

ANIMAL CAVALCADE takes special pride in its editorial contributions by members of the veterinary profession. Various parts of the United States are represented in this issue: Dr. Victor H. Austin (page 12), Van Nuys, Calif.; Dr. Worth Lanier, Auburn, Ala. (page 24); Dr. Robert M. Miller (page 14), Thousand Oaks, Calif.; and Dr. Michael W. Fox (page 20), St. Louis, Mo.

As we put the finishing touches to this issue, the press reports some instances of dogs turning on their owners. Children appear to be involved and family pets heretofore known as gentle animals. The reports do not go to the heart of the problem as, for example, whether the bitten youngster tried to pet the dog while it was eating or had been teasing or otherwise mistreating the dog, etc. In his "Understanding Your Dog," from which Dr. Fox's material in this issue was taken, this recognized Washington University's scholar of animal behavior has a scientific explanation of the problem as follows:
"I have heard occasionally of dogs biting their owners or other people for no apparent reason. When we dig into these incidents, two things often come up. First, the owners have been too lenient, too permissive with the dog during its infancy. With such lack of discipline, some dogs remain perpetual puppies, enjoying the owners' indulgence, but others as they mature attempt to become the dominant (leader wolf) of the household. And some succeed. Such rivalry and testing of the owners for social status is really quite normal. In any group-wolf. dog or human-one individual will be a leader, and if there is no clear leadership, some fighting or conflict breaks out until one is established. Then a kind of pecking order or social hierarchy exists which brings peace through order. Each individual knows his or her place, and there is no further conflict or fighting. An individual that has not learned his place is socially maladjusted; he has no respect for authority or social order and shows no mercy for subordinates. These abnormalities, coupled with a lack of social conscience and morality in both dog and human being, are principally a consequence of early rearing experiences."

June has been designated Cat and Kitten month by the Pet Food Institute,

It behooves each of us to start planning now as to the personal contribution we can make to this all-embracing program.
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## COVER:

A good pet need not be a purebred to qualify for the cover of Animal Cavalcade. This crossbred was photographed by Victor Baldwin, Beverly Hills, Calif.

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# HIIMAI HAIIIII NWS 

## VETERINARIAN IS BIG MAN IN SOUTH AMERICAN DOGS

A big man in dogs in South America is Dr. A. Barone Forzano, a Brazilian veterinarian and physician. He is president of the Brazil Kennel Club and one of only eight all-around judges in his country. He also represents Brazil in the forty-two National Federation Cynologique Internationale (FCI) and in the Confederacao Canina Americana, of which Argentina, Brazil, Chile, Colombia, Mexico, Paraguay, Peru, and Venezuela are members. His doggy interests keep Dr. Forzano literally hopping. In a single recent period, he flew from Rio de Janeiro to judge
the Exposicao Internationacionale de Caes de Kennel Club de Peru, then on to New York for a conference at the American Kennel Club. He then flew to Germany for a specialty show in Neunkirchen and to Budapest for the annual FCI meeting. Shortly thereafter he judged in Yugoslavia and flew to Moscow to try and help make the Soviet Union authorities permit Russian dogs to compete in Rio de Janiero this year. Then on to Milan, Italy, to judge working breeds and to Lisbon for more judging.

## RESTRICTIONS ON BIRD IMPORTS IMMINENT

The U. S. Department of Agriculture is formulating new regulations governing the importation of all poultry, including parrots, myna birds, parakeets, cockatoos and macaws. Restrictions on the importation of birds are necessary because of the danger of Newcastle disease infecting poultry food products, according to Dr. John W. Walker of the Animal Health Division of the USDA. It now appears that birds brought in from any country will have to be quarantined in USDA-approved facilities at one of the following ports of entry: Miami, New Orleans, Los Angeles, Seattle or New York. An embargo on bird
importations from Puerto Rico has already been put into effect because of the high incidence of Newcastle disease prevalent in the area.

## SALT REQUIREMENTS FOR HORSES GIVEN

Salt is very important in horsefeeding. It serves as both a nutrient and a condiment in the ration, states T. J. Cunha in Feedstuffs. As a condiment, it stimulates the secretion of saliva; as a nutrient, it contains the mineral elements of sodium and chlorine. Without salt, feed is less palatable to the animal and is less efficiently utilized. A lack of salt will utlimately decrease growth and milk production. Horses which are worked or exercised heavily require more salt since they lose a considerable amount of it by sweating. The horse needs about 85 grams (about $1 / 5$ pound) of salt daily. This includes the salt in the feed itself. It is estimated that all horses consume an average of 24 pounds of salt yearly. In a day, a horse at moderate work can lose 50 to 60 grams of salt in the sweat, and 35 grams in the urine. Unless this salt is replaced, the horse will show signs of fatigue or overheating. This is one reason why it is so important to self-feed salt to horses so they can consume extra salt if they need it.

# it takes a lot of LOVE 

If a dog is a man's best friend, as the saying goes, then Bobbie, a small collie, must rank as one of the most faithful. In an enthralling true-life story, Bobbie was separated from his family in Indiana, but undaunted he undertook a 2500 -mile journey through snow, rain and cold over a


CANINE CHARMER - This little fellow, hardly appearing sinister enough to warrant his captivity, will star in a particularly heart tugging segment of the upcoming special, "It Takes A Lot of Love," sponsored by the Ralston Purina Company, airing Wednesday, April 19, at 8 P.M. (EST), over the CBS Television Network. Hosted and narrated by Chad Everett, star of television's "Medical Center" series, "It Takes A Lot of Love" will present fourteen fascinating examples of the often poignant, often comical, always unique friendships that grow up between people and their pets.
period of six months until he reached his Oregon home.

This 'truth is stranger than fiction' animal tale is depicted on the special "It Takes A Lot of Love," which will be presented on Wednesday, April 19, 8-9 P.M. (EST) on the CBS Television Network, sponsored by the Ralston Purina Company.

Bobbie's story is one of several vignettes that describe the intimate relationship between man and both domestic and wild animals. Though Bobbie's incredible journey occurred back in 1926, the remainder of the stories on "It Takes A Lot of Love" are contemporary.

Chad Everett, who happens to be partial to horses and breeds them on his San Fernando Valley ranch, is the host and narrator of "It Takes A Lot of Love." The popular television and motion picture star notes that the special's title travels a two-way street.
"The measure of a man or a woman's love for an animal is reflected by an equally warm response from that animal," says Chad. "It just has to work both ways."
"It Takes A Lot of Love" shows this mutual love in several episodes. Perhaps the most touching involves an 85 -year-old spinster whose only companion is Tippy, a large, bushy and gentle cat. For the elderly schoolteacher, Christina Cameron, Tippy is her raison d'etre. The cat is someone to talk to, to be with - and to love.

In a larger sense, Tippy is a partner in this constant mutual companionship, and her existence too depends on affection, both given and received.
"It Takes A Lot of Love" does not fall into the trap of being just another 'animal special.' In its short, observant anecdotes, like the tales of Tippy and Bobbie, it illuminates the distinctive qualities of both man and animal and how both can exist together in affection and harmony. In so doing, the special encompasses the whole range of emotions - laughter, sorrow, courage and happiness. Ultimately one recognizes the particular attitude behind the production that just as every human life is worthwhile, so is every animal's.

This is especially demonstrated in the episode of the "mad" dog. Because of the animal's snarling viciousness and its biting proclivities, the community of a small Southern town put pressure to have the dog destroyed. But the

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deputy sheriff, who has been assigned to dogcatcher, cannot bear to see an animal harmed. So he finds an acceptable use for the animal, turning him into the watchdog of a much-broken-into local lumberyard, and thereby salvaging the unsalvageable.


GUS AND FRIEND - Chad Everett, popular star of the CBS television series, "Medical Center," is shown with his dog, Gus. Everett will be host and narrator of the one hour special, "It Takes A Lot of Love," an intimate study of people and their pets.

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Readers with health and other pet problems are invited to send in their questions to ANIMAL CAVALCADE. Those with the greatest reader interest will be handled on this page by Dr. J.F. Smithcors, D.V.M., Ph.D., who is technical editor of American Veterinary Publications, Inc.


## BOARDING A DOG

Q. We're planning a trip on which we cannot take our Sheltie. How can we be sure the boarding kennel we will have to leave him in is a good one?
A. The quality of care a dog is likely to receive varies from very good to very bad at different kennels, and it will make your trip much more pleasant if you are reasonably sure your Sheltie is in good hands. It may take a bit of effort on your part, but you might begin by asking your friends who may have had some experience in this regard. If several have the same opinion about a particular kennel, this should be helpful, but even so you ought to check out the better prospects yourself beforehand. Any kennel operator who has nothing to hide will be glad to show you his facilities. They need not be "plush," and anyway you should be more interested in how sanitary they are and whether there are reasonable provisions to prevent escape. Also, whether your dog will have an individual cage or be penned with others, what he will be fed, and provisions for exercise. If the first one you inspect doesn't suit you, I would certainly suggest you check others. A veterinarian or a dog breeder might be willing to suggest the better kennels in the area.

## BIG VS. LITTLE TURTLES

Q. Our son is asking for a pet turtle or two. Which is more desirable, the big or tiny ones? Also, how serious is the risk of disease?
A. Generally speaking, the more desirable pet (of any species) is the one your son thinks he will like, though it is often wise to unobtrusively guide him in his decision. The small water turtles sold in pet and variety stores have proved-too often for comfort-to be carriers of salmonellosis, which is transmissable to persons and can produce serious disease, especially in children. There is no very practical way to be certain these turtles are "clean," and I would not allow one in the house. The larger species of water turtles are difficult to care for properly-and some are danger-ous-so I would strongly suggest a box tortoise, which also has the advantage of living longer than the small water turtles. Most of them are more attractive, and since they can be handled more easily they seem to develop a "personality." A corner of a yard (protected from dogs) is a good place to keep one, or you could use a large sandboxin the house. Pet stores have booklets on their care.

## SLEEPING BIRDS

Q. My youngster has come up with this puzzle: what keeps a sleeping bird from dropping off its perch? What is the secret?
A. Birds have an ingenious mechanism for this. When they settle on a perch they naturally bend their legs to sit, and this causes the tendons of muscles which flex (bend) the joints of the toes to lock in a grasping position (comparable to your grasping a stick, except that it is automatic in birds). The bird cannot let go of the perch until it extends its legs in rising. Of course, a parrot can loosen his grip enough so he can hang upside down but he can do this only while he is awake.

## HORSE HAS A COLD

Q. Do horses have colds? Mine seems to be coughing unduly and also has a discharge from the nose. What to do?
A. Horses are not subject to the common cold as we are, but they do get several respiratory diseases which cause coughing and nasal discharge, one of which is simply called "infectious coughing." A more common condition is equine influenza, which resembles the human disease except that horses rarely die of it unless there are secondary complications (other infections after the horse has been weakened by the effects of the influenza virus). As in persons, rhinitis and pharyngitis can result in coughing and a "runny" nose. Strangles ("distemper") is a rather common streptococcal infection which, like influenza, is often mild if uncomplicated, but either can be very serious. If coughing or nasal discharge lasts more than a day or two it would be well to consult a veterinarian, especially if the horse appears to have a fever.

## FELINE DIARRHEA

Q. What can possibly cause persistent and severe diarrhea in our young cat? She is very healthy in every other way.
A. It seems safe to assume this is something less serious than feline panleukopenia ("distemper") since your cat appears otherwise healthy. Beyond this, however, there is no easy answer, though the character of the stools may be a clue. If they are very loose and watery there may be a bacterial or protozoal infection. If they look tarry, this may indicate bleeding in the stomach or small intestine (but they are also black if large amounts of liver is fed). Large amounts of mucus suggest inflammation due to some sort of irritation, as in enteritis from infectious or chemical agents. Cats will rarely eat or drink enough of a poisonous substance to cause diarrhea, but if such an agent gets on their fur they will lick it off. If the stools are greasy or contain obvious fat, there may be a defect in digestion-though this is rare, and such cats usually have signs of diabetes also. Diarrhea is also a sign of several other diseases, but not in an otherwise healthy cat. Finally, cats (but usually older ones) can have diarrhea when in fact the primary problem is constipation; fluids can get by an obstruction in the colon and affected animals strain frequently to pass them. Because the possibilities are practically endless, it would be best to consult your veterinarian rather than try home medication.

SAN FRANCISCO, curomems


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# SEASONAL SKIN PROBLEMS 

by
Victor H. Austin, D.V.M., M.S.
Very few diseases of the dog and cat resent the veterinarian with such an excellent opportunity to take diagnostic advantage of the physical examination than diseases of the skin. No exploratory operations are necessary for the veterinarian to see and examine the skin. Yet it is a relatively simple procedure to take a small section of the skin if a microscopic study of the problem is desired.

It is most important to be able to recognize whether a skin disease is a primary or secondary condition. The skin's appearance may reflect, just as truly as the appearance of the deep seated organs, the existence of a general disorder. The skin may be pigmented in certain glandular conditions, dry and hard in others, or warm, soft and moist in still others. The color of the skin may reflect impaired circulatory or respiratory problems.

Food and vitamin deficiencies are reflected early in the skin. Some of these signs are so very similar to other disturbances that it takes a well trained person and a most complete history to make a proper diagnosis.

Some infectious systemic diseases produce skin changes that are similar to some primary skin diseases. Allergies in both dogs and cats may be manifested by skin changes, especially changes associated with itching.

Finally, there are a host of primary skin diseases that may be more prevalent during warmer weather and some of these are the ones we will be writing about.

In considering any skin disease it is important to have some understanding about the role skin plays in the animal's physiology. Few people realize that skin alone accounts for 6 to 10 per cent of, the total weight of the animal, and to show you the important role that water plays in this system, approximately 20 per cent of the skin is made up of water. When we give these percentages we are referring to normal skin and depending somewhat upon the age of the animal, this normal skin contains from 20 to 40 per cent of the total body water.

When we speak of skin we are also speaking of the hair and the nails. The healthy hair adds to the beauty of the animal and also serves to protect it as an actual shield and as an insulation against heat and cold. Wild animals have many other adapted uses for the hair coat. The skin affords physical protection to the body in many ways. It is also a sense perception organ
sensitive to heat, cold, pain, itch and touch. Of great importance and most complicated is its role in the immunological process of the body. It also has an autodisinfection and self cleaning property by continuous desquamation and the action of the sweat and oil glands.

Keeping all of these important factors in mind, let's talk about a few of the more common diseases that might bother your pet's skin this coming summer.

## NUTRITION

Proper nutrition is absolutely essential for healthy skin and included in this area are the essential vitamins, minerals and water. If I were to give importance to the rating of nutritional items I would rate water as number one. With the summer months coming on and the increase in temperature, free choice of water should be available to the dog and cat at all times. The amount your pets drink will vary with many factors, but make certain they have all the water they want. If you think your pet is drinking too much, consult your veterinarian. Do not limit the amount of water your pet is drinking without professional advice.

There are many fine commercially prepared pet foods on the market today, but remember that you get what you pay for so talk over your pet's diet with your veterinarian before trying to economize. Skin diseases produced by deficiencies are usually reflected by a poor quality hair coat and scaliness of the skin. These conditions cannot be properly treated by merely adding a food supplement oil to the dog's diet. There are far too many skin tonic food supplements fed to dogs and cats. It is important to remember that the total diet must be properly balanced when treating food deficiency diseases. This group of diseases are not common, and when seen are usually only seen in young animals. However, your veterinarian must consider this possibility when examining your pet for skin trouble.

## PARASITES

By far the most bothersome diseases of the skin in regards to the number of animals involved can be placed under the general category of parasitic skin diseases. In this group I would consider the flea the major offender. In 1971 while conducting a dermatological survey on 200 dogs at the University of California at Davis I found that $75 \%$ of these dogs had fleas or evidence of fleas. Many owners feel that their pets just couldn't have fleas because they don't see them. This doesn't necessarily have to be true
because the flea spends more time off of the dog or cat, than it does on it. The flea is only on the pet during feeding time; therefore, the pet could still have skin problems due to fleas without the owner seeing fleas all of the time. Interestingly enough-the fewer the fleas, the more severe the skin problem on sensitive dogs. Those with lots of fleas seemed to eventually build up a resistance to them. Also of interest was the fact that short haired dogs had the least amount of flea infestation and the long haired dogs had the greatest amount.

The best way to handle the flea problem is by using insecticides that kill the fleas when they get onto the pet. If the dog or cat is not allergic to the flea collar, then this is an ideal method of controlling fleas. It should be noted that the proper use and regulation of the collar should be understood before placing it on your pet's neck. If your dog or cat is allergic to flea collars there are still many fine insecticides that can be applied to the animal in a powder or spray form. The more you know about the habits of the flea, the better you will be able to control them, so ask your veterinarian to explain the life cycle to you.

The mite family can also cause considerable skin problems. It is most important that these. mites be found and identified before treatment is started. The skin conditions the mite produces are usually called mange. Many medicines have been named "Mange Cure" medicines, but the fact is there is just no such thing as a general mange cure medicine. Therefore, seek help by proper laboratory identification before treating the suspected mange condition of your pet. These mites are all microscopic in size and in order to examine them they must be obtained by scraping deeply into the upper layers of the skin. Some of the mites are most difficult to find, so don't be surprised if your veterinarian wants to take several scrap-ings-and then may want you to return in a few days for more. Skin diseases caused by mites may or may not itch, depending upon the mite. Some are extremely itchy-while others may only cause a loss of hair. It is important to remember that there are all degrees of skin manifestations of mange and there can be, and often are bacterial, medicinal or self-excoriating complications.

Biting flies cause many problems to the ears of dogs kept outside in the warmer weather. Such skin conditions are usually recognized by small crusts of dried blood over the bite areas on the outside tips of the ears. It is important to make certain that these are not something other than fly bites. Preventative measures should be used along with the treatment.

Other biting insects such as gnats and mosquitos can plague your pets during the summer months. Individual animals vary with their sensitivity just the same as people. We still don't know the reason for this difference in hypersensitivity, whether it is because the individual pet lacks something in its body makeup to repel the insect or whether it has something extra in its make-up that attracts the insects. In any event, the best course to follow is to avoid or eliminate insects. Sometimes the latter is impossible. There are several medications for the skin that can be used locally and systemically to give your pet the needed relief.

Other insects such as lice, ticks and ear mites, plus some plant mites such as the harvest mite or chigger, may cause your pet to have skin problems. The ticks are readily seen and may usually be removed by grasping the head close to the surface of the skin with forceps. Do not try to burn the head out or use irritating substances that might do the skin more harm than the tick does.

Fungi diseases of the skin are usually not influenced by hot weather; however, there are more young animals during the warm weather months and much of the fungi or ringworm skin diseases are seen in young animals. Four of the fungi species that cause ringworm in animals may also cause ringworm in man. Therefore, if you notice a circular scaly area with a loss of hair on your pet, call on your veterinarian to make certain that it isn't a fungus disease. But whatever it is it must be treated properly.

Related to the fungi are the yeast families. This type of parasite family is usually quite harmless but once in a while, under ideal conditions, it may become pathogenic and cause problems with the skin. These problems are usually in the ears, on the feet, or around the body openings. The resultant lesions heal slowly even when treated properly, so here again it is best to know what you're doing before you start with a treatment.

## ALLERGIES

Dogs and cats, as well as many other animals, do have allergic problems that are manifested by skin diseases. The allergy can be one involving the respiratory tract, like hay fever in man, or it can just involve the skin, or both. The allergies we are mainly concerned with here are the ones that involve the skin. Usually the animal rubs, or scratches a great deal, especially around its face. The body can be completely involved and can vary from a minor rash to serious infected ulcerated areas due to self excoriations and secondary infections. There can be all degrees of skin
involvement on the same animal. The skin problem can be worse one time of the year than others, or it can be manifested all year.

The allergies are caused by antigens taken into the body through the respiratory tract, through the digestive tract, or directly onto the skin itself. If the veterinarian can determine the antigen, the problem can be solved. However, this would be most unusual, for the majority of skin problems are due to several antigens-many of which have not been determined. Skin testing can be done for various groups, but desensitization is not satisfactory unless it is a specific program working with a known antigen or antigens. Group skin testing may be worthwhile because certain groups, such as grasses or molds, can be eliminated by controlling the environment. The allergic skin diseases, known as atopic dermatoses, are usually treated systemically by giving antihistamines or cortisone to control (not cure) the problem. Prolonged indiscriminate use of cortisone should be avoided because this drug may produce many problems of its own.

Ofttimes the control of these allergic conditions is disappointing but most usually relief can be offered by your veterinarian. Remember it is an inherited problem, especially with some breeds, so investigate as much as possible the dam and sire of your next puppy or kitten.

## SEBORRHEA

Some diseases are aggravated by hot weather and one of these may be the seborrhea syndrome. This includes a mutliple number of variations of the seborrhea which is essentially a disease of the epidermis and sebaceous glands of the skin. This can be a dry scaly itching condition or a musty smelling oily skin problem. Eliminating other possible skin diseases and then concentrating on the problem at hand is the best approach by your veterinarian. Seborrhea skin problems are not easily solved and many may never be cured. However, proper diagnosis and treatment should give relief and frequently good control.

## SUNBURN

Believe it or not but animals do sunburn and this is especially true with animals having light colored hair and skin. There are some specific diseases that are aggravated by the sun and one of these is seen in white nosed Collies and another in cats with white ears. The Collie gets a chronic inflamed area over the crest of the nose. There is a loss of hair and often the area becomes red and very ulcerated. The cats with white ears seem to be sensitive on the
tips of their ears and this sensitivity may eventually result in chronic ulcerated areas that can progress into skin cancer.

Some owners have their pet's hair clipped during the summer months to help keep them cool. These animals may become sunburned if exposed to the sun's rays too intensely. It is always good to remember that hair insulates against heat as well as the cold.

In closing, it is well to remind the pet owner that good grooming will help prevent many skin problems. A well groomed pet means that the owner is caring for the animal properly and will often notice small problems that can be easily treated before becoming serious. Brushing stimulates the skin and consequently the production of sebum. Sebum is that natural body oil that not only gives the appearance of a sleek, well cared for pet but provides a protective cover to help maintain a normal healthy skin. Good grooming also includes not using irritating medicines on the skin before it is known what you are treating it for.

About the author: Victor H. Austin, D.V.M., M.S., is a member of the American Academy of Veterinary Dermatology.


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It works automatically by picking up the vibrations from the sound of the bark and at that very instant creates a startling sensation. The dog learns by association. He will curb his excessive barking habit immediately. The collar may remain on the dog as long as necessary. Occasional training periods may be desirable from time to time to reinforce the learning process. Completely safe - yet the most effective bark-training aid ever developed.
The tiny Bark-Training unit is about the size of a half-dollar coin and weighs four ounces, Model BTS (small siza) adjusts $8^{\prime \prime}$ to $12^{\prime \prime}$. Model BTL (large size) adjusts $12^{\prime \prime}$ to $18^{\prime \prime}$. For extra-large sizes, a Collar Extender may be purchased for $\$ 2.00$ which adds up to $12^{\prime \prime}$ to collar length.
The Bark-Training Collar carries a 90 day warranty against defects in materials, workmanship and long-life energy cell.
Factory to you price only $\$ 29.95$. For normal delivery, add $\$ 1.50$ for handling and postage or . . . for instant delivery, add $\$ 3.00$ for high priority handling and air mail postage. Pays for itself over and over again by eliminating the problems that can result from unchecked excessive barking.
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NOT COMPLETELY SATISFIED
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Or Money Order Now Toz

## QUESTIONS AND ANSWERS ABOUT THE <br> "SPAY" OPERATION

An exclusive interview with Dr. Robert M. Miller, D.V.M., by Animal Cavalcade's Jo Ann Grant.
Q. What exactly is a spay operation?
A. To "spay" is an old term which, in modern usage, means to remove surgically part of the reproductive organs. In livestock this usually consists of an ovariectomy (removal of the ovaries). In smaller animals an ovariohysterectomy is performed (removal of uterus and ovaries).
Q. Will having my pet spayed make her fat and lazy?
A. No! This is a common misconception. Obesity is primarily caused by an excessive calorie intake. There are many overweight, unspayed females around in both the human and animal species, so don't blame the operation. Many spayed females remain thin because it is their basic nature to be thin.
Q. Will spaying destroy my pet's appearance?
A. Exercise and a proper diet will keep your pet attractive and active. It is impossible even for a veterinarian to tell if a cat is spayed or not spayed by simply looking at it. Female dogs come into season only twice a year. During this time their ovaries produce female hormones. The rest of the year their ovaries are quiescent. In a sense they are physiologically "spayed" most of the time. This is the reason a male dog will not normally pursue a female except when she is in heat.
Q. Will spaying alter my pet's intelligence, personality, or disposition?
A. Absolutely not.
Q. What are the advantages of spaying?
A. There are many. First of course, the pet will not go through bothersome heat periods. She can never bear unwanted litters of young. She can never die of pyometra, common uterine infection. She will
almost never develop breast cancer, the most common malignancy of the bitch.
Q. Well, are there any disadvantages of spaying?
A. Yes, a few. First there is the cost of the operation. Secondly, about one out of every thousand spayed bitches will develop a problem of dribbling úrine. Fortunately, this condition, is easily controlled by periodically giving her some inexpensive medication.
Q. Speaking of expenses, isn't this a very costly operation?
A. Not really. The fee for spaying varies with the location and the economy of the area you live in. In most parts of the United States it will range from twenty-five to fifty dollars. Remember that this is an ovariohysterectomy, a major abdominal operation. It requires general anesthesia, and aseptic technique just as is used in abdominal surgery in human hospitals. Veterinarians refer to the spay as a "service surgery" and are traditionally aware that it is a non-profit operation. The veterinary profession has kept the fee to a minimum as a contribution to society and the control of excessive unwanted pets which flood our pounds. The fee barely covers the cost of anesthetics, labor, the sterilization of the instruments, caps, masks, gowns, and drapes used.

## Q. Is the operation painful?

A. Not at all. This procedure is done under anesthesia of course, and the major problem afterwards is keeping the patient reasonably quiet.
Q. Is there any danger in the operation?
A. There is always a risk when a patient, human or animal, is put under general anesthesia for abdominal surgery. However, the risk is very minor. There is certainly a far greater risk in the probability of the unspayed female developing pyometra, breast cancer, or obstetrical difficulties during delivery.
Q. I've heard that it is advisable for the pet to have one litter prior to being spayed. Is this true?
A. No! It is an old wives tale. It makes absolutely no difference to your
pet in any way whether or not she reproduced prior to being spayed.
Q. Well, it certainly seems as if spaying is a safe and practical operation. We were hoping, however, to have one litter for the children's sake.
A. Yes, that is a common feeling. But the children can learn about the reproductive process nowadays by visits to museums, kennels, farms, zoos, animal hospitals, libraries, and in schools. Or one may keep fish, observe nesting birds, or even hatch a fertile egg in toy incubators. It is beneficial for children to experience the miracle of birth, and watch the litter grow. But, when that litter ends up by being among the millions of unwanted pets destroyed annually in our pounds, the child can only be impressed by the low value which we adults sometimes place upon life.

## WHAT THE INDIVIDUAL CAN DO TO HELP CONTROL THE PET POPULATION EXPLOSION

1. Demand the passage of, and the enforcement of, leash laws.
2. Provide separate and severe penalties for allowing a bitch in estrus to be loose.
3. Publicize the fact that it is INHUMANE to produce more unwanted puppies and kittens.
4. Encourage higher license fees for dogs which are not surgically neutered.
5. Publicize the fact that "mismating" injections are available which effectively prevent conception in the bitch accidentally bred.
6. Encourage poor people to own fewer and smaller pets, and to own male rather than female pets. This will eliminate the expense of the spay operation.
7. Support financially the research projects now in progress to develop contraceptive vaccines and drugs for pets, and encourage humane societies, individuals, and veterinary associations to lend such support.
8. Publicize the advantages of spaying cats and dogs.
9. Destroy the myths about spaying which discourage people from having the surgery performed upon their pets.


## who says they fight

Superstition would have us believe that cats and dogs are natural enemies. But there are many examples of canines and felines who have adopted one another-as foster mothers and babes, as good pals or at least, as mutually accepted members of the same family.

Whether you now have a dog and are planning to bring home a playful kitten, or whether Kitty has been on the scene for many years and you've decided to take on the care and feeding of a frisky puppy, here are a
few tips to help insure the friendship gets off to an amiable start.

Naturally getting a new pet is not an everyday event-particularly for children. But, no matter which animal is the newcomer, don't get him overly excited on the first day in his new home. He should have an opportunity to explore his new surroundings quietly and slowly-this applies to both the house (and/or yard) as well as to the members of his new family. Kittens, in particular, can become frightened from too enthusiastic a reception. (And then you'll have
trouble getting them to come out from their hiding place-perhaps under the couch or behind the water heater!)

It's a good idea to keep your dog and cat apart for a few days-until they become accustomed to one another's scent. When you do decide to let them meet-eyeball to eye-ball-keep their first encounter a short one. Don't put out a single food dish for both. In some cases it's even a good idea to feed them in separate areas or rooms ot at separate times.

Certainly you shouldn't run the risk of unnecessary problems by leav-


## like cats and dogs?

ing them alone together until they've become friendly and shown ample signs of being able to play happily together. This can happen. There was a St. Bernard in Malibu, California named Barney who used to curl up before the fireplace in the evening-his paw gently resting on the back of a very fair Siamese named Cinderella. The two were inseparable buddies and Cinderella was never put off by Barney's size and weight-a mere 200 lbs. to her 6 .

When you introduce a new kitten or puppy to an older pet, be sure to
show the latter some special affection (much as you would an older child when you bring the new baby home from the hospital). Eventually, the mature animal will usually show a protective attitude toward the younger one. Kittens are particularly happy to make friends with just about any-body-if they're introduced cautiously in the beginning. Let your cat make the first overture. It's also a good idea if there's someplace Kitty can climb. She doesn't like to feel cornered.

Most veterinarians do not accept the idea that instinctual animosity
between certain animals is valid. It's their belief-and verified by numerous examples-that even grown animals can learn to get along and accept species other than their own.

The pictures on these pages show cats and dogs who've crossed the "species gap". In later issues, we'll show cats with other friends-birds, mice, even an elephant-and dogs with animals other than cats-raccoons, owls and even lion cubs. Perhaps, the human species can learn a lesson or two about "bridging gaps" from examples in the animal kingdom.


A protective Persian has her arm about a trusting pup. Photo by Louise Van Der Meid


Mama Lion is watching the action as two pups in her custody enjoy a little outdoor fun.

Photo by BIPS
What dog could resist that angelic feline glance?

Photo by John Bright



> "memory tests" for dogs
> By Michael W. Fox, Ph.D., B. Vet Med., MRCVS

Dog behind plexiglass screen (above) watches where the experimenter puts
food-in one of two boxes. He has to remember where the food has been put. A solid screen is then slid over the plexiglass screen for some time before the dog is released. This is called the delayed response test and is one of the best

Intelligence might be defined as the ability to use or call on past experiences in adapting to a new situation or in dealing with a new problem. As the late Dr. T. C. Schneirla of the American Museum of Natural History has emphasized, intelligence is not efficiency in adaptive behavior, for all living animals reveal this. They avoid excessive cold, heat, pain and so on. Intelligence is an ability which an individual inherits from its species-a capacity which is indeed innate or genetically determined but which has never been measured completely in man or animals. The innate potential of intelligence cannot be measured, because intelligence as it develops is affected by the environment-by the experiences an animal has as it matures.

To say that one breed of dog is more intelligent than another is absolute nonsense. Drs. Scott and Fuller, for example, in their extensive studies of several breeds, conclude that they are of very similar intelligence provided that in the intelligence tests used one allows for such things as differences in physical size, agility, stamina, sensory abilities and emotional reactions which may interfere with performance. An extreme example would be to assume that an Afghan hound is of inferior intelligence compared to a German Shepherd because the Shepherd performs so well in obedience trials after only a few lessons while the hound needs countless lessons is tot-
ally unfounded. The Shepherd may simply be more trainable than the Afghan hound, but trainability is not a direct measure of intelligence.

One breed of dog might have some superior sensory ability such as keen ear or nose. To compare this in terms of which is the more intelligent with another breed that might have a good eye would be spurious.

Intelligence is influenced indirectly by such things as emotionality and early experience. An extremely overfearful dog is much harder to train than a more "balanced" individual, but one who is too phlegmatic and easygoing may be suitable for certain tasks, such as guiding the blind.

A dog that has not been properly socialized, not sufficiently "bonded" with its owner early in life, is often harder to train than a well-socialized dog. Socialization clearly influences trainability rather than intelligence. I once worked with a strain of Beagles that were not well socialized, and some of my students have attempted to train some of my wild canids, such as golden jackals, that were socialized only to me: They seem to learn nothing and they are well-nigh untrainable. It would be easy to pass them off by saying that they are stupid, but in reality, they are literally untrainable.

The idea, therefore, that certain breeds of dogs differ in their innate intelligence is scientifically untenable, unproven. And it remains so, for we have not yet fathomed or developed
the full genetic capacities of any breed through environmental programming early in life. Perhaps the superdogs of legend and myth are really everyday, "average" dogs with the same innate intelligence, the same basic capacities as our own. But they have been raised and constantly exposed to an environment conducive to the fullest flowering of their genius, which lies dormant in the majority of their fellow species.

There are, however, specialist breeds of dogs, comparable in a sense to the highly evolved specialist bats, bees and moths. Man has, through artificial selection, developed certain breeds of dogs which, like the various races of man, share identical basic characteristics yet differ on the basis of a few specialist traits such as enhanced trail-following ability-a superior nose or a good ear or eye. These are innate traits or characteristics, the frequency of which is increased by artificial selection in certain breeds.

Other "natural" traits may be enhanced or exaggerated through natural selection so that their frequency is extremely high-indeed, characteristic of a particular breed. Thus, we see pointing in a more exaggerated form and in more individuals of the Pointer breeds than in Poodles or Fox Terriers, which also point but less obviously and less frequently. Thus, different breeds of dogs, like different races and cultures of man, differ in the degree to which they use their sense organs and in the way in which they display, move and communicate nonverbally. The anthropologist E. T. Hall points out that there are cultural differences in our tolerance for proximity with our fellow men. The same is true as a consequence of artificial (genetic) selection of the various breeds of dogs. Some breeds find it difficult to endure the close proximity of others, while others, notably the pack hounds, are more tolerant. Cultural "phenocopies" in man of these genetic differences in dogs are the gregarious contact peoples of Arabia and South America (the Beagles) and the noncontact peoples of North America and northern Europe (the Terriers).

The above rather general discussion should be sufficient to clarify the constant questions concerning differences in absolute intelligence and in specialist traits in man and dog. Cultural evolution, on the one hand, and domestication and selective breeding, on the other, have produced a diversity, a mosaic of similarities and of differences in both dog and man. Also, a wide range of potentials lie dormant in some breeds and races, while in others they have been fully developed. Consequently one breed or race may appear superior to another, but such comparisons are erroneous. One may
simply be more specialized, more perfectly adapted to a particular terrain, climate, way of life, or role.

The same holds true when we ask the question, "Are dogs more intelligent than cats?" or "Are men more intelligent than fish?" Cats are more perfectly adapted to tree climbing and fish to water; they are specialists in their own right. We might try to measure their intelligence with a few tests, as psychologists have done in the past. But the tests may favor a "specialist"; for example, a rat can learn a complex maze faster than other superior mammals, including young human beings! He is naturally adapted to mastering the layout of particular terrain and has a great ability to learn spatial relationships between objects. This could be an insurmountable problem for a different species that specializes in a different kind of learning. Squirrels and foxes, for instance, must have a good place-learning ability, for in nature they learn where their food caches are, or at least a rough approximation of their location, while a browsing animal such as an antelope or cow, never having evolved this particular learning skill or aptitude, might perform poorly in a learning test of place remembering.

Differences in intelligence per se have been demonstrated by comparing the learning abilities of various animals such as fish, mice and monkeys. Chimpanzees can perceive complex relationships about as well as a three-year-old child. Animals generally lack abilities to abstract and to deal with relations between abstractions. These abilities are more or less unique to man, who is also almost exclusively endowed with abilities of self-reactive reasoning, foresight and time-binding or reasoning with reference to problems in the distant future. These abilities are extremely primitive in both dog and chimpanzee. The late Professor Wolfgang Kohler was able to demonstrate insightful behavior in some chimps. A subject unable to reach some bananas would suddenly switch from random behavior and come up with an immediate solution; he would stack up boxes or slot poles together (that he had previously manipulated in an aimless way) so that he could get at the bananas! Great dexterity coupled with such insightful behavior, plus the ability to learn from others through imitation, makes the chimpanzee an extremely intelligent animal.

Dogs and cats are certainly limited because they are far less dexterous, yet both dog and cat can learn through imitation and they have a good memory for place learning and are very skilled at making visual discriminations. I have heard of one dog that showed insightful behavior comparable to Kohler's chimps. This dog suddenly
solved the problem of getting over a gate between the kitchen and living room (where he was not supposed to go) by moving a small stool over to the gate, which enabled him to surmount the obstacle with ease! Dogs can learn to manipulate levers to press bars for reward, but they are incapable of assembling tools as the chimpanzee can; so the question remains-are dogs more intelligent than their inferior motor abilities would lead us to believe?

Some animals in nature use tools of various kinds. Chimps will use twigs to "fish" for termites and sticks as weapons against larger predators such as leopards. One species of Darwin's finch on the Galapagos Islands uses a cactus thorn to spear grubs from inaccessible crevices. The sea otter will lie on its back with a flat "anvil" pebble on its chest and use another stone to beat open abalone shells to get at their delectable meat. Similarly, various birds such as the European thrush will use a particular stone as its anvil against which it breaks open garden snails.

Some of you may have seen carnival shows of monkeys or pigeons playing a piano or even competing in a soccer match. These animals are not showing superior intelligence or insightful behavior; they have simply been conditioned to perform a series of irrelevant acts in order to get a good reward. These acts are strung together by the trainer, so that to the observer the sequence looks like a formidable performance. A rat can be trained to release a rope ladder, climb down it, jump over a hurdle, let down a drawbridge, and fire a cannon when you put a dime in the box which activates a red light which is the signal for the rat to perform. His final goal is not firing the cannon but a tiny pellet of food that is dispensed after he has fired.

But very often an "instinctive drift" occurs, where the animal tends to revert, in spite of careful training, to his natural behavior. For example, a pig that is given a food reward after it has picked up wooden disk "pennies" and placed them in a large piggy bank may eventually "short out" and start holding onto the pennies and chewing on them. A chimpanzee will work for poker chips as tokens which it can then trade for food. They have the ability to make such associations and can even learn that a yellow chip is worth more than, say, a green one. To a limited extent, a dog can make this type of association. He is able to initiate the secondary stimulus by bringing his leash when he wants to go for a walk.

Animals are extremely perceptive, and a skillful trainer can make his audience think that his animals possess
superior intelligence-that they can count, do complex mathematics and so on. The trick is simple. The trainer gets his dog, horse or elephant to nod its head or foot repeatedly until he gives a very subtle and imperceptible signal; he may raise his eyebrows, smile or move his hand slightly. Many people encountered the legendary horse Clever Hans, to whom they would give some difficult mathematical problem. Hans would start tapping his hoof and stop when he came to the answer because he was able to detect a subtle signal from his trainer or a slight change in body tension in some of the observers when he had given the correct number of taps!

But there still remain some uncanny feats that defy our rational minds-cases of dogs and cats being lost or abandoned somewhere and then after many weeks suddenly finding their owners who have moved to a completely new home.

There has been recent speculation about "smart pills" and hopes that certain drugs might increase intelligence. Some drugs such as caffeine, amphetamine and benzedrine do improve problem-solving abilities by making the subject more alert; learning and recall might also be improved. Caffeine and amphetamine, for example, have been found to improve a dog's ability to follow a trail. But as yet there are no pills that will increase the IQ.

I should mention two other points relevant to our understanding of intelligence. Dogs, cats and monkeys respond to a mirror, as do chimpanzees and people, but so far, only people and chimpanzees show self-recognition. Other animals tend to show species-recognition but do not seem to realize that it is their own reflection in the mirror. Apparently only chimps and human beings will use the mirror to groom themselves.

The second point is one of esthetic perception. Dr. Schneirla feels that there is evidence for a primitive esthetic perception in primates, for they will spontaneously paint with clay, drape objects such as leaves or banana skins on their bodies, engage in hand-in-hand dancing and drum on a log. Desmond Morris, in his studies of painting by chimpanzees, suggests that some definitely show esthetic appreciation in the colors they select. It is doubtful, however, that dogs have an esthetic sense, although they will seek out a soft couch, a warm place in the sun and avoid raucous music. They may, though, have a sophisticated esthetic appreciation for certain odors which we certainly do not share; they delight in rolling in carrion and other materials that we find repulsive but that they consider extremely attractive.

## OPEN WIDER please

Felicia Ames,
Friskies Nutrition Research Kennels


A loud wail from Junior's room sends you rushing to his aid. No, he hasn't dropped his guitar or knocked over the bird cage. Rather, he just discovered that Rover, the family's 10-week old puppy, has converted his favorite leather jacket into a giant-size teething toy: Unfortunately, many dog owners are unaware of their pet's teeth until some prize possession has been chewed up or until he has to be evicted from the living room because of B.B. (canine halitosis)! However, if you want to protect your dog's health-as well as his teeth-begin now to pay attention to his dental hygiene.

Many pet owners assume their dog's teeth require little, if any, special attention. This is simply not true. While regular visits to your veterinarian will usually include a dental check-up, its a good idea to be on the alert for possible teeth problems. Many of these can be avoided by a program of systematic home care and periodic professional dental treatment.

The build-up of tartar along the gum lines-both just above and just below it-is the most common canine
oral problem. (This hard, brown residue is a layer of organic and inorganic substances generated by chemical activity between the dog's saliva and his food.) If the tartar isn't removed, it can cause inflammation, infection and eventually the loss of a tooth or several teeth. In some cases, the infection will spread to the bone of the jaw and may be difficult to cure. Also, other complications can occur if the bacteria around the infected tooth enters the blood stream.

To minimize the accumulation of tartar, use either plain water or a mild salt solution in a rubber ear syringe and rinse away the particles that lodge between your dog's teeth. To clean the teeth, a soft bristle toothbrush or a Turkish towel will do nicely. Brush or rub gently from the gums down as tartar is always heaviest along the gum line. Dogs whose mouths have been neglected may object to such dental attention. Better to avoid an "argument" by getting your dog accustomed to a weekly dental session from puppyhood.

If your family has ever hosted a
litter of pups, you know they're usually born without teeth. The situation quickly changes. At 4 weeks, the first temporary teeth appear. By the end of two months, all 28 temporary teeth are in. Permanent teeth begin to appear at about 14 weeks. From six to seven months old, your puppy can boast a full set of 42 permanent teeth (though only 40 in some short muzzled dogs).

It's wise to keep in mind that certain diseases and dietary deficiencies in the early months of a pup's life can cause permanent and irreversible damage to the enamel on his teeth. Distemper in a young pup (assuming he survives) may cause oral difficulties later on. The damaged teeth will have rough surfaces and yellow-brown stains that can't be removed, and the enamel may be incomplete or thin. These teeth tend to fracture easily and their rough surfaces invite tartar accumulation. In addition to distemper, hepatitis, leptospirosis and other intestinal parasite infestations can also interfere with the normal development of enamel.

Remember that once the enamel is formed and the teeth erupt, nothing can be done to change it. It is therefore, very important to make sure your puppy has a nutritious diet and receives the necessary inoculations: on time.

A teething baby and a teething puppy have some things in common-such as the habit of putting any and everything into their mouths! However, permanent canine teeth, unlike baby's, emerge in front and not directly underneath the temporary teeth. So, if a dog's baby teeth haven't fallen out by the time permanent teeth are half-way out (or, if there's a sign of inflammation around the base of the teeth), check with your veterinarian. He may suggest pulling the temporary teeth to prevent food from being trapped between the teeth. Also, pressure exerted on the permanent teeth by the baby teeth can weaken the enamel and leave the teeth open to future damage.

Adult dogs may have other oral problems. Briefly, these include: 1) Caries (cavities) are rare in dogs but they can happen-about $6 \%$ of dogs have them. If your dog drools excessively, carries his head to one side and shies away from his food dish, he may be suffering from a toothache. Check out your suspicions with your veterinarian. 2) A running sore on your dog's muzzle below the eye may indicate a dental fistula. (An abcess around the root of the tooth.) This problem can result from an injury to your dog's face but more often results from a fractured tooth. Whenever you notice your dog has a cracked or chipped tooth, take him to your veterinarian. Infection can spread if not stopped quickly. 3) Malocclusion is rare among dogs in general, but sometimes Bulldogs and other short muzzled breeds may have a jaw structure that lacks space for all 42 teeth. In this case, the pressure of one tooth on another may cause some of the teeth to be out of alignment. Conversely, dogs like the Collie, with extremely long muzzles, may have too much jaw space. The teeth may then shift or fail to line up properly, resulting in an incomplete closure of the mouth. Left unchecked, this condition can lead to broken teeth or irritation of the gums and jaws.

Doggie bad breath is offensive! Don't subject yourself or your neighbors to an unpleasant smell everytime Rover comes over to play. Your dog's breath should have a neutral odor. If not, check the problem out with your veterinarian. It may be dental.

If your family pet is older than five years, he may be more prone to teeth problems. Years of gnawing and chewing wear down his teeth, and his gums are more susceptible to infection.


Don't neglect your dog's teeth. Regular care by your veterinarian will prevent tartar accumulation and sore mouth.

## Photos : Courtesy of Friskies

Post these dental hygiene tips on your mental bulletin board to insure that ybur dog's teeth stay bright, white and healthy:

- professional removal of tartar on a regular basis
- a teething puppy will have itchy, sensitive gums: give him a rawhide bone or a nubby hard rubber ball to chew on; DON'T give him anything he can really chew (what's chewed is swallowed); NO, NO's: soft rubber objects and plastic toys
- A cold, raw knuckle bone (not a sharp one that can splinter) will help relieve the congestion of red, swollen gums - common among teething puppies; when baby teeth begin to drop, your puppy has an even greater need of bones. Give him one every day; the chewing and gnawing will aid the loosening process of his baby teeth and reduce the possibility of extractions
- baby teeth fracture easily; refrain from rough, tough games with your young puppy
- give your grown dog a raw knuckle bone for an hour at least once a
month. Confine him to the yard or kitchen; bones are messy. Permitting Rover his bone all week does nothing more than wear down the tips of his teeth; NEVER permit him to chew on pork, poultry, steak or rib bones
- offer your dog dry, hard biscuits every day; these will help maintain healthy gums and white teeth
- a carrot, an apple or a stick of celery after meals will help reduce tartar

Even the most careful dog owner may have to confront the unexpected. A 5-year-old mixed Dachshund-Beagle named Snoopy injured one of his canine teeth in an automobile accident. His distressed owners asked their veterinarian to cast a gold crown for the fractured tooth. Now Snoopy's "golden" smile has added to his social status in the neighborhood; even the local canine Lucys are being a little less critical!

The time you invest caring for your dog's teeth will pay off-not only in his dental health but in his well-being and vitality.

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## feeding your backyard



I recently visited a family that had owned two backyard ponies. Both animals had suffered severe attacks of indigestion. In fact, the attacks were so serious that one pony died. the other will require a lengthy convalescent period and chances are high that it will develop chronic laminitis (founder).

It was a sad experience for people who had assumed they were providing only the best of care for their animals. And with the ever increasing interest in backyard horses, more and more reports of similar experiences are being received by veterinarians everywhere.

Improper feeding practices are the main cause of health breakdowns in backyard pleasure horses and ponies. Diseases resulting from improper eating probably outnumber all other diseases combined. This is why knowledgeable horsemen place so much emphasis on correct equine nutrition.

One reason so much digestive disorder occurs in horses is the size of the animal's stomach and the fact that horses never seem to learn not to overeat when they have access to unlimited amounts of feed.

Horses are strictly herbivorous animals. Their diet must consist totally of feeds from plant origin. And even though their stomach is rather small and they have no big storage compartment as do cows, they can and do consume large amounts of good quality hay.

Of course, horses that are being worked or exercised vigorously need to consume more feed to supply the increased energy demands. But this is often where trouble arises with the
backyard pleasure horse.
Most such animals are allowed to go for long periods without being worked. And when the interest of a young owner is directed primarily to horseback riding, it's usually overdone, and without either proper conditioning or adjustments in exercise and feeding.

I know of no set formula for feeding a horse. I have always felt that a horse should be fed as an individual animal. Even in large stables where many horses are kept, almost all have different eating habits and nutritional requirements. As the old saying goes, the good horse husbandman will study the "bottom of the trough" rather than the horse when it comes to feeding practices.

A horse's digestive system is so arranged that it must not be fed finely ground rations. In fact, if the animal's teeth are sound, an occasional feeding of unground grains is highly recommended.

Horses should never be fed from the ground or from buckets or tubs. A wooden, box-type manger, placed about chest high, seems to be the most desirable arrangement. Hay should always be placed in a rack to aid in the control of parasites. (Of course, it's true that some hay will be dropped and eaten from the ground, but the manger arrangement will keep this to a minimum.)

It's always a good idea to provide any horse, and especially the backyard horse, with access to salt.

Horses are also peculiar in water requirements. A horse will not drink adequate amounts if the water is ex-
tremely cold. Fresh water should always be provided in the stable even though troughs or streams may be in the paddock.

Spring presents a particular problem for many backyard horses. During that season, many horses suffer from digestive upsets caused by overeating green grass.

If a horse is allowed to be grazed on lush forages, it should first be conditioned. Horses should never be allowed sudden access to unlimited lush grazing after having spent the winter on rations of hay and grain.

Some of the sickest backyard horses I've seen were those that had been fed the cobs and shucks of fresh corn. Hulls of green peas and beans are also dangerous to the backyard horse and should never be fed. And it should go without saying that moldy feeds of all kinds must be avoided.

One authority has suggested that horses in the habit of gulping their feed tend to develop colic. He suggests spreading the feed out in the trough and placing a few ball-sized stones in with the feed so that rapid eating by the animal will be stopped.

If thus far in this article I have given the impression that intestinal upsets, commonly referred to as colic, are a mild problem for horses, then I should now emphasize that there is nothing mild about them. They are extremely serious and will cause violent symptoms in horses.

The affected horse will lie down and roll, trying to ease the pain. A veterinarian should be summoned quickly, and the horse should be kept up and walking until he arrives.


## winning isn't everything

LARRY and Kathy Baxter are losers and proud of it. For more than a year they trained, conditioned, battled freezing cold, wild Alaskan animals and a deflated pocketbook for a chance to race in the Anchorage, AK, World Championship Dog Sled Races.

And they lost.
But they did race and neither came in last-and for

TOM BAILEY, formerly on the staff of SOLDIERS, is Assistant City Editor of the Birmingham (AL) News.
a couple of Alaskan greenhorns like Larry and Kathy, just being there was almost as good as winning.

The story of this first lieutenant, his wife and their menagerie of sled dogs began 2 years ago at Fort Richardson at 4 p.m. on a November day

It was already dark when they reached the dog pound. "Larry and I both had grown up with stories and dreams about sled-dogs crossing the Alaskan tundra and now that we were finally here we wanted a Husky," Kathy recalls.

The Baxters quickly picked up

## the basics of mushing-

## both in terminology

## and equipment.



Coming up fast, another team tries to pass Larry during race, far left. Center, the Baxters' son gets started early as he watches the dogs from his mother's back. Above, Larry leaves the starting line at the World Championship.

By Tom Bailey

## Reprinted Courtesy of Soldiers Magazine

"Twenty homeless dogs clamored for our attention but this particular young Husky just cocked his head and held up a paw. Without hesitation we shook on it and soon Skeena was with us in our little car, his wet nose thrust between the two front seats."

About the time snow started falling at Fort Richardson, Larry began talking about "a couple more dogs and a sled." And then one afternoon Larry came home wearing one of those grins she knew too well. "A man in my office belongs to a sled-dog club here,"
he said. "They have their own kennel and plenty of trails to run. He says he knows a captain who wants to sell a sled . .'
That evening Larry and Kathy were proud owners of an honest-to-goodness dog sled. "We hooked Skeena to it and Larry ran out front coaxing him on while I stood on the runners and yelled 'Mush!'" said Kathy. "I discovered later that nobody says 'mush' anymore —it's usually 'hike!'"

A week later the "man from the office" admitted
he was financially pressed and needed to get out of the sled dog business. Next evening Blu, Star, Ginger, Tilly, Scamp, Princess and Felix received their dinner from the Baxters.
They joined Ship Creek Musher's Club. It was small and they soon found out why: "You have to be crazy to be in this business," another member explained. "How many people do you know who would come out here every night, often at 20 below, to feed and run a bunch of dogs?"

Learning the Ropes. That first winter was spent making equipment and learning about sledding. Kathy made the dog harnesses on her sewing machine. Each dog had to be custom-fitted.

The Baxters quickly picked up the basics of mush-ing-both in terminology and equipment. First, dogs are guided like horses-"Gee" for right, "Haw" for left.

To slow or stop the dogs there is a foot brake. To keep them stopped there's a device like a boat anchor.

Even before they had basics in their heads the Baxters were on the trail. They soon learned that even a routine run may turn into an adventure.

Take, for example, the chilly February night when Larry decided to take his then 7 -month pregnant wife for a pleasure ride.
"We were moving at a good pace and rounded the first bend without incident," said Kathy. "Suddenly I heard a strangled sound of surprise from Larry and the dogs came to a halt. A huge, dark shape crossed my line of vision. 'What's going on?' I asked.
" 'Moose', Larry answered, probably wondering how I could have failed to recognize the animal as it walked right over us. Skeena lunged, and with an angry grunt the moose did an about-face and trampled over the lines again. Larry found himself eyeball to eyeball with half a ton of angry animal. I just sat in the basket with my mouth hanging open.
"Larry pushed my unwieldly frame out of the sled into a snowbank. I clutched my stomach which began to cramp and Larry groaned."

The moose watched for a while-it seemed an eternity to the Baxters-then ambled off into the woods.

Next day they discovered Skeena had removed a sizable chunk of hair from that moose's leg.

Building a Team. Later that month the Fur Rendezvous came to Anchorage. It's an annual event commemorating those wild and wooly days when trappers brought their furs to trade. A few trappers still do come for that purpose but mainly the event is a rollicking week of merriment, climaxed by the World Championship Dog Sled Races.

The Baxters were there but not racing. Standing along the race route, feeling the excitement of the crowd and racers, Larry muttered, "I'm going to run that race next year."

A search for the right dogs began immediately. "I went all over the state looking for dogs," Larry said. "You don't just pick up dogs of professional caliber at the dog lot."


Summertime and the sledding is hard in the Northlandbut the Baxters keep their dog teams in shape by hooking them to a cut down car.

And there's where the money problem came in. His highest priced dog cost $\$ 700$ and several others cost $\$ 100$ or better. But the Baxters learned that it wasn't the original cost, it was the "pupkeep." The dogs would go through a 50 -pound bag of feed a day and, at $\$ 6.50$ a bag, that mounts up in a hurry.

Even the coming of summer didn't stop training for the race. A stripped-down car was used for summer training with the Baxters riding cross country urging on their team.

Trials on the Trail. By November winter had returned and of course that meant racing season. World Championship isn't the only race of the year. First there was the one in which Larry gave his lead dog a "gee" instead of a "haw" and ended up tearing through the bushes, over boulders, through a gravel pit and arriving at the finish line ahead of the other racers. It was hard to explain that short-cut to the judges!

Then there was the time one of his dogs slipped out of its collar, the dogs started fighting and the sled turned over, all within 200 feet of the starting line.

And then there was Kathy's racing debut, on a day of -2 degrees and up to 50 mile-per-hour winds.

The judge gave Kathy the go and her parka blew off. She was already passing other sledders when they overtook another team in a narrow pass. But rather than moving to the other lane, lead dog Sally decided to pass on the right, straight through the bushes. Two

sleds, six dogs and two novice mushers found themselves in a tangle.

Kathy finally staggered across the finish line-exhausted, disgusted and frostbitten. But Larry was jubilant: "Four more seconds and you'd have had a trophy!" he shouted.

Big Moment. When February rolled around, the Baxters were ready for the Fur Rendezvous. For weeks they had raced the dogs every evening while undergoing an informal physical fitness course themselves.

The morning of the big race, Larry and Kathy were up early-checking batteries in the transistor radio they would carry to hear how they were doing as the race progressed, double checking the harnesses. "Then of course we had to prepare special joy juice for our dogs," said Larry. "It's kind of a psychological thing, maybe more so for the musher than the dogs. But anyway, you mix up this bouillon for the dogs so they're not thirsty in the race. Otherwise, they'll eat snow along the way and this will slow you down."

In the Rendezvous race the sleds leave the line at 2-minute intervals racing against a stop watch. If a racer passes another team on the trail he knows he has gained 2 minutes on the team he passes. Passing a team is almost necessary to win. But it isn't always easy. Often the trail is narrow; the snow is slushy and the competing dog teams sometimes stop to fight or play.

The World Championship is divided into a men's and a women's division. Larry's was 75 miles long over 3 days; Kathy's, 36 miles over 3 days. There were 19 teams in Larry's race and 12 in Kathy's.

When Kathy's race was called she was "slightly terrified."

But then she was out there on the trail, roaring to the dogs at the top of her lungs. "But they didn't pay much attention," she said. "They did pretty much what they wanted to."

And when the contest was over she was scratched, exhausted, soaked, but happy just to have finished.

On one turn, with the dogs hitting top speed, the sled tipped. She held on and was dragged over a big rock before she could get the sled righted.

On the home stretch the snow had melted, leaving about 150 yards of icy water for the racers to navigate. "But I slushed through it," said the determined little blonde. "My Labrador panicked and I had to lead the dogs through the water to the finish line."

Then it was Larry's turn.
The first 2 days he finished in 11th place. The third day was a mixture of elation, frustration and despair. "I started fast and was second to the leader at the first check point," he recalls. "I could hear on the radio how I was doing. Soon we caught up with teams 10,9 and 8 . I was right on their tails."

He passed 10 and 9, but before he could get around 8 they entered a wooded stretch. "The driver of team 8 pulled his whip and my dogs were afraid of the cracking noise," he said. "And they just stopped."

Then two of his own dogs slipped out of their harnesses and while he was fixing them, 9 and 10 passed him. Finally he caught up with the team with the whip again. "I finally got past him," said Larry. "His dogs just wouldn't go for him anymore. He was about a mile from the finish line and so mad that he ran the rest of the way. I thought he was going to have a heart attack."

Larry neared the finish line. There they were, 8,000 cheering fans, radio commentators, television cameras, all focused on the Army lieutenant in his first World Championship. Exhaustion began creeping up but he kept running, kicking the sled, screaming encouragement to the dogs, pushing everything to the limit for those few extra seconds.

And then he was across the line. Results were not long coming-he had lost. But, he says, it was worth every penny, every minute of training, every bag of dog food, every inconvenience a pack of dogs can bring.

Neither he nor Kathy finished last. And for rookies, that's something to brag about.

The Baxters won't be racing this year. Larry's in Thailand, finishing his 3-year tour of duty, and Kathy's back home in New York with the dogs they didn't sell.
"But we'll get back into it sooner or later," they say. "Maybe just in New York for ourselves or-who knows -maybe in Alaska again."


## Whal's your suess....meat or cereal?

If you guessed meat, you're only partially right. Because you're also looking at a lot of cereal. Don't be fooled, that isn't ALPO.

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Read the label! No one has yet devised a way for cereal to look like meat on a list of in-


FOR
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If you want what you pay for, read the labels first. You'll find out what millions already have.

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