. Pet stores and libraries have books that deal with various breeds. Become familiar with the information that is available. Birds can become dehydrated very quickly when ill, so don't hesitate to contact your veterinarian if you think your bird is ill.

FERRET

HISTORY: The domesticated ferret's exact origin is still disputed today. Some say it has been bred from a wild European polecat, while others think it is an Asiatic or Steppe, polecat. The European polecat resembles the pet we have today more closely. The ferret belongs to the weasel family, and its cousins would be the skunks, mink, otter, polecat, badger, and wolverine.

Ferrets have been used since the Fourth Century B.C. by Egyptians. The Chinese and Romans tamed the ferrets and used them to catch pests, such as rats and mice.

In England, Scotland, and other European countries, ferrets were used to assist the hunter in killing rabbits. The hunter would send a ferret down the rabbit's burrow to chase the rabbit out, and then it was killed. This practice has since been outlawed in most countries.

By 1875 the ferret became popular in the United States, where it was used to again rid mice and rats from buildings. At the turn of the century, breeding became a popular hobby or business. Several states require special permits, while others still ban their presence completely. The reason for this ban is the fear that they might escape into the wild and set up colonies thereby endangering small game and poultry.

APPEARANCE: Females are about 14 inches long and weigh 1 ½ to 2 pounds. The males are on an average sixteen inches long and seldom weigh more than 3 ½ pounds.

In the beginning, all ferrets that were pets were albinos. As time has passed, many colors have emerged. Sable is the most popular, followed by gray, silver, cinnamon, Siamese, chocolate, platinum, spotted. The feet, legs, and tail can be brown, black, or light colored.

HOUSING: Cages can be made of either wood or wire mesh. Wood cages should have at least one side made of wire to allow ventilation, and to permit the ferret to see out. The wire mesh cage should be welded wire one inch by one inch. Ferrets like room to run, so it is essential that they have a roomy cage. A cage five feet long by three feet wide by two feet high provides them with plenty of room to move around. All cages should be up off the ground to protect them from crawling and hopping animals if housed outside. Each cage should have a sleeping box. Ferrets love to curl up in a dark warm place to sleep. It can be made of wood or plastic, be free-standing or attached to the cage. The entrance needs to be three inches in diameter, with one hole in the front, and another on the side. As with any other sleeping box, the top should be removable, or hinged, so you can clean the compartment easily, or check on the animal. The top should have latches so that the ferret cannot open the top by itself. Ferrets like to use blankets, towels, or fresh hay in their compartments. Be sure to check the compartment every couple of days to remove any food scraps and do a thorough cleaning once a week.

If you house ferrets outside during the winter months, you should have two ferrets, so they can keep each other warm. Two males housed together may fight unless they have been raised together.

CHOOSING A FERRET: Ferrets are often bred for the sole purpose of making money, without regard to improving the breed or shaping the disposition of the breed. Parents which are bad tempered often have bad-tempered off-spring. As a baby, they must be handled frequently and lovingly, so they will learn to trust humans. Deal with a reputable breeder when buying a ferret, so that you may see the parents. As stated earlier, ferrets get very friendly when handled properly, but they are pets for older

children. NOT babies, toddlers, or preschoolers. If a ferret is around younger children, be sure they are supervised the entire time. Ferrets are easily startled by noise or sudden movements. The ferret has poor eyesight and may mistake sudden or quick movements as a threat, and bite in self-defense.

HEALTH: When necessary, a ferret may be given a bath using mild shampoo. Thoroughly rinse and dry them, and allow them to stay inside for several hours, if they are outside pets. The ears can be cleaned using baby oil and Q-tips. BE VERY CAREFUL, so that you do not hurt them.

Ferrets are very susceptible to distemper, so it is very important to have a veterinarian administer this vaccine annually. Some veterinarians also administer a rabies shot at this time. The ferret must be at least six months old. Ferrets may be susceptible to the human cold viruses.

Remember to take added precautions when you have a cold, so you do not pass it on to your ferret.

Pet ferrets have musk glands (scent glands) which do not produce an odor, which some people may find objectionable. These glands can be surgically removed by a veterinarian, and it is usually done at the same time as the animal is neutered. Any ferret that is used for breeding will not have the scent gland removed. A female not used for breeding should be spayed to prevent infection and hormonal toxicity.

FEEDING: Ferrets are carnivores, so they must have a high protein diet. Dry cat food serves this purpose well, as long as you supplement it occasionally with wet, or canned cat or dog food, a little fresh meat, raw fish, fresh vegetables, or fruit. Most ferrets have a passion for milk, yogurt, and ice cream. Use caution when giving them milk products as they can cause diarrhea. You may also add a few drops of skin and coat conditioner, two or three times a week, to keep their coats soft and shiny. They should be fed twice a day, or dry food can be left in the cage all day. NEVER leave moist food in the cage, as it spoils quickly.

NOTE: Before purchasing a ferret, please consult a veterinarian to discuss the cost associated with owning a ferret. They may also be able to furnish the names of a reputable breeder.

Ferret (*Mustēla furo*).

GERBILS

HISTORY: Gerbils originally came from Mongolia and are related to other long-legged rodents that live in the wild in various parts of Asia, Europe, and Africa. In 1954 the first shipment of gerbils arrived in the United States to be used in medical research by Dr. Victor Schwenther.

APPEARANCES: Gerbils have the usual ever-growing rodent teeth plus twelve molars toward the back of the jaws. These are separated from the incisors by a large gap on each side.

A full-grown gerbil is bigger than a mouse but smaller than a rat. They are about four inches long from nose to rump and the tail usually adds another four inches. Weight is around three ounces. The head is shorter and broader than a rat. Their eyes are large and dark with a slight bulge. The ears are well-developed and held erect. Due to the strength in the hind legs, they are excellent jumpers. Each hind foot has five toes. The forelegs are very nimble and used to hold food. Each foreleg has five toes, but the thumb is small and clawless.

A gerbil is covered with fur from the tip of the nose to the end of the tail (even the soles of the feet are hairy). The fur is very thick and soft. The back of the gerbil is a tawny brown but not a solid color; about half of each hair is black tipped. The underside is a creamy tan. These hairs have a black portion close to the skin. The tail of the gerbil is covered with hair, the long tuft at the end reminds one of a lion's tail. The gerbil does use its long tail for balance but as a rule does not wrap its tail around things.

CHOOSING A GERBIL: As always, you should buy your gerbil from a reputable pet store or breeder to avoid disappointment. One of the first questions you need to answer is the number of gerbils you want. Gerbils are very sociable animals and seem to be most content when living in pairs. A single gerbil will do fine when living alone as long as he is given plenty of love and attention by his owners.

Due to the fact that they begin producing litters at ten weeks of age and produce a litter every month thereafter, a population can quickly develop if you have a male and female pair. As a result, it may be wise to choose two females or two males. If you still want a male or female, another possibility would be to get a pair that is past the breeding age (usually one and half years old). One point of consideration when getting more than one gerbil is that it is best to get littermates or gerbils raised together from a very early age. This will help prevent fighting.

The average lifespan of the gerbil is five years or longer if cared for properly.

When selecting your gerbil, watch what happens when the cage is opened. By nature, they are very inquisitive animals and if they have been handled, they will come scampering when the cage is opened, and a hand is put into the cage. If they have not been handled, they will run and hide but should soon come to investigate.

A healthy gerbil's body is firm; a fat or heavy looking body could be an indication of overeating or old age. The gerbil's eyes are large, dark, and bright. The fur should be sleek and smooth.

HOUSING: There are a variety of alternatives for the gerbil. There is a specially designed plastic cage with trails and unique features, but it is expensive. Wire cages are also available but can be a problem if the wire mesh is too large and they can slip out. This is especially true of the babies as they are very

small. The third alternative is an aquarium with a fine wire mesh top to prevent them from jumping out the top.

There should be a large layer of litter at the bottom of the cage. This can include wood chips or wood shavings, ground corncobs, sand, hay, leaves, paper, or a commercial litter. Gerbils do chew some of the material for bedding.

Due to the fact that they drink very little water they produce only a few drops of urine a day. As a result, the home should stay dry and odorless. Cage cleaning is usually a matter of dumping the litter, then wiping the cage down before you replace the litter and the gerbils. You shouldn't need to clean the cage any more often than every two weeks.

Food may be placed directly on the floor. NEVER put water in an open container. Always use a water bottle. If using an aquarium, you can suspend the bottle with a wire. Be sure to check the water bottle to ensure that it is not leaking and that the bedding is always dry.

A can is fine to use as a bed as long as you are sure that there are no jagged edges. Hard things such as nutshells or sticks are great to keep their teeth busy, keeping them from gnawing on things that they shouldn't.

Another must for the cage is toys. Exercise wheels, ladders, and cardboard tubes will fascinate the gerbils.

Gerbils can tolerate a wide range of temperatures but never place the cage in direct sunlight or over a radiator. Gerbils should never be kept in an unheated shed or outdoors during cold weather.

Noise is also something that needs to be considered. Gerbils don't mind a normal amount of noise, but very loud or sudden noises will frighten them. As with all rodents, they are nocturnal animals and will be most active at night.

FEEDING: In selecting a brand of food for gerbils, look for food that is high in protein yet low in fat. It should contain at least 20 to 24% protein. An adult gerbil will eat an average of about one tablespoon of food per day and half that amount for younger gerbils. Dry dog kibble and puppy biscuits are excellent food for the gerbils.

As a treat the gerbils appreciate bits of fresh food such as lettuce (if you are raising them without water, these are a must at least two to three times per week), potato peel, tops and tips of carrots, apple peel or cares, pea pods, celery tops, cucumber peels, corn cobs, and cracked peach pits. Be sure to wash all fruits and vegetables thoroughly. A passion of the gerbil is sunflower seeds, and these should be used sparingly as they are high in fat. Other foods that you might try occasionally are natural foods such as peanuts or other nuts, grass, and dandelions. If using grass or dandelions be sure that they have not been sprayed or recently fertilized.

HANDLING: Avoid sudden jerky motions and any loud noises. Remain still and talk to the gerbil in a soft, calm, gentle voice. First open the cage and hold your hand so the gerbil will come over to it. The next step is to offer a treat, and as it is eating the treat scratch it gently on the head or ears. Once he has gotten accustomed to taking food from your hand, he is ready to be held in your hand.

There are several ways that you can pick up a gerbil. One way is to scoop it up using both hands. The second way is to take one hand and close it around the gerbil gently. Due to the fact that gerbils are very fast moving, many times you will come up empty-handed. Breeders have a third technique, but caution must be exercised. This method involves taking hold of the tail as close to the body as possible, then putting your other hand underneath and gently wrapping your hand around. You must use extreme caution when using this method as the end of the tail could be torn away if you grab the end of the tail.

HEALTH:

Diarrhea: Cut out all fresh greens for several days, change the litter, disinfect the cage, and always isolate the animal. Do not place the animal back into the cage until it is dry.

Colds: Runny eyes, listlessness, loss of appetite. Isolate the sick animal from cold, drafts, and dampness.

Fleas, Lice, Mites: Use a flea control product that is safe for cats or hamsters. NEVER use a brand that is meant for dogs.

Eye Injury or Infection: Treated by bathing the eye in warm water or artificial tears or apply an antibiotic ointment that is meant for gerbils. Consult a pet shop or veterinarian.

Sores or Minor Cuts: Apply antibiotic cream or antiseptic ointment. Again, be sure that this product can be used on gerbils. Never try to bandage as it may make the problem worse since the gerbil will try to scratch the bandage off.

Seizures: This usually occurs when the animal is frightened or placed in strange surroundings. Should this happen, it might be best to consult a veterinarian. Many gerbils do suffer from seizures, but they can evaluate the situation and offer advice.

GUINEA PIGS

HISTORY: They originated in the mountainous regions of Peru in South America. Inca Indians discovered the guinea pigs and domesticated them. They were raised as pets as well as a source of food. Eventually, they reached England and were widely accepted as pets. Within a short period of time, they were then brought to this country.

APPEARANCES: A guinea pig is considerably larger than the other rodents. A full-grown male or boar may weigh two and a half pounds to three pounds. The female, or sow usually weighs a few ounces less. They are about seven to ten inches long. Because of its short legs and heavy body, it does not climb or jump but is well adapted to digging. The front feet have four toes each while the back feet have three. It has no tail, and its head resembles that of a rabbit. It is limited in intelligence and, unlike its relative the hamster, does not store food or hibernate.

COLOR: Wild guinea pigs are dull grayish color, while domesticated varieties have three different types of hair coats.

English Cavy – most common variety, which is short haired, and comes in many colors.

Abyssinian – has a rough curly coat.

Peruvian – long, silky angora-like hair.

HOUSING: A guinea pig's home is called a hutch, and it should be roomier than a gerbil or hamster cage. Many commercial cages are available or, if you have the time and skill, you can make a cage.

A box or shelf should be placed in the corner for sleeping. Your hutch should also have several water bottles which need to be rinsed and filled with fresh cool water daily. Because dampness and drafts are the leading cause of illness, be sure they are placed in a warm, dry, draft-free area.

FEEDING: The guinea pig is herbivorous, so it eats only plants. To be sure he receives a balanced diet, serve your guinea pig only high-quality guinea pig food, do not substitute with rabbit, hamster, or gerbil pellets. Guinea pigs have an absolute Vitamin C requirement that must be met. Apple slices and sugar beets provide an extra treat, and Vitamin C-rich foods such as cabbage or kale are good supplements.

Guinea pigs should be fed twice a day with food placed in a dish which is attached to the cage. They have hearty appetites so feeding a number of guinea pigs can be expensive.

HAMSTERS

HISTORY: The hamster was first introduced to this country in 1938 as an experimental laboratory animal. They did not become "pets" until after WWII and it wasn't until 1947 that they took the world by storm.

APPEARANCES: The head, which was once narrow and rat-like, has grown broader and shorter through selective breeding. The forelegs possess four toes and a rudimentary thumb. The feet are well adapted for digging and climbing and they have sharp claws. The five digits on the back feet are fully developed. With strong muscles in the hind legs the hamster is able to crawl backward as well as go forward through narrow passageways.

The eyes are black and bold. Ears are large and erect, dark-colored, and with almost no hair. The tail is only about a third of an inch long, is flesh colored, and sparsely covered with short white hair.

A mother hamster sings her babies to sleep with a hamster lullaby, and the babies are able to talk in a high squeal and will yap if play gets too rough.

Truly, the most fascinating feature of the hamster is the cheek pouches. These can be stuffed with incredible amounts of food. When full, the head will have ballooned to twice its normal size. The pouches are located on the sides of the head, neck, and shoulders right under the dark stripes. They have no connection with the digestive organs or system and are only used to store food. When he is ready to eat or store the food he simply pushes his cheeks with his front paws.

A hamster's skin fits very loosely over his body and can be pulled out as far as one inch without causing him discomfort.

As a member of the rodent family, he possesses very strong jaws and teeth. The teeth have no roots and extend far into the jaw. A rodent's teeth never stop growing and the rate of growth approximates the rate of wear resulting from constant eating and gnawing. Since they never stop growing, it is important that they receive hardwood or bones to gnaw on.

Differentiation between the males and the females can be done by looking down on them. The male is elongated with a tapered rear view while the female is more blunt and not as brightly colored. The female is the largest of the two, averaging a half inch longer and half ounce heavier.

COLOR: There are four color varieties:

Golden – The hair is dense sleek, reddish – gold on the back while the belly is grayish white. The hair on the underside is sparse when compared to the upper body.

Albino – All white except for the ears and nose, which are black. The eyes which are pink or red. They can and often do suffer from defective vision, as pink eyes are very sensitive to light. Due to the fact that hamsters are rodents they are nocturnal animals, so they do not have good vision.

Piebald or Panda – Golden with white spotting; the amount of white varies. They are not easy to tame due to temperament.

Amber Gold, Cinnamon, or Champagne – Discovered in 1958, they have amber or fawn colored fur with dark eyes and light ears.

CHOOSING A HAMSTER: As with any pet, buy your hamster from a reliable pet store or breeder. It is wise to select a healthy young hamster and train yourself. Look for one between five and eight weeks old, or shortly after he has been weaned. Babies are very shy and easily frightened. A hamster's normal lifespan is two to three years. Take your time and ask the dealer to show you as many animals as you would like to see. Be sure the hamster is in good physical condition and has an even temperament. Things to look for are friendliness, good health – soft sleek fur and bright clear eyes. Avoid all animals that are boney or skinny. Look for the sign of any pimples or blemishes on the nose, feet, or belly. These are the signs of mange. Avoid all animals with runny noses, watery eyes, wet tails, or those which are lethargic, have scars or bald spots.

A hamster may have small spots about the size of their eyes that feel thicker than the rest of their skin. These are pigment spots and are perfectly normal. An animal may also have nicks on the ears, which may be due to a fight with another animal or may, in fact, be a breeder's mark. These again are normal and do not affect the animal.

To tell the approximate age of a hamster, you can look at the ears. A young hamster will have the inside of their ears covered with hair. As the animal gets older this hair begins to disappear and the ears become hairless and shiny.

Hamsters are, by nature, solitary animals. There is no need to worry that they will be lonely should you choose to get only one animal, provided they receive lots of attention and TLC from their owners.

The sex of the animal is not important if you intend to only have one animal. Females do tend to be less friendly as they get older or are pregnant. The male on the other hand remains docile.

Should you decide that you want a female, be sure that she is not pregnant. Ask the dealer to determine this for you. This is especially important if the animals are housed together.

After you have chosen the animal, you would like to look at, have the dealer remove the animal from its cage and place it on a counter. Give him a chance to become accustomed to you then extend your hand slowly. DO NOT MAKE ANY SUDDEN MOVES OR NOISES. If the hamster does not come to you, place your hand over him and hold it there a moment so he sees it, then gently close it over his body. Another method is to scoop him up in both hands. You will get nipped if you try to grab a hamster or move too quickly. Should you be unable to pick him up because he acts afraid or tries to bite, select another pet.

HOUSING: Purchase a cage designed for hamsters unless you have the time and skill to build one. The larger the better, as hamsters are very attractive and they will become snappish and nervous if kept in a cage that is too small.

The cage should have a deep layer of absorbent material at the bottom. Most hamsters do prefer newspapers, although non-cedar shavings are best. Cedar has recently been found to be toxic to hamsters. The reason is that they enjoy shredding it. Avoid placing anything in the cage that could

lacerate or irritate cheek pouches or cause digestive problems should it be swallowed. Never put fabric in the cage as they will quickly shred it.

Place a small feeding dish and an attached water bottle in the cage.

All hamsters love to exercise, so attach an exercise wheel in their cage. Again, the larger the cage and the more toys they have, the happier they will be.

Hamsters should be kept in a room with a temperature between 55- and 70-degrees Fahrenheit. Be sure that the cage is set in a draft free area. Adult hamsters can withstand lower temperatures, but babies cannot. A temperature below 45 degrees will cause the animal to go into hibernation. He will sleep, the body will become rigid, and the body temperature will fall below normal. Do not mistake the animal for being dead.

Since hamsters are nocturnal animals, their cages should never be placed in the sun as their eyes are not designed for exposure to the bright light. If the sun is too bright, they will stay hidden in their cage. Another point to remember is that because your hamster is nocturnal, they will begin to play as soon as it becomes dark.

CARE OF THE CAGE: The cage should be cleaned thoroughly at least once a week with a disinfectant and rinsed thoroughly.

You will find that food has been stored away. Replace this food if it has not spoiled in the same spot as it was in. You will also find stores of wads of bedding; replace it in the same spot or your hamster will become very upset.

A hamster will use one corner of the cage for urination. This area must be cleaned every day with the old litter removed and replaced with new litter. Some people place a wide mouthed jar in that corner, and the hamster will enter the jar to urinate. All that is necessary then is to remove the jar daily, empty and wash the jar and replace it back in that corner. Hamster droppings are hard and dry; they too will be left in a corner and need to be cleaned out and litter replaced.

FEEDING: A hamster will eat just about anything. Hamster food is available and will supply all the necessary minerals and vitamins. If hamster food is not available, or if you should run short, you may use poultry grain, kibbled dog or cat food, bird seed, dried bread, or breakfast cereal. Return to the prepared food as soon as possible. On average, one pound will usually feed one hamster for one month.

Carrots, cabbage, and lettuce can be offered once or twice a week in very small quantities. Grapes or apples are also enjoyed, but EXTREME caution needs to be taken to avoid food that has any rotten spots. This can prove to be fatal to your pet. DO NOT feed acidic foods such as oranges or grapefruit or place evergreen needles in their cage. Raw meat should also be avoided as this has been noted to cause cannibalism. They do not like garlic, and onions will make them furious. All fruits and vegetables should be washed thoroughly before being placed in the cage.

The water bottle should be washed and rinsed thoroughly each day and refilled with fresh cool water.

As always, remember that hamsters are creatures of habit and DO NOT like things removed or moved. Place all things back in their original spot.

TAMING YOUR HAMSTER: Once you bring your hamster home gently remove him from the box and place him in the cage. Leave the hamster alone in the room so he can become accustomed to the surroundings and his new home. After a day or so, you may begin to tame your new pet. All that this involves is gaining confidence. Patience on your part is a must! First, place your hand in the cage and offer a tidbit. When he begins to nibble, gently stroke him with the other hand. Once you sense he is friendly enough to be picked up, lift him out of the cage gently and place him on the table. CAUTION: Do not let them fall. They have poor eyesight and may walk right off the edge of the table. The next step is to place your hand down on the table so he can climb up your arm onto your shoulder.

Remember, they love to gnaw and do not know the difference between furniture and a stick or that electrical cords could be fatal. WATCH CLOSELY.

HEALTH: A clean dry cage is essential for the health of any animal and is certainly true with hamsters. Be sure that wild rats and mice cannot get into their cage as they could pass diseases to your pet.

Any new hamster should be kept in isolation until you can be sure that they are healthy and will not transmit any illness to your pet.

Should roaches, bedbugs, fleas or mites enter the cage, remove your hamster from the cage. Disinfect the cage thoroughly, dumping the litter and spray with insecticide. Read and follow all label directions as it may or may not require the cage to be rinsed. DO NOT replace your hamster until the cage is completely dry.

Should the hamster have mites or fleas on them you may use a commercial flea or tick spray that is made for cats. DO NOT USE A PREPARATION MADE FOR DOGS.

Colds – Isolate your hamster from other animals, dispose of old litter and disinfect the cage. Be sure there are no drafts in the room, and the temperature is warm enough. See that he gets fresh water and give a LITTLE cod liver oil. This may be done by placing a few drops on a piece of dry bread. Disinfect the cage again after he has recovered to prevent reinfection.

Dental – Due to constant gnawing and chewing, dental health is very important. The teeth will break off, get cavities, and are subject to decay. Any of these things can result in an inability to eat, malnutrition or starvation. Examine frequently and consult a veterinarian if any problems are recognized.

Wet Tail – Old and young are susceptible. They become emaciated and weak, and the area around the anus will appear discolored. This is a serious illness and warrants veterinary attention.

Food Stuck in Pouch – Runny eyes. Use a small medicine dropper filled with warm water to flush the pouches.

Hibernation – Due to low temperature of surroundings. Warm gently with your body heat. Carry him cupped in your hands. Feed him warm milk with a small eye dropper ONE DROP AT A TIME, SLOWLY. Remove the cage from the cold area and put it in an area with proper temperatures. When the hamster has revived, return him to the cage and cover the cage.

RATS AND MICE

HISTORY: Christopher Columbus may have brought the first wild mice and rats to the Western Hemisphere. Others were probably brought on ships by early explorers and settlers.

The rats and mice that are most often sold for pets come from lines of house rats and mice that were caught, tamed, and bred for gentleness and interesting color variety.

COLOR: Because of that selective breeding, there are now more than 70 color varieties of mice.

Self – Solid color varieties

Marked – Spotted coats.

Albinos – most common, all white, with pinkish eyes

HOUSING: Mice and rats, since they are rodents, love to gnaw. Their cages must be made of metal, rather than a substance that they can chew through. Aquariums, with a wire mesh top work well for this purpose. A good mouse cage should be at least a foot square and a foot high. A cage for a rat should be at least eighteen inches on the side. If possible, it is also a good idea to have a shelf for a second-story bedroom.

Each cage should contain toys for climbing and an exercise wheel. The bottom should be covered with two inches of coarse sawdust, fresh hay, or cat litter.

A mouse cage is easy to clean; like many of its relatives, it will use just one corner as a bathroom. This area should be built up with litter, and once a day this corner should be cleaned, and new litter used. About once every two weeks, dispose of the litter in the cage, and wash with hot soapy water and disinfectant. For added protection, you can spray with a cat flea and tick killer. DO NOT use a dog product. When the cage is completely dry, add bedding and replace pets. The cage should be cleaned more often if you notice any odors.

A rat cage is more time-consuming to keep clean. Rats do not use just one corner for a bathroom. A rat cage with wire mesh floors should be cleaned every day, and the entire cage cleaned with hot soapy water and disinfectant once every two weeks. Cages with solid floors must be cleaned and washed at least once a week.

Mice like enclosed spaces for nesting and sleeping, even though rats do not use nesting or sleeping boxes they, too, should be supplied with nesting materials. Nesting materials can include soft paper, pieces of wool cloth, or fluffy balls of absorbent cotton. Mice like a cigar box with a hole cut in an end, or another type of box with an opening for their sleeping quarters. The top should come off easily, so you can examine the nest.

FEEDING: It is important they are fed a balanced diet which includes grains, seeds, and a diet supplement with fresh vegetables. A beef bone, or hard-shelled nuts will provide the hard food they need for gnawing. As with other rodents, their incisor teeth will never stop growing.

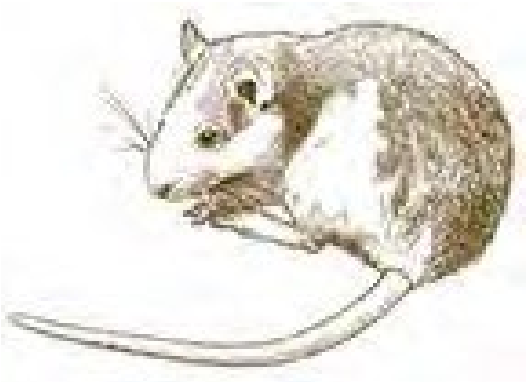
Canary and parakeet seeds make good mouse and rat food. Packaged hamster food, and dry tropical fish food that contain shrimp meals, are excellent supplements. Vegetables like fresh carrots, peas, and dandelion leaves are favorites of both mice and rats. The food should be served in a heavy dish that cannot be tipped and it should be washed daily. Water should also be available in a

water bottle and should be changed daily.

HANDLING: Both mice and rats enjoy being handled. After they reach twelve days old, you may start to hold them. They should be handled gently, and very often. The more they are handled, the more tame and friendly they become. Once your pets are old enough to eat solid food, give them special treats as a reward.

HEALTH: Keep your mice or rat in a clean, dry, draft-free cage. Colds and lung ailments are diseases that will affect them the most. If your pet is coughing or sneezing, remove and isolate at once. Place them in a warm, draft free place. Consult a reputable pet shop or vet for medicine that may help.

The average life span for both mice and rats are two- and one-half years.



CHAMELEONS

DEFINITIONS: Old World – pertains to the eastern part of the terrestrial globe, which includes Europe, Asia, Africa, and Australia.

New World – pertains to the western part of terrestrial globe, which includes North and South America, and all islands and surrounding water.

HISTORY: The American Chameleon or American Anoles, when classified, belong to the Reptilian order called Squamato. All lizards are placed in the suborder Sauria and referred to as Saurians. Anoles comprise the largest group of the iguanial lizards (Iguanas) and are quite different from the true chameleons of the Old World. This family of lizards is descended from a group of ancient lizards that existed during the Triassic period more than 225 million years ago. Anoles are most abundant in the tropics. The green or Carolina anole is the only species native to the United States, although there are four West Indian species now occupying many parts of Florida. Other species occupy Mexico, Central America, and most of South America. Of the Anoles, the most popular is the American Chameleon or green anole.

GREEN CAROLINA ANOLIS.—*Anolis carolina.*

APPEARANCE: An average length of an adult specimen is from 5 to 8 inches. The female is usually smaller and narrower, and with more of a pointed head. The head is proportionately large and distinct from the neck; the tail is long, round, and slender. On each foot are expanded flat, tiny scaled adhesive pads which are present on four of the toes. These adhesive pads enable them to climb smooth surfaces including glass. The body is covered by scales, ranging from tiny on the body to a larger size on the head and tail. There is a ridge on the head that points to the nose. The skin is loose and hangs in a fold at the throat; this is called a “dewlap” on the male. This can spread fanlike by swinging downward from the throat. In some species, the females also possess this flap, but the males are always larger and brighter in color. This “dewlap” serves as a warning flag when other males or predators come near. It is also used as part of the mating ritual. The fan on the green anole displays bright red skin between the scales, which become separated when the flap is extended. The hind legs are long in comparison to the body of the reptile. This adaptation causes them to jump and climb, rather than run.

COLOR: Probably the largest myth is that any lizards, anoles, or true chameleons, will change color according to the object on which it is settled. The most common colors are brown and green. When asleep the color is invariably pale brown with a white belly. If frightened, brown will soon cover the entire body. At other times, the lizard is a pale or rich green. This is usually the color of the dorsal area during the brightest hours of sunlight; the belly will be whitish, tinged with green. It has been noted that if subjected to cold, they may change to a somber gray or yellow.

The change of color is often rapid, and when completed, a peppering or spotting may be present. Often this is a darker shade, rarely a lighter shade.

DISPOSITION: These creatures are very docile, however, occasionally they will bite your hand. This is strictly a defensive act, as this is the only way they have of defending themselves. Should they bite, they will only be released when they are ready or are physically removed. If you remove them, use EXTREME CAUTION. To avoid injuring the chameleon, gently apply pressure on both sides of the jaws with VERY GENTLE FINGERS.

The males will almost always fight one another over territorial rights or females. Facing each other with fans distended, they will engage in "head-bobbing," or "push-ups." At times, one may become discouraged and leave before a fight erupts. Should a fight erupt, usually the defender charges, grabbing any part of the intruder they can reach. Both will then go through body rolls, twists, and shakes. Suddenly, one will make a dash for freedom. In the event that the loser has been grasped by the tail, there is a good possibility that the tail will remain clenched in the jaws of the winner, who will then eat the tail. As in the case of the lizard, a new tail will grow at the point it breaks off but is usually a slightly different shape.

SHEDDING: It is a common practice for reptiles to shed their skins. This is usually done more often by captive individuals rather than those in the wild. Some captive lizards shed their skin five or six times a year. Shedding is a sign of a healthy animal, and it should be noted that while snakes shed their entire skin at once, lizards do not. The lizard can begin to lose its skin anywhere on its body and will lose it in parts. If shedding appears to be going slowly, you may assist by using a cotton swab, dipped in water, and thoroughly soaking the dead skin with it. Then carefully lift the dead skin, using your fingers or blunt tweezers.

HOUSING: Depending on the number of anoles you plan on having, a 2, 5, or 10-gallon aquarium, low potted fern plant, a small climbing leaf plant, and a small branch will provide a very nice home. Remember, they are capable of climbing glass, so for their safety, place a lighted aquarium cover over the top. DO NOT just lay a piece of glass or plexiglass over the top, as your pet needs ventilation. If a screened top is used, be sure to place it at least 10 inches above the highest object on the cage floor.

Changes in temperature or humidity levels should be avoided. They need a constant temperature of 75-80 degrees Fahrenheit. DO NOT place them in an area where they will receive more than 1 hour of sunlight per day.

CAUTION! Avoid too much moisture as it will create mold which can be fatal if ingested or can cause respiratory problems. Soured soil gives off a strong smell and should be replaced immediately with fresh soil.

A wooden screened cage IS NOT recommended for your pet as:

1. The wood will hold moisture.
2. The anole will rub against the screen causing sores.
3. They have tiny toes and legs, which could get caught in the wire, and break in an attempt to free themselves, or you could break them in trying to free the anole.

Lighting ideally should be fluorescent, as it has a cool burning factor. Lighting is vital for a successful anole house. Special bulbs can be purchased at your local pet shop. If conditions are favorable, your pet will respond in a positive way. All housing should have a thermometer placed inside, so conditions can be closely monitored. Lizards are cold-blooded so their temperature is controlled by the temperature of the room or terrarium in which they live. Ideal temperature is 75 to 80 degrees Fahrenheit, with a constant level of humidity of 60 to 80%. If a heating unit is used, ALWAYS place it in the corner, and be sure it does not touch the glass.

SET UP OF THE TERRARIUM: Fill the bottom with small clean gravel or pebbles to a depth of ¾ inches for water drainage. Next, place ¼ inch of charcoal chips over the gravel to help keep the soil odor free. Cover the charcoal chips 1 inch of loamy or sandy soil. Plants should be potted in a plastic pot and should rest directly on the charcoal or gravel layer. When they need watering, remove the pot, and water, allow it to drain, then return it to the terrarium.

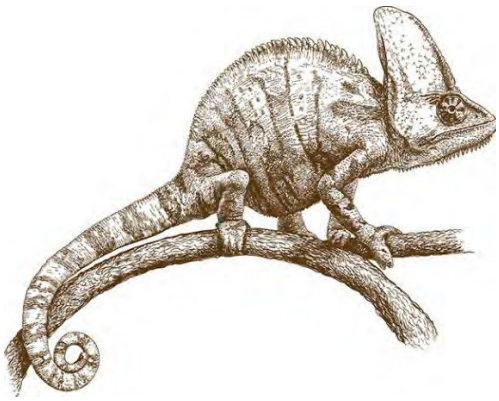
It is of vital importance to provide a branch, preferably a curved one, with the curve facing up. Do not force this into the soil.

A thorough cleaning every two weeks should be sufficient. Use a water dampened towel to wipe down the sides. Clean glass makes it difficult to climb.

FEEDING: After settling into their new home, you can teach them to take food from your fingers if you choose. AVOID all quick, sudden movements. Favorite foods are mealworms and flies, but roaches, small crickets, and spiders will also be eaten. Raw ground beef and mashed fruits such as apples, bananas, grapes, or melons can also be used. Be sure all fruits are mashed. DO NOT feed moths to your anole as the powder of the moth wings can cause death due to choking.

Anoles require plenty of water and, if lacking, will quickly weaken and die. They get water by lapping drops of dew off the vegetation. They do not drink out of a container. The plants, for this reason, should be misted thoroughly. DO NOT use any pesticides on plants in the terrarium.

TERRARIUM LIVING: It is safe to keep more than one anole together as long as their length does not vary more than 2 inches. Males and females have been known to eat their young. Tree frogs can be added, but they require a higher moisture level. Do not add anything to the arrangement until you know what its habits are. Consult a reputable pet store. More than one male can result in fighting, if females are present. A group of males have been known to settle down together. To determine if your pet is a male or female, check the “dewflap.” A male’s is bright and large, while the female’s is smaller and dull.



LIZARDS

APPEARANCE: By looking at the lizard's limbs, it will give you an indication of where it lives.

1. Tree Dwelling – limbs are long, delicately jointed. They have long feet and toes, which have sharp claws. Some may also have fingers of skin on the toes, to enable it to run across water.
2. Terrestrial – short powerful extremities, and heavy feet.
3. Water Dwelling – short powerful limbs with webbed toes. Semi-aquatic lizards use a flattened tail to propel themselves through the water.

   Some special adaptations are lamellae on the undersides of the toes, which enable them to maintain a grip on smooth surfaces.

   Tail – Some lizards have tails that will "break off" at certain spots. This allows the lizard to escape by distracting the predator. The tail will grow back, but it will not always match in color or appearance.
   Eyes – The eyes are the most important sense organ. The sight of most lizards is very well developed, even allowing for color perception. At the base of the eyelids are tear glands.
   Ears - Hearing varies greatly from species to species. Some hear very well and are able to distinguish specific noises.
   Tongue – Tongues differ from species to species. Aromatic substances are taken onto the tip of the tongue, when it is extended, and are deposited on the roof of the mouth, where the Jacobson's organ is located. Here a perception of the aromatic substance is made.

EXAMPLE: Like a dog sniffing excitedly at feeding time. The tongue is also used to "drink", and in the case of geckos, which lack movable eyelids, to polish their eyes.

Skin – All lizards, young and old, will shed their skin when it becomes worn. Molting is governed by hormones, as well as external factors such as temperature, humidity, food, and overall condition of the animal. Depending on the species, the way the lizard loses skin will vary. Color change can be brought about by hormones or the nervous system.

Temperature – Lizards are cold-blooded; therefore, it is important that the temperature in the terrarium corresponds to the needs of the captive lizard.

Behavior – By observing your lizard, you can tell a great deal about the mood of the lizard and tell if the reptile is under stress. It is important to recognize threatening behavior, as it may be directed at you. If you are bitten by a lizard, see a physician immediately. It is also important to remove any other lizard that is constantly being threatened from the terrarium.

EQUIPMENT FOR THE TERRARIUM: Extreme caution must be taken when using electrical equipment and wiring. This is especially important when water is also being used.

HEATING:

Reflecting Lamp – Many lizards associate light with warmth; therefore, it is necessary to provide a heat source at the same time as you provide the light.

Infrared Lamps – These are more economical to use than the reflector lamps, as they do not have to be replaced as often. They can be used for lizards which are not as light dependent. To avoid being burned, the light needs to be placed where the lizard cannot reach it.

Bottom Heating – Is necessary if the room is unheated, or the temperature cannot be maintained. This method is also good when you are having trouble maintaining proper humidity levels.

NOTE – EXTREME CAUTION MUST BE USED. THOROUGHLY READ AND FOLLOW ALL INSTRUCTIONS.

LIGHTING: Lighting is important as it affects the nervous system, through stimulation and regulation. The colors in light are also important for various living aspects of the plants and lizards. You will need to find out which source is best for your lizard.

Fluorescent – suitable for a terrarium up to 28 inches high. Inexpensive and economical. Should be changed after 6000 hours.

Mercury Vapor or Halogen Vapor – recommended for very large terrariums. (1.4 cubic yards or larger). There must be at least 40 inches between the light and contents of the terrarium, as an intense heat is produced.

Ultraviolet – stimulates biological responses. It will take the lizard a period of time to get used to UV radiation. Begin with 1 minute only, and lengthen each day by a VERY SMALL amount until, after 2 months, a one-hour time span has been reached.

REGULATION OF TEMPERATURE AND LIGHT: Most lizards require a cooler temperature at night. Therefore, it would be best to install a thermostat and timer. Be sure the thermostat is placed out of the way of the beams from the heat lamp. It is also recommended that lights be put on timers that have dimmer switches. By gradually turning the lights on or off, you will avoid scaring the lizard with sudden lightness or darkness.

TEMPERATURE CONTROL: Constantly monitor the terrarium's temperature so you can take immediate action should the thermostat fail, or the terrarium will become overheated.

HUMIDITY CONTROL: Humidity is vitally important to lizards from regions of climatic extremes. This must be achieved by spraying plants, or with a bottom heater unit. In order to measure humidity, you will need a hygrometer.

PURCHASE OF A LIZARD: Purchase your lizard from a reputable pet store or breeder. Before choosing a lizard, take the time to observe them. Take special note of:

1. Are they well nourished? Bones should not be too noticeable, and the base of the tail should have a muscular look.
2. The lizard should be alert and should react to noise by fleeing or becoming defensive.
3. The mouth should be closed, with no froth around the mouth, nose, or eyes.
4. Look at the skin for signs of infection and external parasites.

When taking a lizard home, be sure you maintain a warm temperature, and avoid drafts.

QUARANTINE: All lizards should be quarantined before they are placed with others. This can be done by placing them in a quarantine cage which is away from other lizards. At this time, watch for signs of illness or parasites. Treat the parasites as soon as possible after finding them. Examine the feces to be sure there are no worms or eggs. This should be done by your veterinarian.

FEEDING IN QUARANTINE: During the first day of quarantine your lizard may not eat, but small amounts of food may be offered.

Herbivorous Lizards – Leaves or fruit can be offered on the second day.

Carnivorous Lizards – Live animals should be offered from four to seven days.

GENERAL FEEDING INFORMATION: Before purchasing your lizard, become informed on its lifestyle, and be certain that you can afford to supply it with the food and equipment necessary. To ensure your pet is receiving everything it needs, it is best to thoroughly discuss the nutrition requirements with the breeder, pet store, or veterinarian before taking it home.

If your lizard refuses to eat, it may be necessary to force feed it. PLEASE contact your veterinarian for advice before doing so. EXTREME CAUTION must be used to avoid injury to your lizard or yourself.

CLEANING: Clean the terrarium as often as necessary to ensure the inhabitant's health.

1. Use separate equipment in each cage to avoid transmission of infections.
2. Disinfect all equipment after each use. Use a fast-evaporating disinfectant.
3. Uneaten food should be discarded, or reserved for the cage it was removed from.

HEALTH: Before purchasing your lizard, please take the time to familiarize yourself with the health information. There are many excellent sources such as veterinarians, reputable pet stores, and breeders. Books or magazines from your local library, bookstore, or pet shop may be helpful. Some illnesses you will be able to treat yourself, and others you will need expert help from a veterinarian.

SNAKES

One of the first things to consider when thinking about having a snake as a pet is acceptance by all who live in the home. If someone strongly objects to having a snake in the house, and it isn't possible to keep the snake in a separate room, it may be best to reconsider. A second consideration is their cage and food supply. Can you afford to provide your pet with everything it needs in the beginning as well as maintain it on a day-to-day basis?

Please be aware that many snakes are listed as endangered species. Unscrupulous dealers do import these snakes for resale. Please obtain a list of these snakes and avoid purchasing them as it has many legal ramifications and, most importantly, you might be contributing to the decline or extinction of this reptile.

HOUSING: Only a few aquariums are really suitable for your snake. There are a few snake cages made commercially. Most people prefer to construct their own cages. By doing this you can meet the needs of your particular snake.

One of the things to consider when deciding on a cage includes size. All too often the cages are too small. A snake must be able to move about freely. Another major consideration will be providing a natural environment for your pet. A snake coming from the desert is going to require different things than a snake adapted to a moist environment. Heating will be a factor for consideration with all snakes. Lighting the cage and ventilation should never be overlooked.

There are 3 basic habitat set-ups for snakes:

MOIST: Requires a large water container, ample plant growth, climbing facilities. Moss as a substrate on top of humus soil or peat moss. Humidity of 50-80% (eg. Garter snakes, Thamnophis, European grass, or water snake, Natrix, natrix emerald tree boa, Coralles canines).

SEMI-MOIST: A large water container is required and loose topsoil or peat moss, slightly dampened. Climbing facilities are not absolutely necessary. (Eg. Pipe snakes, cylindrophis).

BASIC: A water container that is sufficiently large enough for bathing and large rough rocks or stones are needed. Substrate to consist of pea sized gravel or pebbles, and climbing branches. Plants can be added. (Eg. Various boas, pythons, slender boas, epiciate).

TEMPERATURE RANGE: Tropical snakes should have a daytime temperature of 82 degrees Fahrenheit, but can drop to 72 to 77 degrees Fahrenheit at night. Snakes from temperature latitudes should be given temperatures which do not exceed 72 to 75 degrees Fahrenheit during the day, but can drop to 60 to 65 degrees Fahrenheit at night.

INTERIOR FURNISHINGS: The interior furnishings of the cage are just as important as the cage itself. Snakes must have rough surfaces of some kind to help them shed their skins. In the wild, they use rocks or branches for this purpose. Depending on your snake, one or both of these should be in the cage. Many snakes are climbers, so a branch should be provided just for climbing.

Plants not only add beauty to the cage, but provided needed moisture and help to provide the "natural environment" necessary for their happiness.

Decay, molds, or mildew can also be a major problem due to the humidity levels. Because of this it is of paramount importance to maintain cleanliness.

Drinking water will need to be replaced daily, while water used for bathing will need to be replaced whenever it becomes soiled. All feces and sheded skin should be removed frequently. Substrate, climbing branches and rocks will need to be replaced at frequent intervals. A thorough cleaning with a disinfectant should be done to prevent disease, and to kill mold, mildew, fungi, and eliminate pests.

If you have several snakes which are housed in separate cages, use separate cleaning and feeding equipment for each cage. Be sure to boil or disinfect after each use. To avoid transmission of infections it is important to wash your hands after handling the different snakes and doing the cleaning and/or daily maintenance.

QUARANTINE: Whenever you add a new snake, it is extremely important to quarantine the new snake in total isolation for several weeks. This procedure should also be used for any sick snakes as well.

A quarantine cage should be sterile and contain only the bare essentials necessary for the snake: water dishes, branches, rocks, and an easy-to-clean liner in the bottom of the cage. Heaters and lights are also necessary to maintain the temperature. Observe all regular thorough disinfection procedures to avoid contaminating other snakes or reinfecting a snake.

Before you place the snake into the cage, it should be bathed in water that is 30 degrees centigrade, this removes and dirt particles, uric acid particles, or hardened feces. While handling the snake, inspect it for any injuries or parasites, such as ticks and mites. Periodically, a stool sample should be examined for nematodes, and tapeworms, or any worm eggs.

Depending on what you feed your snake, it will affect the stool. If the snake refuses to eat, or regurgitates partially digested food, consult a veterinarian for advice on how to treat the snake.

FEEDING: As a rule, any healthy snake, after becoming acclimated to its surrounding, will begin accepting food, if the right food is offered. It is also important that the optimum temperature of their environment remain constant, as this does aid the digestive process.

Most snakes should only be fed every 10 to 14 days. There are exceptions to this, including when the snake is shedding, its age, the kind of snake, and the type of diet that the reptile is receiving. Before purchasing your snake, be sure you understand what diet your snake will need and know with certainty that you can both provide the needed food year-round and can afford it.

SHEDDING: The snake has to shed its skin at regular intervals. During this period the snake is nearly blind, and as a rule, will not accept food, will stay out of sight, or prefer their water bath. As a rule, with snakes, shedding begins at the head. In most instances the skin will come off in one piece and without complications. It is important to inspect your snake to be sure there are no remaining pieces of dead skin left intact. This will cause an infection between the old and new skin. Should this occur around the eyes, it could cause blindness.

HEALTH: As with any pet, if you provide them with the proper food, living conditions, keep living quarters clean, disinfect cages and equipment, and tackle pest problems immediately, your pet should stay healthy. Occasional problems do develop, and the reptile will need treatment.

There are some health problems which an individual can learn to deal with. Others, however, should be dealt with by a veterinarian.

We recommend that you consult a veterinarian before buying your snake to learn about any potential illnesses and their treatment. There are also many books which can provide valuable information and can be purchased at bookstores, pet shops, or perhaps checked out from your local library.

TURTLES

Today, many species of turtles are protected by legislation and to possess such a reptile is against the law. Even the common box turtle is protected in some states. Both the sale and possession of protected turtles is prohibited.

CHARACTERISTICS: Odor – Turtles are sensitive to odor, and find their food mainly by its odor. The female also uses odor to find her nesting grounds.

There are some turtles which themselves produce a strong odor. The American Musk turtle, and Mud turtles are two examples. With these few exceptions, turtles are odorless if healthy.

Vision – Turtles have the ability to detect color, as well as having very sharp vision.

Sound – The majority of turtles are mute. For the most part the noises they do make are usually from rubbing their legs together, or clicking their jaws. Some of the large turtles are the exception to the rule.

Lifespan – Turtles, if properly cared for, have the ability to lead very long lives. There have been several instances where it has been documented that turtles have lived over one hundred years. It has been said that under ideal conditions, the American Box Turtle can live for as long as 123 years.

HIBERNATION AND ESTIVATION: A turtle living in an area where freezing occurs will hibernate. This is done because their food supply is drastically reduced, and water supply is usually frozen. Some turtles will hibernate underwater in the mud, while others will remain on land, in holes dug in the ground, or in mulch piles.

For the captive turtles there is no hard or fast rules regarding hibernation. Some sources believe that the turtles should be allowed to hibernate, while others believe they should be kept awake all year. As the days grow shorter, extra warmth and light will need to be provide, using heaters, and artificial lights. If the turtle is not in a full state hibernation, it may use up all of its stored fat, and starve to death before it wakes enough to eat. Please consult a veterinarian specializing in exotic pets regarding your turtle's habits.

Estivation occurs during drought. Turtles will dig deep into the earth and lie quietly until more moisture becomes available. Only turtles living in the wild will experience this problem.

METABOLISM: Most reptiles only have a three-chambered heart; allowing for a mixture of oxygenated and unoxygenated blood. Turtles also have a slow metabolic rate which is very important to the turtle as it enables them to go without food and with limited oxygen for long periods.

RESPIRATION: All turtles have lungs, not gills. Air is inhaled and exhaled by movement of the limbs and the throat. Some air is also moved by the turtle moving its head in and out of the shell. A resting or hibernating turtle under-water obtains its oxygen from the oxygen which is naturally found in the water. This is called pharyngeal respiration.

HEALTH: As with any pet, begin by examining the reptile thoroughly. Start with a healthy, plump, strong turtle.

The eyes should be bright and clear. Colors range from yellow or red to a brownish black. They should never be blue or milky looking. Oversized or swollen eyes are the sign of a nutritional disorder.

If you are able to look in the mouth and throat it should be clear of sores, fungus, and any cheesy look.

Ticks or leeches can be removed by wiping them with rubbing alcohol, then picking them off with a tweezer.

Minor injuries will usually heal themselves, and as long as the turtle's living quarters are kept clean, infections shouldn't be a problem. If the injury is more serious, or infection is a problem, contact a veterinarian.

If roundworms are found in the feces, take your pet to the veterinarian for treatment. Clean the living quarters as frequently as possible, to break the cycle of these parasites.

A hard-shelled turtle whose shell has gone soft is probably suffering from a calcium deficiency. Feeding whole fresh fish should help if supplemented with Vitamin D and unfiltered sunlight. Most window glass will filter out the ultraviolet rays, which the turtle needs to get Vitamin D.

CHOOSING A TURTLE: The following turtles are generally considered best for an inexperienced keeper.

SEMI-AQUATICS – European pond turtle, geographic, reeves, sliders, cooters, painted, Spanish terrapin, some side necks, Malayan box, mud, and musk turtles.

AQUATICS – Common snapping turtles.

TERRESTRIAL – Box, Greek, and wood turtles.

OBTAINING A TURTLE: Buy your first turtle from a reputable pet store. Most reputable pet stores will order you a turtle, if they do not have what you want in stock.

There are no common elements to telling the difference between male and female turtles. Each species seems to have different characteristics. This isn't going to be a problem if you only want one turtle. If you want several, have the pet shop determine the sex of the turtle for you.

FEEDING: Any turtle should eat earthworms, raw fresh fish, snails, bananas, canned dog food, mushrooms, lettuce, and pieces of melon.

SEMI-AQUATICS & AQUATICS – Remember the semi-aquatic and aquatic turtles cannot eat unless they are underwater. They prefer fish, frogs, birds, carrion, worms, snails, crawfish, and freeze dried tubifex worms. Water turtles will eat plants if they are really hungry.

TERRESTRIAL – Chicken liver, hamburger, beans, peas, grapes, leafy vegetables, and water.

Temperature has a large role in determining how much your pet will eat. Start at 75 degrees Fahrenheit, and make adjustments. If the turtle has been purchased from a pet store, get all the necessary information from the dealer.

HOUSING: DESERT HABITAT – For gopher tortoises and Greek tortoises you will want the largest possible surfaces covered with dry sand. These turtles are powerful diggers. ANCHOR all rocks or there is the

possibility the rock could get tipped, crushing, and injuring a pet, or breaking the tank. Anchoring can be done by gluing it in place with silicone rubber aquarium cement. Do not use a glass cover unless ample ventilation is provided. Quarter or half-inch wire mesh makes an excellent cover. A light source will provide illumination and some warmth. Make sure this habitat includes a shady area and a supply of clean drinking water. Heaters will be necessary to maintain the temperature. Contact a reputable pet store for information. A shelf can be a piece of slate, or wood cut to a loose fit, and supported on the sides, or bottoms of the tank.

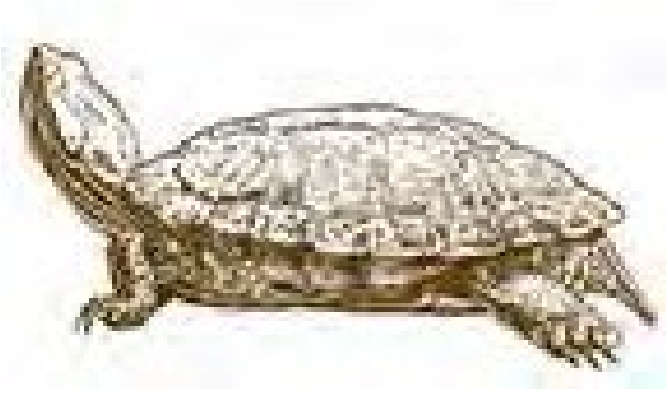
WOODLAND POND HABITAT – The water may be dished or in the aquarium. Avoid mud – bottomed aquariums, as the odor will be very unpleasant. The cover should be hinged with heavy framing.

AQUATIC HABITAT – Many soft-shell turtles will never leave the water, except to lay eggs. Some will climb out to sun themselves. This is true of the mud, musk, snapping turtles, and the South American mata-mata.

Large aquariums are very expensive, but it is necessary to have one that will accommodate your turtle. Try to get one that provides more surface area, rather than a greater water depth. Water depth should be no greater than the shell (carapace) length. The area should be at least three times as long and twice as wide as the length of the carapace.

EXAMPLE: An eight-inch soft shell turtle should be in an aquarium with a minimum length of 24 inches and a width of 16 inches.

Be sure to always put your aquarium on a sturdy stand out of the way so it will not get knocked over.



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