

**FELINE
INFORMATION
BOOKLET**



Animal Haven Veterinary Center

P.O. Box 247
Bear, DE 19701

www.animalhavenvetcenter.com

Dr. Nancy Brady
Dr. Charlotte Fagraeus

Telephone (302) 738-2806

ANIMAL HAVEN VETERINARY CENTER



Dr. Nancy Brady

Dr. Charlotte Fagraeus

Welcome to Animal Haven Veterinary Center. We are a full-service mobile veterinary hospital utilizing modern equipment and techniques to provide complete healthcare for your pet. We have X-ray capabilities, complete surgical service using the safest gas and injectable anesthetics available, complete laboratory diagnostics, and a wide array of pet healthcare products and foods. We also have the option for referral to local specialists when needed. We are extremely excited about creating our new veterinary center and a unique way of providing complete care - in our mobile medical unit!!!

Your pet's health and well being is our primary concern. We believe that our role is to advise and educate you as the owner of all available options for your pet's needs, both from the aspect of preventative medicine as well as care for patients who are ill and need diagnosis and treatment of disease. To support this belief, we try to provide you with handouts that detail specific conditions we may have diagnosed your pet with and procedures (such as bloodwork) we may have done or recommended for your pet. We feel this will better enable you to have an understanding of what we are doing and allow you to understand and more fully participate in your pet's health and veterinary care. We will strive to resolve your pet's problems in a timely and cost-effective manner while minimizing discomfort and providing compassionate care for your family's friend.

Communication between our doctors, staff, you, and the pet is essential. We try very hard to keep you informed of our findings, the options which may be recommended and available for care, potential costs, and what might be expected in the future. We work hard to answer your questions and concerns promptly. Our mobile unit was created with the sole purpose of providing the best healthcare for your pet, and to deliver this care with excellent customer service. Your ideas play an important role in defining what services we offer today, and what services we will add in the future. Please do not hesitate to ask questions or make us aware of your thoughts, concerns and suggestions of how we may better serve you and your pet's needs. We cannot know them unless you tell us.

Dr. Nancy Brady grew up in Johnstown, PA, and graduated from the University of Pennsylvania School of Veterinary Medicine in 1995. She practiced at the Glasgow Animal Hospital and Animal Veterinary Center before starting Animal Haven Veterinary Center. She is married and has 3 children (twin daughters and a son), 3 cats, and 2 Shih Tzu's. She loves being a mom, enjoys her demanding role raising her 3 children, and is thankful for the immense rewards that this important task brings. Also, she is extremely grateful to have an understanding, caring, and supportive husband who encourages her veterinary career and helps balance it with her family life. Dr. Brady has an interest in marine mammal medicine and volunteers her time to the Delaware stranding response efforts - going to rescue and/or work-up cases of dolphin, seal, and whale strandings in Delaware. She also enjoys photography, volleyball, and doing crafts.

Dr. Charlotte Fagraeus graduated from Cornell Veterinary School in 1994, having previously graduated from Duke University with a Bachelor of Science degree in biology and a Bachelor of Arts in comparative literature. She grew up in many different

places, starting in Stockholm, Sweden then North Carolina, Oklahoma, and finally in Delaware. She worked at Kirkwood Animal Hospital and Animal Veterinary Center before starting Animal Haven Veterinary Center. She is not married, but has four "children" of the four-legged variety (2 cats, a Rottweiler, and a Standard Schnauzer). Her personal interests include traveling, skiing, gardening, and spending time with friends and family. She loves making a possible difference in the lives of people and animals and hopes to continue doing so with Animal Haven Veterinary Center.

Making An Appointment

Our office hours are 8 AM to 8 PM on Monday thru Friday and 8AM until 2 PM on Saturday.

In order to maximize your visit with us during any home visit, please have your pets ready and waiting, leashed, or crated.

If you cannot keep a scheduled appointment, please notify us 24 hours in advance if at all possible. This will allow us to schedule another patient that needs our care. We realize that unexpected circumstances in your life can come up and 24 hour notice is not always possible. Please still give us a call to let us know you won't be able to keep your appointment so that we can see a last-minute emergency or sick patient.

We will always try to make appointments with a specific doctor if your prefer. There may be times when that doctor's schedule is full or not in the office on the day you prefer. You may choose to wait for an appointment with your preferred doctor or you are free to see another doctor. You will need to let the receptionist know if you request an appointment with a specific doctor.

Currently, we handle after-hour emergencies by having you call one of several hospitals in the area that offer 24-hour care. These hospitals are: **Animal Emergency Hospital** (phone number = 610-494-6686) , **Windcrest Animal Hospital** (phone number = 302-998-2995), or **VCA Newark Animal Hospital** (phone number = 302-737-8100). Animal Emergency Hospital is located in Aston, PA and is truly an emergency facility open only during the evening, weekends, and holidays and is approximately 20-25 minutes from our facility. Windcrest Animal Hospital has doctors on-site after hours for emergency and critical care and is located approximately 20 minutes from our facility on Lancaster Pike in Wilmington. VCA Newark Animal Hospital is a facility that has doctors on-call during evenings, weekends, and holidays and is approximately 15 minutes from our facility. If you do not feel your pet needs to be seen immediately, you can leave a message on our voice mail and we will return your call and/or schedule an appointment the following business day.

Feline Diseases

Rhinotracheitis is a highly contagious viral disease of cats. It is seen most frequently in kittens less than 1 year of age, but a cat of any age is at risk. The disease often exhibits itself early as a severe cold. The disease causes fever, inappetance, depression, eye and nose discharges, salivation, and coughing. There is no cure against the virus itself and treatment is directed at supportive and symptomatic care. Recovered cats can become carriers of the disease, shedding virus intermittently for the rest of their life. Carriers may or may not intermittently experience clinical symptoms of the disease. Prevention through a proper vaccination schedule is essential.

Calicivirus is another highly contagious viral disease of cats that affects the upper respiratory system. Signs and treatment of the disease are similar to those with rhinotracheitis. Recovered cats become carriers for the rest of their life and may or may not intermittently show signs of disease. A proper vaccination program is very effective in preventing this disease.

Panleukopenia (commonly called distemper) is a highly contagious viral disease of cats. Cats of any age can be effected, but it is more frequently seen in kittens. Symptoms include fever, inappetance, vomiting, diarrhea, depression, dehydration, weakness, muscle tremors, incoordination, and sometimes, even death. Treatment is very difficult and is aimed at supportive care. Mortality rates, especially in kittens, can be very high. Recovered cats can shed virus for 6-8 weeks following recovery. It is nearly impossible to prevent exposure to this virus so prevention through a proper vaccination program is essential.

Chlamydia is an extremely contagious bacterial infection of cats. Clinical signs include: reddened and sometimes swollen eyes, increased tearing, sneezing, increased salivation, and coughing. Sometimes the infection can also affect the lungs. This virus will be shed by a recovered animal and he/she may intermittently exhibit clinical symptoms of the disease. Treatment involves the use of antibiotics. There is a vaccine against this disease, which is often included in vaccine protocols.

Coronavirus is a viral infection caused by two different forms of a virus. The mild form of the virus can cause a self-limiting bout of diarrhea and is rarely fatal. The fatal form of the virus causes **feline infectious peritonitis** which can cause a wide array of clinical signs that may include fever, fluid build-up in the chest and abdomen, weight loss, and inappetance. There is no cure for this virus and cats that become infected usually die within 1-2 years. The risk of getting this disease is very low. Infected cats are generally from a cattery-type of environment. Transmission of the disease occurs through sneezing, hissing, mutual grooming, shared bedding and toys, shared water and food dishes, and through litter and fecal exposure (shared litter pans). There is an intranasal vaccine available to protect your cat against this disease. The vaccine has been the center of some controversy as critics feel it does not give specific immunity and protection. The vaccine works by giving local immunity in the nasal passages thereby reducing the ability of the virus to enter your cat's body. The vaccine is recommended primarily for use in catteries, shelters, and multi-cat households.

Leukemia is a highly contagious viral disease of cats. The virus is transmitted by direct contact with an infected cat or by ingestion of an infected cat's saliva or urine. Kittens can also become infected before they are born if the mother is positive for the disease or becomes exposed to the virus during her pregnancy. The virus can cause the following: cancer of the immune (lymph) system, leukemia, and decreased ability to fight infection. We highly recommend all kittens be tested when you first adopt them. A blood test can be done in our office with only five drops of your pet's blood. You will get the results in just 10 minutes. We also recommend any cat be tested if it has not been done previously. In kittens or newly acquired cats, another test should be done 4-6 months later to ensure that exposure to the virus did not occur just prior to adopting the new pet. There is no cure for the disease and infected cats often have shortened life spans (2-5 years). There are treatments available that can slow the clinical progression of the disease and infected cats need to be put on antibiotics the instant clinical symptoms of another infection (a "cold" for example) appear. There is a vaccine available against this virus. We highly recommend vaccinating any cat that is going to be going outside or for any cat that lives in a household where there is a cat that goes outside. In cat's that are going to be kept solely indoors, you may want to more heavily weigh whether to vaccinate as this vaccine can be associated with a rare but serious vaccine reaction (see "Vaccinating Your Cat" section which follows).

Rabies is a viral disease that infects the central nervous system of all mammals, including humans. It causes altered behavior (friendly pet may turn aggressive, or shy animal may become more friendly), incoordination, seizures, progressive paralysis, and eventually death. It is usually spread in the saliva, following a bite or through a cut in the skin. Vaccination is the best way to control rabies in our pets. Any mammal exposed to rabies has a risk of contracting the disease and veterinarians have federal and state regulations we must follow regarding rabies and animal-related bites (both bites to humans and other animals.) Any person exposed to rabies must undergo a prophylactic treatment and there is no known cure for the disease. This is a disease where an intense responsibility is present—you have an obligation to protect your family, neighbors, and pets by having your pet appropriately vaccinated against rabies.

Feline Immunodeficiency Virus is a highly contagious viral infection of cats that causes disease symptoms similar to AIDS in people. For this reason, the disease has been coined "Feline AIDS" (but know that you CANNOT get AIDS from your cat). Transmission of the disease is similar to that of feline leukemia. Clinical symptoms often include fever, weight loss, inappetance, diarrhea, anemia, persistent upper respiratory infections, and reddened gums. Exposed cats can either become symptomatic within 3-7 weeks or the virus can become "dormant" in their bodies and cause symptoms to become evident later, sometimes years later. We highly recommend all kittens be tested when you first adopt them. A blood test can be done in our office with only five drops of your pet's blood. You will get the results in just 10 minutes. We also recommend any cat be tested if it has not been done previously. In kittens or newly acquired cats, another test should be done 4-6 months later to ensure that exposure to the virus did not occur just prior to your adopting the new pet. There is no cure for the disease. There are treatments available that can slow the clinical progression of the disease and infected cats need to be put on antibiotics the instant clinical symptoms of another infection (a "cold" for example) appear. There is currently no vaccine available.

Lyme Disease is a tick-borne bacterial disease, which infects humans and animals and seems to be on the rise. It can infect dogs and cats, but is more commonly seen in dogs. The deer tick is the principal source of the disease. Studies of the disease in cats indicate that many cats test positive for exposure to the disease, but rarely show symptoms of it. Symptoms of Lyme disease in dogs (and more rarely in cats) include depression, inappetance, fever, and lameness (which may come and go or fluctuate between different legs). Sometimes animals do not show clinical signs of infection until the disease is significantly progressed. In severe cases, the skin, heart, brain, and kidneys can be affected. Although clinical disease associated with Lyme disease in cats is not a proven entity, there are reports of cats that have tested positive for Lyme disease exposure developing fever and lameness. These cats have responded to standard therapy for Lyme disease (a prolonged course of a specific oral antibiotic). There is no vaccine currently available for cats against Lyme disease. There are many safe and simple products available to protect your cat against ticks (Please see section called "Controlling Fleas and Ticks").

Feline Bordetella Bronchiseptica is a disease in cats that has come to the forefront of discussion in the past year. It is an upper respiratory infection in cats that causes sneezing, eye and nasal discharge, low-grade fever, anorexia, lethargy and trouble breathing. Unlike this same disease in dogs, coughing is an unusual presentation of this disease. In more serious cases, the infection can cause pneumonia. The disease is readily transmittable from cat to cat and studies indicate that as many as one of every three cats have, or have been exposed to, this disease. In cats that have been exposed to the disease, clinical symptoms can be brought on by stressful situations (such as introduction of a new pet or baby into the household, transporting, boarding, and breeding). Cats living in multiple-cat households, that live in a household where they or another cat goes outside, and/or cats that are boarded or showed are at higher risk for exposure to this disease. Although the disease and its symptoms can be treated with antibiotics, treatment does not prevent the disease and clinical symptoms from reoccurring. There is a vaccine available for the prevention of this disease (See "Vaccinating Your Cat").

Vaccinating Your Cat

Many diseases may infect your cat, even when you are as careful as you can be to limit their exposure. With many of these diseases, prevention is the key to your pet's lifelong health. We want to help to educate you about these illnesses and your joint responsibility with us as your veterinary care facility to provide a health-care program for your pet that will establish a healthy and happy life for your pet. We feel prevention is of extreme importance and it is often far less costly for you to prevent disease rather than treat them. Many common diseases can be prevented through routine and complete vaccination programs combined with yearly physical examinations and periodic testing.

Kittens receive some immunity from their mother during her pregnancy and nursing. Sometime during approximately 6 to 16 weeks of age, this immunity fades and vaccination becomes essential. The exact time when the immunity fades is dependent upon a number of factors, including but not limited to the immune-level for each disease in the kitten's mother, individualities of each kitten and the specific disease we are trying to vaccinate against. Our vaccine will not be effective at providing prolonged immunity to the kitten unless the immunity provided through the mother is gone. Not knowing when this immunity will fade and not knowing how much immunity the mother passed on to the kitten means we need to start vaccinations early in case immunity fades early, but continue to vaccinate past the point when the mother's immunity can remain so that our vaccine works most effectively.

It is important to remember that vaccines will typically provide protection in 95-98% of animals, but no vaccine is 100% effective. However, with the creation of vaccines, pets are living healthier, happier, longer lives. In order to provide the best chance for success, it's important to follow the vaccine recommendations given. Delayed time frames between vaccinations could allow immunity to fade thereby increasing your pet's chance of contracting the disease we are trying to prevent.

Our recommendations for vaccines are as follows:

FVRCP-C (Protects against Rhinotracheitis, Calicivirus, Panleukopenia, and Chlamydia). The kitten will need a series of these vaccines starting between 6-8 weeks of age and continuing every 3 to 4 weeks until the kitten is over 16 weeks old. We will give you a tentative vaccine schedule specific for your kitten when we see him/her on the first visit. We will typically vaccinate every 4 weeks, but keep in mind when you are scheduling your kitten's vaccine that it is better to come in closer to 3 weeks from your kitten's last booster than to wait longer than 4 weeks. After the initial series of boosters is complete, your cat needs a yearly booster to protect against these diseases.

Leukemia We highly recommend this vaccine for any cat that is going to be going outside or for any cat that lives in a household where there is a cat that goes outside. In cat's that are going to be kept solely indoors, you may want to more heavily weigh whether to vaccinate against this disease as the vaccine can be associated with a rare but serious vaccine reaction that can cause a type of skin tumor called a sarcoma (and the condition is termed a Vaccine-Associated Feline Sarcoma). Only about 1 in every 10,000 cats receiving the vaccine develops this rare vaccine reaction, but it is a potential side effect and we therefore recommend you consider the pros and cons. It is also worth noting that there is a great deal of research currently being conducted in the field of sarcomas. So, new information will likely become available. Cats receiving this vaccine must receive two vaccines at 3-4 week intervals when receiving the vaccine for the first time. The vaccine is then boosted yearly. Kittens as young as 10 weeks old can receive the vaccine.

Rabies This vaccine is mandated by law and can be given as early as 12 weeks of age and all cats over 4 months are required to be vaccinated. Currently, the laws then require a yearly booster followed by boosters every 3 years as long as the 3-year booster is on time.

Bordatella Bronchiseptica This vaccine is a new vaccine that has been available since early 1999. Since the time the vaccine was first introduced, a great deal of research has been conducted in reference to this disease and the potential need to add this vaccine to a routine vaccine schedule for all cats. At this time we do not require the vaccine for our feline patients that are staying at our hospital and we have not made it a routine part of our vaccine program. We are however carrying the vaccine and making owners aware of the new information that has come to light regarding this disease and using the vaccine. If your cat is showing signs of upper respiratory infections, the veterinarian may recommend administering the vaccine to your pet. Also, if your cat goes outside (or lives in a household with a cat that goes outside) and/or is frequently boarded or showed, you may want to more strongly consider having your cat vaccinated against this disease. Kittens as young as four weeks of age can be vaccinated against this disease and only one vaccine is required for effectiveness. The vaccine is also safe for use in pregnant cats. The vaccine is then boosted yearly.

Please keep in mind that a new kitten's immunity is not at its peak until the recommended vaccine series is complete. Therefore, until the vaccine series is completed, you should use extreme caution when exposing your pet to other animals and unfamiliar areas where you are unsure of what your animal may be exposed.

Vaccine Reactions

Vaccine Reactions, although rare, can sometimes occur. The protection against disease that vaccines provide far outweighs the potential risks associated with vaccination. You should consider scheduling your pet's vaccinations for a time when you can spend several hours with your pet following vaccination. By being able to observe your pet during this time period, you can contact us should complications arise. Your pet may be slightly lethargic, have a decreased appetite, be itchy at the site of the injection, and/or run a slight fever for the first 24-72 hours after receiving vaccines. Rarely, a more serious reaction can occur (similar to humans with bee sting reactions).

Symptoms of a more severe vaccine reaction may include: 1) severe and prolonged salivation, vomiting, and/or diarrhea and/or 2) skin hives, facial swelling, etc. These more serious vaccine reactions usually occur within a matter of minutes to a few hours following vaccination. If any of these occur, your pet needs to be seen as quickly as possible as these symptoms can progress to trouble breathing and heart trouble. With veterinary attention, these side effects can be reversed. Make sure to advise your veterinarian if your pet has experienced a vaccine reaction in the past as there are precautions that can be taken to minimize the risk of future reactions.

Another fairly common finding after receiving a vaccine can be a small, marble-sized mass at the injection site. This is most commonly seen in association with rabies vaccines, but can occur after any injection. As long as there is no overt pain or discharge, this side effect is not considered dangerous. This lump can sometimes persist for up to 3 months. If it is painful, has a discharge, gets bigger than a large marble, or lasts greater than 3 months, please call to schedule an appointment to have the lump examined.

How Old Is My Cat in Human Years???

We commonly get asked this question. The general thought you have probably heard is 7 "cat years" to every one human year. Here is a closer comparison:

Age of Cat in Years	$\frac{1}{4}$	$\frac{1}{2}$	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Age in Human Years	5	10	15	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80	84	88	92	96	100	105

Feline Heartworm Disease

This disease is not new. The first case of feline heartworm disease was diagnosed on a post-mortem examination in 1921. But, a big problem facing veterinarians until recently was that there was not a reliable test available for detecting heartworm disease in cats. Because the life cycle of heartworm disease in cats and dogs is different, and because the number of worms found in positive cats is often less than those found in dogs, the same test used in dogs may not detect a positive cat. Heartworms are spread to your cat by mosquitoes. After biting another infected animal, the mosquito carries a microscopic baby form of the heartworm. Then, when the mosquito takes a blood meal from your pet, it injects the baby worm into your pet. After about 5-6 months the baby worms have become adults that are up to 14 inches long and live in your pet's heart and major arteries of the lungs. Because of the long life cycle and relatively low number of heartworms found in infected cats, your pet often may not show signs of infection for several years, if at all. If the cat does show signs of infection, it is often only once permanent damage has occurred. Symptoms could include vomiting, coughing, difficulty breathing, lethargy, exercise intolerance/tiring easily, fainting, weakness, and/or abdominal distension to name a few.

Obviously, worms living in your pet's heart can be a life-threatening situation. There is currently no safe treatment available for infected cats. However, the good news is that the disease can easily and effectively be prevented by giving your cat a prescription medication once every 30 days. You should give your cat heartworm preventative year-round for the rest of its life. Two medications are currently available to prevent heartworms in cats:

- **Heartguard** is a small, semi-moist chewable treat. This medication also prevents your cat against an intestinal parasite called hookworms. Kittens as young as 6 weeks can be started on heartworm preventative and the sooner a pet is started on the preventative, the better chance we have of preventing the disease. The medicine is for a weight range and cannot be halved because the medicine is not mixed throughout the entire treat. In order for the medication to be absorbed properly by your pet, the tablet must not be swallowed whole (so if your pet tends to gulp it/not chew it, you should break it up into small pieces). If your pet is at a weight that is bordering between two ranges, it is better to go with the larger dose of medicine to ensure your pet is protected. If you miss a dose of your cat's preventative, give it as soon as you remember and then resume your regular schedule as before

- **Revolution** is a liquid that you apply to your cat's skin over the base of its neck. This medicine has been available since the end of 1999. It also protects cats against two types of intestinal parasites (hookworms and roundworms), ear mites, and fleas (kills adult fleas and prevents flea eggs from hatching in the house). We feel this is a viable alternative for use in cats that will not eat the other medications currently available for heartworm prevention (Heartguard).

Unlike dogs, cats do not HAVE to be tested prior to being put on heartworm preventative. This is again due to the different life cycle the worm has in cats than in dogs. However, it is important to remember that the medicine only prevents against infection. It DOES NOT treat an existing infection. There is a blood test available to test your cat for heartworm disease and **routine screening is recommended** because there are things we can do to minimize heart and lung damage and the incidence of sudden death in cats testing positive.

Indoor cats are at just as much risk of developing heartworm disease. This is because cats seem to be able to build up an "immunity" against the infection. Therefore, an outdoor cat is more likely to be exposed to mosquito bites, thus establishing a higher immunity than in an indoor cat that just gets bitten once in a while.

Heartworm preventative should be continued during pregnancy and nursing.

There is currently a lot of research being conducted on feline heartworm disease and hopefully this will allow for a better understanding of this disease in cats and lead to statistics about efficacy of the preventatives available, the reliability of the tests which have become available, and a treatment against this disease for infected cats.

Intestinal Parasites

As unappealing as it is, the truth is that our pets can become infected with worms that live in their intestines. These worms are most commonly transmitted to our pets by their mother or by ingesting them. It is not at all uncommon for puppies and kittens to be born with worms that their mother transmitted to them while she was pregnant and nursing. Some worms can have dormant stages that are not detected in the mother until she becomes pregnant. The added stress of pregnancy and nursing allows the worms to "come out" of dormancy and infect the mother and/or her offspring. These parasites can be harmful because they can cause damage to the intestines and other organs and they also rob nutrients from your pet. Symptoms of intestinal parasites can include a "pot-belly", vomiting, diarrhea, blood in the feces (sometimes this can cause the stools to be black and tarry if the bleeding has occurred closer to the stomach), constipation, anemia, and weight loss just to name a few. Sometimes animals show no symptoms at all. **Routine testing (called fecals) of your pet's feces at our office can detect the worms and medications to rid your pet of the worms it has can be dispensed.** **When we do a fecal, we are looking for the microscopic eggs the worm sheds into your pet's feces.** Often times you can't see the adult worms because they stay attached to your pet's intestines and are not passed in the feces. Instead, the adult worms shed eggs into your pet's feces that are only detectable with a microscope. We recommend two negative fecals in a row at 4-week intervals in new or young pets to ensure the pet is intestinal parasite-free. Why? Because we are looking for the eggs, they must be being shed by the adult worms (baby worms won't be shedding them yet). After your pet has two negatives in a row, a yearly fecal should be done to ensure that your pet has not become infected since your last annual visit.

The most common worms your pet can become infected with are:

- ◆ **Roundworms** (also called ascarids) are the most common worms found. These worms are white or tan, 4-6 inches long, and are round. People often describe them as looking like spaghetti if they are seen. They can sometimes be passed in the feces or vomit. Immature larval stages travel through the liver and lungs, which can cause respiratory problems and liver disease. The adult worms then attach to your pet's small intestines. Treatment involves deworming the pet with a liquid prescription medication that you give to your pet once every 7 days for 3 treatments. The medicine smells like bananas and most pets do not seem to mind its taste. A fecal should be done at 4 and 8 weeks following the initial diagnosis of roundworms in order to ensure that all worms have been cleared from your pet.
- ◆ **Hookworms** live in your pet's small intestines where they use teeth to attach. They then suck blood from the intestines. In severe infections, the intestines can bleed as well and your pet can become severely anemic. Treatment involves deworming the pet with a liquid (or powder you can mix in canned food) depending on each individual case and doctor's discretion. In some cases, the veterinarian may recommend the treatment be repeated in two weeks. A fecal should be done at 4 and 8 weeks after the initial diagnosis of hookworms in order to ensure that all worms have been cleared from your pet.
- ◆ **Whipworms** are most commonly found in dogs and are the most difficult to completely eradicate as the eggs are very hardy and can remain viable in the environment for long periods of times. Adult worms attach to a portion of the dog's large intestines. The worm's tail is very sharp and acts like a whip as it moves inside the intestines. This movement creates fine cuts on the inner lining sometimes causing infected pets to have bloody, mucousy feces, often diarrhea. Treatment involves deworming the pet with a liquid (or powder you can mix in canned food) once daily for 5 days in a row. In some cases the veterinarian may recommend the treatment be repeated in two weeks. A fecal should be done at 4, 8, and 12 weeks following the initial diagnosis of whipworms in order to ensure that all worms have been cleared from your pet.
- ◆ **Coccidia** are intestinal parasites that are actually not worms but rather a single-celled organism called protozoans. They can cause diarrhea, vomiting, weight loss, and/or anorexia. Some animals show no symptoms at all until infections become very progressed. Treatment includes giving your pet either a pill or a liquid by mouth once daily for 10 days in a row. A fecal should be done at 4 and 8 weeks following the initial diagnosis of coccidia in order to ensure that all worms have been cleared from your pet.

- ◆ **Tapeworms** are transmitted to your pet by ingesting a flea carrying an infective stage of the tapeworms. Tapeworms live in the small intestines and can be several feet long. The worm is composed of a bunch of segments. Each segment is basically a reproductive factory, harboring bunches of eggs. As the eggs mature, a segment from the end of the worm is shed and passed in the feces. When initially shed, these segments may move and look like little white inchworms or maggots around your pet's tail, anus, or in your pet's feces. As the segments dry out, they no longer move and become little white flakes, which many owners describe as looking like rice. Because the eggs are usually retained within these segments, eggs may not always show up on a fecal test so these worms are more frequently diagnosed by the owner seeing the segments. Sometimes an entire worm can be passed or a bunch of segments may pass while still attached. In these instances, you would see a long, flat white or tan worm that looks like it has had slice marks put on it. Treatment of tapeworms involves giving your pet a pill by mouth at the time of diagnosis and again 30 days later. **Further** chances of re-infection can be decreased by controlling fleas on your pet and in the environment (See "About Fleas and Controlling Them").

After your pet receives a deworming medicine, you may see worms in their feces and/or vomit and your pet may have some diarrhea (especially if we are treating for roundworms and or tapeworms). This is just do to the dead worms being passed and is nothing to be alarmed about.

Another cause of diarrhea (and sometimes even vomiting) is flagellates. These are single-celled organisms that invade your pet's intestinal tract. We diagnose them by looking at a smear of your pet's feces under the microscope. If diagnosed with this, we will put your pet on a medicine that you will give to your pet by mouth once or twice daily for approximately 10 days.

Pet owners should be aware that some intestinal parasites could also be infective to humans. The worm must be at a particularly infective stage for this to occur and human infection usually involves ingestion. Children are therefore most commonly infected as they seem to constantly put their hands in their mouths. Prompt removal of feces, washing hands, and covering sandboxes are usually sufficient to prevent human infection.

About Fleas and Ticks and Controlling Them

The flea has a lifespan of 6-12 months. Each female flea can lay up to 2000 eggs at a time!!! Fleas actually spend about 80% of their time off your pet, only hopping on him/her to take a blood meal. Therefore, if treatment is only directed at the pet, the flea problem will be more difficult to control.

The life cycle of the flea takes 4 steps. The adult female lays eggs that become larva. The larva then becomes a pupa encased in a cocoon. Finally the pupa becomes an adult. The eggs, larval and pupal stages of the life cycle are not affected by baths and dips, and are often very difficult to eliminate with sprays and foggers, especially if allowed to progress to the pupal stages which can stay dormant in adverse environments for very long time periods.

To determine if your pet has fleas, use a flea comb or fine-toothed barber's comb to survey your pet's coat for fleas or flea dirt. The tines of a flea comb are small enough to trap fleas and flea dirt. If you catch a flea, you can kill it by dipping the comb in soapy water. Flea dirt looks like dark black specks of "dirt", but it is really dried blood left behind by feeding fleas. If your pet is small, comb it on a white washing machine or dryer so that you can see the dark fleas and flea dirt easier. If your pet is too big to lift, put a white sheet or towel under them and brush. You can often also diagnose fleas in a heavy flea infested environment by placing a flat dish of soapy water on a white sheet or towel under a light on the floor of a room where the dogs usually sleeps. Fleas will be drawn to the light and will be visible on the sheet and drowned in the soapy water. Precautions must be used to prevent electrical and house fires.

In addition to their pesky ability to cause frustration, fleas can cause medical problems in your pet. A flea's saliva can cause a severe allergic reaction, resulting in extreme itching, scratching, chewing, or nibbling of the skin. Fleas can also transmit a type of intestinal parasite called tapeworms (please see the section in this book called "Intestinal Parasites"). Should any of these symptoms occur in your pet, please call us for an appointment.

The good news is that fighting fleas and ticks is safer, easier, more effective and convenient today than ever before. Please take advantage of the following wonderful products and let us help rid you and your pet's life of fleas forever. Your pet will love you for it!!

- **Program** is a once-a-month tablet or liquid (an injection we give once every six months is also available for cats) given to your cat at mealtime. When the flea bites your pet, it ingests some of the medicine. The medicine then works within the female flea to change the shell composition of her eggs so that they are unable to hatch, thereby breaking the flea life cycle. It is a very safe and convenient way to control flea infestations, since it breaks the life cycle right at the beginning. Program is extremely safe and can be started in puppies and kittens as young as six weeks and can be used in pregnant or nursing pets. Program is not an insecticide so it is safe for your family members as well, and alleviates concerns about using insecticides in the home and environment. If your pet already has fleas, it will take longer for Program to break the life cycle because it can take 30-90 days for eggs that have already been laid to hatch and develop into adults. Once the life cycle is broken, continuing to use Program year-round will prevent the life cycle from starting again.

Please note: Program is safe to use in conjunction with heartworm preventative. Also, the effective cat dose of Program is 3 times larger than in dogs. Therefore, the weight on the packet of tablets is for dogs not the smaller cats, but if it is easier to pill your cat or if you have multiple cats that are difficult to separate during feeding, we can prescribe the tablets or you can bring your cat into our office to receive the Program injection every six months.

- **Advantage** is an odorless liquid that you apply every 30 days to a small area of skin over your cat's neck or dog's shoulder blades. On larger dogs it is applied over several spots on the dog's back. The product has a special carrier mechanism that takes it to the base of each hair on your pet where it quickly dries and lasts for approximately 30 days. The flea does not have to bite your pet for this product to work (the medicine gets absorbed through the flea's skin), thereby helping to avoid the itching commonly caused by flea bites. Advantage works by affecting the flea's nervous system. The flea is paralyzed and therefore dies within 12 hours of the flea hopping on your pet. Recent research also shows that as the animal sheds, the medicine is shed with it and can act as a means of helping to kill fleas in the pet's environment (carpet, floors, etc.) Advantage is extremely safe for your family members and your pet and can be started as early as 6 weeks in puppies and 8 weeks in kittens. It is also extremely easy to use and much more convenient and long-lasting than bathing and dipping. If your pet is frequently bathed or goes swimming (more than about once a week), Advantage may need to be applied slightly more frequently than every 30 days in order to continue achieving greater than 90% effectiveness.
- **Frontline Plus** is an odorless liquid that you apply to a small area of skin over your pet's neck. Frontline Plus can kill adult fleas, flea eggs, and flea larvae for up to 3 months in dogs and up to 6 weeks in cats. It also kills ticks for at least a month in both dogs and cats. We find it works best if it is applied once every 30 days. After application, the medicine will spread in the oils of the skin over the pet's body and is protected by the hair follicle and oil gland making it protected from removal by shampooing or swimming. Once the product is spread over the pet's body (a process which can take up to 24 hours to complete), fleas and ticks are killed within 24-48 hours. Frontline Plus can be applied to puppies as young as 10 weeks of age and kittens as young as 8 weeks of age. This product is extremely easy to use and much more convenient than bathing or dipping. If your pet is frequently bathed or goes swimming (more than about once a week), Frontline Plus may need to be applied slightly more frequently than every 30 days in order to continue achieving greater than 90% effectiveness.
- **Revolution** is a liquid that you apply to a small area of skin over your pet's neck. It can be used on cats 6 weeks of age and older. It prevents heartworms, kills adult fleas, prevents flea eggs from hatching, treats ear mite infections, and prevents two intestinal parasites (hookworms and roundworms). We believe this to be a useful medication in cats that will not eat the Heartguard tablets (See section titled "Feline Heartworm Disease").
- **Capstar** is a tablet that you give to your pet that kills fleas starting 30 minutes after it is administered and kills 90% of fleas within 4 hours on dogs and 6 hours on cats. Capstar is safe for puppies and kittens 4 weeks and older, 2 pounds or greater, and is safe for pregnant or nursing dogs and cats. The dilemma with Capstar from our point of view is that it has no residual activity and therefore, may need to be applied daily to kill the fleas. It is also not as cost-effective as compared to the other products that are available and we therefore, recommend using either Advantage or Frontline Plus to kill adult fleas and have the added benefit of these products working for several weeks to kill fleas on your pet.

A word on flea and tick collars...for the most part, we do not find other brands of collars to be effective and often find fleas and ticks on pets wearing them. It is for this reason that **when it comes to controlling fleas and ticks, our recommendation is** that all pets be put on Program when they are young, or in older pets, before a flea infestation exists. It is extremely safe and effective at keeping the flea population at a minimum and because it works by breaking the life cycle, it is most effective if used year-round. Using year-round is also most cost effective because once the life cycle is broken, there is no need to treat the environment with sprays and foggers.

If you see fleas or ticks later in the year, we recommend continued use of Program year-round to prevent a major infestation and then adding Advantage or Frontline Plus in order to kill the adult fleas and ticks. Using Advantage or Frontline Plus is much more convenient and effective than bathing and/or dipping, since most flea and tick shampoos and dips will **only** kill the fleas and ticks that are on your pet **at the time** of the bath/dip and they rarely have any repelling effect afterwards. **By using Program in conjunction with Advantage or Frontline Plus,** you will be able to kill adult fleas and ticks that are picked up from the environment, while also preventing fleas from laying viable eggs in your house before they are killed by the Advantage or Frontline.

If your pet already has fleas or has a severe and/or long-standing infestation, the Program combined with Advantage or Frontline Plus protocol we recommend will work to eliminate the fleas but it will take longer because the pre-adult stages will be in the environment already. Here are some things you can do to expedite the elimination process:

- Bathe or dip all household cats or dogs
- "De-flea" the pet's environment, including bedding, furniture, flooring, etc. by vacuuming to pick up fleas, eggs, larva, and pupa. As soon as you have vacuumed any areas your pet frequents, throw the bag away in a trash can **OUTSIDE** in order to prevent them from "escaping" back into your house.
- Use of fogging/spray types of insecticides and growth regulators in the yards and/or home.
- In extremely severe cases, an exterminator may have to be called in to help

(The latter 2 of the above have virtually become rarely necessary because of Program, Advantage, and Frontline Plus.)

Now a word on ticks...Ticks are a nuisance for your pets and family. Not only do they cause blood loss, irritation and infection where they attach, they may also transmit to your pets and family certain disease, such as Lyme disease, Rocky Mountain Spotted Fever, Ehrlichiosis and Tick Paralysis. Both female and male ticks are blood-sucking parasites. Although they often feed for 4-5 days, after a blood meal they usually detach and fall to the ground, where they find a dark, warm and humid spot to hide and for the female to lay her eggs. Unlike fleas, in which only the adult stage is parasitic, all tick stages can feed on you or your pet.

When a tick attaches to your pet, they inject something into your pet's skin to keep the blood from clotting as they are ingesting it. Because of this, some animals will have a local tissue reaction to the tick bite. The reaction looks like a red, raised bump right around where the tick was attached. This reaction usually remains for 5 - 14 days and sometimes even longer. As long as the reaction does not have a discharge or cause overt pain to your pet, it is not considered serious. You can apply some triple antibiotic ointment (neosporin) to the area 2 - 3 times daily.

Hairballs

During the grooming process, cats swallow some loose hair. This hair cannot be digested and over time, accumulates in your cat's stomach. Eventually, this build-up of fur blocks the outflow tract between the stomach and intestines which causes complications with digestion. Because of this, cats may vomit food and sometimes, a hairball. Hairballs can also cause constipation and/or a coughing or wheezing. Both long and short-haired cats can have problems with hairballs, although it seems to be more prevalent in cats with longer hair.

To help minimize this problem, you should brush or comb your cat on a regular basis (daily is best). You can also give your pet a lubricant called **Laxatone**. This coats the outer surface of the hairball and helps it to either pass through the gastro-intestinal tract and be passed in the feces or to be brought up in one of your cat's coughing/wheezing/vomiting spells. We recommend feeding this to your pet daily. There are also special foods now sold (Science Diet Hairball Formula) to help minimize hairballs.

Bathing

For the most part, cats do not require, nor tolerate, baths. Cats groom themselves and tend to be very "tidy". Should your cat get something on its fur that it cannot or should not lick and clean off, the best thing to bathe a cat in is either liquid Ivory or Dawn dish soap. These are very mild cleaners that are not irritating or toxic to the cat. Dawn works well to remove oil/grease. **And by using the medicines described above for flea and tick control, bathing and dipping to rid your cats of these pests is no longer necessary!!!** If your pet has a medical need for more frequent bathing, we can suggest some shampoos available at our office.

Nutrition and Feeding

You should feed your kitten a kitten food until 9 months of age. Kitten foods have higher levels of vitamins and minerals that young kittens need to grow and develop bones and muscles. At 9 months old, you should buy adult food and slowly start to mix the adult food into the kitten food. You will do this for the next 3 months - slowly increasing the quantity of adult food while decreasing the kitten food. At one-year old, your pet can be fed exclusively adult food. This gradual change allows the pet's intestinal system to adjust to the new food and usually prevents stomach upset and diarrhea.

In general, premium foods will provide the best food source to your pet as these foods tend to use fewer by-products than foods purchased at a grocery store. Premium foods often are also available in life-stages that you can use for your pet's different age needs (kitten, adult, and senior formulas). These foods allow you to change your pet's food to a different life-stage without completely having to change brands and the food change therefore seems to be accepted by your pet better, both mentally and physically. Examples of premium foods include Hill's Science Diet, Iams, and Eukanuba. If you choose to purchase food from a grocery store, try to avoid "generic" foods or the store's name brand food as we typically find these can cause gastrointestinal upset. Also, we again recommend you select a food that comes in different life-stage formulas.

The dry vs. canned issue is often of concern. In general, it does not seem to greatly matter which your pet eats. We see just as many animals with dental disease that eat canned foods as we do that eat dry food. In some instances, your pet may develop a specific health problem which could require a specific food. In these circumstances, we will discuss what is best for your pet at that time.

How much food should you feed? In general we do not like to give a set amount since, just like humans, each animal will have different metabolic and individual needs. In general, you should feed your pet the amount they can eat in a 15 minute span without having it gone instantly, but also not have a bunch left over. Also, another useful tip to use to evaluate if the amount you are feeding is okay for your pet, you can evaluate their body structure. You should be able to feel the ribs without seeing deep indentations between each rib. If you can see indentations, you need to increase the food amount you are feeding. If you cannot feel your pet's ribs when just gently touching the rib cage, then your pet is becoming too heavy and you should slightly decrease the amount of food you are feeding. If you feel your pet is too heavy or too thin despite what you feel is appropriate feeding, please make an appointment for your pet to be examined, as there are many metabolic diseases that can show such symptoms.

Dental Care

Your kitten has "baby" teeth that will be replaced by an adult set of teeth. The baby teeth generally start to become loose and fall out when your kitten is approximately 12-16 weeks of age and are all out by about 20-24 weeks of age. If the baby teeth are not all gone by the time your pet is 6 months old, we recommend they be pulled while your pet is anesthetized for his or her neuter in order to prevent complications that could arise from the baby teeth not falling out. This second set of teeth is your pet's permanent set of teeth that they will need for their lifetime.

Dental disease can be serious problem, which can result in pain (especially when your pet eats), difficulty eating when trying to get the food from the food bowl into his/her mouth, tooth loss (teeth may fall out or need to be extracted), bad breath, abscesses on the face, and reddened gums. With serious dental disease the bacteria in the plaque can get into the bloodstream and cause infections in your pet's other organs such as the kidneys, heart, lungs, and liver. Many of these problems can be avoided by starting your pet on preventative dental care at home.

To limit plaque and tartar build-up on your pet's teeth and to prevent the need for repeated cleanings (and anesthesia) in our office, we recommend routine brushing, feeding special treats, and yearly physical exams.

First, we recommend brushing your pet's teeth with a fingerbrush and toothpaste specifically formulated to reduce bacteria typically found in animal mouths. The fingerbrush fits over your finger like a thimble and is therefore often not viewed as a chew toy or a scary object coming at your pet's mouth. Daily brushing is best, but any brushing is better than none.

Secondly, there are specially designed treats called T/D that have special enzymes in their formula that stick to the teeth and help decrease bacteria and plaque formation. T/D is actually a food, but we do not feel it is balanced enough to be fed exclusively. They do however work wonderful as treats.

Finally, there is a product called Maxiguard Gel, which can be applied to your pet's teeth weekly to prevent plaque build-up. This product works well, but brushing and/or using the T/D treats seem to prevent plaque build-up better. Maxiguard Gel is a better alternative for pets who will not tolerate having their teeth brushed and/or for owners who can honestly not add yet another task such as brushing their pet's teeth to their already busy schedules!

There are other products, such as mouthwashes, which may be recommended for your individual pet's dental care program.

You should begin a dental program as soon as possible since your pet needs to be trained to accept having its teeth brushed. With time and patience most animals learn to accept, and even like, having their teeth brushed.

Sometime during the course of your pet's life, we may recommend that your pet have a dental cleaning performed. This means that your pet will need to be anesthetized so that the teeth can be cleaned with an electronic scaler to remove existing plaque and tartar. The teeth will then be polished to make the surface smooth and completely clean. This procedure can be more fully explained to you should the need for a dental arise in your pet.

Ear Care

For the most part, animal's ears d not require much care. Their ears are shaped differently than human's. Animal ear canals are shaped like an "L" (there is a vertical canal then a 90° bend followed by a horizontal canal and then finally, the eardrum). Here are some tips about ear care for your pet:

- ❖ DO NOT put peroxide, water or alcohol in your pet's ears. Water/moisture in the ear provides a good environment for bacteria and yeast to grow. Peroxide breaks down into hydrogen and water thereby promoting moisture. Alcohol can be too drying and can "sting" your pet if the ear is irritated or infected. For routine cleaning of the ear, we recommend a product called **Epi Otic**. It helps to clear moisture and breaks down wax that can build up deep within the canal. To clean the ear, fill the canal with the **Epi Otic** until some drips out then massage the base of the ear (where the ear "attaches" to the head). Then, let the animal shake its head (best to clean ears either outside or in a bathroom where clean-up is easier). By allowing the animal to shake the cleaner out, any wax or debris from deep within the canal will also be shaken out. You SHOULD clean the ear with the Epi Otic after baths. You can also gently clean out the debris you can SEE with a cotton ball.
- ❖ If your cat is shaking its head, rubbing/pawing at its ears, or has smelly ears, your pet should be examined, as these are all potential signs of an ear infection or problem. Infections in the ear are usually due to mites, bacteria, and/or yeast. Specific medications for each can be dispensed at our office should the need arise in your pet.

Neutering vs. Breeding

Cats are generally sexually mature enough to breed between 6-9 months of age. Most females will have their first heat cycle around this time. During her heat, your cat may become more friendly, less friendly, eat less and become very vocal (meow a lot). No bloody vaginal discharge is typically seen. She will typically have a heat cycle every 3-4 weeks. This heat cycle can last for as little as 5 days or as long as a month. Male cats are able to breed throughout the year and will often be prone to roam in search of a mate.

We recommend having your pet neutered when it is approximately 6 months old. We select this age because it takes this long for a vaccine series to be complete and for the immunity from the vaccines to reach their peak. With each vaccine, your pet receives a physical exam so we will have had several opportunities to evaluate your pet for potential surgical risks.

When your pet is neutered, they only need to be at our hospital for the day. Anesthetic will be given throughout the process so that they will be completely asleep and feel no pain during the procedure. In females, the entire uterus and both ovaries are completely removed in a procedure called an ovariohysterectomy (more commonly called spaying). In males, both testicles are removed in a procedure called an orchiectomy (more commonly called castration). **For the female**, several layers of stitches are placed under the skin that will slowly dissolve over the next 2-4 weeks. In most cases, skin glue may be used for the final skin layer, thereby alleviating the need for stitch removal. In a few cases skin stitches are placed which will need to be removed in 7-10 days following surgery. The decision to place skin stitches or not is decided on a case-by-case basis. **For the male**, no skin stitches are placed. Given this, there can be a small amount of bloody discharge from his incision site for several days following surgery.

There are many good reasons to neuter your pet. In females these include:

- ◆ Eliminates risk of developing a life-threatening infection in the uterus called a pyometra after each heat cycle. With this infection the uterus fills with pus and can cause widespread infections in other organs and in the bloodstream.
- ◆ Eliminates chance of developing uterine and ovarian cancer since those organs are completely removed.
- ◆ No need to have to confine the female during what would otherwise be her heat cycles.
- ◆ Decreases behavior problems that can be triggered by the hormones associated with heats such as urine marking.
- ◆ Minimizes the problem of overpopulation and unwanted kittens.
- ◆ Minimizes territorial scent marking and spraying.

Reasons supporting neutering a male cat include:

- ◆ Minimize inter-male aggression and sometimes decreases aggression towards humans.
- ◆ Limits wandering in search of a female mate.
- ◆ Minimizes territorial scent marking and spraying.
- ◆ Minimizes the problem of overpopulation and unwanted kittens.

Neutering will NOT change your cat's disposition, personality, or intelligence.

Neutering will NOT cause your cat to become fat and lazy. This is something that happens due to overfeeding and decreased exercise in any pet. This problem can be especially evident in cats. As they age they tend to become more sedentary, whether neutered or not.

When trying to decide whether to breed or neuter we ask you to consider the above benefits of neutering combined with the commitment it will take to breed your cat and raise the offspring. You should evaluate your cat critically. Does it have a good temperament? Does it have good structure and soundness? Does your pet have other conditions, which could be passed on to the offspring (eye problems, inheritable bleeding disorders, etc.)?

If you decide to breed your cat, we recommend waiting until the female is at least 1 ½ years old to allow her to become more mentally mature to deal with a litter of kittens. Make sure she is up-to-date on her vaccines so she will be able to provide good immunity to her kittens during gestation and nursing. The FVRCP-C (distemper combination) vaccine cannot be given during pregnancy so if she will be coming due for it during that time, it should be boosted PRIOR to her conceiving.

Immediately before breeding you should have your veterinarian check your cat for:

- 1) feline leukemia and feline immunodeficiency virus AND
- 2) intestinal parasites

She should be fed a kitten food during breeding, gestation, and nursing to give her the extra nutrients required during this stressful time. She should be fed a kitten food until 4 weeks after the kittens have been completely weaned. After 4 weeks you should slowly reintroduce her to her regular adult food over the next 4 weeks (slowly decrease the amount of kitten food while slowly increasing the amount of adult food).

Once the female has conceived you will need a queening box to contain the kittens in and give the mother a place to quietly be with her kittens. The kittens will be born approximately 63 days following conception. Radiographs can be taken about 54 days into gestation to determine the minimum number of kittens. This is recommended so that you will know the minimum number of kittens she should deliver. If she does not have this number and begins to show signs of trouble delivering any more kittens, you will then know for sure that she needs to be seen by a veterinarian. A count of the kittens can be done earlier using ultrasound.

During the delivery, you should be present in case she develops complications, but you do not want to "hover" because this may make her nervous and could slow delivery and make her too anxious to properly care for her new kittens. On the day or day after of whelping, the veterinarian may recommend bringing her into the office for an injection called oxytocin. This helps uterine contractions, clears out any remaining placentas, and can minimize chances of uterine infection.

When the kittens are 3-4 weeks old you can start to offer them watered down canned food. The kittens can be completely weaned between 6-8 weeks of age and are ready to go to their new homes at 8 weeks old. The kittens should receive their first FVRCP-C (distemper combination) vaccine at 6-8 weeks old.

To Declaw or Not To Declaw

Many cat owners elect to have their cat declawed in order to protect furniture and/or family members (especially children) from being scratched. In general, we recommend this be done at the same time as neutering so that your cat only has to experience one anesthetic procedure. If the cat is just being too destructive and you cannot wait until the recommended age of 6 months, the declaw and neutering can be done earlier. We prefer waiting until 6 months of age because at this age, the animal is at a safer weight to "handle" anesthesia and we also will have been able to complete your pet's vaccine series and perform several physical exams to evaluate your cat's health.

When we declaw a cat, the entire nail including the bone back to the first "knuckle" joint is removed. Surgical glue is used to close the skin and bandages are placed on the paws overnight. The next morning, the bandages are removed and the cat will be able to go home that afternoon. The paws can remain tender for the next 2 weeks (and sometimes even for 3-4 weeks, especially in cats over 1 ½ years old). At home, it is very important to limit your cat's activity and to not allow it to jump onto/off of heights and/or hard surfaces. It is also important **NOT** to use regular clay or clump litter for the next 2 weeks. These litters tend to irritate the incisions and can cause the incisions to open and become infected. We recommend a special litter called "Yesterday's News". This is "litter" made out of recycled newspapers compressed into pellets. The other alternative is to use shredded newspaper in the box. The "Yesterday's News" is often a better choice because the cat can still dig/scratch in the "litter" and bury, etc. Therefore, it is generally accepted better by the cat than just shredded newspaper.

There are pain medicines available to your cat that can minimize the post-surgical pain associated with a declaw. The medicine is started by us giving your cat an injection before it wakes up from the anesthesia and is continued with a tablet given to your cat by mouth 3 times daily for 7-10 days following the declaw.

There are several alternatives to declawing. They include:

- 1) **Tendonectomy** With this procedure, the nail is not removed. Rather, the tendon that allows the cat to stick their claws out is cut. Therefore, the cat cannot scratch at something. But, if the cat is sitting on something and jumps off (for instance a child's lap or waterbed), some scratching can still occur. Some people believe that this procedure is generally less painful because a tiny incision is made under the foot just behind the toe pads and no bones are removed. Surgical glue is used to close the incision. Aftercare is the same as for a declaw. The recovery time is often shorter than for a declaw (about 1 week). However, you **MUST** trim your cat's nails on a regular basis (every 3-4 weeks) because they cannot be worn down and will get long enough to get caught in things (draperies, carpet fibers, etc.). Also, if not trimmed, the nails will start to curl under the cat's paws and "grow" into the underside of the foot.
- 2) **Soft Paws** These are soft rubber nail caps that you glue over your cat's claws (similar to fake finger nails). They last a varied amount of time depending on each cat, but generally last about 2-4 weeks.
- 3) **Keeping nails trimmed short**.

4) **Training to use a scratch post and not to use the furniture.** Encourage your cat to use the scratching post by putting it in its favorite place (ie. not in a secluded area). Select an appealing surface such as carpet, cork, rope, or wood. Make the post appealing by attaching toys and possibly rubbing a small amount of catnip onto the surface. Reward your cat (with verbal praise, physical contact, and, if you choose, a small food treat) whenever it approaches the post. Doubly reward the cat when it uses the post for scratching. Make scratching of inappropriate object temporarily unappealing. Covering it with plastic or foil often works. Also, use of a verbal command, such as "No scratch", will help and the cat will hopefully learn to respond to the command alone in the future. For more persistent cats, squirting it with a water bottle, a blast of air from a compressed air can, or shaking a jar of pennies **at the time** the cat is inappropriately scratching are "shock" factors that you can use in conjunction with your verbal discipline. Again, the hope is that the cat will learn not to scratch at all and if need be, to respond to your verbal command only.

*****We understand** that the decision to or not to declaw can have moral and ethical feelings surrounding it. In general, our feeling is that if you absolutely will not be able to tolerate a cat that ever scratches and would choose to declaw it later in life should it start scratching (for instance, 10 years down the road when you get new furniture), then it might be better for everyone to have it done at 6 months of age. This way, you won't be stressed and your cat's surgical recovery will likely be quicker. Or, if you decide not to declaw your cat at 6 months old and your cat becomes a "scratcher" later in its life, then an alternative to declawing should more heavily be considered since the recovery from a declaw is generally longer and more painful for older cats.

*****Please remember** that physical punishment (swatting with hand/newspaper or thumping it on the nose) to get it to stop scratching, and even to stop biting or playing rough should **never** be used. This often only causes the cat to become fearful and sometimes even provokes aggression.

Feline Urologic Syndrome (Feline Urinary Tract Disease)

This is a condition in cats that cause the outflow tube/tract from the bladder to become clogged with crystals. When this occurs, urine and toxins cannot be expelled. This is a life-threatening situation. There are many factors that are believed to contribute to this condition such as nutrition, obesity, stress, infection, and/or genetics. This condition is much more common and dangerous in male cats. This is due to the difference in anatomy - a female cat has a shorter and wider outflow tract, which seems to allow for passage of the crystals. Signs of this condition include frequent trips to the litter box, urinating in inappropriate places, blood in the urine, and/or crying when urinating). If the crystals completely clog the outflow tract, the cat cannot empty his bladder. However, the bladder continues to receive urine from the kidneys. As his bladder becomes distended, his abdomen will become painful and he may begin to cry/moan (even when not in the process of urinating). He may also become lethargic, stop eating, and may begin vomiting. If the clog of crystals is not removed, kidney failure and death can result.

Treatment will include anesthetizing the cat so that the clog of crystals can be removed by passing a urinary catheter and "flushing" the crystals from the bladder and urinary tract. Several days of hospitalization, intravenous fluid, and blood testing to check kidney function are often required. A cat that has been diagnosed with FUS will need to be fed a prescription diet for the rest of its life. The special diet will minimize crystal formation. There are several diets available based upon the type and number of crystals found in the urine. Most cats really like these prescription foods and live very happy and normal lives.

General Things to Know

- Advil (ibuprofen), onions, onion salt, chocolate, and Tylenol (acetaminophen) are toxic to animals
- A normal temperature is 100.5 - 103
- Antifreeze (ethylene glycol) is severely toxic to animals. It tastes sweet so they like drinking it!
- The theory of wet vs. dry nose is just an old-wives tale.
- Cats normally sleep 16 hours every day.

Hints About Litter Box Training

- ✓ Try to use the same type of litter kitten/cat is used to, often unscented litters are preferred by felines.
- ✓ Place litter box in a private, quiet area that is also easily accessible.
- ✓ Try to keep plants off limits since soil is similar to litter and may be preferred.
- ✓ When training a new kitten, you should try to watch the kitten at all times at first. When it starts to sniff, gently place it in the litter box. Reward your cat (with verbal praise, physical contact, and, if you choose, a small food treat) when it goes to the litter box and for scratching and sniffing in it. Doubly reward it when it eliminates in the box.
- ✓ Have two litter pans available. Add 1-2 additional pans per each additional cat.
- ✓ Some cats prefer covered litter boxes, other cats can feel "trapped" in them. Usually if started from the outset, the cat will accept them. A covered litter box helps with cats that have poor "aim"!
- ✓ You **MUST** keep the box clean or your pet will not want to use it (just like you don't like using a bathroom that is not clean). Scoop the box at least daily and completely clean it weekly. Try not to use a cleanser with a strong odor as some cats won't use a litter box if a "detergent" odor remains.
- ✓ Avoid making sudden changes in litter brand and type of litter box.
- ✓ Make the area of your cat's litter pan a safe haven. Do not scold the cat, give medications, or do anything your cat does not generally like (nail trims, brushing) near its litter pan.
- ✓ When a mistake occurs, clean the area right away with an enzyme cleaner (such as Simple Solution or Eliminator) to remove the odor so your cat will not be drawn to the area again.
- ✓ If "mistakes" repeatedly occur, your pet may have a medical problem and should be brought in for an exam.

Basic Training

When sitting with your kitten (watching TV), play with its ears, paws, toes, etc. This will make your cat used to being handled so that it will better tolerate maneuvering the ears and paws for cleaning and nail trims..

If your kitten is mouthy (nipping, playing rough), you can gently place your hand around its muzzle to close it and say "No bite". Replace the object the cat is inappropriately chewing on with an appropriate chew toy. If the inappropriate biting/chewing continues, you should stop interacting and contact with the cat completely by giving it a "time-out". The kitten should be put in a quiet room by itself. Be sure this area is NOT the same area you expect it like to be in while you are away nor in a common family area where you expect it to spend a lot of time with the family. Leave the cat for a short period of time (2-3 minutes) and then bring him/her back with you and try again. There is **NEVER** a place for physical punishment .

Positive reinforcement and praise are key to the bonding process between you and your new pet. We cannot stress enough that physical punishment (swatting with hand/newspaper or flicking it on the nose) will only cause your pet to be fearful of you and possibly even cause aggression. Positive reinforcement, on the other hand, will make your pet a better life-long companion.

Wellness Testing

We may recommend doing bloodwork on your pet during the course of its lifetime. In younger animals these tests can serve to diagnose disease, congenital abnormalities, and also can serve to establish an individual baseline of normal values for your pet. In the older animal, these tests will help us evaluate your pet's organ function, find diseases before they cause permanent organ damage and/or clinical symptoms, and ensure your pet will be able to tolerate medication. Performing bloodwork before anesthesia is recommended because we can then detect underlying kidney and/or liver disease that might lead to complications during or after anesthesia. Since the kidneys and liver are the primary organs involved in metabolizing anesthetics, it is important to check their function BEFORE anesthesia is administered.

Basic blood tests can provide insight into the function of the internal organs. These are called blood chemistry profiles. The other type of test, called a complete blood count or hematology test, provides information about the blood cells themselves.

Specific details about blood testing and specific tests recommended can be discussed with you at the time such tests are suggested for your pet.