LITTLE THIEF FERRETS FERRETRY

INFORMATIONAL GUIDE



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INTRODUCTION

Hello, and thank you for your support and interest in Little Thief Ferrets! We adore our little fuzzy noodles and would love the best for them. So the following pages are just some more general coverage of ferret care and what you could expect as an owner of a LTF ferret.

We have had ferrets in our lives for over a decade as of writing this. Though they have been mostly those commercially bred that we had adopted, we loved them all the same. Sadly of course, these commercially bred ferrets are not of the best of health. We lost ours due common diseases found in these lines. This inspired us to find and support private bred ferrets in our area- but there were none. After considering long and hard and preparing, we started our own ferretry; Little Thief Ferretry started in 2021 officially.

We have talked to other known breeders all over the world and with their guidance, knowledge and assistance they have assisted us in growing. We have added bloodlines from Eastern North America, Hungary, Romania, and the United Kingdom currently, with plans to further diversify to reach our goal. To produce healthy and happy ferrets!

Little Thief Ferrets do not plan on specializing outside of standard coats or patterns. Here at our ferretry, we have an arrangement of coat colors, but only plan on concentrating breeding to produce strong healthy lines.

In this informational guide you will hopefully find the answers to and questions you might have with your new LTF ferret and if you don't, feel free to contact us at any time! Ferret knowledge and research only grows as time goes by, and you can never do too much research.

Thank you again and we hope you and your new wiggly companion(s) have fun together!

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TIME TO GET PREPPED

Ferrets are not a small rodent that requires very basic needs. They are quite intelligent and mischievous because of that. Often more times than not, you will be ferret testing and ferret proofing it's living space. Because of this and their size you'd have to consider them somewhat between that of a small critter and a cat, in many aspects. Here is a checklist and notes of things you'll need:

Cage/Enclosure

The cage will need to be in a location where they are not in a lot of light for more than 8 hrs a day. The are natural burrowing animals and their hormones/chemistry is heavily dictated on being regulated accordingly otherwise it can cause unnatural cycles and thus, illness. If your ferret set up is in a room with lights that are often on, you can also cover the cage.

The type of enclosure should have open airflow, never tanks/aquariums. They need open ventilation. The cold is easy for ferrets to live in but heat can kill.

Per single ferret, an enclosure space of 18"x36" minimum is fine but remember, they do need to stretch their legs so some "free roam" once a day is very important.

Bedding

Ferrets love hanging hammocks and cloth tubes/tunnels. Fleece works best for ferrets as it's not as easy to get their claws stuck in the fabric as it is for say, wool. You can also use small dog or cat beds, small fleece blankets or even some articles of your own clothing (as long as there isn't very strong perfumes on them, this can even help them bond or feel closer to you). Washing these regularly will help reduce ferret musks as well. Small animal bedding such as wood shavings is not good for your everyday bedding as it is fibrous and dusty and can cause respiratory issues.

• Food

Avoid grain in their diet at all times. Go for high protein ferret foods or kitten food (grain and vegetation free). They are obligate carnivores. Meaning they cannot digest anything outside of meat/protein well. Cycle through your choice of food to keep their stomachs adjustable to changes of food in case a food allergy appears or if they discontinue your regular food. Soaking ferret kibble in water can help with their hydration as well.

• Water Dish

Ferrets must have water at all times. They can become dehydrated easily and because of their diet, if they are on kibble, it makes hydration all the harder to maintain. A drip water bottle should be secondary, as it does take a lot to get a good drink from it. Ferrets are very mischievous and playful. A normal dish of water will be flipped over in no time. Try hanging cage/crate water dishes that fasten with a screw on fastener/crock-loc.

Food Dish

This would be the same as the water dish. They'll likely tip it over to see how they can play with it first. Having a hanging cage/crate water dishes that fasten with a screw on fastener/crock-loc works best, or no spill small cat or dog food dishes.

Litterbox

Ferrets need at least 1 litter pan/box in their cage. They tend to aim for corners, and they'll let you know which corner they prefer. Find a nice corner litter pan/box ideally. Lower lips are best as they do have tiny legs. You may need to zip tie or secure it in some way on the cage so they don't push it around.

For free-roam playtime, you may want to put a litter pan in their favorite corner or puppy potty pads.

Litter

We recommend paper or wood stove pellets. They're less tempted by their ancestral burrowing nature to dig in it as opposed to sand/clay/soil litters.

Carrier

Always important so that you can take your ferret to the vet or anywhere needed. If a ferret is misbehaving, it can also be used as a time out spot.

Treats

Just like any pet, you don't want to spoil them, give them unhealthy treats, or lose the reward factor if given too often. They should be just that, a treat. Freeze dried meat treats you can find for dogs or cats are wonderful. Avoid sugary or grain filled treats. Pieces of plain cooked meat, or salmon oil. Eggs are good in small bits, cooked or raw and as a rare

treat or else you're gonna get to smell how bad it goes through them once they make a stop at the litter box.

Rewarding behavior you like from your ferret will help you and your ferret bond. If they are food motivated, you can even teach them some tricks!

• Toys

Ferrets can make anything they find fun. They will play with just about anything but think of them like puppies or kittens. They use their mouths on things a lot and can't help but chomp down on some of them. And because of their claws they can get caught on or in things. No soft or foam toys. Nothing small enough for them to swallow. Nothing that their nails can get caught in that is stringy and fibrous.

You can never go wrong with tubes! They love boxes and paper bags (be careful of plastic bags!). They love a lot of cat toys, kong balls or plastic easter eggs. You can even get them dog puzzle toys, they're smart and hiding treats in them will get their brains working.

Shampoo

As tempted as you might be to bathe your ferret, you must keep it at a minimum! Three to four times a year at best. Bathing your ferret will cause them to create more oils to make up for the oils they lost. So if your goal was to get rid of their ferret musk, you're gonna get 2x the smell afterwards. Very mild shampoos are recommended.

Q-tips/Ear Wipes

Check your ferret ears regularly. If you see a dark build up, wipe them out with a damp warm q-tip or pet ear wipe. Mineral oil can help with the more difficult cases. If it's an excessive case, make sure to see your vet about it. It could be ear mites or another issue. If you do this regularly and give them a treat afterwards, they'll come to enjoy it.

Tooth Brush

Just like all pets, preventing tartar build up is important. A weekly brushing with a small pet or child's toothbrush is great. (soft bristle)

Nail Clippers

Cat nail clippers are what to use for ferrets. Because they are not in their natural habitat, digging through rock and dirt, their nails have no way to file down naturally. You will have to do this yourself or with a vet or groomer on a fairly regular basis. If not, they can get caught on things and in a panic they will thrash and twist and possibly break something. It

can also cause foot development issues. There are many videos instructing out to do this yourself with ferrets thankfully!

HUSBANDRY

In North America, ferrets are kept primarily as indoor pets, while in Europe they are often maintained outdoors. Indoor ferrets may be housed in cages or "ferret-proofed" rooms. Minimum cage size should be 9.5 × 9.5 × 7-cm high, and should be large enough to provide an area to sleep, eat, exercise, and have a litter box. Litterboxes should be placed in corners they favor to relieve themselves.

Aquariums are not suitable for ferrets because they do not allow for ventilation that they need. Ferrets should be allowed to be loose in the home only under supervision. Ferrets are capable of squeezing into very small spaces, into furniture, appliances, and ventilation systems. This is an instinct for them as they are digging/burrowers. They also like to chew, and sometimes swallow, rubbery items, pencil erasers, furniture and mattress stuffing, stereo speakers and headphone materials, and pipe insulation. Owners must "ferret-proof" the house or room before allowing their ferrets to run loose. It will be a lot of trial and error as your ferret will test everything.

Ferrets have a tendency to urinate and defecate in corners, and can be litter trained. Owners may need to place litter boxes in multiple corners to ensure compliance. Recycled paper litters or processed natural fiber litters are recommended for use in the litter box. Clay cat litters are not recommended because as the ferret digs and burrows into the material. The litter box should be cleaned often to regulate odors.

Ferrets like to burrow and hide, and should be provided with sleep sacks, sleep tents, towels, or old shirts. If the ferret wants to chew or ingest these items, PVC tubing, dryer vent hoses, or cardboard boxes may be used instead. Ferret toys should be composed of hard plastic material that cannot be chewed up and swallowed. No foam or soft rubber toys that can be pierced easily. Their teeth are strong. We unfortunately learned the hard way with a ferret who managed to tear apart a rubber ball and swallow a piece, leading to the need to get it surgically removed. Some ferrets may safely play with cloth toys, but the owner must be very observant for any evidence that the ferret may be trying to chew off pieces and ingest them. Make sure they are well fed. Sometimes they get the munchies and relieve it with these bad habits.

Be wary of loop strings as they can get tangled or worse, strangled. Avoid leaving them alone with toys with bells on it. I have heard of ferrets losing a toe by it getting caught in the slot of the bell.

Outdoor ferrets must be protected from extremes of heat and cold. Ferrets do not tolerate temperatures over 32°C (80°F), and can suffer from heatstroke. In winter, shelter with bedding should be available. Supplemental heat should be provided when the temperature drops below 6°C (40°F).

Articles referenced: Ferret care and Husbandry, Heather Bixler, VMD and Christine Ellis, DVM

FERRET DIET

Overview

Ferrets have been kept in captivity since 300 BC, but it is only in the last 40 years that we have changed their diet from a raw one to something more commercially processed for convenience. Raw food has been something debated on by pet owners, veterinarians, and researchers alike. But what they all can tell you is that ferrets are **obligate carnivores** and need a very strict meat, organ, fat diet.

If you absolutely can not do a raw diet, it must be a very high grade protein kibble. The trouble with kibble is that they often put starches, grain, fruits or vegetables in it as a filler and stabilizer. Ferrets bodies were not ever meant to process these things. Ferrets have short GI tract with very simple stomach flora. Meaning their **digestive absorption is rather inefficient**. Ferrets eat several smaller meals and carry any excess to their stashes to eat later. You may see this habit in them stashing their treats, food or even toys in hidden spots.

Because their absorption of nutrients in their food is so poor, ferrets require a diet that is highly concentrated with fat as their main source of calories (energy) and highly digestible meat-based protein. Carbohydrates should be avoided for ferrets (vegetable, fruit, grains, starches) as they cannot digest it. **If their diet contains an excess amount of plant/grain matter it can lead to many disorders, diseases and symptoms**. Such as bladder stones, eosinophilic gastroenteritis, insulinoma, cancers and more. As well as poor skin/coat, teeth and bad odors.

So what IS the most appropriate diet for a ferret?

Whole Prey

All research and science suggests whole raw prey. It is the most natural and contains every type of protein they'll ever need. Muscle protein, fat, organs, bone meal calcium. No supplements needed. Biting through and pulling away at the meat, stripping the fur or feathers, works sort of like a floss. As well as the bones strengthening their teeth and gums. Their is mental stimulation as well as they need to work at their food.

Of course, not a lot of people are comfortable with it or can have that readily available. A small option would be rats, mice, chicks or quail. Their are places available, such as reptile feeders that provide bulk options.

Carnivore diet

The next best option from prey is raw carnivore diet. This can be found in most pet stores with large food supply options. They are found in a cooler section. They tend to have the full mix of fat, meat, and organs even bits of bones. Often coming in large patties to little single pouches conveniently packed in freezer safe, meal sized portions. Many Raw Food pet supply stores can be found now as well that supply these in bulk. **BE SURE it isn't dog mix**. As they have fruits, veg or grain. Cat mix is usually the best. But **ALWAYS read the ingredients** to be sure. And to make sure it's not just muscle meat. I personally avoid beef, as I've had it not agree well with one of my ferrets and one or two others turn their nose up at it consistently.

A internet search for "raw pet food store near me" will give you options for locations that supply these.

Additionally, some have expressed concern over if raw food makes pets aggressive. This is **absolutely not true**. Personally, after over a decade of feeding raw, I have not experienced it within my own pets. But I have seen it when people do not feed their pet enough of their raw food. So not only does the pet find the raw more desirable than kibble, but they are hungrier. Thus making the food very valuable. Which creates resource guarding or aggression. This can and has happened with ANY food, even kibble. It is simply more common with raw as people don't measure it appropriately to their pet or it is not morally or aesthetically pleasing to handle so then skimp on the food.

Dry Food

Ok, now if you absolutely can't do raw; there *are* options. This one is a bit tricky as making a dry food without starch, grain, veg or fruit is virtually impossible. No one brand, style, form is fantastic for ferrets but there are fairly good options. Numbers wise, a dry ferret diet should contain at least 30-40% crude protein and 15-20% fat. The protein should be animal product protein and highly digestible. Some pet food brands use grain proteins to make some of those numbers. But it is filler and non-digestible for ferrets. You must look to the ingredients to assure this is mostly the correct protein. The first 3 ingredients must be animal meat-based. The hard part is finding brands without all the added dextrose, cranberries, sweeteners, corn by-products, etc. There are freeze-dried

options that do a better job than most kibble. Specialized ferret diet formulas, high quality, high protein kitten food may also be an option.

Treats

Ferret targeted treats in pet stores are horrendous options. I am unsure who decided molasses, sugars, peanut butter and such are okay foods or treats for ferrets. They are usually loaded in sugars, salts, and not a drop of actual protein.

Freeze dried chicken treats have always been a winner for us but you can see if your ferret(s) enjoy other types of meat. Salmon oil/ferretone very sparingly. Raw or cooked pain meat pieces (no additives, of course). Eggs, very sparingly as well unless you want very messy stinky poops. I mentioned cooked meats here only. This is because it's not for whole nutrition but a healthy tasty treat. Nutrition for ferrets is lost in cooked food.

If you are to change their diet from one to another, it's best to do it cold turkey instead of gradual. Ferrets can be picky eaters. So if they believe they'll still get their old diet one way or another, they will snub anything new.

Additional information you may need....

- If you switch from different food types per meal, be sure to space it several hours as it can upset their guts.
- Kibble cake on their teeth as well, be sure to brush those teeth!
- For a sick ferret, critical care food supplements may be needed. We use Critical Care Carnivore and always have some on hand just in case. There are other options such as Oxbow Carnivore Care, EmerAid Intensive Care Carnivore as some examples.

- The diet of a ferret, just like all pets, will determine their smell. A poorer diet will make for a stinkier ferret.
- Raw food will likely be more expensive than the alternative. But it'll save on medical bills in the future that they wouldn't get otherwise.
- Carbohydrates are not needed or digestible.
 Ferrets get energy from the fat calories in their food.

- ALWAYS make sure they have water available.
 Putting a little water into their food adds extra insurance of water intake.
- Plant based proteins are a large cause for kidney stones in ferrets.
- Ferrets, like cats, can have kidney/bladder issues due to their diet. Hydration is very important.

(More info on pg.

 Kits require diets higher in protein and fat and more frequent feedings than when they are older. Be sure they have food available often.

Articles referenced:

Rethinking The Ferret Diet, Susan Brown, DVM | Ferret care and Husbandry, Heather Bixler, VMD and Christine Ellis, DVM

KIT TRAINING

Ferret kits, just like kittens and puppies are very nippy. Ferrets have a thicker skin than us as well as a protective layer of fur and they don't understand that we humans don't have that. It is up to us to teach them as it would be their parents or other ferrets. They have a very assertive pecking order.

Stage 1 - For 4-5 days, when your kit starts to nip, reaches as if nipping, pretends to nip, or is even just looking like they are going to; make a noise in a high pitched, shrill voice much different to any of your normal sounds/calls, like of "Yow!" or "Aa-Aa!" or "Aye!". This will be your equivalent of the ferret sound to let them know you're not having fun with that type of play and to stop. (They have their own sound for this too) A ferret kit will usually stop and look at you to register how they cause that and processing that that was your 'hurt' sound.

If this doesn't seem to do the trick, you gotta do a combo of that and stage 2...

Stage 2 - Pick them up and put them in *Air Jail. A hold where they can wiggle but there is no where to go and no fun to be had. If you are worried about being grabbed you can use a blanket over them. Follow this with a "Kshhh" hiss. If you say the word "NO" in a calm, quiet, yet stern voice at the same time as doing your yelp sound will train it that the "NO" word is the same..

Use the above stages together for 4-5 days. If you have an exceptionally stubborn ferret, add to it with stage 3...

Stage 3 - After doing all of the above, while still holding the kit by their scruff, but on the ground–VERY LIGHTLY drag them across the floor about 3-4 times, in a 1m/3ft area. This is a ferrets' strict punishment similar to what the mother would do.

Additionally, some people use Apple Bitter(sold at most pet supply stores) on their hands to deter further.

• Never cage or place down after nipping. This also includes if they wiggle and flail a lot. If you do, YOU are being trained by them. This only teaches them doing these things will get them what they want.

• You can use a small pet taxi as a "time out". No toys or blankets to play in. But only for 2-ish minutes. For a hyper ferret kit, 2 minutes is a lifetime.

• Rewarding and reinforcing good behavior with love, cuddles, kisses, treats or praise assures your kit what that good things come from good behavior.

• Every time you pick up your kit, try giving them a little treat. Being picked up will be associated with rewards!

Freeze dried treats, pieces of raw or cooked meat/egg, salmon oil, etc.

• Provide toys and interact with acceptable human play behavior. Their is hardly any limit to their toy preferences. Even flapping a light blanket/towel on them will have them dancing in fits of joy.

• Ferret kits will be nippy if they are hungry. Make sure they get fed their meals regularly.

• A young ferret is also at their nippiest when first let out. They tend to forget their manners through the excitement. Let them run around a bit to burn it off before playing with them with your hands.

• When they are burnt out and found a napping spot, instead of putting them away. Put them on your lap and pet them while they drift off. This helps them associate you with comfort and relaxing as well.

*Air Jail reference



Visual reference for the "Air Jail". You take them out of fun, and nothing to really look at with their poor eyesight.

- Use two hands for support.
- Thumbs behind the arms/shoulder blades. This keeps them from pulling their arms away and from their head swinging back to nip.
- Only put them down if they are not wiggling! Wiggling is a ferret telling you what to do.
- If you have a particularly bottom heavy ferret. You will probably need to finesse the hold with one hand on the upper half, and one supporting their bottom so their isn't excess strain on them.
- As you pick them up into the hold, add the hiss and firm "No".

<u>Do NOT</u> hit, bop, nose flick, gag or thump your kit. Doing this teaches them that YOU are the threat and intend to do them harm. This will only result in a fear-biting, nervous and mistrusting ferret. Show your ferret love, play and structure. This will result in a happy and loving ferret!

Articles referenced: Informational Guide, Scarlett Gray-Saling of Happy Dookers

BEHAVIOR

Ferrets as a species are a quirky animal in general. So it's easy to understand that they have a very large variety of questionable expressions and behaviors. Here's a list of what might be going on:

Dead Sleep - Ferrets have a startling habit of sleeping SO hard, that they look dead. You can pick them up, shake or poke them, make sounds at them and they will be an unmoving, limp, lifeless noodle. I have yet to get used to it! Check if they're breathing and coax them out of sleep if you'd like. Doing so won't harm them.

Dooking - This is an excited and happy sound! Some may use this to express just that. Some loudly, some quietly, and some don't at all. Though no dooking doesn't mean they're not happy or excited, they may just express it a different way. It's hard to write in description but the best I can explain it is a sort of low chuffy hoot in fast succession.

Happy Dance - Probably the funniest behavior a ferret can do. It is a burst of excitement that can't be contained that they seem to lose control of their body. Thrashing, bouncing, whipping all over the place! This can be accompanied by dooking or breathy huffs (we call it laughing) and a wide open mouth as if silently laughing.

Backing Up into Corner - Ferrets do this for different reasons. If they dash to it, or back up rapidly, hiss, or puff up, they are frightened and needs to be left until they calm and realize there's no danger. Calming sounds you make for them when you're playing with them as you do other things will usually assure them.

Another reason is to relieve themselves! They favor corners usually when using the bathroom. So puppy pads come in handy if you have them out and know their favorite corner if you can't quickly move them to their litter box. A good tell is if they don't look scared, have a wide leg spread and an up tail.

Bottle Brush Tail - Ferrets get a puffy tail when they are frightened or excited. Generally, overstimulated one way or the other. Being introduced to a new animal, a puffy tail means fear. Being in a new environment can mean fear, apprehensive excitement or just excitement. Judging what the tail means can be a puzzle piece game. Slinking with a puffy tail = fear. Wardancing with a puffy tail = over excitement, etc.

Wagging tail - This is a rare one! It's a serpentine wag or a rapid dog-like one. There's a lot of mixed reviews on what it means. Most generally have reported it's due to anticipated excitement! We have only seen it in one of our ferrets, Lemon, who is very low energy so it's hard to tell but he usually wags his tail when he is in a new environment or just let out of his enclosure for play time. I've also read that it's a sort of proud strut expression. Usually by a more dominant ferret.

"Poofing" - You see your ferret bristled and scared, and suddenly you smell something. We call that "poofing". It is something only in ferrets that have not been descented (scent glands surgically removed)t is a defensive behavior when they are VERY upset or scared. The use of poofing is defers from ferret to ferret. Some never ever do even when frightened, some do a lot. In my experience, female ferrets are more likely. Though this is usually in pecking order disputes as females are more dominant usually.

It's not as abrasive and long lasting as a skunk blast, and not "staining" either. I would even say that I've smelled worse from dogs. But it isn't pleasant. It will stick to whatever they were on when they poofed. A simple spray and wipe or washing machine cycle will remove the smell.

Hissing - Ferret have a low "kshhhh" hiss. Some quiet, some loud. It can range from being just being grumpy or angry. Generally, just give them a moment. They could be rough housed too much, or at "war dance" levels. Or for silly little reasons even, our Warboy used to hiss over discovering his food dish was empty.

War Dance - This often is confused with their happy dance. If they are bristled, back arched, jumping, and hissing, your ferret is telling you it's frightened, angry or hurt. If your ferret is not de-scented they may also "poof" as well. Similar to a skunk, it's a defensive behavior. They are telling you to not come near so best to leave them until they feel comfortable again. If you think the ferret is hurt, still, give it a moment. An angry, frightened and defensive ferret will not be cooperative in the least.

Sneezing - Ferrets sneeze a lot. They are low to the ground and like to dig and get into dusty places. However, if you see discharge that persists past a day, you may have a sick ferret. Discharge, coughing, mucus, runny nose, and lethargy are when you should take your ferret to the vet for a checkup.

Toe Nipping - Ferrets will do this especially at younger ages. They are treating your feet like another ferret, trying to get you to play. A playful nip can feel like a bite, feet are sensitive! Especially on top of the foot, yowch! Best to go over what you've learned on training behavior stages (seen above in Kit Training). But also, as most in the ferret community will tell you, ferrets are obsessed with feet. Something about the smell, as humans have sweat glands in their feet. You also travel with your feet, picking up smells from around the place. We have 2 ferrets that keep us in crocs or thick socks for this reason when we play with them.

Wrestling - Ferrets play through chasing each other and wrestling. They will usually go for the "scruff" (behind the neck) of the other ferret and alligator roll. They play in this way to also re-establish and affirm dominance. It can be accompanied with lots of sounds. Dooking, whining and screaming. This may often look serious, however this is just rough play. In the not so common possibility that it is serious, there will be urine and feces. Check for wounds and clean them if this is the case. Sometimes ferrets will not like each other or take special measures to be introduced.

Alligator Roll - Ferrets have a lot of tricks and methods to their wrestling. One of them is the "Alligator Roll". This is when one ferret grabs the other by the scruff and rolls in a way that get's the other ferret flipped over. It is how ferrets assert dominance, with the submissive ferret on it's back. It's all part of their pecking order process.

This can also be poorly used by young ferrets learning and practicing by doing this to their humans loose skin, feet or socks. It's never meant to hurt you, as they don't understand that you don't have a thick skin or fur for protection. Be sure to correct this behavior appropriately so that they understand your limits.

Scratching/Itching - Ferrets are itchy regularly. If they suddenly stop to itch out of no where, frantic or not, it's usually par for the norm. Always be sure to check for fleas, redness, bumps, skin lesions or mites just in case from time to time, especially if you have other animals in the house or if you take them outside. The more familiar you are with your ferret, the more you will recognize their normal scratching from something to be concerned about.

Object scooting - When ferrets try to move awkwardly shaped objects and their mouth can't do the trick they will try to scoot it with their nose or, the silliest way; putting their paws on the object and pushing it into their own chest or stomach as they scoot backwards with it. It's usually poorly executed and they go in a circle or into a wall. It is still funny nevertheless!

Running into things/Falling off things - Ferrets have a poor depth perception, as well as poor radius of sight. They are burrowing animals who use their whiskers and smell mostly for searching for prey. For this reason they often run into things, usually when being chased as they are trying more so to look from their peripheral which is better than their frontal sight. And worst of it they fall off of anything. It is highly advised *never to allow your ferret to run around on balcony or high dangerous places*. I can promise you, they *will* fall. Plexiglass and borders on open banisters or balconies is advised. If there are places your ferret can go that you know is quite high up, you should supervise them closely. Some ferrets are airheads, and don't learn their lesson even after falling.

Object obsession - Ferrets can become invested in certain objects or toys. This usually comes with your ferret stashing it in a particular hiding place or moving it to place to place. It can be silly but the objects disappearance can make your ferret stressed, anxious or angry. Ferrets can get into disputes over other ferrets touching or moving their object. Our ferret, Lemon, loves round rubber kong balls at certain sizes. He moves them to a very specific hammock that he has to really go out of his way to put them up in. Sometimes the ferrets will move them or accidentally drop them out of it and he will go looking for them obsessively until he puts them back. Once he caught another ferret in the act of moving it around and he walloped them for it!

This is a toy or object that they will have a lot of contact with so be sure it's safe for your ferret.

Screaming - A screaming ferret is not a happy ferret. They will scream if frightened, injured or unhappy. Always check on your ferret if you hear them scream. If injured, take them to the veterinarian. They're very good at hiding just how bad an injury is. For example, if fallen from a height is followed by

a scream, but they walk it off. Always look over it for injury. There's a good chance they may have broken something!

Screaming can also be telling other ferrets they are at their limits when there is dominance play. Or even out of sheer frustration over the audacity that someone is trying to put them into a submissive position. This is especially the case when being introduced to new ferrets. If you see no sign of injury or relieving themselves in fear, allow them to "duke it out".

Chasing - Ferrets love chasing and being chased! Besides wrestling, tag is their favorite. You will see and even hear them fly through a tunnel so that the other can get out first to turn around and wrestle or nip at each other at the exit. This is sometimes started with a ferret trying to initiate a chase by bouncing around a ferret and doing little lunges. This is a good sign when introducing new ferrets, even if the new ferret isn't too fond of it as they are uneasy. They'll see the fun in it eventually.

Food digging - Ferrets are diggers and burrowers. So unfortunately, this is an instinct they will display with their food sometimes. It's not something that can really be trained, so it's an inevitably. This does not mean they dislike the food, they'll still likely eat the food they dug out as well.

Litterbox digging - Like above, and unfortunately, yes, even their litterboxes are no exception. I found if at all, it's most common in cleaned litterbox as they are excited for the new material. You may just have a stinky freak who thinks it's fun either way. This is most common in intact males as they want to be as stinky as possible. But most avoid it. Adding less litter material will also make it less enticing. You can make a "dig box" for them to let this behavior out on. Rice in a box is a good one, raw uncooked dry beans, dry leaf material, etc.

Water/Food tipping - Ferrets are curious, playful, puzzle solvers. They will experiment in cause and effect. But also so that they can play in the water or food that they have spilt. Definitely an unwanted behavior. The best you can try to do is using "no-spill" bowls for food and water dishes that latch/screw onto the cage bars so they can't be moved. It's not foolproof, but it does help.

GROOMING

Overall

Ferrets have a natural musky odor, which is stronger in the intact ferret than the neutered ferret. Their ferret musk is something that some people enjoy and some don't. Similar to how some people like a puppy smell and some don't.

Ferret diets also contribute to their odor. A poor diet will lead to body odor and oils similar to humans.

Regular bathing is not recommended; at most, bathe a ferret once a month *at absolute most* with a mild shampoo labeled for kittens or ferrets. The more you bathe them, the more their body will try to replace the lost oils. Resulting in a more oily smelly ferret. We sometimes wipe them down with odorless baby wipes when they get into their food and such. Bathing a ferret can be a big endeavor as well. The majority of ferrets dislike baths. There are many videos online to help you teach your ferret to enjoy bathing as well.

If you give them a bath, be sure to place them in an area with a towel and nowhere for them to roll in to get dirty again while they are wet. This includes behind dressers, dusty corners, litter boxes. As they will roll in anything to try and dry themselves off. They get a burst of energy after bathing so they'll be hard to catch! It is funny to watch as they slither across the towels and blast off like a rocket!

Nails

Use pet safe nail trimmers. Preferably cat targeted trimmers as they have similar nail structure. Do not cut into the quick (pink vein in nail) of the nail. Styptic powder should be applied if a nail is trimmed too short. Distracting the ferret with a treat can be helpful when trimming nails. Putting some salmon oil/ferretone on their belly so they are distracted from moving by licking it as you clip their nails in your lap.

Teeth

Brushing the teeth would be similar to how you would a cat, and probably just as frustrating for you and your cat/ferret. You can use small baby toothbrush, soft bristle. Or pet finger brushes. Use cat toothpastes.

Articles referenced:

Ferret care and Husbandry, Heather Bixler, VMD and Christine Ellis, DVM

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FERRET HEALTH

No matter where you get your ferret, every ferret has its own chemistry, genetics, environments, temperaments, diets, etc that will determine its health. You can have the healthiest genetic lines and a small food allergy could disrupt its health entirely. As well as ferrets can catch respiratory illnesses from humans. Without the same vaccinations as us or immunity, it can be deadly for them.

The best we can do as good ferret owners is keep a good eye on any irregularities or concerns that we may catch. Ferret disease processes differ from dogs and cats, and it is important to identify them for the best course of treatment.

Unfortunately, because ferrets are also bred in labs as lab testing animals, the one good thing from it is that we have mountains of research and studies on ferret health.

This portion of the guide, we'll cover ferret health, diseases, symptoms and other things to look out for.

Symptoms

PAIN

Ferrets express pain associated with disease, and their manifestations vary from cats and dogs. Ferrets with pain show bruxism, with or without salivation (especially with gastrointestinal ulcers or foreign body/trichobezoar). Other signs of gastrointestinal pain or nausea may include: abdominal tensing during exam palpation, retching, or salivation.

Ferrets with generalized or severe pain may have a bushed tail (the piloerection makes the tail look like a bottlebrush), have dull mentation, may crouch in a sternal position with an arched back, and do not play. They may also lie in lateral recumbency with the head tucked. Ferrets may exhibit a change in personality, such as severe aggression, and show atypical attempts to bite a handler—this needs to be differentiated from the mild aggression of adrenal disease. Dental pain may include dysphagia or drooling. Facial or ear pain may be expressed by head shaking or ear/face scratching.

Treatment of pain includes: identification and treatment of the underlying cause of pain, administration of an appropriate oral or injectable nonsteroidal antiinflammatory, or administration of an opioid-analog analgesic such as buprenorphine HCI (Buprenex) or butorphanol tartrate (Torbutrol, or Torbugesic). Caution: ferrets treated with butorphanol often exhibit a heavy stupor for 4 to 6 hours post medication in the authors' experience.

Painful animals should be housed in quiet surroundings, and should be provided with a hiding place such as a sleep sack, towels, and an appropriate litter pan.

LIGHT CYCLES

Ferrets need to rest in **total darkness for 14 hours a day**. This is due to their need to regenerate melatonin. This process is impossible with light.

For this reason, you should provide a compartment within the cage with a small hole wide enough for the ferret to pass through or a section of the cage that is completely dark and covered.

If the cage is small, you should provide a little den in the corner of the cage where the ferret can rest in darkness. Serious health problems may arise if this light cycle is not respected. This also refers to artificial light. The artificial light cycles cause continued overstimulation of the hypothalamic–pituitary–adrenal neuroendocrine axis, resulting in production of androgens by the adrenal gland. These factors combined may give rise to what is labeled as adrenal disease in ferrets (hyperplasia of the adrenal glands, adrenal adenomas, and/or adrenal adenocarcinomas).

VACCINATION REACTIONS

Ferrets are more likely to have anaphylactic vaccine reactions to either rabies or distemper vaccines than canids or felids. Owners should be asked to remain at the clinic for 30 minutes post vaccination to observe for signs of possible reaction. Clinical signs of a vaccine reaction include: diarrhea that is sometimes bloody, hematuria, dyspnea, vomiting, and fever. The veterinarian should treat the ferret with diphenhydramine HCI (Benadryl) 2 mg/ml intravenously (i.v.) or intramuscularly (i.m.), and dexamethasone 1 mg/kg, i.m. When severe reactions occur, epinephrine can be administered 20 mg/kg i.v., i.m., subcutaneously (s.c.), and supportive care initiated immediately as for dogs and cats. The veterinarian can discuss reactions, risks, and modification or cessation of vaccine protocols with the client, if indicated.

HAIL LOSS

Ferrets may exhibit seasonal hair loss during normal shedding cycles, usually in the Fall and Spring. This coat change is more noticeable in intact ferrets. Ferrets will have a shorter darker coat in summer and a longer lighter colored coat in winter. As ferrets age, alopecia is likely to become more prominent. Waxing and waning alopecia with or without pruritus may be an indicator of future adrenal disease, which appears to be more prevalent in North American ferrets.

Alopecia may occur symmetrically over the tail, may involve only the tail tip, and may also include hind quarters, shoulders, ventrum, or head. Focal hair loss may also be caused by

neoplasia (especially mast cell tumors), external parasites, contact dermatitis, or trauma. When clipping an animal for procedures, clients should be told that depending on the hair coat cycle, there may not be hair regrowth for weeks to months.

HIND LIMB WEAKNESS

Hind limb weakness is a common nonspecific presentation in ferrets. This may indicate generalized weakness due to underlying disease such as insulinoma, trichobezoars, Gastrointestinal (GI) foreign body, neoplasia, cardiac disease, or sepsis. Primary spinal lesions or myelopathies are not common in ferrets.

ANOREXIA

Anorexia is a general clinical sign for many diseases, and may be associated with GI foreign body, GI obstruction, food changes, infection, hepatic disease, renal disease, heart disease, neoplasia, and endocrine disease (insulinoma especially). Ferrets that are nauseous will exhibit bruxism, salivation, squinting, and head shaking when food is presented.

RESPIRATORY DISTRESS

Ferrets are nasal breathers; therefore, open-mouthed breathing is abnormal. Ferrets in respiratory distress will stand with lowered head and neck, and will breathe with increased rate, often with abdominal effort. If the ferret cannot stand, it may lie in sternal or lateral recumbency with the forelimbs extended or at the sides. Mucous membranes may be cyanotic. Causes of respiratory distress include: upper or lower respiratory infections, influenza, or, toxicity, congestive heart failure, pulmonary edema, pulmonary effusion, neoplasia (ie, lymphoma), trauma, metabolic disease, or airway obstruction. Panting can also be an indicator of heat stroke.

HEATSTROKE

Heatstroke is more prevalent in outdoor ferrets or indoor ferrets with restricted access to water during warm weather. They evolved as a cold weather animal which means ferrets have ineffective sweat glands in haired areas; thus, they are more at risk for heatstroke at ambient temperatures over 35°C (85°F). Ferrets will present often recumbent, stuporous, dehydrated, and may be in shock with body temperatures at 40°C (104°F). Immediate treatment is imperative.

Treatment of Heat Stroke:

Since the degree of damage done is dependent on the length of time the temperature is elevated, start cooling the ferret as soon as heat stroke is suspected. While instituting these measures, get to a veterinarian so that further treatment can be begun.

• Do NOT immerse the ferret in an ice or cold water bath. This will cause the peripheral blood vessels to constrict and actually make things worse.

• Do not cool lower than 39°C(103°F) rectal temperature, as doing so will actually result in hypothermia.

- Do not use alcohol or ice packs on the skin.
- Do not give subcutaneous fluids unless directed to do so by your vet. They may cause peripheral blood vessels to constrict.
- Use cool or tepid water to wet the skin and hair coat.
- Direct a fan toward the animal to increase air flow, which will increase the heat loss as the water on the skin evaporates.

• If the animal is conscious and will drink, small amounts of a cool liquid will be helpful, but do not force the animal to drink.

Once you are at the veterinarians, an assessment will be made of whether further measures are needed. They may include intravenous fluids, cool water enemas, or other cooling procedures. Drugs to control any cardiac problems will be started. Oxygen therapy should be done to increase the amount of oxygen reaching the tissues, and may require intubation. Bloodwork is needed to determine the function of the kidneys and liver, and will probably need to be repeated depending on the degree of heat stroke suffered. The ferret may need to be hospitalized for some time. Drugs may be needed to protect the gastrointestinal system.

Prevention of Heat Stroke:

First and foremost, air conditioners are wonderful things. If, for any reason, climate control is not possible, the following are some ways to keep your ferrets from suffering heat stroke.

• Circulate the air - fans, open windows, etc.

• Cool surfaces for them to lie on - bottles of ice in the cage, stone tiles are some examples. With bottles of ice, be careful to wrap the bottle in cloth to avoid getting the ferret too cold.

• Cool water to drink - bowls allow them to wet themselves (and everything else, unfortunately!) and many ferrets will drink more from a bowl than from a bottle.

• Swimming or cool water baths - a wet ferret is rarely an overheated ferret.

STRANGURIA (CONSTIPATION/STRAINING TO DEFECATE)

Owners may notice a ferret elevating its tail, crouching, straining, and not passing urine and/or stool. The owner may be concerned about constipation, which does need to be ruled out, but constipation or colitis occurs less frequently than urinary tract disease. Stranguria or pollakiuria is often caused by urinary tract infections, urolithiasis, neoplasia, urethral strictures, or obstruction secondary to adrenal disease due to an enlarged prostate.

DIARRHEA

Gastrointestinal causes of diarrhea in ferrets commonly include: *Helicobacter mustelae* gastritis, eosinophilic gastroenteritis, lymphoma, epizootic catarrhal enteritis, and proliferative bowel disease. Nongastrointestinal causes of diarrhea include: insulinoma, allergic reaction, toxicity, hepatic disease, neoplasia, trauma, or Aleutian Disease virus.

Ferrets may present with melena. Causes of melena include: nonsteroidal anti-inflammatory toxicity (especially ibuprofen), gastric or duodenal ulcers secondary to foreign body, or *H mustelidae*, inflammatory bowel disease, and corticosteroids. *H mustelae* infection has also been associated with gastric adenocarcinoma and certain forms of lymphoma.

Epizootic Catarrhal Enteritis (ECE or "green slime disease") is commonly seen in ferrets, and is thought to be caused by a rotavirus or coronavirus. The clinical signs can include: green watery diarrhea, vomiting, dehydration, weight loss, and death. Green stools are not pathognomonic for ECE—they can be caused by bile pigments being more visible in the feces when a ferret is showing decreased food intake. Following infection with ECE, damage to the GI tract can lead to chronic malabsorption/maldigestion, and possible predisposition to other diseases. Ferrets can act as asymptomatic carriers for life.

Aleutian disease is an uncommon parvoviral disease originally seen in mink. Symptoms include: progressive weight loss, melena, lack of appetite, and immune complex-associated signs such as uveitis and elevated gamma-globulin levels. There is no effective serodiagnostic test available; the tests currently in use show many false positives due to cross reactivity of antigens to other parvoviral diseases.

Hospitalization and supportive care is indicated for any ferret that is vomiting. Diagnostics such as radiographs, complete blood cell count (CBC), and serum chemistries should be considered.

Radiographs should be taken using inhalant anesthesia to facilitate positioning. A plain film is taken first. If necessary, a large diameter red rubber catheter can be introduced into the mouth and esophagus, and the stomach can be insufflated with 15 mL of room air. A radiograph is taken immediately after insufflation. This procedure aids in identification of foreign material in the stomach, but is not a substitute for a barium study. When indicated, a barium study should also be performed. Gastrotomy is the treatment of choice for trichobezoar or gastric foreign body removal. Biopsy of the gastric mucosa is recommended to rule out underlying gastric disease.

VOMITING

Gastric foreign body, trichobezoars, and gastrointestinal ulceration are all common gastrointestinal causes of vomiting. Less common causes include gastric neoplasia, parasitism, and megaesophagus. Non Gastrointestinal causes of vomiting include: hypoglycemia, allergic reaction, renal disease, toxicity, neoplasia, trauma, or Aleutian Disease Virus.

Gastrointestinal foreign bodies are prevalent in ferrets under 2 years of age, whereas older ferrets are more prone to trichobezoars. Either condition may or may not present with vomiting. Weight loss and occasional diarrhea may be the only presenting signs and signs may only be intermittent.

BLADDER STONES

Also referred to as Uroliths, are rough in nature, causing the ferret's urethra, urinary bladder, or kidneys to become inflamed. Kidneys can also become inflamed due to secondary bacterial infections. Ferrets suffering from urolithiasis will lick or bite the urinary

area. And while some are unable to urinate or at least urinate properly, others frequently urinate but only in small amounts, leaving the fur around the perineum damp. In severe cases, urolithiasis may lead to renal failure. Some other symptoms include:

- Painful and difficult urination
- Cloudy urine
- Bloody urine
- Foul-smelling urine
- Loss of appetite
- Weakness
- Lethargy
- Abdominal pain
- Dehydration

The consistency of uroliths depends on the types of minerals or solutions in the formations. For example, urolithiasis struvite stones consist of magnesium ammonium phosphate and causes the ferret's urine to become highly alkaline, and urolithiasis cystine stones consist of calcium oxalate, causing the urine to become highly acidic. Meanwhile, ammonium acid urates and silicate stones cause the urine pH to become either neutral or acidic.

Urolithiasis is most common in middle-aged to older ferrets (3 to 7 years), especially males. Risk factors include the consumption of dog food, poor quality cat food, or diets with plant-based proteins. Abnormal retention of urine can also lead to urolithiasis.

Diagnosis

Other than observing the ferret's clinical symptoms, the veterinarian may recommend X-rays and urine examinations to confirm the diagnosis. Culture and sensitivity tests may be required if secondary bacterial infections are present.

Treatment

Once the type of urolith is diagnosed and located, your veterinarian will devise a treatment plan. If the uroliths can not be dissolved with antibiotics, surgery is required to remove the "stones." Fluid therapy is also necessary to maintain the ferret well hydrated.

Living and Management

Once the stones are removed, your veterinarian will devise a dietary and living plan for your ferret.

Prevention

Providing a well-balanced, healthy diet for your ferret may help prevent uroliths from forming in your ferret. But because there are various causes for the condition, there is no surefire way to prevent it.

MAST CELL TUMORS

Ferrets can be affected by a variety of skin tumors. Some of these are benign (generally harmless) and some can be malignant (cancerous). It is often not possible to diagnose what type a tumor is by looking at it and further diagnostics are often required to decide upon a diagnosis and treatment plan.

Mast cell tumors however, are benign in ferrets but are surgically removed due to the discomfort they can cause from histamine release. Ferrets will often scratch and self-mutilate them causing bleeding and scabs to form. Surgical removal is usually curative, and unlike mast cell removal on cats and dogs, large margins around the mass do not need to be taken.

Articles referenced:

Ferret care and Husbandry, Heather Bixler, VMD and Christine Ellis, DVM | Heat Stroke in Ferrets, Ruth L Heller, DVM | Urinary Tract 'STones' in Ferrets, PertMD Editorial

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Diseases and Sicknesses

ZOONOTIC DISEASES

The only documented zoonotic diseases of the ferret are influenza A and B, (orthomyxoviruses); however, human-to-ferret transmission is more common than ferret-to-human transmission. Human influenza and respiratory disease/illness are very contagious to ferrets, such as coronavirus, h1h1 (swine) flu, etc. Are also susceptible to canine distemper.

Ferrets may exhibit high fever that may undulate, heavy bouts of productive sneezing, lethargy, and lack-of-appetite. Young or immunocompromised ferrets are at risk for secondary sequelae such as pneumonia. Antipyretics are not indicated.

Potential bacterial zoonotic diseases such as leptospirosis, listeriosis, salmonellosis, campylobacteriosis, and tuberculosis may occur in the ferret, but transmission to humans has not been documented. Ferrets are susceptible to rabies; however, there has never been a report of rabies transmission to humans from ferrets. Little is known about natural rabies infection in this species. Ferrets are susceptible to dermatophytosis (*Micropsorum canis* and *Trichphyton gypseium*), which can be transmitted to humans. Respiratory or systemic fungal infections are rare in ferrets and diagnosed postmortem. Potential zoonotic parasitic diseases of ferrets may include scabies (*Sarcoptes scabeii*), giardiasis (*Giardia* sp), toxoplasmosis (*Toxoplasma gondii*), and coccidiosis (*Eimeria* sp).

SPLENOMEGALY

An enlarged spleen (hypersplenism) may be noted on palpation in clinically normal ferrets, and rarely represents primary splenic disease. Pathologic enlargement of the spleen may indicate primary neoplasia, metastatic neoplasias (lymphoma, insulinoma, or other neoplasias), or a hematoma. Seventy-five percent of ferrets with lymphoma may exhibit splenomegaly, but many ferrets with enlarged spleens may not have lymphoma. Splenomegalic ferrets may have abnormal blood hemodynamics, and can show evidence of thrombi. Splenectomy is performed if there is diagnosed neoplasia, if the enlargement causes discomfort, or if trauma to the spleen is evident.

NEOPLASIA

Neoplasia is a common cause of disease in domestic ferrets worldwide but more so in North America than it is in Asia or Europe. The most common neoplasms are islet cell tumors (insulinoma), adrenocortical neoplasms, and lymphoma. Definite causes are difficult to determine but genetic predisposition, husbandry, infectious agents are suspected causes.

The probability of developing neoplasm in the endocrine (hormone) system starting at 4 years and continuing into later years. Their later years past this will likely develop neoplasm of other types.

Diagnosis

If your ferret is suspected of having neoplasia, testing for diagnosis needs a complete blood count (CBC) and serum/plasma biochemical analysis to determine definitive diagnosis. Radiography and ultrasonography are used to also diagnose tumors but to determine the stage of neoplastic disease, plan for therapy and monitor the response to therapy. Most cases will also require a sample of the neoplasm for microscopic analysis.

Treatment

Based on the type of tumor and location, treatment may be therapeutic options. This includes; surgery, chemotherapy, and radiation therapy. Because neoplasia affects the endocrine and hemolymphatic system, the spread can vary throughout the body. Veterinarian practitioners should always discuss the therapeutic goals, potential outcomes, prognosis for cure and adverse effects to the treatment options.

INSULINOMA

Insulinomas are neoplasms involving the beta cells of the pancreas. Insulinomas secrete excess insulin, resulting in hypoglycemia. Insulinoma is commonly diagnosed in ferrets 4 to 5 years of age, but can occur between 2 to 8 years of age. Affected ferrets exhibit intermittent or variable signs related to effects of hypoglycemia on the central nervous system.

Ferrets may present with chronic signs, such as weight loss, hind limb weakness, increased daytime sleeping, and decreased appetite. Ferrets may also present with sudden collapse, lethargy, a "glazed" expression, or salivation. Episodes may last minutes to hours. Severe signs include tachycardia, tremoring, hypothermia, and subsequent cerebral hypoxia that can lead to death. A presumptive diagnosis of insulinoma is made when repeated fasting blood glucose levels are below 70 mg/dL. Other less common causes of hypoglycemia in ferrets include starvation, sepsis, and hepatic disease.

Ferrets that present in an acute hypoglycemic crisis should have a blood sample drawn for blood glucose analysis. Once the sample is taken, give a sugar-rich source orally, such as 50% dextrose or Nutrical (Evesco Pharmaceuticals, Buena, New Jersey) followed by a high protein meal. An unconscious hypoglycemic ferret requires 50% dextrose given by slow i.v.

bolus to correct clinical signs—not the hypoglycemia—and appropriate supportive care. Medical or surgical therapies are addressed by the veterinarian.

LYMPHOMA

Lymphoma is not uncommon in ferrets. Multicentric lymphoma affecting lymph nodes and organs is the most common form; however, gastrointestinal, cutaneous, and orbital forms are reported as well. Splenomegaly may or may not be present.

Ferrets less than 1 year old may exhibit weakness, weight loss, lack of appetite, and lymphadenopathy. Ferrets 1 to 3 years of age commonly develop mediastinal or multicentric lymphoma, and present with the above signs, or may have muscle wasting, occasional vomiting, and respiratory difficulty. Ferrets greater than 3 years of age are often asymptomatic, or may show signs of chronic illness. The course of this disease may wax and wane, with or without treatment for up to 6 months before the animal becomes ill again. Diagnostics may include: CBC, whole body radiographs, a serum chemistry panel, lymph node biopsy, and bone marrow cytology.

ADRENAL DISEASE (ADRENAL HYPERPLASIA/ADENOMA/aDENOCARCINOMA)

Adrenal disease is a common disease in North America. Ferrets have a complex neuroendocrine system. Pet ferrets are usually neutered early, and are also removed from a seasonal day:night cycle because they are kept indoors. Current hypotheses suggest that the adrenal cortex begins secretion of sex hormones in place of the "missing" gonadal tissue. The artificial light cycles cause continued overstimulation of the hypothalamic–pituitary–adrenal neuroendocrine axis, resulting in production of androgens by the adrenal gland. These factors combined may give rise to what is labeled as adrenal disease in ferrets (hyperplasia of the adrenal glands, adrenal adenomas, and/or adrenal adenocarcinomas).

Affected ferrets will present with varying levels of hair loss, often beginning at the tail. The hair loss may wax and wane over a few years until regrowth stops. Spayed female ferrets may develop an enlarged vulva, and vulvovaginitis. Males may develop prostatic cysts secondary to adrenal disease, and may demonstrate stranguria or urinary tract obstruction. Pruritis, or anemia secondary to bone-marrow suppression by excess secretion of estrogen, may occur. Diagnostics include adrenal hormone assays, CBC, serum chemistry panel, and radiographs to evaluate for concurrent disease. Treatment options for adrenal disease include medical management or surgery.

DISSEMINATED IDIOPATHIC MYOSITIS (DIM)

Disseminated idiopathic myofasciitis (DIM) is a relatively new disease that affects pet ferrets. DIM is a severe inflammatory condition that affects primarily muscles and surrounding connective tissues. There have been hundreds of suspected and confirmed cases since the disease was first identified in 2003. For several years the disease was considered to be a hopeless, fatal disease in ferrets, but now we have a fairly effective treatment protocol and many long-term survivors.

Symptoms

The onset of clinical signs for DIM is usually fairly fast, often followed by a rapid decline over a period of 12 to 48 hours. Affected ferrets usually have multiple, concurrent common initial clinical signs:

- High fever (104-108 F)
- severe lethargy
- general weakness
- Dehydration

Further and more varied signs may also include:

- Most affected ferrets are depressed but aware of their surrounding environment. Decreased appetite
- Enlarged lymph nodes or masses under the skin and
- Abnormal stools (can be green, dark, mucoid, diarrhea).
- Some ferrets will refuse to eat their kibble, but will eat soft food such as canned food or critical care foods, mushy soup foods.
- Often ferrets will become sensitive, especially in the back end, showing signs of pain when touched and are often reluctant to move.
- Elevated heart rate and many acquire heart murmurs as the disease progresses.
- Clear discharge from the nose
- Labored breathing
- Coughing
- Discharge from the eyes
- Pale gums
- Tooth grinding
- Fluid accumulation under the skin or seizures
- Tiny, orangish dots on their skin on their trunk and face.

Ferrets untreated or treated with ineffective drugs usually continue to progressively decline until they die or are humanely euthanized. Over the last 10 years, many ferrets

definitively diagnosed with DIM or those strongly suspected to have DIM that have been treated with the current treatment protocol have recovered from the disease.

Diagnosis

A presumptive diagnosis of DIM can be made based on a ferret's clinical signs and signalment. A definitive diagnosis can best be made by obtaining surgical biopsies of external muscle tissue. However, some ferrets are too weak to undergo anesthesia and surgery, some owners have financial constraints and cannot afford biopsies, and sometimes owners prefer to treat their ferret presumptively for DIM.

Treatment

One consistent characteristic of ferrets with DIM has been a general lack of response to treatment and a high mortality rate. Treatment with various antibiotics and other medications such as glucocorticoids, non-steroidal anti-inflammatory drugs, antipyretics, pain medications, interferon and cyclosporine have been unsuccessful in treating DIM patients. Acupuncture was helpful and gave pain relief to one ferret with DIM. Since 2006, many confirmed and suspected cases of ferrets with DIM have improved and recovered from DIM. The combination of cyclophosphamide (chemotherapy drug), prednisolone (steroid), and chloramphenicol (antibiotic) have been used to successfully cure many DIM ferrets. As prednisolone and antibiotics, including chloramphenicol, have been used unsuccessfully to treat DIM ferrets, this author believes that cyclophosphamide is the key drug in treating the disease.

Prognosis

The prognosis for ferrets with DIM that are treated appropriately is relatively good. We now have many suspected and confirmed cases that have responded to therapy and have become long term survivors. The treatment appears to be most successful when the medications are started as early on in the disease process as possible, but a number of ferrets have recovered even when the medications have not been started right away. DIM is not a common disease and it can sometimes take awhile for a ferret's illness to be recognized as being DIM. Some ferrets that have been sick for too long may not respond to treatment. Not all ferrets with DIM respond to treatment, but many of them do.

FERRET SYSTEMIC CORONAVIRAL DISEASE (FSCD) / FERRET - FIP

Ferret systemic coronaviral disease (FSCD) is a chronic, lethal disease of domestic ferrets. It is caused by a coronavirus initially designated as ferret systemic coronavirus (FSCV). Microscopic lesions in affected ferrets are identical to those seen in cats with the dry form of feline infectious peritonitis (FIP). The first cases of FSCD were seen in 2002 and has only been seen in ferrets.

FSCV can infect ferrets of any age and sex, but young ferrets (<1 year old) are more commonly affected. This age-related susceptibility may be due to immune suppression in

ferrets that have been recently weaned, neutered, vaccinated, descented, and shipped to pet shops and private pet homes.

The epidemiology of FSCD follows patterns similar to those of FIP, with outbreaks usually followed by a return to the endemic form of the disease.

Post-weaning stress and immune suppression due to surgeries, vaccination, overcrowding, and poor husbandry and shipment

Failure to quarantine newly introduced young ferrets The role of fomites is unknown. Transmission routes are unknown, but it is believed that the virus spreads by the same fecal-oral route as the FIP virus. No zoonotic potential is known.

ALEUTAIN MINK DISEASE (ADV)

Aleutian disease is a parvovirus that ferrets contract from other ferrets and mink. As the virus spreads through a ferret's body, the ferret's antibodies -- the protective immune system -- attack the virus, forming complexes which collect in the kidneys, liver, spleen, and other organs causing them to fail.

The disease is incurable and if you have a multi-ferret household, you should consider testing your other ferrets for Aleutian disease and having them euthanized should they be positive.

Ferrets which contract this disease may appear healthy and act as carriers (persistent nonprogressive form), lose weight over time (progressive form) or become very ill and die (another progressive form).

It is also possible for a ferret to have caught the disease and to have fully recovered, not being a carrier (non progressive form). However, the vast majority of infected ferrets will become very ill and die (progressive form). Fortunately, this disease is not terribly common.

Symptoms and Types

- Paleness
- Lethargy
- Muscle wasting
- Weight loss
- Enlarged abdomen
- Black-colored feces
- Weakness in the rear legs
- Neurological signs (e.g., stumbling, circling, difficulty walking, stupor, coma)

Causes

As stated earlier, Aleutian disease is contracted from other other ferrets or mink, specifically from the animal's bodily fluids (i.e., urine, blood, etc.). The virus was first recognized in mink and was later spread to the ferret species.

Diagnosis

Your veterinarian will perform a complete physical exam on the ferret. He/she will take a thorough history from the owner and order a blood chemical profile, a complete blood count, an electrolyte panel, and a urinalysis.

Your veterinarian will also want to do more specific tests, such as a counter electrophoresis to check for high antibody levels. If the ferret is not showing signs of illness because it has a persistent nonprogressive form or a nonprogressive form, it can be tested with immunofluorescent antibody testing to see if it is a source of the parvovirus. Laboratory testing of samples using polymerase chain reaction can also identify the virus.

Treatment

If your ferret is a carrier of the virus but it seems healthy, you could quarantine your ferret away from other pets. If you own other ferrets, you may want to have your ferrets tested and cull all the animals harboring the parvovirus.

Living and Management

This disease can take up to two to three years to become active and cause illness. The best way to prevent it is to keep your ferrets away from other ferrets and any mink. Also, you may want to have your ferrets tested (especially if you had a ferret ill with Aleutian disease) and cull the ferrets carrying the parvovirus.

Prevention

Unfortunately, there is currently no vaccine for this illness.

INFLAMMATORY BOWEL DISEASE (IBD)

Inflammatory bowel disease (IBD) is a group of gastrointestinal diseases that result in the inflammation of the intestines and chronic symptoms related to the gastrointestinal system. Though the exact cause of IBD is not known, abnormal immune system response thought to be initiated by normal inhabitant bacteria of the intestine is suspected to be the cause of inflammation. There is no sex or age predilection for IBD.

Symptoms

The inflammatory response is usually lymphocytic (white blood cells found in bone marrow), lymphoplasmacytic (The fluid portion of the lymph), or eosinophilic (cells that can be stained and then detected). This may lead to:

- Vomiting
- Lack of appetite (anorexia)
- Weight loss and/or muscle wasting
- Diarrhea (sometimes with blood or mucous)
- Black stool (melena)
- Excessive salivation, pawing at the mouth

Causes

Though no single cause is known, more than one cause is suspected. Hypersensitivity to bacteria and/or food allergies are suspected to play a major role in this disease. Food allergens suspected to play a role in this disease include meat proteins, food additives, artificial coloring, preservatives, milk proteins, and gluten (wheat). Genetic factors are also suspected to play a role in IBD.

Diagnosis

Your veterinarian will take a detailed history and ask you questions regarding the duration and frequency of symptoms. A complete physical examination will be conducted and after the examination your veterinarian will conduct routine laboratory tests, including complete blood count, biochemistry profile, and urinalysis. The results of these routine laboratory tests are often normal. In some ferrets, anemia and abnormally high number of white blood cells (as in infections) may be present. Fecal examination, meanwhile, is performed to verify the presence of parasitic infection(s).

Treatment

In most ferrets, IBD cannot be "cured" but can be successfully controlled. However, even after complete recovery, relapses are common. Major goals of treatment are the stabilization of body weight, the amelioration of gastrointestinal symptoms, and the reduction of the immune system's response.

In cases of dehydration, fluid replacement therapy is started to overcome the fluid deficit. Ferrets with continuous vomiting are usually not given anything orally and may require fluid therapy until vomiting resolves. Dietary management is another essential component of therapy, with hypoallergenic (even cat food) diets being the most recommended. Usually two weeks or so are given to see your ferret's response to such a diet.

Living and Management

Again, it is important to note that IBD cannot be "cured," but can be managed in most ferrets. Be patient with the forms of treatment suggested by your veterinarian and strictly adhere to diet recommendations made for the ferret. In stabilized patients, a yearly examination is often required.

CARDIAC DISEASE

Dilated cardiomyopathy is the most commonly seen cardiac disease in middle-aged or older ferrets(4 years and up). Hypertrophic cardiomyopathy, heartworm disease, valvular heart disease, myocarditis, metastatic neoplasia, and congenital heart disease have all been documented as well. Hypertrophic cardiomyopathy does not appear to be associated with hyperthyroidism in the ferret.

Ferrets symptoms may show as weight loss, lethargy, and hind limb weakness. An elevated heart rate, muffled heart sounds, cyanosis, harsh or dull lung sounds, tachypnea, dyspnea, prolonged capillary refill time, jugular venous distention, a weak femoral pulse, or femoral pulse deficits may be noted.

Splenomegaly, hepatomegaly, and/or abdominal enlargement due to ascites may be apparent on examination if congestive heart failure is present. Coughing and/or vomiting is not common in the ferret. Ferrets with dilated cardiomyopathy may present with a holosystolic murmur, tachycardia, and/or a gallop rhythm. Appropriate diagnostics include a CzC, serum chemistry panel, radiographs, electrocardiogram, and cardiac echocardiogram.

INTERNAL PARASITES

Gastrointestinal parasitism is uncommon in the ferret, but may occur. Occasionally, ferrets may become secondarily infected with nematodes (*Toxascaris leonine*), *Giardia* sp, or coccidia from other pets in the household, or tapeworms (*Diplydium caninum*) transmitted by fleas from other pets. A fecal sample may be submitted for a direct smear and fecal floatation when kits are first presented to the veterinarian. Annual fecal examinations may not be necessary for adult ferrets kept indoors unless the ferrets are exposed to cats and dogs that venture outside.

Ferrets are susceptible to heartworms (*Dirofilaria immitis*), and often present with symptoms of congestive heart failure or respiratory distress. In endemic areas, ferrets should be placed on heartworm preventative at 12 to 16 weeks of age, and ferrets 6 months of age or older and not currently on preventative should be heartworm tested prior to starting preventative therapy. Monthly ivermectin is most commonly used, and year-round therapy may be indicated for endemic areas. It has been recommended that ferrets be heartworm tested

prior to starting heartworm preventative; however, there is currently no accurate heartworm test available for the ferret. The occult tests are often not accurate because ferrets usually only have a burden of one to three adult worms]. The direct test (Knotts test) may be performed; however, microfilaremia occurs in less than 2% of infected ferrets. Thoracic radiology, and echocardiography have both been useful in the diagnosis of heartworm disease. Treatment of heartworm disease is difficult because most ferrets present to the veterinarian in advanced stages of cardiorespiratory disease at the time of diagnosis.

EXTERNAL PARASITES

Ferrets are susceptible to canine and feline ear mites (*Otodectes cynotis*). Affected animals are often asymptomatic, and may only present with thick, brown debris in both ears. Diagnosis is based on identification of the mites with light microscopy and treatment is with intraaural ivermectin.

Fleas parasitize ferrets, and kits, and geriatric ferrets with severe infestations may develop anemia. Most flea products approved for use in cats may be safely used on ferrets; however, it is prudent to check with the manufacturer(or your veterinarian) of the product first before using these products.

Anecdotally selamectin (Revolution) has been used to treat and prevent fleas and ticks in the ferret. Fipronil (Frontline Top Spot) and immidaclopramid (Advantage) have been used anecdotally with success topically once every 60 days; sebum production is higher in ferrets than in cats and dogs, allowing for a longer interval between dosing. Lufenuron (Program), has also been anecdotally used in the ferret. Topical flea foams with carbamates and organophosphate derivatives should be used with caution. Rarely, infestations with *Demodex* sp or *S scabei* are noted in ferrets.

Articles referenced:

Ferret care and Husbandry, Heather Bixler, VMD and Christine Ellis, DVM | Neoplasia in Ferrets, Bruce H. Williams, DVM, Diplomate ACVP and Nicole R. Wyre, DVM, Diplomate ABVP (Avian, Exotic Companion Mammal) | Aleutian Disease in Ferrets, Inflammatory Bowel Disease in Ferrets, PetMD Editorial | Disseminated Idiopathic Myositis (DIM) In Ferrets by Katrina Ramsell Ph.D, DCM, AFA Health Affairs Committee

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Caring For A Sick Ferret

A ferret's normal temperature should be between 37.8-40°C(100°F-103°F). If your ferret feels abnormally warm to the touch, is acting lethargic or has very warm foot pads, they may have a temperature. Make sure your ferret takes in plenty of water or Pedialyte and take them to a veterinarian as soon as possible.

Tips to use in caring for a sick ferret:

- Keep your ferret warm, comfortable and separated from any other ferrets until the illness has passed.
- Keep your ferret hydrated.
- Make sure your ferret is eating enough to maintain weight.
- Give your ferret lots of love and attention.

Caring for a sick ferret can be a scary, challenging, and rewarding experience. Whether it is a cold or a life threatening illness, ferrets really benefit from constant attention and love. It is imperative that you contact or take your ferret to a veterinarian any time it is sick. What may start out as a simple cold or flu could turn into pneumonia or dehydration.

Be sure to check with your veterinarian before administering any "over the counter" pet store or human medications. Inappropriate doses or types of medication can be *lethal*. Your veterinarian can tell you which medications are safe and the correct dosages to give. Here are some *tips* for tending to a sick ferret. Remember, always follow your veterinarian's instructions first and foremost!

- Keep your ferret warm, comfortable and caged separately from any other ferrets. If your ferret has a contagious virus, any other ferrets you own could catch it as well.
- Wash all communal toys and bedding to avoid spreading the virus. You should always have an extra cage available in case separation is needed.
- Ferrets who are recovering from surgery should also be caged separately to avoid ripping or snagging the stitches during play. Most ferrets want quiet time when they are ill (except for your pampering). Keeping them caged during an illness makes keeping an eye on them a lot easier as well. A sick ferret may curl up under a piece of furniture or under a cabinet for privacy, making it very hard to find them.

- Make sure your ferret has something warm to snuggle up in as well. Do not place your ferret on a heating pad.
- Make sure your ferret stays hydrated. You can tell if your ferret is dehydrated by pulling up the skin on the "scruff" area of the neck and letting the skin fall. If the skin doesn't snap back into place, or takes a long time to snap back, you ferret is probably dehydrated (older ferrets tend to have skin that may naturally snap back slowly. Get to know the normal skin behavior of your ferret.).
- You can also feel your ferret's tongue and gums to see if they are lacking moisture. Often, ferrets will act disoriented and lethargic if dehydrated. If you suspect your ferret is dehydrated, please take it to a veterinarian. Once a ferret is very dehydrated it can not drink enough water to solve the problem. Intravenous or under the skin fluid injections are often needed. Just a few bouts of vomiting or diarrhea can cause dehydration.

Dehydration Prevention

To prevent dehydration, give your ferret a mixture of Pedialyte and water to drink (half Pedialyte and half water) following an initial bout of diarrhea, vomiting or not drinking due to malaise. You should give them fluids that are at room temperature. Very cold, refrigerated fluids can cause your ferret stomach upset. You can also use Gatorade and water, however you must dilute it more (three parts water, one part Gatorade) due to the high sugar content. I would recommend using Pedialyte first and then trying Gatorade only if your ferret refuses to drink the Pedialyte. As much as sugar is a no-no for ferrets, it's more important that they get hydrated in this crucial state.

Try putting the drink mixture in your ferret's water dish, keeping the water in the water bottle pure. If your ferret refuses to drink the Pedialyte mixture, you want to always have plain water available. If your ferret is not taking in any fluids, or is refusing to drink the mixture, you may have to syringe feed the fluids. You must be very careful while doing this, for they can aspirate the fluid and develop an infection.

Fill a syringe with Pedialyte and water, scruff your ferret and slowly inject the fluid into the side of their mouth, one small drop at a time. They will usually resist at first, so it may be a long process. Try to angle the syringe tip towards the front of your ferret's mouth, rather than the back. This gives your ferret a chance to swallow the fluid on it's own. You should try to get your ferret to drink about fifteen milliliters of the solution every three to four hours (if your ferret is not drinking any fluid on their own).

Check with your veterinarian to find out exactly how much of the fluid mixture you should syringe feed your ferret per day in order to prevent dehydration. Make sure your ferret is taking in food. If your ferret is recovering from an intestinal virus, low blood sugar,

surgery or other disease, he or she may not be eating enough to maintain body weight. If your ferret is refusing to eat on it's own, you may need to hand feed a prescription diet canned food or a suitable replacement.

Feeding A Sick Ferret

Make sure your ferret is taking in food. If your ferret is recovering from an intestinal virus, low blood sugar, surgery or other disease, he or she may not be eating enough to maintain body weight. If your ferret is refusing to eat on it's own, you may need to hand feed a prescription diet canned food or a suitable replacement.

Suitable replacements can be carnivore critical care foods, such as Critical Care Carnivore and always have some on hand just in case. There are other options such as Oxbow Carnivore Care, EmerAid Intensive Care Carnivore as some examples. Another practiced and used critical care food for a ferre is Gerber Chicken critical care food (blue label).

Ferrets will not generally take to a new food right away, so you may have to scruff your ferret and rub a little of the critical care food around their mouth and gums to let them taste it. If they still don't seem interested in eating any, open their mouth and place a very small dab of the food on the roof of their mouth, keeping towards the front of their mouth. Do this very carefully, you don't want your ferret to aspirate the critical care food. Continue to feed your ferret in this manner until they have eaten about one tablespoon (or as much as your ferret will tolerate) of the food per feeding. You should try to feed your ferret every three to four hours, during the day and overnight.

After a few such feedings, they may eat the food themselves. Allow them to eat as much as they're interested in until they are recovered and gained their weight back. You should always make some of their normal food available in your ferret's cage as well. As your ferret's health and appetite improves, start mixing your ferret's normal food with the critical care food. If their normal food is dry, make sure to soak it beforehand. Keep an eye on their stools and overall response to progressing them back on normal food.

Finally, when your ferret is feeling better and has gained weight, encourage your ferret to return to their normal food. Moistening with warm water will also encourage your ferret to eat. Continue feeding the critical care food as a supplement until your ferret is eating mostly normal food. Eventually, your ferret will begin eating on their own again. Hand feeding your ferret during an illness is an excellent way to earn your ferret's trust and administer some much needed attention.

How to Medicate an Avoidant Ferret

Tools

- A towel to place the ferret on
- A very small syringe. A one cc works best medications mixed with something good tasting (like turkey/chicken baby food) and watered down.
- Nutrical/Ferretvite for a treat afterward. One calmed down ferret.

The Method

With the ferret on your lap. Get comfortable and let him/her see and smell the syringe. Put the end of your finger in the side of the mouth to gently force it open from the left side, and insert the end of the syringe into the right side. Squirt in no more than 2 to 3 drops while holding the head up so the liquid runs to the back of the throat and massage the throat so the ferret doesn't try to spit. After two to three squirts, let the ferret run into a hutch where it can compose itself for a few seconds. While this is happening, refill your syringe if all the medication isn't used up yet. Repeat the procedure until the medication is gone.

The Finale

Use the Nutrical/Ferretvite as a TREAT also to cleanse the pallet of the ferret. This will also give the ferret something to look forward to the next time you have to medicate it.

Articles referenced:

Ferret care and Husbandry, Heather Bixler, VMD and Christine Ellis, DVM | Neoplasia in Ferrets, Bruce H. Williams, DVM, Diplomate ACVP and Nicole R. Wyre, DVM, Diplomate ABVP (Avian, Exotic Companion Mammal) | The information on this guide is not intended as medical advice but merely as an informational guide. If you are concerned with health or behavior the best option is always to consult your veterinarian.

FERRET FIRST AID KIT

A list of some key items to have in your Ferret Emergency Kit, which should always be on-hand and easy to access. Be sure that all perishable items are regularly replaced before they expire.

- Your Nearest Emergency Vet's Contact Information (business card, print out, etc)
- Nail Clippers
- Small, sharp scissors
- Vaseline (100% petroleum jelly)
- 1 can of plain, canned pumpkin (100% pure pumpkin, NOT the pie filling) OR squash baby food
- Syringes
- Eye dropper
- Styptic Powder
- NonStick Gauze
- Koban/Vet Wrap
- Q-Tips
- A bottle of water
- Oxbow Carnivore Care, Carnivore Critical Care and/or meat baby food(Beechnut is a reliable brand with minimal added ingredients)
- Honey or Karo syrup
- Sterile Saline
- Rubbing alcohol
- SudoCrem or at walmart
- Spare puppy pad
- Popcicle Sticks (for splinting)
- 1 tube unopened Bactroban or Mupriocin ointment (or Original Neosporin)
- Bonus: a non-chemical heat pack (e.g. a sock full of rice)
- Bonus: SubQ fluids (from your veterinarian)
- Heating pad
- Baby wipes
- Tweezers
- Ferretone/Linatone/Salmon oil

FERRET NEUTERING AND CONTRACEPTIVES

Neutering your pet can help prevent illnesses and some unwanted behaviors. It can also stop unwanted pregnancy. Neutering your ferret makes sense for these reasons however, it's more complicated than it is for other pets. Here's everything you need to know about ferret neutering:

A male ferret is called a 'hob'. A male ferret who has had a vasectomy is known as a 'hoblet'. A castrated male ferret is called a 'hobble'

Risks

A female ferret that is not planned for breeding and not spayed may lead to fatality. Female ferrets called 'jills' are 'induced ovulators'. This means they need to mate to stimulate the ovaries to release eggs. If the jill does not ovulate, she'll continue to produce estrogen (she'll stay in season until they're mated).

But, remaining in season can cause severe health problems for a jill. It can cause alopecia (hair loss) and even death from estrogen-associated anemia (deficiency in red blood cells).

Ferret neutering options

There are various ferret neutering options available and each comes with pros and cons. Methods to prevent the health issues associated with jills include:

- Surgical (neutering)
- Chemical (contraception)
- Combination of both.

Some owners may use vasectomised hoblets to bring their jills out of season through the act of mating.

There are benefits and risks to each method, but they all prevent unwanted pregnancy and can help reduce aggressive behavior. They can also help reduce the typical musky smell associated with the maturing male.

Ask for advice from your vet to decide which method is best for your ferret.

Surgical neutering of ferrets

- 'Spaying' is the surgical removal of the ovaries and uterus from a female ferret.
- Castration involves the surgical removal of the testes of a male ferret. Castrating male ferrets can reduce aggressive behavior and also increase play.
- Surgical neutering is a permanent procedure and more cost-effective method.

• If castration or spaying is performed, it's generally best to wait until after puberty, to delay the possible onset of adrenal disease.

Chemical contraception methods for ferrets - implants or injections

The most common contraceptive method for ferrets is the chemical implant, placed under the ferret's skin while they are sedated. This happens at regular times throughout the ferret's life.

'Deslorelin' implants can be used in both sexes and work to reduce the release of sex hormones from the brain. It also removes the trigger for sex hormone production in the adrenal glands. These are generally very safe but can be costly.

The implant's slow-release action means that they're generally long-lasting, depending on the strength of the implant used and the time it's implanted. Implants can generally last up to 18-24 months before another one is needed.

Yearly hormonal injections for the jill were a common method of stopping oestrus. These are still available, but are difficult to source and also expensive unless many ferrets are being injected at once. 'Jill jabs' are usually given at the beginning of the breeding season, in early spring.

Vasectomy for ferrets

A vasectomy is a process of sterilizing a male ferret by cutting the tubes that carry sperm from the testicles to the penis.

The process of vasectomy doesn't affect the hob's capability to mate. Mating jills with a vasectomised hob, or 'teaser', to bring them out of season has been common practice in the UK for many years, largely thanks to its ease and low cost.

However, although mating is a natural behavior, the act itself is often violent and very stressful for the jill. Repeated matings may result in damage to the jill's neck, so this practice is not recommended.

Neutering can cause Hyperadrenocorticism

Neutering both male and female ferrets can lead to the development of a hormonal condition called hyperadrenocorticism (adrenal disease). This generally happens several years after neutering.

Signs of hyperadrenocorticism in both sexes include:

- Hair loss
- Swelling of the genital area
- Urinary blockage and cyst formation in hobs
- Pruritus (itchiness), lethargy and muscle wasting

Early detection, treatment and appropriate monitoring can all help manage symptoms.

We still recommend neutering as a permanent way to stop females from being in season and reduce aggression in males. However, it's important to be aware of the signs of hypoadrenocorticism and to remember that treatment may be needed in the future.

What's the best neutering or contraceptive method for ferrets?

As a ferret owner, it's important to be proactive in managing their reproductive issues. We advise that ferrets are either surgically neutered or that a chemical method is utilized. A combination of both may also be used.

Always discuss your options with your vet to avoid unwanted pregnancy and health issues. They'll be able to explain possible side-effects and costs. Knowing the benefits and risks involved in all methods will help you make an informed decision on what's best for your ferret.

For animals rehomed by our animal centers, surgical neutering is our standard approach as it's the most cost-effective and permanent method. If you're thinking of adopting a ferret, you'll need to be aware of the signs of hyperadrenocorticism and remember that your pet may need treatment for it in the future.

Articles referenced:

Neutering and contraception Methods for Ferrets, RSPCA Heath and Care article

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