

Ferret Facts

The ferret (*Mustela putorius furo*) is a domestic pet. It is *not* a wild animal, though ferrets are descendants of the European polecat (weasel) and are, therefore, close relatives of skunks, mink, otters and badgers.

Types and Terms

There are several varieties of ferrets, based on coloration. Fitch ferrets (the most popular) are buff-colored, with black masks, feet and tails. Albino ferrets are white, with pink eyes. There is also the Siamese ferret. The female ferret is called a "jill," while the male is called a "hob." Babies are "kits."

Physiology

The gestation period of ferrets is 42-44 days (average, 42 days). The average litter size is 8 (range, 2-17). Kits are born deaf, with their eyes closed. Their eyes open and they begin to hear between 3 and 5 weeks of age. Their deciduous ("temporary") teeth begin to erupt at 2 weeks of age, at which time they begin to eat solid food. Kits generally are weaned onto commercial kitten chow at 4-8 weeks of age. Kits reach their adult weight at 4 months of age. Males are typically twice the size of females, but both sexes undergo periodic weight fluctuations. It is not uncommon for the average ferret to add 30-40% of its body weight in fat deposited beneath the skin in the fall, and lose this fat the following spring. The average lifespan of ferrets is 9-10 years.

Behavior

Ferrets make wonderful pets because of their engaging personalities, playful activity and fastidious nature. They can be easily trained to use a litterbox because they tend to habitually urinate and defecate in the same places. Provide a low-sided litter box for easy entry and exit. More than one litter box may be necessary if the ferret has free run of the house.

There is no innate animosity between ferrets and dogs and cats, and all can usually share a household with little difficulty. However, ferrets have been known to attack pet birds, so it is advisable for owners of both to take appropriate precautions to prevent these encounters.

Ferrets are naturally inquisitive and can squeeze through very small spaces. It is important to "ferret-proof" your house before bringing your pet home. Thoroughly check every room it will inhabit, sealing all holes and openings wider than 1 inch in diameter. Make sure that all windows that may be opened have secure screens. Check the openings around plumbing, heating and air conditioning ducts or pipes.

Some kits are small enough to squeeze under some doors. Ferrets are so small and silent that you will

usually not hear them approach. They are easily stepped on when they are sleeping under a throw rug or suddenly turn up under foot. Their love of tunneling and their inherent curiosity frequently places them in potentially dangerous situations. They could very easily crawl unnoticed into your refrigerator, into the bottom broiler of a stove, through the rungs of a balcony railing, out the front door, or even end up in the washing machine with clothes under which the ferret was sleeping. Other dangers include folding sofa beds and reclining chairs. The obvious solution to avoiding accident and injury is to learn your ferret's habits and be constantly vigilant.

To help protect your ferret, especially if it is allowed free run of the house, obtain an adjustable, light-weight cat collar, the kind with elastic on one end, a small bell, and an ID tag. The bell will signal that your ferret is underfoot or has perhaps slipped out the front door. The bell also helps to warn caged birds allowed unrestricted freedom in the home that the pet ferret is nearby. Unfortunately, we have seen a number of cases of serious injury and death to pet birds caused by ferrets. The collar also indicates to unknowing neighbors (many people have no idea what a ferret is) that whatever it is, it must be someone's pet.

While ferrets are not destructive to most household items (furniture, clothing, etc), some have a tendency to chew on soft rubber. This is especially dangerous because the pieces of tennis shoes, Barbie Doll toes, or other rubber items can become impacted in your ferret's intestines. Ingested pieces of kitchen gloves or sponges with household chemicals can also threaten your ferret's life if eaten. Latex rubber squeak toys should *not* be given to ferrets because they may swallow parts of them, causing intestinal obstruction.

All ferrets have an affinity for people. Some enjoy people more than others. The older a ferret is, the more mellow it is likely to become. Young kits tend to be nippy, but no more than a new kitten or puppy. They just nip with more enthusiasm. Some kits never nip at all, but most that do eventually outgrow it. Ferrets have tough skin and kits have sharp little teeth. The roughhousing a kit may do with its littermates may not be appropriate for its owner's finger. Many new ferret owners mistake this nippiness for viciousness, even though the same behavior in a new kitten or puppy is accepted.

There are a number of documented cases of ferret attacks on infants and small children. Some involved serious injury to the child. Parents must either forbid encounters between pet ferrets and their infants or very young children, or closely supervise all of these encounters. It is important to point out, however,

that these unfortunate encounters are far less common than those involving household dogs and cats.

Ferrets are unusual animals, but not "exotic." They have been domesticated for thousands of years and can be treated under the same set of disciplinary rules you would use for any other domesticated animal. Ferrets are extremely intelligent and can quickly be taught what they may and may not do.

Diet

The dietary requirements of ferrets can easily be satisfied by feeding commercial cat food. The growth formulas for brand-name cat foods, composed of high-quality meat (not plant) protein are preferred (for example, Iams or Science Diet). Dry kibble is recommended over semi-moist and canned foods because soft foods lead to disease of the gums and tooth roots.

Table food also can be offered but should be limited to cooked meat, fish and poultry. Fruits and vegetables may be offered in very limited quantities. Do *not* feed milk and foods rich in sugars (cookies, candy) and carbohydrates (pasta, rice, cereals, bread) because ferrets have great difficulty digesting these foods. Bones and foods containing bones should not be offered because they are likely to injure the ferret's digestive tract.

It is not necessary to offer vitamins or vitamin-mineral supplements to your ferret as long as it is fed as outlined above. Your veterinarian may recommend these dietary supplements, however, under special circumstances or for aged ferrets.

Fresh, clean water should be available at all times. Water bottles or heavy ceramic (crock) dishes can be used for this purpose.

Housing

Ferrets must be confined within the home and when their activities cannot be adequately supervised. Most ferrets prefer to sleep within a relatively small, enclosed area. A cat- or rabbit-sized wire cage or a suitably sized dog/cat airline carrier works very well. Wood shavings or a few towels can be used on the bottom of the enclosure. Ferrets are especially fond of tunneling under towels and prefer to sleep in this manner.

Odor Control

The objectionable odor of pet ferrets is primarily the result of the influence of sex hormones on normal skin secretions. Consequently, castrating male and spaying female ferrets is usually sufficient to control this problem. It is usually done at 6-8 months of age. Castrating male ferrets also helps reduce any aggressive tendencies. A very pungent and equally objectionable secretion occasionally is produced by the ferret's scent (anal) glands. Some owners also have their pet ferrets descented.

Restraint

When awake, ferrets generally exhibit constant activity. They can be easily picked up, however, and gently restrained by using both hands to support their weight and provide security from falling and injury. Ferrets can also be easily restrained for examination, laboratory sample collection, and treatment by gently suspending them off their feet by the nape of the neck. The relaxation that results from this method is similar to that exhibited by very young mammals as they are carried in their mother's mouth from one place to another.

Disease

Two medical conditions of ferrets demand special mention: the ferret's extreme susceptibility to canine distemper and the unusual consequences of female ferrets coming into heat. Other medical conditions are also briefly discussed below.

Canine Distemper

Ferrets are highly susceptible to canine distemper. The initial signs of the disease appear 7-10 days after exposure to the virus and include inappetence and a thick mucus and pus-laden discharge from the eyes and nostrils. A rash commonly appears under the chin and in the groin area 10-12 days following exposure. The foot pads become greatly thickened. This disease is considered 100% fatal, with infected ferrets dying 3-3 1/2 weeks after initial exposure.

Prevention of this disease should be an absolute priority because treatment is useless. Kits should first be vaccinated against canine distemper at 6-8 weeks of age (4-6 weeks of age if kits are from unvaccinated mothers). A booster vaccination is essential 2-3 weeks later. Yearly boosters are recommended thereafter.

Heat Periods

Female ferrets are seasonally polyestrous, which means they can come into heat more than once during the breeding season (March through August). They are also induced ovulators, which means ovulation occurs after copulation. The onset of heat is recognized by swelling of the external genitalia. If a ferret in heat does not engage in copulation, she will remain in heat for up to 160 days. If she is bred, the swelling of the external genitalia usually regresses to normal within 2-3 weeks after copulation.

Sustained sexual heat is dangerous and life-threatening because it usually results in bone marrow suppression. This results in severe anemia and decreases in the number of circulating white blood cells. Because of this likelihood, any female ferret not intended for breeding should be sterilized (spayed or ovari hysterectomized) at 6-8 months of age. Female ferrets in heat can be taken out of heat within about 3 weeks by injection of a specific hormone after the first 10 days of heat. Once out of heat, they can be

spayed before they come back into heat (usually 40-50 days after administration of the hormone).

Feline Distemper

Researchers claim that ferrets are not susceptible to feline distemper. There are, however, reliable reports to the contrary. Consequently, the decision to vaccinate ferrets against this disease is an option for each ferret owner. However, if an individual ferret is likely to have substantial contact with cats (especially those of unknown or uncertain health status), vaccination of the ferret against feline distemper is a wise idea. The vaccine itself cannot harm the animal, and it represents "insurance." The vaccination schedule for feline distemper is the same as for canine distemper. Most veterinarians administer a combination canine distemper-feline distemper vaccine.

Rabies

Ferrets are highly susceptible to rabies and can transmit the virus. A rabies vaccine is now available for use in ferrets. Ferrets 3 months of age or older should be vaccinated, with annual boosters thereafter. Owners of vaccinated ferrets should know, however, that under certain circumstances, public health authorities may require euthanasia (humane killing) of vaccinated ferrets that have bitten a person.

All pet ferrets need not be routinely vaccinated for rabies. Chances are remote that a pet ferret living in an urban household would be exposed to rabies virus through the saliva of a rabid animal. This is because ferrets, unlike many urban cats, are never allowed to roam freely outdoors, where they may come in contact with wild animals or other domestic animals.

It is important to understand, however, that pet ferrets *not* vaccinated against rabies may be quarantined and even euthanized after a biting incident so as to determine whether the animal was carrying the rabies virus. On the other hand, vaccinated ferrets are usually not quarantined after biting incidents. Consequently, each ferret owner must decide whether or not to vaccinate their ferret against rabies.

Other Viral Diseases

Ferrets are not susceptible to viruses that commonly produce upper respiratory disease in domestic cats (rhinotracheitis, calicivirus), nor are they susceptible to canine hepatitis. There is no definitive evidence that ferrets are susceptible to canine parvovirus or feline leukemia virus; therefore, vaccination against these diseases is probably unnecessary. A few cases of lymphoma and lymphosarcoma (cancer) have occurred in ferrets. Some of these ferrets tested positive for feline leukemia virus, while others tested negative. Though a cause-and-effect relationship cannot be proven by such a small number of cases, the possibility exists that ferrets may become infected with feline leukemia virus. Cancer can be one possible result of an infection. Some researchers believe

that leukemia and related diseases among ferrets may be caused by a virus or viruses specific to ferrets.

Feline Infectious Peritonitis: This is another serious viral disease of cats for which ferret susceptibility is not yet known. There is no vaccine available for this disease in ferrets. Because of the lack of knowledge regarding ferret susceptibility and the other feline diseases previously discussed, ferret owners should be extremely cautious with regard to their pet's exposure to cats, especially those exhibiting signs of illness and those of unknown health status.

Influenza: It is interesting to note that ferrets are susceptible to infection with several strains of human influenza ("flu") virus. Signs of this illness may mimic those of canine distemper (listlessness, fever, inappetence, sneezing, nasal discharge, etc). Unlike distemper, however, influenza usually passes within 5 days of the onset of illness, and ferrets recover. Treatment with a specific anti-influenza-A drug may be recommended. Such treatment is not recommended if bacterial infection complicates the influenza infection.

Parasitism

Most of the external parasites of domestic dogs and cats (fleas, mange mites, ear mites, etc) can cause disease in ferrets. Less is known about the ferret's susceptibility to the more common internal parasites (roundworms, etc) of dogs and cats. Protozoan (one-celled) parasites, also shared by dogs and cats (especially *Giardia* and *Coccidia*), can cause intestinal disease among ferrets. Periodic fecal (stool) examinations should be performed by your veterinarian to check for such parasites. Appropriate treatment can then be given, if warranted.

Ringworm

Ringworm (a fungal disease of the skin similar to athlete's foot) has been reported in young ferrets and may be transmitted by infected cats. As a rule of thumb, products manufactured and intended for use in and on cats (dewormers, flea products, ringworm medications, etc) are safe and suitable for use in and on ferrets, with one exception: flea collars should *never* be used on ferrets.

Heartworm Disease

Ferrets are susceptible to heartworm disease, a mosquito-transmitted illness seen mostly in dogs. Ferret owners must carefully consider the pros and cons of preventive therapy for this disease. Some ferrets may have adverse reactions to the drug used for heartworm prevention. Further, the average ferret is very unlikely to be bitten by an infected mosquito unless it lives in an area of heavy heartworm infection and is often exposed (housed outdoors) to mosquitoes. Most ferrets housed exclusively indoors are unlikely to become infected by heartworms and should not require preventive therapy.

Bacterial Infections

Various bacteria can produce a variety of diseases in ferrets, including botulism, tuberculosis, dysentery (caused by *Campylobacter fetus*), and abscesses and infections caused by bite wounds and other injuries. Judicious use of antibiotics is usually sufficient for treatment of most, but not all, of these conditions.

Heat Stroke

Ferrets lack sweat glands and are somewhat compromised in their ability to maintain normal body temperature in extremely warm environmental temperatures. If the temperature rises above 90° F, and if water is restricted or not available to ferrets, heat prostration is likely and death quite possible. Providing ample shade and spraying your ferret on hot days will help reduce the likelihood of this problem.

Urinary Stones

Urinary stones, either within the kidneys or urinary bladder, may cause serious problems in ferrets. Both sexes seem to be affected equally. Signs of urinary stones include blood in the urine, inability to urinate, a swollen and painful abdomen, vomiting, listlessness and inappetence. Surgery is usually necessary to correct this problem, though a special diet may eliminate certain types of stones or prevent recurrence.

Cardiomyopathy

Cardiomyopathy is a condition of the heart muscle seen in dogs, cats and ferrets. Most affected ferrets are males over 3 years of age.

The cause for this condition is unknown. The muscle walls of the heart become thickened, reducing the ability of the heart to pump adequate quantities of blood to the rest of the body. Signs include inappetence, fatigue, increased periods of sleep, intolerance to exercise, fainting and shortness of breath.

Cardiomyopathy is diagnosed using chest x-rays, an electrocardiogram (EKG), and echocardiography (a diagnostic technique using ultrasound waves). All ferrets older than 3 years should have an EKG to screen for this disease.

Miscellaneous Problems

Insulin-secreting tumors are not rare among ferrets. These tumors cause persistently low blood sugar

levels, which produce weakness, depression, fainting spells, changes in behavior and convulsions.

A number of autoimmune diseases of ferrets have been identified. These types of diseases arise when the ferret's immune system begins to destroy one or more of the body's components. These diseases are usually very serious. Signs may include depression, lethargy and weakness. Veterinarians experienced in working with companion exotic animals should be consulted if this type of disease is suspected. An evaluation of the blood (and perhaps other tissues) is necessary to diagnose autoimmune disease.

Cataracts are fairly common in pet ferrets (young and old). Their significance and genetic predisposition are not fully understood.

Ferrets' nails (claws) can become extremely sharp and should be trimmed periodically. The method used and guidelines followed are identical to those used in trimming the nails of a dog or a cat. Ferrets should *not* be declawed.

Acknowledgment: Thanks to April Landmeier for her information on "ferret-proofing" of homes and ferret behavior.

For More Information

Below are the names and addresses of organizations and publications dedicated to ferrets.

California Domestic Ferret Association
P.O. Box 1868
Healdsburg, CA 95448
(707) 431-2277

Central Illinois Friends of Ferrets
P.O. Box 564
Urbana, IL 61801

The Ferret (journal for veterinarians)
1014 Williamson St.
Madison, WI 53703

Ferret Fancier's Club
713 Chautauqua Court
Pittsburgh, PA 15214

Greater Chicago Ferret Association
P.O. Box 7093
Westchester, IL 60153
(312) 357-8682

International Ferret Association
P.O. Box 522
Roanoke, VA 24003

Richard W. Woerpel, MS, DVM
Walter J. Roskopf, Jr, DVM

Avian and Exotic Animal Hospitals of Los Angeles and Orange Counties

4871 W. Rosecrans Avenue
Hawthorne, California 90250

10661 Ellis Avenue, Suite A
Fountain Valley, California 92708