## **The Ferret Owners Manual**

By Dick Bossart



In memory of Berret, 2/15/97

Congratulations on your new family member. Probably about now you are questioning your sanity and judgment, and wondering what in the world you have gotten yourself into. Relax. The domestic ferret is an affectionate, highly intelligent little critter who will rapidly claim a large piece of your heart.

This booklet summarizes a few of the more important things that you need to know about your new companion. It covers: basic behavioral characteristics; ferret-proofing your home; feeding requirements; litter box training; recommended types of cages and bedding; grooming; toy selection; vaccination requirements; and health tips.

We hope you find this booklet interesting and useful. Most of all we hope that you and your new ferret experience a long and enjoyable friendship.

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## The Ferret Owner's Manual

#### FIRST THINGS FIRST

Before you bring your new domestic ferret into your home, you will need the following supplies and equipment.



The Ferret Who Started It All Valentine, our first ferret

**Food** - The domestic ferret will thrive on a premium dry ferret food or, if that's not available in your area, a premium kitten food. Keep in mind, though, that cats and ferrets have differing nutritional needs and cat/kitten foods will not completely satisfy the dietary needs of a ferret. At our shelter we use Totally Ferret manufactured by Performance Foods, Inc. Dog food doesn't even come close to meeting the ferret's nutritional needs. The analysis (found on the bag) should show a minimum of 34% - 36% protein and a minimum of 22% -24% fat. The bulk of the protein (especially the first two on the ingredients list and perhaps three of the first four) should be from animal sources, preferably poultry. Most vegetable matter such as corn can not be adequately digested. Corn has been shown to cause urinary stones, so make sure it appears far down on the ingredients list. Although vegetable matter adds to the "protein" analysis on cheaper foods, it amounts to a "filler" that will pass right through a ferret's short digestive tract. Make sure you read the ingredients on the bag. Some "ferret foods" are really mink foods. These usually have a fish or fish byproduct listed first or second. Some nutritionists feel that large quantities of fish is not the ideal diet for a ferret. Fish may also cause "litter box odor." Also look at sugars. Sugars, including fructose and glucose are not the ideal diet ingredient, especially for older ferrets. Some sugars are "hidden" as fruits. They should be far down on the list, if present at all.

**Cage** - For the animal's protection and security, if you aren't absolutely positively sure that your home is ferret-safe, I recommend confining him to the cage during the night and periods when no one will be on hand to supervise. It is the best way of ensuring that he will stay out of harms way.

Remember, however, that a ferret is a companion animal, like a dog or a cat. It is not a "cage animal." It is an animal that just happens to fit in a cage. Most of the time, your ferret should be out of the cage and interacting with you and your family, just like a family dog or cat. You wouldn't keep a dog or cat in a crate most of the time. Don't do that with your ferret. If you have a cage, be sure to leave the cage door open while he is out so that your ferret can go in and out for food, water, to use the litter box, or even to nap. (Although most of ours prefer to nap in drawers, behind the refrigerator, under the futon, behind the TV, or some other inaccessible place. One has even taken to nap under the grandfather clock.)

If you must have a cage, it should be large enough for the ferret to stretch and for limited play even though he will likely just sleep most of the time that he is confined. The cage should be large enough to provide room for a litter box, an area for food and water, and an area for sleeping. A cage measuring about 3 feet by 3 feet deep by 2 feet high will comfortably house one or two ferrets. Multi-story cages will provide more area for the same amount of your floor space, but make sure that there are no areas where the ferret could take a long fall should he slip from one of the upper floors. The floors of the cage should be solid and padded. Bare wire will damage their delicate paw pads. You can cut linoleum samples to fit the floors. To help keep it in place, punch small holes in the corners of the material and use a tie wrap through the holes and around the wire on the floor.

Small area rugs, sweatshirts, etc. will provide a soft sleeping area and allow the ferret to "tunnel in" for sleeping. Watch that your ferret's nails aren't split or long such that they catch on the material. Terry cloth and similar material may snag on the nail and cause serious injury as the ferret struggles to free itself. If you use a cloth material for bedding or flooring, be sure to check it periodically to make sure that the ferret is not eating the material and that the material is not unraveling. Long threads can wrap around a ferret and cause injury or death. Use those with caution. The bedding should be washed at least weekly. This significantly reduces the musky odor common to ferrets. Please *don't use wood chips, wood shavings, or shredded newspaper for bedding* as these create a breeding ground for bacteria. Cedar and pine chips release aromatic oils that are believed toxic to ferrets if they are in prolonged, close contact.



Typical Cage Setup

A cage, constructed of a heavy gauge wire or rubber coated wire, is usually a good choice. These can be made or purchased. Aquariums are not a suitable cage for your ferret. Lack of ventilation will allow buildup of bacteria in the very air your ferret has to breathe. Most plastic pet carriers suffer from the same problem - lack of adequate ventilation. While they are good for transporting your ferret from your home to the veterinarian's office or off to a visit to Aunt Harriet's, most plastic carriers are not recommended for long term housing.

If you are considering making your own cage and are thinking about wood for a frame, remember to heavily urethane the wood on all sides and ends to keep moisture out and so that you can wash the cage when necessary. **Don't use pressure treated lumber. The chemicals used to treat the wood may poison your ferret.** 

Remember, your ferret is NO more a cage animal than is a dog or a cat. He needs time to play and interact with people. He should out of the cage most of the time EVERY day. He looks forward to being with you and interacting with you.

**Food and Water Containers** - Dry food (except for very young kits) and fresh water should always be available. The ferret's digestive system is about 3 - 4 hours long. He needs to resupply his system frequently. Ferrets are notorious for tipping over dishes. A heavy weighted bowl with a wide, flat base will help prevent this. The hooded parrot feeding dishes that clamps on the side of the cage will help deter a ferret who loves to dig in his food. (These may not be suitable if your ferret is quite large.) Water bottles keep water from being spilled and keep the water fresh for longer periods of time. Even at that, be sure to change the water at least daily, and clean the bottle regularly. (Baking soda and warm water does a great job, but rinse thoroughly afterwards.) Always keep fresh food and water within his reach.

Litter and Litter boxes - Regular cat litter boxes are fine. A sometimes better and cheaper solution is to use a small, rubber dish pan with one side cut to about 1-2 inches high. The higher sides of the pan will help prevent "overshoots." Regular cat litter can be used. We now use wood pellets made for wood stoves. They are inexpensive, dust free, and turn to a powder when wet. If your ferret is not one to dig and play in the litter, the "scoopable, non-track, dust free" variety makes it easier to keep the litter box clean. If your ferret thinks of the litter as a sandbox and/or scoots in the litter, the clumping litter is not recommended. A regular dust free clay litter, recycled paper pellets, or similar litters may be better.

**Vitamins** - If you use a quality ferret food, extra vitamin supplements are usually not required. A supplement going by the name Ferretone or Linatone does make a great training aid, however. Ferrets almost universally love the taste. (If they don't seem willing to eat it at first, place a drop on your finger and rub it in their mouth.) Ferretone and Linatone are very high in vitamin A . We always dilute ours to reduce the amount of vitamin A that they ingest. Dilute the Ferretone/Linatone with Olive Oil; one part of the Ferretone/Linatone to two parts (or greater) Olive Oil. Give no more than a total of a half of a teaspoon of the diluted supplement a day.



Ferrets *love* Ferretone

This group surrounds the Ferretone bottle so that it won't get away

**Ferretproofing** - Some ferret owners claim that you can never <u>ferret-proof</u> your home, only make it ferret-resistant. Ferrets are intensely curious about everything. They can fit through very small openings. Unfortunately not every place they wish to explore is hospitable to small, furry animals - the underside of refrigerators, washers, dryers, dishwashers, stoves and ovens; the insides of walls and floors. Many places contain rotating machinery, open electrical terminals, flames, heating elements, drive belts, or just places to get lost in and not be able to find one's way back out.

Plaster over holes in walls and floors. Screw in the adjustable feet on appliances so that they sit flat on the floor. If possible, place screening material over holes with the tape on the inside (ferrets love to pull off tape). Cabinets quite often have an opening at the top of the toe area just above the floor. These should be sealed, or else you need to plan on a way of getting into them to get your ferret out. On ours, I used thin wooden strips cut to length and width, and used an adheasive to glue them in place. Look at every opening made where a pipe or duct passes through a wall or floor - seal as necessary. In fact it may be a good idea to look over your home at ferret eye-level". You might be surprised at what you see from a viewpoint just an inch or two above the floor.

Another thing to look for are small, almost ferret-sized spaces behind "hard" furniture, between vertical pipes and walls, under baseboard radiators, etc.. If the space is small and slightly tapered, (becoming narrower at the bottom or one end) the ferret could fall in or become wedged and suffocate.

Ferrets love to sleep in dark spaces. You can provide sleep boxes or sleep sacks for them to

go into and curl up to sleep. We found some small wooden boxes with hinged lids at a local unfinished furniture store that work great as sleep boxes. The measure about 14 in x 6 in x 6 in. I cut a 4 inch hole in the back and provided soft bedding for the interior. It's usually the first place I look for them when they suddenly "disappear."

Speaking of "dark spaces" most ferrets love to climb into stuffed sofas and chairs, as well as into box springs. They'll claw a hole in the thin bottom fabric and make themselves at home. With sofas and chairs you can staple a heavy fabric over the thin material, or go so far as to cut thin plywood or particle board to fit, and nail it into place. (We resorted to futons.) Box spring sleeping can be deterred with a fitted sheet, fitted and stapled to the underside of the box springs.

Fiberglass window and door screens are easily cut by the ferret's nails. I recommend metal . (They can still cut through it but it does take longer.) While you're at it, check to make sure that the screen is in tight and can't be pushed out. Ferrets are very nearsighted and will jump out of a multistory window as quickly as off of a chair or couch -check balconies for access by the ferret. My son's ferret jumped off of his second floor balcony - fortunately landing in soft dirt. Check for access to open stairways too.

Try to introduce a ferret to a new brand of food and they'll turn their nose up at it. Leave a piece of Styrofoam, foam rubber, a small button, a rubber band, vinyl rubber (a toy or balloon, for example) lying about, and they'll eat it; block their digestive systems; and require emergency surgery to save their life. Pencils with erasers have caused more blockages than I'd care to count. Same with foam rubber ear plugs. Watch out for the rubber backing on throw rugs. Ferrets often find it tasty but very dangerous.

You can <u>not</u> ferret-proof a recliner or pullout sofa bed. They are <u>deathtraps</u> for ferrets. They <u>will</u> climb in the mechanisms and be crushed. No matter how careful you are, someone will eventually come into your home, sit on the chair and operate the mechanism. Get rid of the recliner, or bind the mechanism so that it can not be operated; <u>and</u>, if it has a handle on it, remove the handle.

**Treats** - Ferrets can be fussy eaters when you want them to eat something - even treats. Basically, with exceptions, you can try them on anything that you can eat; just do so in very small quantities. Some of ours like Cheerios; some love strawberry flavored licorice; some love raisins, mellon, bananas, cucumbers. No onions, please. There is a substance in raw onions that may cause serious blood disorders. Nuts may cause a blockage. Steer clear of foods very high in fibers such as lettuce and carrots which may also cause intestinal blockage. Even raisins are fairly high in fiber and no more than 2-3 per treat should be given in any one day. Milk and milk products may cause diarrhea in some ferrets, although many seem to do just fine on small portions. Lactose free milk substitutes seem to be better. Many love yogurt. Some people claim that Chocolate, especially dark chocolate, can cause serious illness (but ours have survived eating stolen chocolate bars with no obvious problems, and others have reported similar stories so I include this as a caution only). Caffeine is also **not** recommended (coffee, tea, colas, etc.), since it might overstimulate the heart. All in all, try to keep the sugar quantity to a minimum. Ferrets generally love Ferretone.

A few treats, once in a while won't hurt, just make sure that any treats you give them constitutes much less than 10% of their diet - maybe a teaspoon or less per day. (Of course, if your ferret is ever diagnosed with a disease called "insulinoma," where the pancreas

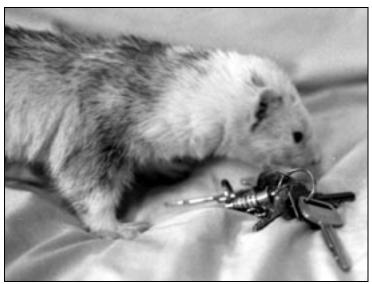
produces too much insulin, no sugars should be given. This prohibition includes honey. (Look at the ingredient list. <u>Anything ending with the "ose" (fructose, glucose, etc.) should be avoided.)</u>

#### **COMMON BEHAVIOR**

**Background** - First, the domestic ferret is not a "tamed wild animal" any more than a Poodle or Persian cat. The ferret is a separate species from its wild cousins; the weasel, mink, and its very distant cousin, the native, American Black-Footed Ferret. The ferret has been domesticated, according to some scholars, for over 2500 years. As a result, the ferret has lost most of its ability to survive in the wild and depends totally on humans for its survival. If released outside, he would very likely starve to death within a week, if not first killed by a neighbor's dog, or a hawk, or run over by a car.

Ferrets have personalities that vary as widely as do humans. Compared with the more common household pets, the ferret's personality could be said to be somewhere between the dog and the cat in overall behavior. It is not as demanding for attention as the dog, nor is it as aloof and independent as the cat. Like the dog, the ferret can be trained to come to his name and to do "tricks." Unlike the dog, it does not have to be walked, and makes little noise. Unlike the cat, it retains his playful "kittenish" behavior all of his life.

In many ways, having a ferret in your home is a lot like having a 2 year-old child (often known as the "terrible twos.") Put away the breakables; hide the small valuables; put everything easily movable that you want to protect, up and out of reach.



"Has anyone seen my car keys?"
Ferrets love to collect things

Unaltered male ferrets are called "hobs;" altered males are "gibs". Unaltered female ferrets are called "jills;" altered females are "sprites." Even though most private breeders and knowledgeable veterinarians do not recommend altering ferrets until after they have sexually matured, most ferrets born on the large breeding farms are altered a few weeks after birth. Unless

you are a breeder, both the male and female should be altered shortly after sexual maturation. A jill may come into "heat" at about 5-6 months of age, typically in the spring. Unless bred she will remain in heat. This condition will likely lead to either a fatal infection or aplastic anemia - fatal in nearly 50% of the cases. Hobs will exhibit a <u>very</u> strong, musky odor when he comes into season, and proceed to "mark" his territory (your home and even you) with urine.

## If you get an unaltered ferret, be sure to have him/her altered. A jill's life, in particular, will depend on it.

The temperament of altered males and females is similar. The unaltered male tends to become twice the size and weight of the unaltered female. On the average, the gib tends to weigh between 2 -5 pounds (with the hob generally at the higher end of the scale), while the sprite tends between 1 - 2 1/2 pounds (with the jill at the lower end of the scale). Males (particularly the late alters) also tend to have a broader face than the females, making them easily identifiable once you know what to look for.

Young ferrets are called "kits." They generally reach full size at around 5 - 6 months, but may put on an additional growing spurt at around 8 months. They are considered adults at 1 year. During this process, the ferret goes through several behavioral stages. The earliest stage is the "Gee, I have teeth!" stage.

*Gee, I have teeth!* - Kits love to play, and all of their young life they have played almost exclusively with their littermates. Ferret kits, unlike humans, are blessed with incredibly tough skin. Normal play involves biting and shaking that would rend most other tiny animals into small bite-sized pieces. To the kit, this is just great fun.

Suddenly the kit finds itself with a great, new, funny-looking playmate - you. One of the first things he will try to do is engage you in "play." However, you will probably find this "play" somewhat painful. Kits are very intelligent and will quickly learn that their new playmates don't appreciate that type of play, *if you firmly and consistently discourage him*. The main thing to remember is that all young animals will use their mouth to grasp things. They aren't being mean. They don't mean to hurt. You, as the owner, are responsible for teaching them what constitutes acceptable behavior. The ferret learns faster than most animals (including many human children) just what is acceptable. (See the section on Training, for tips on training a ferret not to nip.)

At this stage in their life, they love to explore. Put them in a new room and they'll examine every nook and cranny. Then they'll go around a second time to make sure that they haven't missed anything the first time through. Then they'll go through it again to make sure nothing has changed since the last time. Kits tend not to like to be held for long periods of time. There is just too much that they want to see and do. However, if you want a cuddly pet, hold them often. Even when they wriggle and struggle to get down, continue holding them until you are ready to set them down. Often they will give a big sigh and then relax. At that point, praise them and give them a small treat (a lick of Ferretone, for example) then set them down.

Kits sleep for considerable amounts of time, and sleep *very* soundly. Many an owner of a young ferret will think that there is something terribly wrong because they can't get their ferret to wake up, or if they do he shakes uncontrollably. This is normal in a ferret, particularly in a kit. I've heard many stories of people rushing their limp, unconscious ferret kit to the vet, only to have him yawn and stretch as soon as they get into the office. I've come close to doing that more than a few times myself. Some call it the AND (Asleep Not Dead) syndrome.

**The Ferret as an Adolescent** - Just when you think you have all the training behind you, your ferret becomes an adolescent and forgets everything you've taught him. At least it seems that way. At about 6 months of age, the ferret begins to mature and develop his adult personality. Like a human adolescent, this is a time for testing boundaries. Just be firm and consistent. Provide play and love in large measures. Be patient. It only lasts a few months.

**Adulthood** - The ferret reaches adulthood by one year of age. By then you will probably notice a change in his personality. Although still very playful, he may begin to seek you out and "ask" to be picked up and held. He will actively seek your approval and take an interest in things you are doing. Most owners of adult ferrets are well aware of "weasel help" when it comes to sweeping or mopping the floor, or doing a little home repair. He will enjoy going on "outings" with you, sometimes even uninvited. One of our first, Valentine, decided to hide in my wife's purse after we told her that she couldn't go shopping with us. After we were a mile down the road, Valentine popped her head out and looked around as if to ask, "Are we there yet?" Many knowledgeable people recommend that first-time ferret owners consider the adult ferret as their first choice.

**Old Age** - The domestic ferret, barring accident or early onset of cancer, will typically live to be 6 - 8 years old. Nine year old ferrets are not uncommon with some reported living to the ripe old age of 12 or older. Although the ferret will sleep more as he gets older, he will continue his kitten-like behavior for his entire life.

After the age of three, an annual physical exam is a good idea. Some vets recommend a blood test just to make sure that problems are caught early. Once your ferret reaches this age you may want to discuss the pros and cons with your vet. You should realize, however, that by the time the ferret reaches 6 years of age, nearly half of them may have undergone at least one major surgery.

A mature ferret, upon reaching four years of age, may require less protein in his diet. Some owners and vets recommend a switch to a high quality adult ferret food, rather than the regular formula. At least one manufacturer of a premium ferret food (Totally Ferret) has an "adult" formulation of their product. The lower protein is said to be easier on their kidneys. Again, this is a good topic to discuss with your vet for your particular ferret's age and health. Ours, some of whom are going on 7 years, do just fine on the regular formulation rather than the adult fair.

General Behavior - Regardless of age, you will find that your ferret is a hyper-energetic little bundle of fur. Ferrets are constantly into everything. If this is your first ferret, one of the things you will probably observe in the first day or two is the "ferret-dance of joy" or sometimes called the "ferret war dance." They will hop about like they have springs on their feet, back arched, mouth wide open, head swinging back and forth, sometimes making a hissing or chirping sound, sometimes banging into walls and furniture. This has panicked many new owners who are unfamiliar with this "call to play". "What's wrong with my ferret? Is he sick?" Don't worry. It just means that your ferret is happy and is having a great time.

An almost universal pose, is the "flat-ferret". Here the ferret gets as close to the ground and as flat as possible, usually right in front of you. (He looks like a miniature "speed-bump.") It's almost saying, "Gee, look how pitiful I am. How can you not hold me? Please pick me up." Ignore this and he might even come up and tap you on the leg or foot to get your attention, before going back to the flat-ferret pose.

The flat ferret pose, though, sometimes means "I'm invisible. You can't see me." This is

often used when sneaking up on something or someone. The problem is that it's difficult to tell when he wants attention, or wants to be invisible. Ignore a ferret asking for attention risks disappointing the ferret; picking up an "invisible" ferret risks ruining his game. I usually just pick them up. I've found that when they're trying to be invisible, it just means that they are about to get into trouble anyway.



**Doc doing his Flat-Ferret Pose** 

[If it seems that your ferret is doing the "flat ferret" much more than usual, you might want to take him to a vet for a check up. It could be just fatigue or it could be an early sign of illness.]

Ferrets are very clever and their front paws are great at manipulating objects. They can open cabinet doors and drawers, so be careful where you leave your caustic cleaning materials. Child-proof locks are not necessarily ferret-proof locks. Ferrets are also ingenious at figuring out paths to things that are "up out of reach." They can even open zippers and unscrew bottle tops that are not on too tight.

Ours have figured out that if they open the bottom drawer of the kitchen cabinet and crawl to the back, they can climb up the back of all of the drawers, push the top drawer open from the inside and get to the counter top. I've also watched one of ours trying to get into a tall, plastic trash container. Unable to climb up the slippery sides of the container, he simply pushed the container over to his 6 foot tall cage, climbed up the cage and hopped in the trash. (Unfortunately he didn't think about how he was going to get out again.) I've also watched the drag laundry baskets, pet carriers and what-have-you over to something that they want up on but can't reach. They used this as an improvised stepping stool to climb to new heights of mischief.

If you're going to own a ferret, you have to have a great sense of humor.

### **VACCINATION REQUIREMENTS**

Ferrets are extremely susceptible to canine distemper. Distemper, in the ferret, is considered 100% fatal. The disease can be spread by direct contact with infected animals or by indirect contact. It can be brought in on clothes, shoes and the skin. Fortunately, it is easily prevented through annual vaccination with an approved canine distemper vaccine. Vaccinations against feline distemper and canine Parvo are neither necessary nor recommended.

Make sure that your vet understands that a vaccine made with ferret tissue <u>cannot</u> be used. This may <u>cause</u> the disease in the ferret. Presently there are two vaccines, FERVAC by United Vaccine, and Merial's new PUREVAX Ferret Distemper Vaccine, both approved by the USDA for use in the domestic ferret. Although the PUREVAX is relatively new, it is reported to cause fewer allergic reactions in ferrets. Some shelters, and owners use GALAXY-D (formerly FROMM-D) but this has not been proven effective in ferrets. Vaccination against canine distemper is to save the ferret from the disease.

Most pet store ferrets will have received the initial vaccination from the breeder at about 6-8 weeks of age. Some pet stores promote this initial vaccination as "the ferret has had all of it's shots." This is definitely **NOT** true. A booster is required by 11 weeks of age, and another at about 14 weeks of age. There is a general agreement that ferrets be re-vaccinated every year after that. Ferrets brought to ferret shows are required to show proof of vaccination against canine distemper within the past 12 months. If a ferret has an unknown history of vaccinations, vets recommend a series of two vaccinations, spaced about 4 weeks apart just to make sure that the ferret is protected against this painful and fatal disease.

Ferrets also should be inoculated against rabies. The only current USDA approved vaccine is IMRAB-3, a killed virus vaccine. This should be the only vaccine used since it is the only one recognized by the Government. Vaccination is recommended after 14 weeks of age and annually thereafter. Ask the veterinarian for a certificate of vaccination. Make sure that the certificate states that IMRAB-3 has been used.

The canine distemper and rabies vaccine should <u>not</u> be administered in the same day. A two to three week period between these vaccinations is recommended. This not only may decrease the possibility of an allergic reaction, but if one does occur, will let you know which of the vaccines caused the reaction.

Allergic reactions to the vaccines sometimes (although rarely) occur. Such a reaction is life-threatening. Always remain at the veterinarian's office for at least 30 - 45 minutes, or longer, after the vaccination to make sure that your ferret does not develop such a reaction – sometimes characterized by diarrhea, retching and/or vomiting, possibly followed by a rapid drop in body temperature, shock and death. On the other hand, sometimes the ferret exhibits a bright red skin; the hair on the tail "poofs" out; the ferret begins to have difficulty breathing. In either case, death can occur rapidly without prompt, knowledgeable treatment. (We have found that pretreating the ferret with 0.5 to 1 ml (depending on the ferret's weight) of pediatric Benadryl, orally, about 30 minutes prior to the vaccination somewhat reduces (doesn't eliminate) the allergic reactions. Check with your vet for the recommended dosage for your ferret. It is no guarantee, however, so stay in the vet's office 30 - 45 minutes.)

Sometimes the reaction to the vaccine may occur several hours after the vaccination, so be

sure to keep an eye on your ferret. Mild lethargy for a couple of days after a vaccination is normal. What you want to watch for is vomiting, severe diarrhea, especially black or bloody diarrhea. We usually plan vaccinations for the days when one of us can stay home with the ferret to make sure that there are no problems.

Rabies in the domestic ferret is quite rare. In fact, since 1958 fewer than 25 cases have been reported in the entire United States. Some cases are believed due to the use of a modified live virus rabies vaccines that actually *gave* the ferret the disease. These types of vaccines are not approved for use in ferrets. There has **never** been a case reported of a ferret transmitting rabies to a human or another animal. Annual vaccinations with IMRAB-3 will effectively prevent your ferret from contracting the disease should he ever get outside. Now, most states follow "The Compendium of Animal Rabies Control" and will treat a ferret that bites a human the same as they do dogs and cats - a ten day observation period, after which, if the ferret remains healthy, he will be released from quarantine. Not all states, or communities within the state recognize this procedure, so always check with your local animal control or public health office for the latest regulations for your area.

#### **TRAINING**

**Litter box** - Litter box training is one of the first items on most new owner's agenda. If the kit was kept in a confined area where a litter box was always available, chances are that he at least knows what a litter box is used for. The idea of a confined area with a litter box is a good beginning regardless of the age of the ferret. Just remember, "Ferrets are not for the fastidious."

A ferret is not a natural litter box user like a cat. A ferret is more like a dog that you want to paper train. Supervision and consistancy are the keys. A dog won't naturally go to a paper to relieve itself if you let it go anywhere/anytime. You have to watch the dog, and when you see it act like it's going to "go" you carry it to the newspaper, make it stay there, then praise it and reward it. If you don't show it what you want, and are inconsistant, it simply won't learn. Same with a ferret. The first thing in the morning when it wakes up, put it in the litter box. Make it stay there until it goes, reward and praise as it goes. Supervise during the day; carry and reward what you want it to do.

The first day home, the ferret should be confined to a small area - if necessary, to his cage - while he gets used to the sights, sounds and smells of his new surrounding. The domestic ferret is a "clean" animal. He will relieve itself well away from his source of food and his sleeping area. Keep a close eye on your new pet. If you see him using the litter box for its intended purpose, lavishly praise him and give him a drop of diluted Ferretone/Linatone as a reward. If he begins to relieve itself elsewhere, shout a loud "NO!" pick him up and place him in the litter box. Make sure he finishes there; praise him and give him the Ferretone/Linatone treat.

After that first day or so, give him the freedom of a room. You may have noticed that the ferret always uses a *corner* of the litter box. In the room he will also tend to use corners. Place litter boxes in strategic corners of the room. It's also a good idea to place strips of plastic carpet runner, newspapers or vinyl flooring samples under each of the litter boxes to protect carpets from accidents. It may also be a good idea to place the runners in corners where there is no litter box. Again repeat the close-observations-and-reward when your ferret uses the litter box, or the shout-and-carry when he does not.

Most ferrets very quickly learn that he gets a treat when he goes to the litter box. After a while they may frequently run there and pretend to relieve themselves just to get the reward. They are great actors and actresses.

If you notice that your ferret is backing up to the litter box, but relieving himself just in front of it, you might try cutting down the front of the box. A ferret will often simply back up until he feels something against his backside, then take a step or two forward and let loose. Cutting down the front side of the box to about 1-11/2 inches may help.

When the ferret is using the litter box regularly, you can expand his territory. Repeat this gradually until he has the run of your home (or at least those areas where you are willing to allow him to roam). Litter boxes will usually be required in each room, however. The ferret is very careful about protecting his food and bedding from his waste-products. Outside of those areas, he really doesn't see the reason for the fuss. If a litter box is available and they can get to it in time, they figure, "Great!" If they can't, "Hey, my food is way over there, and my bedding it way down there. What's the problem?" You can use this to your advantage by placing part of his bedding or a dish of his food in the corner you don't want him to use and you don't want to put a litter box. Chances are good that he won't use that area as long as the bedding or food dish are present.

If the extended freedom proves too much for his litter-training program, reduce the area and try again. Very few ferrets will be 100% "accurate," 100% of the time. Most ferret owners would be overjoyed with even 85%. One new owner asked me "How can I keep my ferret from going to the bathroom on my kitchen linoleum?" My answer, "Take up the linoleum!"

"Accidents do happen." Ferrets often find places to relieve themselves through smell. If they went there once, they'll probably continue using that spot. You can reduce that likelihood, either by giving up and putting a litter box there; or by a thorough cleaning with a good cleaner or a mixture of 1/4 white vinegar and 3/4 club soda. Some of the enzyme based cleaners made for pet stains also work well. **Don't use a cleaner with ammonia.** Urine contains ammonia and the smell of the ammonia in the cleaner will send the wrong message.

A ferret will not use a litter box he considers too dirty. Clean the box on a regular basis, but not too clean. Leave a small bit of waste, or a little soiled litter. Otherwise they may think that you got them a new sandbox, and will have a GREAT time digging in it and throwing the litter everywhere.

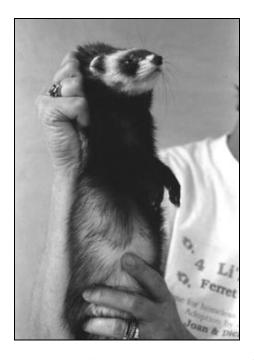
While on the subject of cleaning the litter box - a warning on using cleaners [containing phenylphenol (Lysol and others) - either spray or liquid. This | chemical disinfectant, is believed to be very toxic to ferrets. If you disinfect the 'litter box with such a cleaner, rinse and air-dry thoroughly before allowing your ferret to use it again. Don't spray it near the ferret or allow the ferret to walk on the floor of the area where it was used until the floor has been thoroughly washed and rinsed and dried.

**Biting** - Puppies bite, kittens bite, children bite. For some reason many people think that a bite by a ferret kit is a sign that it is a "wild, vicious, animal."

With a kit, biting is usually a part of his normal play activities. If you've ever watched a group of kits playing, you've probably wondered how they can keep from hurting one another. The answer is an unusually tough skin. Ever try to vaccinate one? The term "shoe leather" comes to mind.

Biting from the older ferret is relatively rare compared to the dog or cat, and is often a sign of either an untrained or an abused animal. Even these older animals will quickly respond to kindness, firmness, consistency, and genuine affection.

Should he nip a little too hard, a firm "NO!" will let him know that he has done wrong; especially if this is accompanied by "scruffing" i.e., holding the ferret up by the loose skin on the back of the neck and giving him a light, firm (not violent) shake. Afterwards, continue to hold him and talk soothingly. If he behaves, perhaps a taste of Ferretone will help reinforce his good behavior.



Joan and Valentine demonstrate the "scruff"

One of the most common behavioral problem I see at our shelter is the result of the former owner putting the ferret on the floor as soon as he nips. The ferret very quickly gets the idea "Oh, so this is how I'm supposed to ask to be set down?" So if he doesn't get set down after the first nip, he "shouts" a little louder. I use the scruff, shake and hold technique until he learns that a nip is not the way to ask to be set down. In fact, I usually hold the ferret until he goes docile and gives a big sigh of resignation.

Some people claim to have had good results in training ferrets not to nip by "flicking" them lightly on the nose with their finger. I don't agree with this procedure. It does work for some ferrets in some situations. I have, however, seen this cause *significant* problems with many ferrets. It may actually result in a real hate-hate relationship forming between the two of you, and that is exactly what you *don't* want.

A few ferrets are genetically deaf. This is common in ferrets with a mostly white head or a pronounced stripe between the ears. Sometimes, but not always, these are more difficult to train simply because they can't hear you tell them "no." Often the owner will have no clue that their ferret is deaf until they eventually notice that he doesn't seem to react at all to sudden, loud noises. Nip training in this case might involve using your forefinger and thumb to lightly hold the ferret under his jaw and on top of his snout, while scruffing with the other hand.

If the scruffing approach fails, one good anti-nipping training aid is Bitter Apple (or Orange, or Lemon) - available in most pet stores, usually used to keep animals from licking their fur. Spray your hands and fingers, then offer it to the ferret to "taste." Most think that this is the worst tasting stuff, ever! Spray your hands before you pick him up, or in the type of situation where the nipping usually occurs. It doesn't take long for the ferret to learn that you don't taste good. Never spray it in the ferret's face, and never put it directly in their mouth.

Whatever training approach you use, remember to hold him and love him after the punishment. Rewarding good behavior is always preferable to punishing bad behavior, and teaching him that you love him is, after all, the most important lesson.

Ferrets *love* socks, especially white ones, with or without feet in them. Wearing white socks without shoes is an invitation for a ferret to try to steal your socks, feet and all. Some people discourage this behavior using the nip training techniques described above. Our ferrets trained us to always wear shoes over our socks when the ferrets are up and about. My sister-in-law learned the "white sock fetish" on her first visit when she attempted to come down the stairs in the morning, wearing white socks, in spite of our warning. Eight of our ferrets cornered her on the stairs and kept trying to steal her socks right off her feet. She fled up the stairs and changed to red socks. The ferrets ignored her.

There is "ferret play" and there is "human play." The idea is to teach the ferret when each is appropriate. One of the most important lessons to teach your ferret is "pickup is not play-time." When you pick up your ferret to hold, *never* roughhouse or invite play. This must be a signal of "quiet-time"; a time for hugs and petting. Once you pick your ferret up, keep holding him on *your* terms. No matter how much he may want down, no matter how much he squirms and wriggles, keep holding him until you are ready to put him down. Once he settles down (usually with a big sigh), give him a reward of diluted Linatone/Ferretone. He will get the idea. Soon you will have a ferret that loves to be held and cuddled.

If you decide to Ferret-play, choose your terms. If it's going to be a very rough and tumble play, I'd suggest you use a thick "puppet" (stuffed animal or something similar) that your ferret can readily chomp without fear of hurting you. If it's going to be a more subdued play (human-play) don't get too rough and confuse the ferret. Stick to tummy tickles and a little fur roughing, or tug-of-war. They are smart and will quickly learn the difference.

**Digging** - Ferrets love to dig. Potted plants make great ferret fun-digs, not to mention"salad" out of your plants. You might try:

- Putting your plants out of reach (good luck since ferrets are great climbers);
- Putting medium-sized (3-6 inch) rocks on top of the dirt;
- Cutting linoleum or wire mesh to fit around the stem and inside the pot and covering that with stones;
- Giving up and buying plastic plants (this is the route we took after trying all the above).

A friend of ours tried to protect her prize plant by putting a bell on the ferret's collar so she could tell if the ferret was in the living room with her plant. Like any good ferret, she soon learned to slip the collar, and in her "stealth" mode dig to her heart content. Undaunted, our friend put the bell on the plant. Since the plant normally didn't do much walking on its own, she knew when she

heard the bell, that her ferret was busily trying to inspect the roots.

Your ferret will quickly discover that there are "things" to see and do behind every closed door, and he will try his best to get in "there." If you have carpet under the door they will try tunneling under the door. Of course this requires going through the carpet first. Plastic runners (available in carpet stores and some building supply stores) work well. Cut these about 6 inches wider than the doorway; notch the middle of the sides such that it fits between the door jams (sort of a wide, sideways figure "H". I'd recommending tacking it in place so that your ferret can't crawl under and start a tunnel from there. Another, more "formal" approach is to use oak thresholds cut and nailed firmly in place. These look good and are too hard for the ferret to dig through, but may not prevent your ferret from trying to dig just in front of the wood.

What if a door has a gap high enough for a ferret to fit under? One of our tiny sprites taught us this trick. She was always getting into the spare bedroom, a nominal Ferret Free Zone. I certainly didn't want to replace the door, and stuffing things under the door just meant that she had to work a little harder, first removing the "things," before she could get in. Visiting the local home improvement store, I bought a piece of rectangular trim, narrower than the thickness of, and as wide as the door. I popped the hinge pins, removed the door and tacked the trim to the underside. It is invisable from the outside, and our littlest ferret could no longer squeeze herself under the door.

#### **GROOMING**

**Bathing** - I am often asked "What can I do to keep the odor under control? We bathe him every week."

Even altered ferrets will have a slight musky odor. Frequent bathing, however, is *not* recommended and will actually stimulate the production of a strong musky scent. We rarely bathe ours - unless they have gotten into something (again) and a bath is the only way to get them clean. We once were surprised to find ourselves the proud owners of a Red-Eyed Black ferret - our albino had gotten into the fireplace ashes. Our first "Black-Eyed White" was a former silver mitt who had gotten in the powdered sugar. Sometimes young kits will require more frequent bathing then older ferrets, until their body learns to regulate itself. Changing the bedding on a regular basis (at least once a week) will do more to cut down on ferret "body odor" than just about anything else.

I'd recommend a good ferret shampoo for normal bathing. We've occasionally used a "notears" baby shampoo for really wriggly ferrets so as to keep the shampoo from hurting their eyes. If you have to use a flea shampoo, <u>use only kitten-safe shampoo</u>. A normal dog or cat flea shampoo may poison your ferret. <u>Never use a flea collar or flea powder or flea dip.</u>

The bath and rinse water should be warm; neither hot nor cold. A ferret's body temperature is about four degrees higher than a human's, so that what is lukewarm to you, is cold to the ferret.

A double basin sink works well. Fill one side with a few inches of warm water, and use the other side for the wash operation. If you don't have a double basin, a plastic dish pan will work

almost as well. Fill the basins before you put the ferret into it. The running water may frighten the ferret.

Wet the ferret and apply the shampoo. Work into a lather - don't forget the head (careful of the eyes) and tail, and under the legs. Gently dip the ferret in the rinse water and rinse thoroughly. A sink sprayer sometimes works, but frightens some ferrets. Repeat the wash and rinse. A few drops of a moisturizer such as Avon's Skin-So-Soft oil added to the final rinse water will help prevent dry skin. Or, if you prefer, a Skin-So-Soft oil and water mixture can be sprayed on from a pump-bottle and rubbed in thoroughly after the final rinse.

If you are using a kitten-safe flea shampoo, start at the neck to prevent the fleas from migrating from the body upward. Be very careful around the eyes. A non-no-tears shampoo in the eyes may make future bathing very difficult, so do be careful. Ferrets are fast learners and may learn from one experience that bath time means hurting time.

Have plenty of towels handy. Rub the fur reasonably dry then put your ferret on the floor. Give him a dry towel, and he will finish the job. It might be a good idea to remove the litter boxes for a while, because the wet ferret will use not only the towel but almost everything else to dry itself and litter makes a messy drying tool.

Some ferrets absolutely love a bath; most will tolerate it; a few will go bonkers at the mere thought of a bath. One of ours lets out an ear piercing scream if it even suspects a bath is in its immediate future. If you happen to have one of the rare latter ones, dry powder shampoos are available, but they don't really do well in cleaning syrup or peanut butter out of the fur. Amazingly enough, these same ferrets who go bonkers in the sink may want to jump in the tub or shower with you. If that's the case and you're up to it, carry in the ferret shampoo along with your own.

**Shedding** - The ferret usually sheds their coat twice a year - in the late winter or early spring; and in the late summer or early fall. They will groom themselves fairly well so daily brushing is not necessary, but is helpful and may prevent your ferret from ingesting too much hair, during their self-grooming. If they ingest significant amounts of hair it could cause upset stomachs and even intestinal blockages. A little bit of a hairball remedy paste (about 1/2 inch or so), such as made for cats, may be given daily or every other day through the shedding period to help prevent the blockage. I like to give a dose of the hairball remedy at least once a week regardless of shedding. Most ferrets prefer the "malt" flavors. If you suspect a blockage, contact a vet immediately. (See the section on intestinal blockages for symptoms.) Substances such as Ferretone or vegetable oils will not break up hairballs.

**Toenails** - Toenails will have to be trimmed about once a week, or once every other week. If you don't, the nails will grow to painful length and the vein in the nail will expand and make future trimming difficult. The front nails usually have to be trimmed more frequently than the rear ones.



A couple drops of Ferretone on the belly makes nail clipping a snap

Use a regular human-type toenail clipper or the dog/cat type. Make sure it is sharp. Otherwise, it may cause the nail to split. Clip the nails such that the flat portion of the trimmed nail will be parallel to the floor when the ferret is walking. A couple quick strokes with an emery board to round off the edges of the nail after clipping will also prevent splitting, will make the nail smoother and less likely to snag on things.

Getting their toenails clipped does not exactly top the ferret's most-fun list. They will wriggle and squirm and twist and pull. For this reason some ferret owners wait until their pet is asleep and get one paw at a time. A much easier way is to lay the ferret on your lap with his head up and his back down; place a few drops of Ferretone/Linatone on his stomach; show the ferret where it is; then while he is busy licking, you start clipping. You'll find that your ferret sticks all four paws out while reaching for the Ferretone/Linatone. That makes snipping all four paws a snap. You may want to try out the Ferretone-on-the-belly technique a few times before you actually clip the nails so as to get your ferret used to the procedure.

When you trim, look carefully for the dark vein in the nail. **Be careful that you do not clip the vein.** It is a good idea to have styptic powder handy just in case, because if you do clip into this vein, you *will* hit nerves, the ferret *will* scream, and the toe *will* bleed. The styptic powder will at least stop the bleeding. If you don't have styptic powder, try corn starch.

Don't even think about "de-clawing" a ferret. They need their nails like you need the ends of your fingers and toes. They need them for walking. They need them for grasping. A de-clawed ferret is a crippled ferret.

**Ear-Cleaning** - The ferret's ears will build up a reddish wax that should be removed about once a month. One of the best ways of cleaning the ears is to let the ferret do most of the work. Drop some ear cleaning solution (such as Chlorhexi-Derm Flush - available from your vet) or similar solution) deep into the ear and massage for a few moments. Then let the ferret shake. Much of the ear wax will be shaken out. What's left on the surface can be cleaned out with a cotton swab.

If the wax is a dark gray and the ear has an unpleasant odor, it is likely that ear mites are

present. If your eyesight is keen and you have a magnifying glass you may be able to see the white mite if you rub the ear wax on a piece of dark paper. Look for a slowly moving white dot. (Make sure that the diagnosis for ear mites is confirmed by a microscopic examination of a swab.) Commercially available ear mite medicine will work eventually, but your veterinarian has medications (in particular a very dilute solution of ivermectin) that will work much faster and with more positive results. Clean the ears thoroughly before using any of the ear mite medicines.

**Teeth Cleaning** - Like human teeth, ferret's teeth will build up a layer of tarter which, left untreated, may lead to teeth and gum disease. If you feed your ferret a dry ferret food and keep the treats to a minimum, the rate of tarter build-up should be low. Eventually though, the teeth will take on a yellowish hue, sometimes with brown spots near the gum line, and it will be time for a through cleaning.

Some people claim to have great success doing this at home. I'm not one of them. This I leave in the skilled hands of our veterinarian. There is no way I want to try to hold a squirming, wriggling, unhappy ferret while I attempt to scrape his teeth up under the gum line with a sharp dental tool. Our ferrets get their annual dental check-up along with their annual vaccinations. Much easier on everyone.

The vet checks for cracked or broken teeth (especially canines) and for indications of gum abscesses and, of course, tarter build-up. The teeth should be scaled well up under the gum line where tartar may cause serious gum diseases. Such a deep cleaning is usually done under a general anesthetic. Our vet also polishes the teeth after he is done scaling them in order to seal the surface of the teeth against decay.

**Odor Control** - A healthy ferret should only have a very slight, musky odor. If you notice a strong unpleasant odor, it could be do to a number of things:

- Don't bath the ferret unless it's absolutely necessary (remove mud, syrup, etc.). Think of bathing them about as often as you would a cat. It's usually not necessary, and will greatly increase the odor. The more you bathe the ferret, the more oil their skin will produce. The more oil, the greater the odor.
- Check the package label on the ferret food. If fish or fish product is listed in the first 1 5 places on the ingredient list, it may be the source of the odor. Fish based food smells bad in the food bowl and coming out the other end.
- Be sure to change the ferret's bedding at least once a week. The bedding will pick up and hold the oil from their skin, and over time will begin to develop a strong odor.
- Dip/change (depending on the type of litter you use) the litter daily. Empty and scrub the litter box at least once a week. Wipe out the cage floor with an animal-safe cleaner such Simple Green.
- Check the ferret's ears for ear mites. As mentioned above, ear mites can produce a strong, unpleasant odor around the ears. Your vet can check for and treat these if necessary.
- If the urine smells unusually strong, have the vet check for kidney disease.

#### **TOYS**

Ferrets are naturally courious critters. They love new things. Consequently, finding that their environment is the same, day after day, they quickly will become bored and listless. Try to keep life interesting to them by providing new "adventures" regularly. It doesn't take much. A cardboard box, a paper sack, a few small stuffed toys, baby rattles will likely cause considerable excitement for your ferret. No need to be constantly going out a finding new toys. Simple "rotate" the toys from time to time. Pick up the "old" toys and put them away for a few weeks, while bringing out others which you had previously stored.

Ferrets are "packrats." They will take anything that interests them and drag it off to their "hidy-hole" usually in/under a couch or bed or chair. This may include: socks (clean or dirty), foil, bottle caps, keys, hair brushes and combs, wallets, pencils and pens, jewelry, slippers, (my wife lost her flute - case and all - dragged under and up inside the couch), TV remote controls (ours is still missing); anything small enough for a determined ferret to drag off. Usually these will stay "hidden" and not constitute an everyday "toy."

Ferrets seem to love toys that squeak. Normally these are made of vinyl rubber. The major problem with these toys is the ferret's sharp teeth. Ferrets will, in very short order, puncture and tear the toy. The risk is high for ingestion of the pieces and possible intestinal blockage.

One possible approach to the ferret's having his toy and not eating it too, is to put the toy in an old sock and tying a knot in the end of the sock to keep the toy in where it can't be eaten. Not only does it protect the toy itself, but the sock is a toy all by itself. Other possibilities are squeak toys that are contained in lamb's wool coverings. These are typical cat or dog toys. Inspect all toys periodically; even the socks. If they appear to be eating it, it is time for a new toy.

A flexible dryer hose makes a great toy that will satisfy the ferret's tunneling instincts. This is our ferrets' favorite toy; one that they've never tired of. These come in various lengths from about 4 feet to 50 feet or longer. Some are opaque white, others are clear, some are made of a heavy gauge aluminum foil. With the clear dryer hose, you can watch the ferret at play, or, with two or more ferrets in the clear hose, watch the mock battles and tail wagging. Run a strip of duct tape around the edges to keep the sharp wire inside the hose from working loose. Ferrets never seem to tire of running through the hose. To make it more interesting, buy some round, plastic, four-inch diameter "Y" and "T" connections and connect several pieces of dryer tube to these using duct tape. You can make fairly complex "mazes" that will entertain a curious ferret for hours. Two or more ferrets will invent games based on these hoses and it will be as entertaining for you as for them. The heavy cardboard tubes that carpeting is rolled onto is a great substitute for the dryer tube, and does tend to last much longer.

If you have the space for it and an area that will allow for it, a sand box is a very entertaining play area for a ferret. They love to dig, and a sand box full of clean sand will satisfy their digging urge. Most will quickly learn all kinds of new "games" including "make-a -pattern", and "sand snorkeling". You can hide some of their smaller toys in the sand for them to find. They will sling the sand while digging, so this is not recommended for your living room.



Ollie and Doc play "Tube Race"

There are special ferret balls that you might find in pet stores. One type is about a foot in diameter with a large hole on one side and a group of smaller holes on the other. Ferrets seem to love climbing inside and rolling it around. If there are two or more ferrets around, they'll play "king of the ball," with the one inside trying to keep the others out. Be careful if the ball only has the one large hole. Your ferret can get inside and have the ball roll over and block the hole. If the ferret is too young to roll the ball off the hole, he could suffocate. If you do buy such a toy, even with the six smaller vet holes, drill several more holes all around the ball to ensure plenty of air flow. If you ever "lose" your ferret and can't find him, and you do have one of these types of balls, be sure to check there. Your ferret could have climbed inside, rolled the ball up against some object, and is unable to get out.

A simple cardboard box will enchant a ferret for hours, especially if it has a lid on it. Just cut a ferret-sized hole in one side and watch the fun. When I made one for our ferrets, our red-eyed white, Bear, ran inside it, then back out. He ferret-danced all over the room in shear joy before running back inside the box for another look. Then he ran off and brought his friends to play in "his" new toy. Like most "kids", ferrets often enjoy playing with the box that the toy came in more than the toy itself.

Small cardboard tube, like found in toilet paper, wrapping paper, etc. are <u>not</u> safe toys. Ferrets can get their heads stuck in the tubes, panic and go into shock.

Many of ours love to play in their "tower," playing "king of the tower." It seems that the rule is to see who can keep the rest of the ferrets from getting to the top.



Left; King-of-the-Tower Game Right; Andy is the King

#### ADDING ANOTHER FERRET

Ferrets should carry a warning label "Warning! Owning ferrets is addictive and may cause you to buy more." Even though all of our ferrets were altered, somehow they managed to multiply out of control. We started with one soon after they were legalized here in New Hampshire, and ended up running a ferret shelter, and meeting over 1,000 of them as they went to their new homes.

Ferrets are not significantly territorial, but they do have a social order. Once accepted into the existing "colony," ferrets will share food, water and sleeping areas very readily. This acceptance may take minutes or weeks depending on the ages of the ferrets and how long they've been "alone."

Young kits seem to adapt the best to the addition of new ferret members. They seem to take everything in stride. As they get older, it may take a little longer. Your best bet is to take it slow and supervised, but don't be overprotective.

Remember, ferrets play rough. Don't mistake rough play for fighting. Dragging by the neck or ears is normal behavior. There may be squealing and chittering; that's probably OK too. Violent shaking and drawing blood is not. If you aren't sure, separate the fighters and carry the one that appears to getting the worst of it a few feet away from the other. If, after you put him down, he runs over and leaps on the other, then it was just play. If he runs the other way, it's time to separate them for a little while.

Keep them in separate cages during the introductory period and exchange bedding with one another so that they can get used to one another's scent. One trick that works in some of the rare, more serious situations is to liberally coat the victim with Bitter Apple. You can spray it on directly, but be very careful of the eyes, nose and mouth. Better yet, spray it on your hands and rub it into the ferret's coat. Be sure to cover the neck and ears as these are the most prone areas to

"attack."

Some owners report considerable success with introductions by having all of the ferrets share a dish of Ferretone.

You may have to keep up this supervised play for days or even weeks until they decide just who is "boss" ferret. It's usually more of a worry for the owner than the ferrets though.

Again, patience is the word.



Doc and Ollie at "Play"

#### FERRETS AND OTHER ANIMALS

Ferrets may get along with many other animals, particularly with dogs and cats. Since the ferret ancestor evolved as a hunter of rodents, we don't recommend hoping that your particular ferret no longer has his hunting instinct. Even if he doesn't, ferrets play far rougher than what the typical rodent can tolerate. The same is true with birds and some reptiles.

Adding a ferret to a dog or cat home or visa-versa, is similar to adding a new ferret to a ferret home. Supervision and patience are the keys. Don't leave them unsupervised for an instant until you are absolutely positive that they do get along with one another (and probably not even then). Some ferrets have died when the family's pet dog suddenly turned on the ferret after months of apparent friendship. Be very cautious with cats. Many a ferret has been blinded by one swipe of a paw.

The ferret has no instinctive fear of either a dog or a cat and will usually walk right up to it and may even try to grab it by the neck/ear/tail and attempt to drag it off to hide under the couch (even if the dog happens to weigh over 100 lbs!). Many a dog or cat will take this in stride. Some take it as aggression. Hence, **CAUTION.** 

You might think that fish and a ferret would be compatible. That is true if you can keep the fish in the water and the ferret out. My daughter lost her pet goldfish to our ferret, Bud. Bud was absolutely fascinated by the fish which we kept "up, and out of harms way". My wife came in one day and found Bud, submerged in the fish bowl up to his shoulders, watching the fish go round and round. He raised his dripping head out of the water with an expression on his face "Hey, this is neat!" and dove back in again. The fish died a few days later; probably of fright.

My biggest concern with covered aquariums is the possibility of a ferret slipping under the cover and being unable to get back out.

#### FERRETS AND CHILDREN

We do not recommend ferrets for homes with children under six years old; sometimes not with children under eleven, because the ferret is a delicate animal that can be easily injured and crippled for life. Their back is particularly vulnerable to injury from an uncontrolled squeeze, hug or by improperly picking up or holding the ferret. The ferret is not a "cute, cuddly, *stuffed* toy." They can not take the rough handling that all too often is doled out by a young child. Even if your child has been taught how to handle small animals with care, you can't be sure that all of your child's friends are similarly civilized.

Infants are a particular problem. Some ferrets seem to be attracted by the high pitched cries of babies. Others, always curious, will investigate all new furnishings, sounds and smells. A infant tends to grasp anything that is near it and attempt to "suck" on it. The pain of the grasp, and being drawn to the mouth will terrorize the small animal. The infant is likely to be scratched and even bitten by the frightened ferret as he tries to get away. Another possibility is your ferret trying to drag the infant to his "den" to "protect it". Regardless of the reason, the result is an injured child and another story to add to the myth of the ferret as a vicious attacker of infants and children.

No one who is unable to protect themselves should ever be left alone with <u>any</u> animal -dog, cat, parrot, anything - at any time. It's only common sense.

#### **MYTHS**

Speaking of myths, the ferret is the subject of a few. Here are the more common ones you are likely to hear. Some are amusing. Some will make your blood boil.

"The ferret is a vicious animal." - Actually the ferret is one of the least likely of the companion animals to cause a serious injury. Bite statistics show that any given domestic ferret is about *200 times less* likely to bite than any given pet dog.

"The ferret is a wild animal." - Well, less so than a house cat or poodle. Either of those can survive on their own; a ferret can't. Dogs and cats will eat what's available. Ferrets will literally starve to death in the presence of eatables - they just don't recognize it as food. If they haven't eating it before they were 3 months old, chances are they won't recognize it as food. Ferrets were believed to have been domesticated at least 2500 years ago for rodent control and as aides in hunting rabbits.

"The ferret is a rabies carrier." - The ferret is one of the least likely companion animals to catch or transmit the rabies virus. The IMRAB-3 rabies vaccine was only approved for the domestic ferret in 1990, yet since 1958 less than 25 cases of rabies in the ferret have been reported. Compare this number to the thousands of dogs, and thousands of cats that have been found carrying the rabies virus. The Centers for Disease Control in Atlanta has said that there has *never* been a reported case of a ferret transferring rabies to a human or another animal.

"The ferret doesn't have any backbone." - No, the ferret *does* have a backbone. He is just remarkably flexible, allowing him to turn around in a very small space. Even though flexible, he can be injured through rough handling or a fall.

"The ferret is a rat [or rodent]." - No, the ferret is a carnivore (meat eater), distantly related to the dog, which is why they are more prone to canine diseases. One look at the structure of their teeth will show you that they are not rodents. They do not have the chisel-shaped front teeth characteristic of rodents. In fact, their teeth resemble those of a cat. Ferrets are more closely related to the weasel, and mink. Some ferret owners affectionately refer to their pets as "weasels". In fact, one person told me, "Ferret owners are the only people I know, who, if you call them a weasel, take it as a compliment."

#### **HEALTH TIPS**

The following is not meant to replace examination and treatment by a qualified veterinarian. This information is only intended to give the ferret owner tips on things to watch out for, and suggest some over the counter medications that the owner may wish to keep on hand should they be recommended by the veterinarian. Always consult your veterinarian at the first sign of illness or injury and follow his/her instructions carefully in the use of any treatments land/or medications.

What to look for in a vet for your ferret - The ferret owner should look for a veterinarian more carefully than they would for their personal or family physician. At least the physician has seen and worked with humans before they have set up their practice. Many veterinarians are not at all familiar with the ferret; the ferret being relatively new to the pet scene in many parts of the country.

Hopefully, if you look around your community and in neighboring communities you will find a veterinarian who has experience with the ferret and their special needs. You might ask the vet what his experience with ferrets is and how many s/he has treated over the past year. If you are not sure of where to look for a ferret-knowledgeable vet, check out the ferret shelter links at http://www.ferretcentral.org. There you will find shelters listed by state and country. If you can find one near you, give them a call and ask whom they would recommend.

If you have a choice in veterinarians, find out if the vet has an after-hours emergency service. Ferrets always seem to get sick or injured late at night, well after the normal vet hours. You don't want look for a vet office that is open when your ferret's life is on the line.

Does the vet have reasonable office hours? A vet that is only at the local clinic once or twice a week may be fine for vaccinations and check-ups, but what will you do during an emergency or illness when they are not there?

What about surgery? Compare rates of typical surgeries and treatments. You might be very surprised at the differences in charges, sometimes amounting to hundreds of dollars. Some vets charge a stiff premium for "exotic" animals, which a ferret is definitely not. Then again, a relatively high fee may be due to the special equipment that the vet keeps on hand for ferrets and other small animals. Ask questions.

Does the vet require that you sign a statement to the effect that, if your ferret bites someone during the treatment they will have the right to seize your ferret and have it tested (translate that as "killed and beheaded") for rabies? If so, run, don't walk out the door and find another vet. It's obvious that they are not really familiar with ferrets.

Finally, just observe how they act with your ferret. I've seen some vets and their assistants look positively uncomfortable holding or even being near a ferret. Also observe how your ferret reacts with the vet. Does he seem unusually uncomfortable or fearful?

Pick a vet for your ferret as if his life depends on it. It does.

**Flu** - The ferret is one of the few animals that can catch a human flu virus. Conversely if he has the flu, he can pass it on to humans. (Yes, first hand experience.) If you have a cold or flu (some flu cases are so mild that they seem to be just a cold), try not to handle your ferret until you are well over your symptoms. If you must handle him, do not put him next to your face, or cough of sneeze directly on him. Wash your hands before handling the ferret. Do not allow anyone else who has a cold or flu to handle your ferret.

The flu symptoms in a ferret are similar to those in a human - runny nose, fever and sneezing. As long as the ferret is breathing properly just see that he stays warm and gets plenty of liquids and food, and rest. If the congestion is heavy, a 1/4 ec of pediatric Robitussin or Benadryl, or similar product, may relieve some of the symptoms (always check with your vet first.) **NEVER** give your ferret any product containing Acetaminophen (Tylenol and similar products) or Ibuprofen (Advil and similar products). Both can be toxic to ferrets, causing fatal liver failure. If the flu symptoms persist for more than 5 days, or the ferret seems especially listless and does not eat or drink, or the ferret's breathing becomes raspy, see your veterinarian at once. Flu is more serious in the ferret than in humans and can quickly develop into pneumonia.

Another thing to consider if you observe flu-like symptoms is a sinus infection, which may be bacterial. Have your vet check, since bacterial infections can be serious, cause significant damage, but can be treated with antibiotics, while viral infections can not.

**Intestinal Blockage** - I have previously mentioned the dangers of intestinal blockage in the ferret. If your ferret develops a persistent "cough" or choking that is not accompanied by a runny nose and watery eyes, **or** he begins vomiting, monitor his food intake and waste elimination closely. Put him in a separate cage with measured amounts of food and water, and a clean litter box. If, after half of a day (and waiting that long is taking a chance), you find that your ferret has not eaten or eliminated, or if the stool is very thin and almost hairlike, <u>rush</u> him to a vet. Do so earlier if the ferret seems to be in pain and bloated. Some blockages move in the stomach and only intermittently block the opening to the intestine; causing intermittent symptoms. An intestinal

blockage is fatal if not treated in time, and it is an all too common cause of death.

**Protruding Rectum** - The normal ferret rectum should be flush with the skin. A slightly protruding rectum is not uncommon and may correct itself if the cause can be determined and corrected. Most often it is caused by: feeding a very young ferret hard food too early, a continued feeding of moistened food for too long of a time, causing prolonged diarrhea, or a prolonged period of straining during bowel movement, or some intestinal virus or parasite. If it does not clear up by itself in a few days, if the rectum is bleeding, or the protrusion is very pronounced, take your ferret to a veterinarian as soon as possible. If the protrusion is minor, a human hemorrhoid treatment such as Tuck or Preparation H, may be recommended by your vet.

**Falling** - Many of the injuries suffered by ferrets are the result of a fall. Being extremely nearsighted, they can mistake a major height for a short jump. The results can be anything from sprains, to broken bones, to internal injuries. If your ferret has suffered a fall, examine him carefully. Obviously bent or disjointed limbs require immediate medical attention. If nothing is immediately obvious, observe his movements. If he limps or has trouble coordinating his back leg movements, seek medical attention immediately. If he seems normal, monitor his bowel movements. A tarry-looking stool is a sign of internal injuries and requires medical attention. Lethargy is also a sign of potential internal injury, as is abdominal tenderness.

**Diarrhea/ECE** - Diarrhea in a ferret should always be treated *aggressively*. If your ferret stops eating and drinking for any length of time, it's a sure sign of illness and worth a trip to the veterinarian. Pay particular attention to signs of dehydration which can quickly lead to death. Often this is due to a prolonged bout of diarrhea.

One quick check is to grasp the skin over the ferret's neck and shoulder area as if you were going to pick him up by the scruff. Release the skin and it should quickly spring back into place. If it does not, this is a sign of severe dehydration and that you need to get your ferret to a veterinarian as quickly as possible.

In the case of several consecutive episodes of diarrhea, and you can *not* get to a vet right away, Pepto Bismol or Kaopectate, administered in 1/3 - 1 ec doses two to four times a day (check with your vet first), may control it until you can actually get your ferret to the vet. If the ferret reacts violently to the Pepto Bismol, particularly if he vomits, Kaopectate is a second choice. The animal will need plenty of liquids too, even if you have to trickle it into his mouth with a syringe or eyedropper. Pedialyte is recommended (unless the ferret is insulinomic), but water will do if you don't have the pedialyte. (Be very careful he doesn't inhale the liquid. Place the syringe or eyedropper in the corner of his mouth, between the teeth and lips, then trickle in the liquid just fast enough for the ferret to "lap" it. Remember, prolonged diarrhea is life-threatening to an animal as small as a ferret. Get the ferret to a vet a soon as possible.

If your ferret is vomiting, you might try to give him some heavy peach syrup (the kind that canned peaches are packed in). About 1 ml of the syrup will often calm the stomach. Remember, though, that vomiting is one of the signs of a partial or complete intestinal blockage which may require immediate veterinary treatment.

If you are concerned that your ferret is not eating, first make sure he really is not eating. Confine him to his cage. Make sure the litter box is freshly dipped and that there is a *measured* amount of food and water so that you can track both input and output carefully. You may find that your critter has a stash of food someplace and is chowing down regularly out of sight.

One recipe that very often works to stimulate the appetite of a sick ferret is called Duck Soup, named in honor of a ferret named Lucky Duck, for whom the recipe was first concocted.

#### **Duck Soup**

1/2 cup of high quality, dry ferret food

1/8 cup (approximately - about equal to the volume of one regular ice cube) of Sustical or Ensure Plus (or equivalent liquid, nondairy food supplement, found in most grocery and drug stores in 8 oz cans. Don't use the high fiber variety. Ferrets seem to like strawberry the best but any flavor except chocolate is fine.

Pour the remaining supplement into an ice I cube tray and freeze. After it's frozen, the supplement "cubes" will keep for several weeks in a plastic bag in your freezer.)

1/2 inch ribbon of Ferretvite/Nutristat. (Ferretvite is available at many pet shops.

Ferretone/Linatone • 1/2 tsp. if desired.

Place the food in a blender. Add sufficient cold water to soften. Blend thoroughly. Add more

water as necessary to make a stiff paste. Stir in the Ferretvite, and Ensure. Add Ferretone/Linatone if desired. The mixture should be the consistency of a thin paste or thick soup. (You can add more water if necessary to make a very thin mixture if you have to force-feed the ferret with an eyedropper or syringe.) You must be careful that the ferret does not inhale the food. Use the same technique described for "dehydration", to feed him the Duck Soup.

Microwave for about 15 - 20 seconds, until warm.

Check the temperature before you begin feeding. It should be warm, not hot. Be sure to stir it well and make sure that there are no HOT spots. (I use my finger to stir it. That way I can be sure that there are no hot spots.

If your ferret is suffering from insulinoma, leave out the Ensure/Sustical and the Ferretvite/Nutristat.

Feed the ferret all he will eat or that you can make him eat comfortably. (This should be about 5 - 15 ml, depending on the size of the ferret, at each feeding. Initially you may want to limit the "soup" to 2 - 3 ml at each feeding and feed more often. You may gradually increase the amount and cut down on the frequency. A typical adult ferret will require 100 - 110 ml of food a day and 90 - 100 ml of fluids. Your vet can tell you how much to feed at any one sitting and how much total he will need each day. Feed about every 2 - 4 hours depending on the amount you are feeding, and give ample water or Pedialyte along with the Duck Soup. Cover and refrigerate any left over mixture. It will keep approximately one day. Microwave to rewarm. Remember to check the temperature of any microwaved portion carefully. Parts of the mixture may feel only warm but other parts may be HOT.

Most ferrets will eat Duck Soup eagerly. It's high in fat; has protein from the ferret chow; and vitamins and minerals from the Ensure and Ferretvite (or Nutristat), plus water. Don't make a

steady diet of this after your ferret recovers. His regular food is best for long term nourishment.

With severe diarrhea lasting more than several bowel movements, aggressive treatment is critical. A common bacteria, Helicobacter mustelae, is often the cause. This bacteria may cause ulcers in addition to the diarrhea. Most ferrets carry this bacteria in their systems with no outward signs. A stressful situation, such as a new ferret or other pet, new home, change in food or water, even a new human baby in the family may cause the bacteria to begin growing out of control resulting in the diarrhea and ulcers. Typical treatment for this diarrhea is with Amoxicillin, Flagyl and sulcrafate for the potential ulcers. Pepto Bismol or Kaopectate will control the diarrhea to some extent while the antibiotics do their thing. Try to give the sulcrafate at least 20 - 30 minutes prior to feeding and at least 20 - 30 minutes prior to or after any antiacid. The duration of the disease may be from a couple of days to over a month. Usually, the sooner the treatment is started, the faster it will be cured.

If the ferret will not eat or drink, the ferret should be syringe fed using the Duck Soup or similar food, and given copious amount of water or Pedialyte. You must do this about every 3 - 4 hours until the diarrhea is under control and the ferret is eating on his own.

You may hear the term "ECE" or "Green Diarrhea" in conjunction with severe diarrhea. True ECE is caused by a virus; is contagious, and very difficult to eradicate. The virus that causes it may live in the environment for six months or more. New ferrets coming into a home infected with the ECE virus may come down with ECE. Antibiotics are not effective against true ECE, but may halt secondary infections. There are no accurate tests for ECE. It is usually diagnosed by ruling out all other causes.

Lately, the term ECE is being incorrectly applied to all severe cases of diarrhea, especially if the diarrhea is green in color. It is very important to know that **not all green diarrhea** is **ECE**. The green color is simply a sign of the rapid passage of the food through the ferret's gut. Diarrhea from other causes will usually clear up with Pepto Bismol or Kaopectate, Amoxicillin, Flagyl and sulcrafate within a few days. ECE will take considerably longer and may be accompanied by a secondary infection such as helicobactor, which can and should be treated. With *aggressive* treatment and care, your ferret will very likely recover and be his frisky self again.

*Hair loss and Adrenal Tumors* - Loss of hair may be due to many causes. Ferrets experience shedding twice a year. During this time it is not unusual for the ferret's coat to appear rough and sparse, particularly on the tail. Sometimes the tail may become nearly bald from about halfway down its length to the tip and covered with black "dots."

The dots are really blackheads and can be removed with a special acne cleaner containing benzoyl peroxide, available from your vet. Just shampoo the ferret with your usual ferret shampoo, but wash the tail with the benzoyl peroxide. Work it into a lather and let sit for 5-10 minutes. (A soft brush rubbed gently over the tail will help remove the blackheads.) Rinse very thoroughly. Repeat in about 2 weeks. (Some owners say that they've gotten good results by using Stridex Medicated Pads on the ferret's tail every day for a week or so.) Once the blackheads are removed, the hair will generally grow back in before the next shedding period - often within a month.

Unusual and prolonged stress may often be a cause of a similar hair loss. Moving to a new home; the addition of a new (and unwelcome) ferret or other pet; the prolonged absence of a beloved owner, or even the stress of normal shedding may cause a temporary hair loss at the tip of the tail which spreads upward toward the middle. Relieving the source of the stress, (or the ending of the regular shedding period) usually clears up this type of hair loss.

If the hair loss is near the base of the tail and spreads up the flank, under the belly, and down the legs, it is likely that the hair loss is due to an adrenal tumor. With an adrenal tumor, the skin may show as shiny or "scaly" where there is hair loss. Some ferrets with adrenal tumors show hair loss on the shoulders or even on top of the head rather than on their flanks or base of their tails. Some don't show any hair loss.

A female ferret may (in about 75% of the cases) show an enlarged vulva as if she were in heat. The male ferret may show signs of rut, complete with sexual aggression toward other ferrets and a "marking" of his territory with urine.

This disease is more dangerous in the male ferret than the female, although it does not seem to occur as frequently. In the male ferret, the adrenal tumor may cause the prostrate tissue to enlarge and close off the urethra, preventing urination. This can quickly lead to death. If you see him make frequent trips to the litter box but with no production of urine, RUSH him to a vet immediately.



Typical Hair Loss Pattern in Adrenal Ferrets (Note the hair loss at the base of the tail and the tops of the rear feet)

If you suspect an adrenal tumor in your ferret, male or female, it's a good idea to get them to a vet as soon as possible. These tumors are not uncommon in ferrets and do require surgery for their removal. Unless there is another complication, such as a heart condition or other illness, the ferret should recover from the operation in short order and the hair begin to grow back in a couple of months, or after the next shedding period. Their energy level rebounds rapidly and you'd never know by watching them play that they had a 3 - 4 inch incision down their abdomen.

If your ferret is not a good surgical candidate, Lupron can eliminate many of the symptoms of the disease, such as the hair loss and itching. Usually the four month time-release form is used. The treatment is expensive, however, and does nothing to reduce or eliminate the tumor itself.

We've also found that Melatonin can also relieve the outward signs of an adrenal tumor in some cases. About 1/2 mg of Melatonin per pound of ferret weight, given in the early evening, will, in some cases, reverse the signs. The liquid Melatonin is the easiest to administer. We've found the liquid Melatonin in various concentrations at both GNC and Wal-Mart. The concentration of the liquid may vary depending on brand. Adjust the amount of the liquid to equal

a 1/2 mg dose of the Melatonin for each pound that the ferret weighs. For example, if the liquid solution contains 2.5 mg/ml, you would give 0.4 ml of the liquid to a 2 pound ferret. If the concentration were 2.0 mg/ml, give 0.5 ml of the liquid. Again, I emphasis that both Lupron and Melatonin only reduce the outward signs of the tumors and do nothing to shrink the tumor. Surgery, on the other hand, can be curative.

Sometimes a young ferret will exhibit some the external symptoms of an adrenal tumor, but the swollen vulva in the female, and the sexual aggression in the male, will be due to an incomplete spay/neuter. A few cells may be missed during the spay/neuter process. These cells may migrate and attach themselves somewhere inside the ferret. There they will grow, and release hormones simulating the normal mating cycle. The male will become sexually aggressive toward any female ferrets; may proceed to "mark" his territory and generally exhibit all of the symptoms of a hob in rut. Blood tests can be done to test for excess hormones resulting from the adrenal tumor or the incomplete spay/neuter. If the outward signs are obvious enough, the vet may suggest exploratory surgery instead of the lab tests, to look at the adrenal glands and to look for reproductive tissue.

Signs of an incomplete spay or neuter will usually show up during the first year of life. A ferret much older than one year with these signs is usually suffering from an adrenal tumor.

If you have a hob, have the vet check that both testicles have descended. An undescended testicle will often become cancerous and needs to be removed as soon as possible.

**Hypothyroid** - Another possibility that may be seen in older ferrets which mimic some of the signs of an adrenal tumor is caused by a decreased secretion of the thyroid gland. Signs of hypothyroid may include lethargy, thin and brittle hair, and weight gain. The hair near the rear end may be thinner than the rest of the body leading some to think of an adrenal tumor. A simple blood test can check the thyroid levels. What once was considered "low-normal", a 1.5 result is now being considered "abnormal-low." Medication can improve the thyroid functioning, although the ferret's thyroid level should be checked monthly.

*Ulcers* - Prolonged stress (such as from adding a new ferret to an established ferret home) or changing foods, and/or an infection by Helicobacter mustelae bacteria may eventually lead to a stomach ulcer. Symptoms are usually, but not always, a black tarry stool. Sometimes the pain of the ulcer may cause the ferret to grind his teeth. He may show loss of appetite and lethargy. Your vet will usually prescribe a combination of treatments. Sulcrafate, made into a suspension in water, will coat and protect the raw stomach tissue. Amoxicillin combined with Metronidazole (Flagyl) will often be prescribed to kill the bacteria. Pepto Bismol may also be suggested both to sooth the stomach and, due to the bismuth in it, help kill the heliobactor. Generally such treatment works best if continued for at least a month. An alternate treatment consists of a combination of Clarithromycin and Ranitidine bismuth citrate. Both of these treatments must be administered for at least 14 days or longer.

**Fleas and Ticks** - fleas and even ticks seem to be a normal part of summer in many parts of the country. They may come in on pant legs, other animals or perhaps be picked up by the ferret during a walk outside. A large flea infestation can, if left untreated, lead to anemia in a ferret. A high quality, kitten safe flea spray such as VetChem, available from your veterinarian, is a good quick-fix for fleas. Begin at the neck then work down to the tail. Finally spray some on your hands and rub it thoroughly over the neck, head, ears, and muzzle. You will also have to treat the rugs, carpets and upholstered furniture to make sure you have all of the newly hatched fleas.

A good preventative for fleas are the newer products such as Frontline or Advantage. Although not tested on ferrets it does seem to be safe and effective. I use Frontline spray at our shelter, simply spraying one squirt down the ferret's back, then rubbing it well until it dries. It is bath proof and is effective for at least a month.

**Heat Stroke** - Ferrets do not do well in excessive heat. Prolonged temperatures above 85 - 90 degrees F, can be fatal to a ferret. If the weather is hot, and if you see your ferret panting, he is in extreme stress and needs immediate attention. Dip him into tepid (not cool or cold) water to bring down his temperature. Cold water may put him into shock, so use tepid water only to lower his body temperature, then get him to a vet immediately. At this point he may be seriously dehydrated and only your vet can quickly rehydrate him. Heat stroke will usually lead to organ shut-down and death.

Fans are not effective in keeping a ferret cool. Fans feel cool to humans because humans perspire. The moving air stirred up by the fan aids in evaporation of the perspiration. It's the evaporation that cools your skin. Since ferrets don't perspire, the moving air will not cool them to any significant degree.

If you don't have air conditioning in your home and the temperature is approaching 85+, you might try filling several, large, plastic soda bottles about 3/4 full of water and freeze them. Once the water is frozen, wrap the bottle in a thin towel and place it on the floor, perhaps in a shallow box, where your ferret can wrap themselves around them. As the ice melts, replace the bottle with a frozen one.

**Heartworm** - Ferrets are susceptible to heartworm. The heartworm larva is transmitted by mosquito to the ferret. Once inside the ferret it migrates to the heart where it grows to the point that it interferes with the functioning of the heart. Treatment is very difficult, usually involving treatment with ivermectin and other drugs over at least a six month period. Survival from heartworm is estimated at about 50/50.

During the mosquito season, in those parts of the country where heartworm is prevalent, the ferret should receive a monthly dose of a heartworm preventative, which is available through your veterinarian in several different forms. Some ferrets prefer the chewable tablet. Some will only take it if you mash up the pill form and mix it with Ferretone. If your vet has the necessary equipment, he can formulate a very dilute solution of ivermectin and glycol which you can give your ferret once a month. Heartworm is much more easily prevented than cured.

Cardiomyopathy - Cardiomyopathy is a disease of the heart. It is usually seen only in older ferrets. The heart muscle becomes progressively weaker to the point that it can no longer efficiently pump. This results in the heart becoming enlarged and the tissue, thinner and weaker. Fluid will build up in the abdomen. As the fluid expands it begins to put pressure on the nearby lungs, causing a persistent cough. Fluid may also build up in the abdomen to the point that it has to be withdrawn by needle and syringe. A ferret that seems to tire quickly and has a chronic cough should be examined for this ailment. The earlier the treatment is started, the greater the probability that the ferret will live a relatively longer life.

Although not scientifically proven to be effective, some ferret owners believe that a combination of vitamin E (5 IU per kg of ferret weight) and Coenzyme Q-10 (0.3 mg per kg) once a day in a "Duck Soup" (less the Ensure and Ferretvite) may help stabilize the condition. **Never administer such supplements in place of prescribed medications, and never without approval** 

#### from your vet.

The disease is usually progressive, but its course can be slowed through the oral administration of diuretics.

**Insulinoma** - Insulinoma is a disease found more commonly in older ferrets; typically four years of age or older. It has been found, although more rarely, in younger ferrets. It is the result of tumors on the pancreas which causes over-production of insulin, which in turn lowers the blood glucose to dangerous levels. Since glucose is the "food" of the cells and nerves of the body, the body begins to shut down. Blindness is often results from insulinoma near the latter stages of the diseases.

Symptoms of insulinoma may include: lowered physical activity; bouts of "blank staring", staggering; convulsions; excessive salivation; and hind end weakness. If your ferret exhibits these symptoms have your vet do a fasting glucose test immediately. If your ferret is suffering from the more extremes of these symptoms (convulsions, staggering, etc.) dip a cotton swab in some Karo corn syrup, then rub it on your ferret's gums. If your ferret "returns to normal" within a few minutes it's a sign that insulinoma is likely present. Prompt veterinary care is essential. Blindness and death are common.

Your vet will ask you to "fast" your ferret for about 3 hours (never more than 4 hours) before the visit, when a blood sample will be drawn. Generally, a blood glucose level below 70 is indicative of insulinoma; levels between 70 and 80 warrant a retest in a few months.

Surgery is sometimes the best, long term option. A portion of the pancreas (often about a third to a half of the organ) will be removed. After recovery, your ferret should have another blood test scheduled in about one month, then every 3 - 6 months.

Another option, if your ferret is not a good candidate for surgery, is medication such as prednisone or proglycem. These medications should only be given after a feeding. While these are not curative, they will relieve the symptoms for a time. High protein diets will also help stabilize the condition. A Duck Soup (minus the Ensure and Ferretvite) made with strained chicken (baby food) is a good source of protein.

Most vets recommend that you never give sugary treats to a ferret having linsulinoma. This includes raisins, fruit, honey, and treats containing sugar (including fructose, glucose, and other natural sugars.)

**Hidden Dangers** - Because ferrets are so curious, they often find themselves in situations that are life threatening. The empty cardboard tubes from toilet paper and paper towels are just large enough for the ferret to get his head stuck inside. If you aren't around to remove it, the ferret will panic; often to the point of severely lacerating his tongue, or rupturing his larynx. Take a few seconds to tear such tubes lengthwise before discarding them. Be cautious of anything that is just big enough for a ferret's head to squeeze into.

Ferrets like to "tunnel" under things. Throw rugs or small area rugs are great places to play, until someone steps on the rug. Be <u>very</u> cautious where you step. A ferret makes a small "bump" under a rug that is very difficult to see. A similar danger exists for couch and sofa cushions although here the danger is sitting rather than stepping on the burrowing critter.

When you open your refrigerator, make sure your ever-curious ferret has not decided to climb

inside to see what's new. Same goes for washers, dryers, and dishwashers. (Dishwasher detergent is **highly** caustic. Even the residue sometimes left behind will quickly kill a curious ferret if they ingest even a tiny amount.) When you do laundry, make sure that the dirty clothes do not include a sleeping ferret. Before you empty your trash, make sure that the trash bag doesn't include your ferret.

**Lost Ferret** - To a curious ferret, the door to the outside is just another door to another room. Given even half a chance he will dart out between your legs without you ever seeing him. Once out, he will go into his "explore mode," quickly become lost, and starve if he is not found soon.

First, if you can't find your ferret, check the home thoroughly again. We "lose" at least one ferret a day and I often end up combing the neighborhood only to find that he had decided to take a nap in some strange, never before visited place in the house, right under our noses. Sometimes the ferret isn't lost, but has become trapped somewhere. Check rolls of carpeting, behind furniture, etc.

If he is lost, contact the police, animal control officer, and local shelters. It pays to advertise too. Put an ad in the local newspapers and place posters around the neighborhood - particularly where children are likely to congregate (schools, clubs, playgrounds, ball fields). If ferrets are not common in your area, be sure to include a picture of your ferret on the poster. For an offer of a reward, you can recruit a medium sized army of children. Ferrets have been found several miles from home, so don't necessarily restrict your posters to the block where you live. If you can, place his cage and bedding, with food and water, outside. He might just stumble on his own scent and find his way back home. You may just be fortunate to look inside the cage and find your wayward pet looking back at you wondering where you've been.

**Deaf Ferret** - Deafness is not a major problem for ferrets. It's not that there aren't many deaf ferrets, it's just that they don't use their hearing very much anyway. It is sometimes years before some ferret owners even notice that their ferret is hearing impaired. (After all, it doesn't seem to make much of a difference whether the ferret can hear you or not when you tell him "No.") Ferrets with a white stripe running down the middle of his head and ferrets with all white heads sometimes carry this as a genetic defect.

If you suspect that your ferret may be deaf, try squeaking a toy behind his back and see if he responds. Try this several times just to make sure. He may hear you just fine but is trying to ignore you. If he doesn't respond after several tries, though, he is likely deaf. All that really means is that you should at least try to give your ferret some warning before you pick him up so that he doesn't think it's about to be carried off for a snack by some bird of prey. Make sure he sees you hand first, or slap the floor several times (he can feel the vibrations) so that he turns around and sees you before you pick him up.

**Blind Ferret** - Blindness in a ferret is usually more traumatic to the owner than the ferret. Ferrets are very nearsighted to begin with. One with normal sight is not at a very great advantage over one that is totally blind. Unless the cause of the blindness is obvious, such as from cataracts, the owner may not even notice it.

Ferrets get by quite well with just their memory and keen sense of smell. As long as you don't rearrange the furniture too often, a blind ferret will get by quite well. To be polite, however, you should announce yourself to the blind ferret before you pick him up.

We had one blind, three-legged ferret in our shelter who we adopted to a family with two "normal" ferrets. They told us that for the first week or so, the two sighted ferrets would guide the blind one all over the house; one in the front; one following behind. These two showed the new family member: all the great hidy-holes; where the litter boxes were placed; and where the toys were kept. After that, she would often beat the other two to where ever they were heading. One of her favorite games became hiding in an overturned wicker umbrella stand; leaping out and capturing one of the other ferrets as he walked by; and dragging him into the umbrella stand. Whether by vibration or smell, she could always tell when the other ferret was within reach of her lair

#### **FINALLY**

I have attempted to answer most of the questions asked by the first-time ferret owner and even many questions asked by the more experienced owner. If some of the material seems negative, it was not intentionally so. Questions asked are usually relative to the "problems" sometimes experienced with a new type of pet. The domestic ferret is a "new" pet on the scene in the United States and there is much for the new ferret owner to learn. I think you will find that you will be very happy with your choice of a pet, and that you will grow to love your ferret and be loved by it more than any other pet you have ever owned.

If you have any questions, please don't hesitate to contact either Joan or me. That's what we're here for.

You can send email to me at: RBossart@AOL.COM



Nala and I hope that you found this manual useful and that you and your ferret will have a great time together.