NOV/DEC 1975 60¢

THE ANIMAL HEALTH MAGAZINE

HAPPY HOLIDAYS

VETERINARY DIAGNOSIS CARE OF THE REJECTED KITTEN LOOK OUT FOR EYE DISEASES IN YOUR PUP

EDITOR'S NOTEBOOK



EDITOR'S NOTEBOOK **'TIS THE SEASON**

As the holiday season approaches, we have pleasant thoughts and reflections of the recent months and years. Inevitably, some of the warmest recollections relate to animals we have encountered or owned.

It is a time to sort of pull the strings together and prepare for another year. We are hopeful that our readers will devote a little extra time and thought to their animals, being sure they are in comfortable quarters, properly fed, and their health protected.

Faithful, contributing members of the ANIMAL HEALTH FOUNDA-TION, are protecting hard earned savings during these burdensome times and, yet, are lending strong support to the FOUNDATION in its promotion of better health for all animals. The ANIMAL CALVACADE magazine is one of the non-profit, educational programs of the FOUNDATION.

Our readers will find elsewhere in this issue of Cavalcade, interesting means of providing better health for animals, without 'pain' to the thoughtful donor.

Here's wishing all our readers the best of health for themselves and their animals during the memorable Bicentennial Year of 1976!

> C. M. Baxter, D. V.M. **Editorial Director**

URGENT!!!

Please notify Animal Cavalcade when you move! Failure to do this costs the Animal Health Foundation funds which should be spent on caring for sick animals or for veterinary medical research.

Send change of address information to Animal Cavalcade, 8338 Rosemead Blvd., Pico Rivera, Calif. 90660.



Official Journal of the Animal Health Foundation on animal care and health.

.

NOV/DEC 1975

Volume 6 Number 6

ARTICLES

The How of a Diagnosis, C. P. Ryan, D. V.M
Caring for the Orphaned or Rejected Kitten, Jane Taylor 10
Problems with Tabby, Ruby Harris Arnoth 12
Be on the Lookout for these Eye Diseases in your Dog 14
Pannus in Dogs Studied 15
"Giving Power" 16
A Look at Canine Behavior, Michael W. Fox, M.R.C. V.S., Ph.D 17
How to Raise a Happy Hamster, Sue Kizer 18
A Marble Sarcophagus for a Pretty Cat, Mary Wells Geer 21
Solving Birth Defects in Cattle
Pet Doctors Respond Around-the-Clock
Cage Birds Need Special Attention Now 29
Can Cats Be Trained?, Louis J. Camuti, B.S., D.V.S

DEPARTMENTS

Editor's Notebook	 3
Doctor's Advice	 4
Cavalcade Health News	 6
Children's Page	
When Pets Were Gods, Letha Curtis Musgrave	
Book Review	 31

C. M Baxter, D.V.M
Norene Harris
Millwood A. Custer, D.V.M
Charles H. Reid, D.V.M
Robert J. Schroeder, D.V.M Ecology & Public Health Editor
Oscar W. Schalm, D.V.M
Wesley A. Young, D.V.M Exotic Animals Editor
Bill Williams
Laura Tracy Advertising Director
Harry Maiden

Address all advertising and editorial communications to ANIMAL CAVALCADE. 8 338 Rosemead Blvd., Pico Rivera, Calif. 90660. All editorial correspondence and manuscripts must be accompanied by a stamped self-addressed envelope.

COVER:

Siberian Husky "Trisha" and American Short Hair "Long John." Photo by MikRon Photos - Mike Lidster and Ron Bona - Palo Alto, California.

SUBSCRIPTIONS AND CHANGE OF ADDRESS

Send subscriptions and change of address to ANIMAL HEALTH FOUNDATION, 8338 Rosemead Boulevard, Pico Rivera, Calif. 90660. Be sure to notify us of your change of address at least six weeks before the change is made, including an address label clipped from your latest copy. Give both your old and new address and include your ZIP CODE.

ANIMAL CAVALCADE is published bi-monthly by the Animal Health Foundation, 8338 Rosemead Blvd., Pico Rivera, Calif. 90660. Single copies \$.60. 12-issue subscription, \$6.00; additional gift subscriptions (if ordered at the same time), \$4.00 each. Copyright, 1972, Animal Health Foundation. 3

DOGTOR'S Advige

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.

Q. How should I get the hair mats off my long haired cat?

- A. Small hair mats can often be combed or brushed out; larger ones may require scissors or clippers. Frequent brushing will prevent them from forming and lessen the danger of the cat swallowing clumps of hair, with the risk of hairballs forming in the stomach or intestine.
- Q. Is the new vaccine for "acute sniffles" in cats available yet?
- A. I assume you mean the vaccine for feline rhinotracheitis, which has been available for a year or so. Your veterinarian can advise you on its usefulness in your particular situation.
- Q. Is there an explanation why many blue eyed cats and Dalmatian dogs are deaf?
- A. Blue-eyed white cats are frequently deaf because deafness is associated with the genetic factor for white coat color. Some families of Dalmations carry a gene for deafness, the specific cause of which is a defect in the sensory cells of the inner ear.
- Q. Why do gray horses sometimes get tumors around the tail?
- A. These tumors are composed of cells that produce melanin, a black pigment widely distributed in skin,

"BEST AVAILABLE PROTECTION AGAINST LOSS OR THEFT" Since January 1966. Dogs tattooed with Social Security number. Owner registered with NATIONAL DOG REGISTRY 227 Stebbins Road, Carmel, N.Y. 10512 Phone: 914-277-4485 varying proportions of which account for shades of gray to black hair color. Gray horses apparently have a genetic predisposition for these cells to go awry, since about 80% have such tumors by the time they are 15 years old.

Q. Why do cows swell up when they get indigestion and other animals don't?

A. Unlike horses, pigs and dogs, the cow (and sheep, goat, etc.) is a ruminant with a large forestomach (rumen) that stores grass and hay as the animal eats. This is later regurgitated and reswallowed after chewing, but a large accumulation of green forage, especially clover, in the rumen may undergo fermentation and produce gas which cannot escape, thus causing bloat, which may be rapidly fatal if not relieved by stomach tube or puncturing the animal's side.

Q. Why are some worms in horses called "blood" worms?

- A. The Large strongyle (Strongylus vulgaris) of horses is commonly called the bloodworm because its larval form enters the blood vessels supplying the intestine and causes occlusion, which results in formation of an aneurysm, a thin-walled distention that may rupture and cause death.
- Q. Do captive animals produce young that can be returned to their natural habitat to help populate the areas of endangered species?
- A. Generally not, or at least the young animals would have to be trained to cope with conditions they would encounter in the wild. This would be especially true for species like the large cats, which must learn to hunt, whereas a young bison might manage if added to a free-ranging herd.

Q. Should I bathe my dog in the winter?

A. A dog should have a bath whenever it needs one, i.e., whenever it gets dirty. Whether in winter or summer, you should be certain that the dog doesn't get chilled before it is completely dry.

Q. How should I handle an injured stray dog to take him to the doctor?

A. Approach the dog cautiously, since he may bite if handling causes pain, and be careful about exposing your hands, arms and face within range of his jaws. Use heavy gloves if available, or you can reach your hands into the sleeves of an old coat (and the coat in front of you will afford extra protection). Transport the dog in a box or wrapped in an old blanket, etc.

Q. Why are horses blanketed in the summer time?

A. Even with proper cooling off after exercise, a blanket would help prevent chilling under some conditions, e.g., a drafty or damp stable, and some hot summer days are followed by cool nights. A blanket also will keep the horse cleaner, and it provides protection from flies. The horse books of a generation or more ago all recommended that each horse have its own summer and winter blankets, and this still seems a good idea.

Q. Is it harmful to give aspirin to dogs and cats?

A. Yes, except in very low doses if recommended by your veterinarian. Aspirin may cause gastric bleeding in both dogs and cats. One 5-grain (adult) tablet will poison many cats, and 2 may be lethal. Even one "baby aspirin" may be too much for a small cat.

WHY NOT GIVE A MEMBER OF YOUR FAMILY "ANIMAL CAVALCADE" AS A VERY SPECIAL CHRISTMAS GIFT?

AS A COURTESY TO ITS SUBSCRIBERS, CAVALCADE IS MAKING IT POSSIBLE FOR YOU TO GIVE INDIVIDUAL GIFTS OF A TWO-YEAR SUBSCRIPTION FOR \$4.00.

BY DOING IT IN '75, YOU CAN SAVE MONEY ON THE '76 SUBSCRIPTION INCREASE.

CAVALCADE

A \$5,000.00 research grant has been given by a prominent breeder in Texas through the Animal Health Foundation to Dr. Pierre Lieux of Riverside.

Dr. Lieux graduated from the French Veterinary School of Alfort in 1949. After a stage at the Equine Research Station in Newmarket, England, he came to the United States in 1951. He first spent three years in Lexington, Kentucky with the firm Haggyard, Davidson and M. Gee. Then he moved to Riverside, California, where he established an equine practice.

Dr. Lieux's practice is almost strictly breeding oriented. This specialization within a specialty makes the everyday work very seasonal, and gives him some time to devote to practical research.

The purpose of the contemplated research is to explore the possible practical uses of endoscopic techniques in the broodmares. Human medicine has made giant leaps in the last few years with diagnostic and surgical endoscopes, particularly in the urogenital field. Similar techniques could certainly be applied to broodmares. Systematic explorations of ovaries, uterine ligament, oviduct and the uterus will be attempted on the standing patient, either through the flank or endouterine approach. The feasibility, practical diagnosis or surgery of ovarian conditions will be studied. Particular attention, if possible, will be given to examine the pathology of the oviduct, an absolutely unknown factor in the broodmare. While in the woman, the testing of the potency of this canal is a routine operation, it has never been done with the equine patient as the same techniques cannot apply.

The work will be done in its initial phase on broodmares given for this purpose to Dr. Lieux by several of his clients. When the techniques have proven to be safe and of practical use they will be tried on problem mares in everyday practice. The work will be done in Dr. Lieux's Equine Sterility Clinic, which is well equipped for this type of research.



Dr. Pierre Lieux

RAPID NEW DIAGNOSTIC TEST SIGNALS BRUCELLOSIS PERIL FOR PET CARE PERSONNEL

Every positive result from the rapid new diagnostic test for canine brucellosis, recently introduced by Pitman-Moore, Inc., is a warning signal to the veterinarian and his assistant – and to all other pet care personnel who might have had contact with such infected dogs – to watch for telltale symptoms of human brucellosis among themselves, the company cautions.

"There's no question the disease is communicable to humans," says Dr. P. R. Glick, Vice President – Marketing for Pitman-Moore, Inc. "Although only a few isolated cases have been reported, we're sure the new in-office test will pick up many cases among dogs, not previously diagnosed, and consequently this may pose a threat to humans who've been in contact with those animals. Professional pet care personnel will be most vulnerable – veterinarians, S.P.C.A. and animal shelter workers, kennel and pet shop personnel, dog handlers and trainers."

Unlike cattle-induced human brucellosis, which occurs mostly after drinking raw milk and is generally known as undulant fever or Malta fever, researchers still do not know exactly how canine brucellosis is transmitted to humans. Compounding the problem for doctors is the fact that symptoms in humans – fever, chills, headache, general malaise and weight loss – are similar to symptoms associated with other types of illness. Some cases have been misdiagnosed as mononucleosis; when patients didn't respond to treatment, a check of pets they had been in steady contact with revealed canine brucellosis. A special antibiotic regimen was instituted, with the patients recovering.

"We don't suspect canine-induced human brucellosis to be widespread," says Dr. Glick, a veterinarian himself. "We are reasonably certain however, that many dogs have the disease right now, imperiling other dogs and all humans who have regular contact with them. Undoubtedly people are coming to their family physicians complaining of the disease symptoms, but physicians are still too unfamiliar with the disease to consider it as a possible cause."

That's why the new diagnostic test, developed at Cornell University's Veterinary Virus Research Institute, serves such a valuable purpose for all dog owners with its quick results right in the office, Dr. Glick notes.

"If the test is positive, the dog should be isolated and treated. The veterinarian and his personnel should be alert to symptoms among themselves and certainly the family doctor of the pet owners should be notified so he can consider brucellosis as a possible cause if any family member shows up with the symptoms," Dr. Glick cautions.

As a precaution, Pitman-Moore, Inc. urges all dog owners to have their pets tested for brucellosis. The disease affects a dog's reproductive organs in particular; in the male, abnormal sperm or inability to mate are common and in the female abortion or early death of fetal puppies occurs. Any unexplained reproductive failures in either male or female dogs should be reported immediately to the family veterinarian.

continued on page 27



What does it mean when your Veterinarian prescribes a Prescription Diet[®] Food for your pet?

You probably know of people who require a special diet because of certain medical conditions. Pets too may require special diets to allow them to function normally under specific medical or stress situations.

Prescription Diet[®] products are special foods prescribed by your veterinarian for pets with altered dietary requirements. Examples would be diabetes, colitis, obesity, food allergies and certain heart, kidney and liver disorders.

How do PRESCRIPTION DIET[®] Foods differ from ordinary pet foods?

The pet foods you buy at the supermarket are intended to be fed to normal, healthy animals. While some of these foods are of higher quality than others, their intended use is still the same...nourishing a healthy pet.

Prescription Diet[®] foods are for use in animals with special dietary requirements. They cannot be supplemented with other food as is the case with regular pet food. They must not only provide all of the basic needs for maintaining the animal, but at the same time, meet the altered dietary requirements.

This requires specialized formulations using specially selected ingredients. The ingredients must not only be of the highest quality, but specifically chosen and formulated for the individual diet. While these ingredients are more costly than those that can be used in regular pet foods, they are essential if the dietary food is to perform its intended function.

Are PRESCRIPTION DIET[®] Foods expensive?

The price per can is considerably higher than for regular pet foods. However, because of the nutritional density of the Prescription Diet[®] foods, 1 can (16 oz.) is the feeding equivalent of $1\frac{1}{3}$ to $1\frac{1}{2}$ cans of regular pet food. This means that the actual cost of feeding is no more than 10¢ a day above that for regular canned pet foods...in many instances 5¢ or less. So, for just pennies a day you can feed a complete and balanced diet...and at the same time provide for the special dietary requirements.

Your veterinarian's medical knowledge and clinical ability are the keys to the correct diagnosis and treatment of an animal. This includes prescribing the proper diet for the specific needs of your pet. For this reason, Prescription Diet[®] products are available only upon the order of a licensed graduate veterinarian.

For more information write:

Hill's Division Riviana Foods, Inc.

Dept. 769, 401 Harrison Street, Topeka, Kansas 66601

THE COW OF A DIAGNOSIS

By C. P. Ryan, D.V.M.

How does the doctor know what is wrong with the patient that can't talk? In other words, how does the doctor make a diagnosis?

Diagnosis refers to the art of distinguishing one disease from another and can be quite involved in some cases while in other cases it may be relatively simple. Diagnosing a torn nail may be straightforward whereas diagnosing diabetes in a cat can be more difficult.

Your veterinarian's formal training and his or her experience with disease aids in making a diagnosis. Rapid advances made daily in medicine keep those in the medical field studying constantly. It has been estimated that five years after a veterinarian graduates, half of what he or she learned in school will be outdated.

The first clue as to what may be wrong with your cat is the history you give your veterinarian; how the cat acts at home, how long the cat has been sick, how much time the cat spends outside, the consistency of the bowel movements, vaccination record, and so forth. The history of a patient is a very important aspect in making a diagnosis and you should try to recall events as accurately as possible. The history not only suggests diagnostic possibilities, but also the probabilities to the doctor. For instance, certain disease possibilities are suggested for a patient who develops a chronic cough and lives in the dry desert region of the southwest. The probability that the cat's chronic cough is from lung worms is remote since the cat becomes infected with lung worms by eating slugs and snails.

After talking with you, your veterinarian will want to examine your cat. During the examination the doctor may use several of his or her senses (sight, touch, hearing and smell) to aid in collection of many different facts to make a correct diagnosis. Your veterinarian often looks your cat over completely and palpates (feels with the hands) different areas of the body. Various chest sounds are listened for and often a stethoscope is used to aid in this task. The veterinarian may even use the sense of smell to detect any abnormal odors on the cat. An example of an abnormal odor is a uremic odor of the breath which many times is present in cats with kidney failure. To aid the doctor's senses, special instruments may be used to examine certain areas such as the ears (otoscope) and eyes (opthaloscope) more thoroughly.

After examining your cat in this manner, your veterinarian may accumulate enough evidence to determine the cause of your pet's difficulty. If not, more tests will have to be made since several diseases cannot be distinguished from one another on just history and physical examination. Once the disease is diagnosed your veterinarian will be able to prescribe an effective treatment if one is available. helpful in determining the nature of the problem include; radiographs (Xrays), chemical tests, microscopic study of the body cells and electrical tests.

Besides detecting broken bones, radiographs are used to detect changes in the internal body structures. For instance, radiographs are used to detect changes in shape of organs, like the liver and kidneys and to detect abnormal structures like tumors.

An example of a chemical test used to detect disease would be the determination of the blood sugar which aids in the detection of diabetes in cats. Diabetes is a common disease of man and is also seen frequently in dogs. The incidence of diabetes in cats is much lower than in dogs. Cats with diabetes are often placed on daily injections of insulin for the rest of their lives.

Probably the most common test performed on the cells of the cat is the CBC (complete blood count) in which the blood cells are analyzed and counted. In certain diseases the only way a positive diagnosis can be made is by examination of the blood cells. A disease of cats that is diagnosed by examination of the blood cells is feline infectious anemia which can be fatal. This disease is caused by a tiny parasite which attacks and destroys the cat's red blood cells, causing the cat to become anemic.

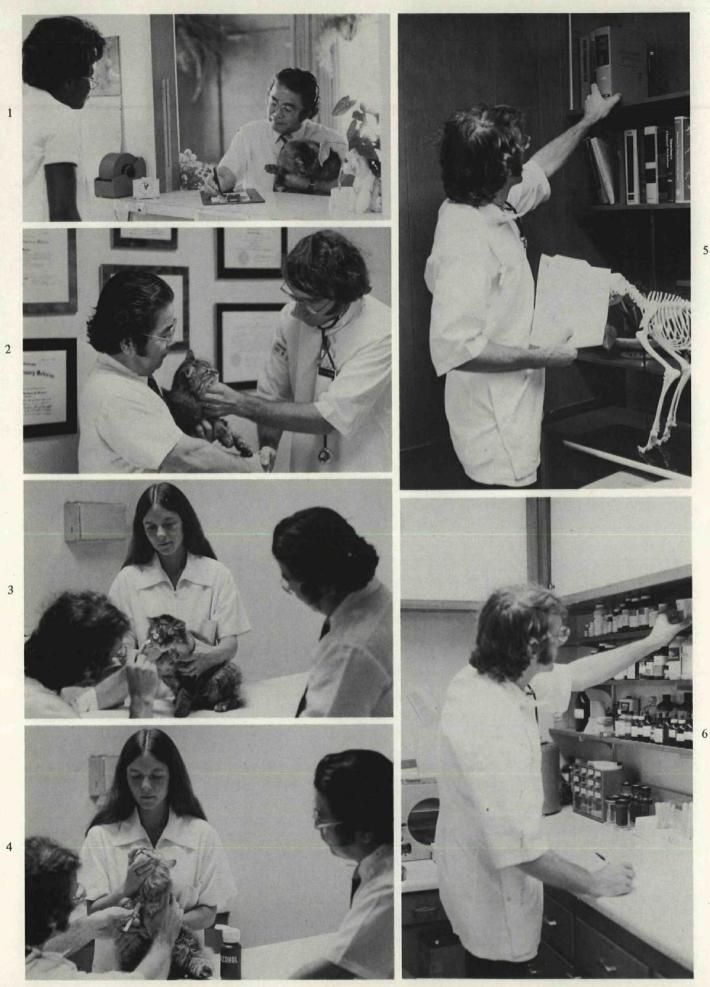
The electrocardiogram (ECG) is familiar to many people who have had or now have heart problems. Electrocardiograms are also run on animals. Heart disease in cats had been considered to be less common than in either man or dogs, but recent studies are beginning to cast doubts on this assumption.

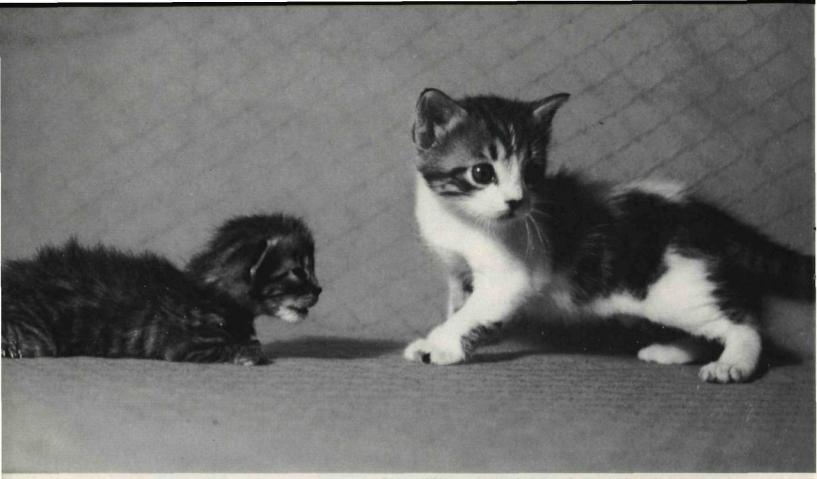
At times your veterinarian may make a tentative diagnosis based upon the available sources of information, but subject it to change as more facts become known in the individual case.

Some tests which can be extremely

Photos by Roy Martin

- 1 Filling out "Susie's" record. Filling out records can seem a nuisance at times, but accurate records are valuable and are required by state law.
- 2 Meeting "Susie's" owner. The first clue as to what may be wrong with your pet is the history you give the doctor.
- 3 Checking "Susie's" response to light. Correct diagnosis often requires the accumulation of many facts in order to fit all the pieces of the jigsaw puzzle together.
- 4 "Susie" donating blood for the laboratory. With some diseases the only way to make an accurate diagnosis is by examination of the blood.
- 5 Dr. Ryan checking a current reference book. It requires constant study to keep from becoming outdated or obsolete in the rapidly changing medical field.
- 6 Getting "Susie's" medication. Once the disease is diagnosed, the doctor will be able to prescribe an effective treatment if one is available.





Rejected kitten compared to size of normal kitten from same litter.

••• CARING FOR THE ORPHANED OR REJECTED KITTEN

By Jane Taylor

Photos by Jane Taylor

The orphaned or rejected kitten should first be examined by a veterinarian to make sure whether its problem is insufficient nourishment or some chronic illness. The kitten in the accompanying photographs was the runt of a litter of four and was too weak to contend with its littermates for the mother's milk.

Chilling and over-heating are both extremely dangerous to the young kitten. A complete environment must be constructed to allow it to follow its instincts in keeping comfortable. A small electric heating pad on low temperature should be laid along the sides and bottom of only one half of a box. This allows the kitten to get away from the heat if it should become too warm. A towel should be securely fastened over the heating pad and bottom of container so that the kitten cannot crawl under it and get directly on the heating source. The towel should be of a rough texture so that the legs and chest muscles develop correctly.

The orphaned or rejected kitten must be regularly hand fed a milk supplement for the first few weeks of its life. Such products as Borden Kitten Milk Replacer can be obtained inexpensively from any veterinarian; a can (13 fluid ounces) or information can be gotten from Borden Inc./ Chemical Division, Animal Feed Supplements and Products, P.O. Box 419, Norfolk, Virginia 23501. Products such as this one meet the nutritional requirements of young kittens and are far superior to any remedy that can be concocted in the home. The contents of the can should be divided into four small, clean containers and numbered so that you completely use one supply without exposing the others to the air. These should be kept refrigerated but guard against freezing as any frozen solution should be discarded immediately.

The supplement should be warmed in hot tap water for a few minutes before feeding begins. Prop the kitten in a comfortable position and administer the liquid with a small eyedropper. The eyedropper should be held at a slight vertical position so air



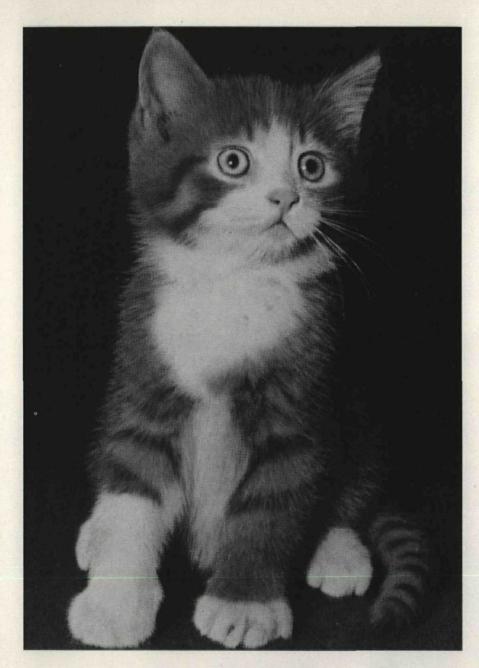
The dam with the litter feeding and rejected kitten in foreground.



When feeding you should guard against bubbles forming in the elevated eyedropper.

bubbles do not form as the solution is fed slowly to the kitten. Watch for its stomach to become slightly extended but do not bloat or overfeed as it is better to underfeed for the first 2 or 3 days. This procedure should be followed 3 times daily for the first 2½ to 3 weeks. At this time the supplement can be mixed with a high quality instant baby cereal which is fed to the kitten with either the eyedropper or a spoon. By 4 to 5 weeks, the kitten should be eating high protein, soft cat food.

The elimination functions must be stimulated by the person caring for the kitten since the mother is not cleaning it after each feeding. This is done by gently rubbing the genital region with a moistened cotton swab. The kitten's eyes should also be checked regularly for any build-up of matter and cleaned with cotton. If any irritation or infection becomes visible you should of course have it examined thoroughly by a veterinarian at once. Caring for an orphaned or rejected kitten is a most rewarding experience and doesn't take more than a little patience and looking after detail.



PROBLEMS WITH Tabby ?

By Ruby Harris Arnoth

Try these helpful tips for good results . . .

We felineophiles know that cats have interesting, amusing personalities and are capable of very cute eccentricities without any coaxing from humans. Cats, unlike dogs, are not usually trained to do tricks for entertainment, (you've heard "roll over, Spot," but have you ever heard "roll over, Fluffy?"). They can, however, be trained to eliminate undesirable habits.

For cat owners, the two most undesirable habits a cat can develop are to scratch furniture and to eliminate body wastes in places other than the litter box or out-of-doors, whichever you prefer.

Anyone with any experience with cats knows they're basically independent and clean animals. Consequently, when one suddenly, seemingly without explanation develops poor sanitary habits – what can you, the owner, do? Assuming you like cats or you wouldn't have one in the first place, you don't have to get rid of the cat to get rid of the problem.

Convincing Tabby to use the litter box instead of your new shag carpet will require patience, constant supervision, and wary surveillance. You will also find a common child's water gun indispensable. The water won't hurt the cat, but since cats don't like water, it can be very effective.

You'll have to be aware of your cat's usual times to need the litter box. That will usually be either after eating or napping. Watch carefully so that you will catch the cat using another place like your rugs, drapes, easy chair or wherever it has picked. Cats usually pick a place to do these things repeatedly. I had one cat who chose a soft bath rug near the litter box, another picked the drapes — and the very same spot for each offense.

The nature of the problem can vary between male and female cats. With female cats, look for horizontal offenses, with males, look for vertical offenses, or either with a neutered male. Tom cats (unaltered males) are difficult house cats because of their offensive odors. Neutered males are still capable of spraying your drapes, chairs, or walls. I heard of one who even chose the television screen when the TV was turned on.

Don't let young children use the water gun!

When you catch Tabby in the act, quickly spray her fur (not the face or eyes) with a few squirts of the water gun accompanied by a loud, firm, "NO!" The water will distract her. At that point, pick up the cat and take it to the litter box. Don't try to force the cat to stay in the box until it uses it, because cats like privacy and can be far more stubborn and patient than you are. This procedure won't be an instant cure. You may have to repeat this four or five times in one day until nature forces the cat to go ahead and use her litter box. Meanwhile you have to watch her constantly to prevent her from using your chair or carpet. One day won't affect a cure either. It may take four days or four weeks, depending on how stubborn Tabby is. Don't despair, there is something you can use to help when you can't watch her every minute. There is a spray product available in supermarkets in the pet department. Spray it on a paper or cloth (but not on the cat, of course) to put on your cat's favorite "accident area"; it produces an odor your cat won't like, so it will stay away from it.

The same procedure can be used if you wish to train the cat to go outdoors when nature calls, so that you don't need a litter box inside. Because of today's living styles, many more people find it necessary to maintain a litter box inside rather then turn the cat outside from a highrise apartment or into a busy street. Even in the suburbs, there are still busy streets, dogs, fleas and ticks.

Forget the M&M's, but remember to love her/him.

In addition to punishing the bad behavior, add a little positive reinforcement. When Tabby does use her box, congratulate her. Stroke her, pet her, talk to her, preferably in the same room where the box is located. Make her associate pleasant feelings with the place where her box is kept. Coax her into that room several times a day just to pet her. If she has a favorite toy, take it in and play with her a bit. Cats thrive on attention unless it is forced when they don't want it. That's when they don't have the voracious appetites of dogs. If they aren't hungry, they might not eat it. You know your cat best - what does she like? Then use that to reward her.

Keep that litter box clean.

By close observation, be careful that Tabby doesn't just give up her favorite "accident" area for another. At this point, pause to wonder why the poor habits were developed in the first place. The best cure is to eliminate the cause. If the veterinarian says the cat isn't physically sick, then the next place to look is the litter box. How often do you sift it? How often do you clean the box, change the litter, and mop the floor? The box should be sifted daily and the floor swept clean of litter. It is wise to keep the litter box on a floor that is easy to clean. As for the length of time between changing the litter, that could depend on your individual cat. Some have more sensitive noses than others. If you can smell it, that goes double for your cat. Change the litter once a week first. If that doesn't satisfy her, you may have to go as low as three days between changings. Yes, litter is expensive, but so was your shag carpet. Generally 5 - 7 days work if one cat is using the box, less if two or more cats use the same box.

If your litter box has a strong ammonia odor, your veterinarian can prescribe pills to change the cat's chemistry to acidify the urine so it doesn't have such a strong odor. There are deodorizer sprays also available in pet departments for litter boxes which help, provided your particular cat will put up with their smell in her litter box. However, deodorizer sprays can't replace a clean box. If the box is kept clean, sprays aren't usually needed.

After you've satisfied yourself that the box is as clean as any fastidious cat could want, check the room where you keep the box to be sure something else isn't disturbing the cat. Is the box large enough for Tabby? Is it jammed too close to the wall to be comfortable for her to move around in it? Does the room need ventilation? Is it too drafty or too hot? Are loud noises a problem? Can kids or dogs bother the cat while she's trying to use her box?

If your dog bothers the litter box, there is an instant cure. Put red peppers in the box. One taste won't hurt and will cure the dog but keep Tabby away until the dog is cured. Then change the litter. You wouldn't want to spoil the cat's good habits.

Bid for attention

When you're sure all is well with Tabby's toilet area, and Tabby still persists in producing "accidents," perhaps she is playing games with you. Or maybe she is trying to tell you something. A friend's cat didn't like to be left alone during trips so she produced "accidents" in the luggage that was being packed. Maybe Tabby's poor sanitary habits are a bid for attention. Cats can be as devious as children, consequently they need affection and amusement too. Play with Tabby, pet her. This need for attention could also be the reason for the other problem – clawing furniture.

Is clawing the problem?

It isn't really necessary to declaw the cat to avoid this problem. Besides, many veterinarians don't recommend it and won't do it because the cat needs its claws for self-protection, especially if it goes outdoors. It should be sufficient to simply flatten the tips of the claws with a nail clipper about twice a month. Tabby will be less inclined to pull on your furniture if you provide its own scratching post. Many sizes and varieties are available in pet stores. You can produce a sturdy one at home by nailing a 3 foot 2 x 4 to the center of a 2 foot square piece of plyboard. Cover both with dense, tightly woven carpet, sprinkle a little catnip on it, and Tabby will love it.

If Tabby scratches the furniture anyway, spray it with the water gun, accompanied again by a loud "NO!". Eventually for both problems, when Tabby becomes better behaved, you should be able to eliminate the water gun and simply use the loud "NO" to maintain the discipline you've established. Any sizeable backsliding might necessitate the re-use of the water gun to regain control of bad habits.

Sound like a lot of trouble to have a cat around the house? Undisciplined animals can become as troublesome as undisciplined children. Ask yourself this question. Do you want Tabby around the house or it a porcelain cat more suitable for you?

MORE AND MORE CATS

There are an estimated 22 million cats in the United States, including the 500,000 felines in the City of Los Angeles. Cat owners should procure cat identification tags, according to Robert I. Rush, general manager of the Los Angeles City Department of Animal Regulation.

"A cat identification tag gives a cat identity in a world full of stray animals," says Rush. "A lost or injured cat with ownership identification can be reunited with its owner quickly if the tag is affixed to the cat's collar."

In the City of Los Angeles, cat identification tags, on a voluntary basis, are available for \$5 at any of the six animal shelters, or at the Animal Regulation License Division. The tag is valid for the life of the cat.

The proliferation of cats since they became domesticated housepets about 3,000 B.C. in Egypt is a statistic of never ending multiplication. Of contemporary interest, as reported in ANIMAL CAVALCADE, is the fact that the pet cat population has increased 13% in the past eight years. Currently, 12.9 million U.S. households are habitats for pet cats.

While this large volume of cats enjoys a life of contentment, a reliable estimate by humane authorities says that approximately 25,000,000 cats die each year from traffic accidents, starvation or through euthanasia in animal facilities.

In this nation's formative history, cats were brought to the North American continent by colonists as protectors of granaries. In mining towns where rats abounded, cats were a precious asset and sold for as high as \$25 in gold.

The belief that a cat is the natural enemy of the dog, and vice versa, isn't entirely true. Fifty percent of the nation's cat owners also own a dog. On these fronts, cat-dog compatibility ostensibly prevails.



BE ON THE LOOKOUT FOR THESE

eye diseases

The sincere, conscientious dog breeder is anxious to learn of any physical or disease condition that might afflict his or her breed. No one is happy to learn of these conditions, but being aware of their existence is the first step towards elimination.

It should be understood that a congenital condition need not be inheritable. An abnormal condition or anomaly present at birth does not necessarily mean that it is an inherited defect. The gestation period holds many factors that might influence one or more puppies of a litter. Discussed here are some of the congenital eye conditions which appear to be heritable, but most attention is directed towards the diseases in which there appear to be a particular breed disposition.

BREEDS WITH LID ANOMALIES

In the normal lid structure of the eye, for man or beast, the lids should cover the eyeball in proper position. They should not be rolled in or out. Entropion is a condition in which the lid is rolled in. This causes constant irritation to the eye. A simple operation will correct this condition, and unless corrected, there is ulceration and possible loss of the eye.

There is a definite breed predisposition to entropion in Chow Chows, Chesapeakes, Golden and Labrador Retrievers, and it has been seen also in the Kerry Blue, St. Bernard, Rottweiler, Bulldog, English Springer Spaniel and Bull Mastiff.

Ectropian is just the reverse; the lid rolls out, or drops away from the eye. In this you see the so-called "haw" or third eyelid, a very important structure. There is a breed predisposition to ectropion in the Cocker Spaniel, Bulldog, Basset Hound, Bloodhound and St. Bernard.

PANNUS

A haze that covers the cornea of the eye is a condition seen in German Shepherds from 3 to 6 years, and usually attacks both eyes similarly. It occurs in the breed all over the world and the cause is not known. Some studies are now being made towards that end. However, it will respond to treatment with cortisone drops or ointment, if used continuously. In advanced cases, surgical removal is necessary.

ULCER

Recurrent corneal erosion (ulcer) is seen in Boxers. Again, this occurs in the breed all over the world and the cause is unknown. It is not due to environment or nutrition. This is a superficial condition, but painful and usually occurs at 3 to 6 years of age. It can be easily treated, heals quickly – in early stages in a week – but is subject to relapse. In late stages surgery is needed.

GLAUCOMA

Glaucoma is a disease in which there is increased pressure within the eye. It is estimated that for the middle-aged dog in the U.S. today, more are blinded by glaucoma than by any other single disease. It is seen in the 4 to 8 year age range and mainly in the Cocker, Basset, Fox terrier, Sealyham, Cairn, Welch, Manchester, Toy Manchester and Welsh Corgi. Glaucoma can be corrected surgically if caught in time. One kind of glaucoma especially affects Cocker Spaniels. Another kind affects Wire Fox Terriers and Sealyhams. Unfortunately, it is not just one eye that is involved. The second eye invariably becomes involved a few weeks or months later. The pressure destroys the nerve fiber layers, and once destroyed, they won't come back.

CATARACT

Cataract is one of the most misunderstood eye diseases. Most people think of it as a sort of scum over the eye that can be removed. In reality, it is the lens of the eye that becomes opaque. In the normal eye, light might be able to pass through the cornea, through the lens to be magnified, and to the retina to be recorded on the brain. When the lens becomes cloudy, it must be removed so that light can be sent through.

There is a definite breed predisposition to cataract in the Poodle, Miniature Schnauzer, Wire Fox Terrier, Boston Terrier, Afghan Hound and a scattering in another half dozen breeds. Fortunately, it can be operated on and there is a high incidence of success.

COLLIE EYE SYNDROME

The eye symdrome occurs in Collies and to a small extent in Shetland Sheepdogs. There are many degrees of affliction, from slight, up to retina detachment and blindness. The only way this disease can be eliminated is by selective breeding.

Portions of this article were based upon information supplied by Gaines Dog Research Center.



Pannus is a chronic disease of the cornea (clear part of the eye which permits light to enter) which occurs most often in German Shepherd dogs. There is a definite breed predisposition to cataract in the Poodle, Miniature Schnauzer, Wire Fox Terrier, Boston Terrier and the Afghan Hound.

PANNUS IN DOGS STUDIED

Progress in developing better techniques for identifying dogs that may be susceptible to the eye disease pannus has been made by scientists at Michigan State University.

Pannus is a chronic disease of the cornea (clear part of the eye which permits light to enter) which occurs most often in German Shepherd dogs. As seen in man, pannus may occur along with another disease, following several traumatic and infectious diseases or as a change as the person grows older.

Lorel Anderson Evans, D.V.M., reported on the Michigan State University study to the annual meeting of the Morris Animal Foundation in June.

Dr. Evans explained that the exact causes and an efficient, always effective treatment for pannus are not yet known. The first part of their study, which has been completed, concentrated on finding a way to identify dogs that may develop the disease which can leave them blind.

She pointed out that military, police and dog guide organizations often use German Shepherd dogs. If the dogs later develop pannus and its associated visual impairment, time, money and effort involved in training the dogs for specific duties have been wasted.

Through the years, many different treatments have been tried for pannus, with varying success. One treatment which has been used requires continuous therapy - daily eye drops for the rest of the affected dog's life.

"In spite of the success obtained with this method, continuously treating a chronic disease which is so prevalent in the German Shepherd breed without being able to identify the cause has been a frustrating experience," Dr. Evans said.

Besides developing techniques for identifying pannus-susceptible dogs at an early age, which they feel they have been able to do with some success, the scientists will study family tendencies toward the disease. They will follow related young Shepherds and monitor for pannus and other diseases, and they hope to do breeding studies to see if they can eliminate or decrease the incidence of pannus by selective breeding.

Pannus begins with a hazy or cloudy area in the margin of the eye. Both eyes may be involved as it progresses. Eventually, within months or perhaps years, the cloudy area may cover the entire cornea.

Some dogs do not feel uncomfortable with the disease, but for others there is pain and discharge from the eye.

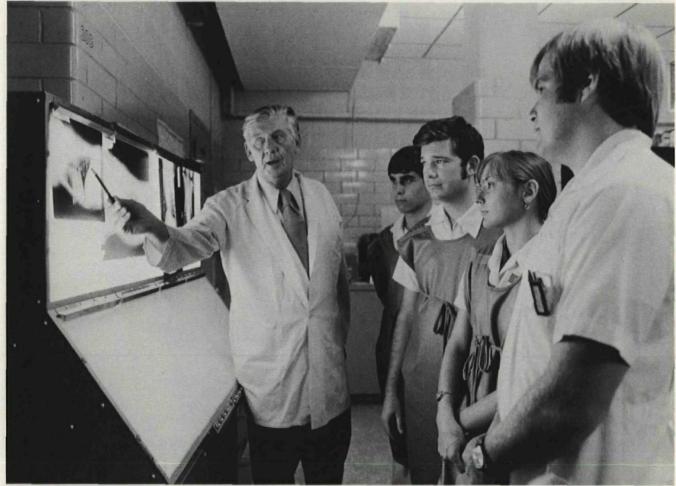
Because pannus occurs principally in one breed, the German Shepherd, it is thought to be inherited, but this has not been proven.

GIVING POWER

A WAY OF HELPING YOU HELP ANIMALS

(AND SAVE MONEY AT THE SAME TIME!)

Photo Eastman Kodak Company



A NEW LOOK AT YOUR CHARIT-ABLE CONTRIBUTIONS

Almost everyone has a favorite charity. It may be a school, a hospital, or a church. It may be a medical research organization or some other group or fund serving humanitarian needs.

Typically, Americans have been generous in supporting the work of institutions and organizations, many of which depend almost entirely on the contributions of their benefactors. People give what they can afford. Some are able to make substantial gifts, while others find it easier to give small amounts periodically. Many in the latter group would like to make a contribution that would merit lasting acknowledgement, but they feel that it might be over their heads financially. Is a substantial gift beyond the person of moderate means, or is there a suitable way for him to provide for something as expensive as a new church organ, an ambulance or some specific medical equipment or research and still not overburden himself?

HOW TO INCREASE YOUR GIVING POWER

Whether you are a person of moderate means or considerable wealth, there is a way for you to increase your giving power – and this way is through life insurance.

A growing number of people interested in charities and foundations have discovered that life insurance is a unique and effective way of providing money for charitable gifts or bequests. They value the built-in e-x-p-a-n-s-i-o-n power that can transform modest annual gifts into substantial ones or that can build an already substantial annual gift into one of truly sizeable proportions.

Charitable giving has assumed a major role in many taxpayer's financial planning. So much so that Treasury Department's statistics disclose that, in recent years, charitable deductions are claimed on over 90% of the returns filed by taxpayers who itemize their deductions.

At one time, the contribution to charity presented only one problem:

the selection of the charity. Today, because of an exceedingly complex tax structure, charitable contributions are usually made with at least some consideration given the tax implications (both income and estate taxes).

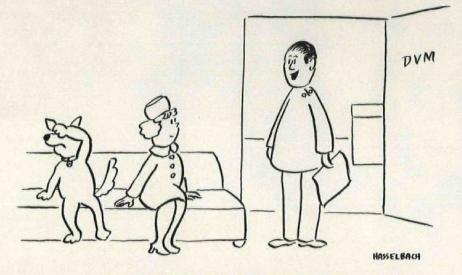
Tax statutes tend to encourage charitable gifts by, according to them, favorable tax treatment. The effect of this tax treatment is to reduce the cost of the gift. Nevertheless, while a deduction is attractive, some cost is always involved (unless the taxpayer donates appreciated property which, in some cases, may result in a gain).

The cost is usually that portion of the gift which the taxpayer would have had retained after taxes had he not made the contribution.

HOW LIFE INSURANCE CAN BE-COME A PART OF YOUR CHARIT-ABLE GIVING

It will be the purpose of this review to discuss the major uses of life insurance as part of a program of charitable giving. Naturally, there are *Continued on Page 28*

a look at CANINE BEHAVIOR



"OKAY, YOU CAN BRING SARAH BERNHARDT IN NOW."

By Michael W. Fox, M.R.C.V.S., Ph.D.

A discussion presented at a Dog Health Seminar sponsored by the Morris Animal Foundation, Denver. Dr. Fox is a veterinarian and associate professor of psychology, Washington University, St. Louis.

PART I

We have been domesticating dogs for 10,000 years, but to get an idea of what normal behavior is, we have to turn to antecedents of modern behavior. I prefer to look at the wolf to understand some of the origins and the subtleties of canine behavior.

The wolf is sexually mature at two years of age. Males produce sperm seasonally in synchrony with female heat. In contrast, domestic dogs reach sexual maturity around six months of age, and the male constantly produces sperm. This is a problem of sexual frustration for males. I think to make life better for the dogs you should have them spayed or castrated if you have no intention of breeding them.

I have seen bitches in heat literally tearing a place up to get out, so it is not just the males who get frustrated.

I think the castrating of males can make them more tractable and may stop them from roaming. We have genetically modified the sexuality of the dog after 10,000 years of domestication, and a simple surgical sterilization procedure can help them adapt to our modern way of living.

Another crucial difference between dogs and wolves is that wolves tend to remain attached to the people who raise them. We call this primary socialization. But a dog becomes attached, usually, to everybody, although there are exceptions. We call this secondary socialization.

Puppies start forming shyness around the same developmental time we see shyness forming in the wolf – four to five months of age. This kind of temperament is regressing to a wilder type. I think we have to be mindful of this and carefully select against it because these temperaments are rather unstable. They are not vicious; they are just shy and timid but nevertheless intelligent dogs.

Our domestic dog came not primarily from the wolf, but more probably from the dingo-type dogs, which in pre-Stone Age time were widespread throughout Europe. The dingo-like animal still had a lot of very wolfish traits, as do some of the breeds today. But still dogs respond to a leader, and this is why they make such excellent companions. They see you as a master in the realm of leader, and this is precisely what occurs in a wolf pack. The leader of the pack is like a magnet attracting the others.

A very clear display in canines is rolling over - submitting. Konrad

Lorenz, an Austrian ethologist, said several years ago that he thought a low-ranking dog or wolf exposed its throat or jugular vein as a sign of submission. Wolves and dogs never had a course in anatomy, so they do not know where the jugular vein is. The wolf or dog is actually avoiding eye contact in an exaggerated way, not presenting his throat!

Some of you have had the experience of staring at your dog, he rolls over submissively and urinates. This is another wolf-like behavior, and it may be seen in maturity toward the leader. When a dog urinates at your feet, it really means a bouquet of roses to him.

The direct state is a channel of communication between many species of animals. Even people of higher esteem receive more eye contact. You can control your dog through the direct stare. It is important to establish dominance over the puppy early in life to get him properly socially adjusted, and you can use eye contact for this, but it can be overdone.

One of my criticisms of the way we have molded dogs began at dog shows. I believe dogs that show submission are to be preferred. And yet at dog shows you reward a dog who stands like an aggressive-looking zombie. There are show dogs, of course, that are literally bursting with joy. These are exceptional dogs, and I wish there were more of them.

Canids have extreme sensitivity in their teeth, especially their canine teeth. There are many, many nerves around the roots of these teeth so they can delicately control the intensity of the bite to the point where they can groom each other, and they can greet each other by giving inhibited, very gentle bites. A dog could remove another dog's muzzle in one bite, but the bite is usually inhibited.

I emphasize this point because there are many cases a day of pet dogs giving uninhibited bites. I think any dog that breaks the skin of his owner or a child should be very carefully scrutinized. But you must ask first, was there any provoking cause for the bite? We now know a tendency to bite is genetically controlled. I have studied it with hybrids and wild canids including coyotes, foxes and wolves. We can select against it now.

Some dogs over-react when they feel threatened, when they are suddenly put out or displaced by another animal, and their reaction is to give a totally uninhibited bite. We must remember that this can be bred against.

However, we must also consider how people are communicating or not communicating with their animals and with each other. Underlying many continued on page 20

HOW TO RAISE A happy hamster

By Sue Kizer

Hamster eating peanut butter off owner's finger. A good way to develop affection is through hand feeding. Photos by Sue Kizer

Since hamsters are deservedly considered an ideal pet, perhaps the thing to concentrate on is how to do the special little things for them that will make them truly contented pets.

Since a hamster requires only a small cage in which to live comfortably, why not provide him with a large house so that he can have a lot of room to run in and explore? This can easily be done by attaching a relatively deep and heavy cardboard box (or boxes) to the small hamster cage most people house their pet in. To this, of course, can be added many additions complete with tunnels, sand boxes, or anything else your hamster might enjoy. Our pet hamster had a "mansion" consisting of two cages and five boxes hooked together complete with stairways to the second floor. It was fun and rewarding to build such a house.

Hamsters are very inexpensive to feed, one fact that makes them ideal pets. They like the commerciallyprepared hamster food. The white part of hard-boiled eggs is also a favorite of hamsters and will help provide a beautifully shiny coat. Other foods that might be tried in small portions include nuts and peanut butter, cooked spaghetti (such fun to watch them reel it in), apples, lettuce, beans, bananas, popped popcorn and carrots. Hamsters do not overeat, so give your pet all he wants.

Most hamster owners have probably turned their pet loose on the floor to watch him dash about exploring every nook and cranny. It is great fun for pet and owner alike, but caution must be taken to make sure that the space the hamster has to run around in has no holes into which he can get that he should not. This applies to even the tiniest hole or crack, for a hamster can get through a space the size of a quarter.

One of the most distinctive characteristics of the hamster is that he is *nocturnal*. Unlike most humans, he sleeps during the day and is awake and active at night. However, *like* humans, he does not like to be disturbed while he is sleeping.

Hamster owners have differing views on whether the hamster should be given a box to make their bed in or whether they should make it in the open. The enclosed bed, I think, more closely parallels their habitation in the wild, where they burrowin the ground. You may also want to give your pet a small blanket such as a silk neck scarf or a square of cloth like a handkerchief, but never, never give him any coarse or wooly material as he will chew it, swallow the "fuzz" and become sick with digestive disturbances. The blanket should be laundered often to keep the most germfree environment possible for your pet.

In the wild state (in the Syrian desert) hamsters live solitary lives so they do not need a lot of attention and playing with as pets. However, any time you spend in such activity will be greatly rewarding because your pet will learn to love and respond to you. It will take time, of course, so don't expect your pet to start showing his affection right away. Scoop him up gently with cupped hands when picking him up, talk to him softly, don't startle him with loud noises, feed him at night from your hand, and you will soon have a hamster that loves you and cannot wait till you come to play with him. After about eleven months our hamster got to the point where she scratched on the side of one of her boxes when she wanted me to play with her. They are intelligent and sweet little animals and are capable of more than you thought possible if you are just willing to spend some time with them.

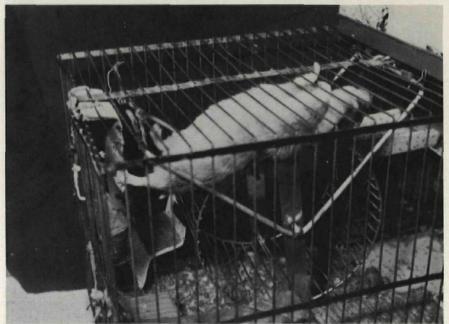
The hamster is a very healthy little animal, but care must be taken to protect him from catching cold. To prevent him from catching cold, keep him in a draft-free room, keep the temperature comfortably warm (75° or so) and, naturally, isolate him from any person with a cold. If your hamster should happen to catch a cold and castor oil and warmth do not seem to help him, take him to a veterinarian immediately. If the weather is cold, don't forget to bundle the cage up and warm the car up ahead of time.

One quite unusual characteristic of the hamster is that he will go into hibernation if the temperature goes below 50° or thereabouts. If, for some reason, you discover the temperature in the hamster's room below 50° and he appears not to be breathing, get him to a warm room and hold him in your hands to warm him up. He will awaken and be alright in a short while.

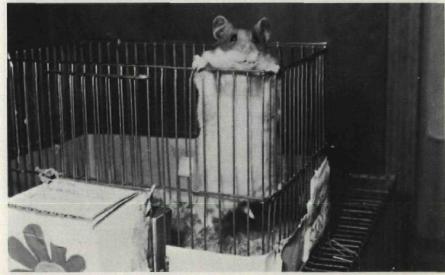
To summarize:

- Feed fresh food and water daily, Commercially-prepared hamster food can be kept in the cage until consumed.
- 2) Change litter every 10 days or sooner, as needed.
- 3) Keep the animal out of drafts and away from people with colds.
- 4) Maintain a warm temperature (75°-78°) in the hamster's room.
- 5) Prevent him from chewing on anything wooly or fuzzy.
- Always handle gently and avoid sudden movements around or toward him.
- 7) Provide exercise equipment.
- If your pet is allowed to run loose on the floor, check and double-check beforehand for holes or cracks.
- Don't bother him during the day while he is sleeping.
- Take your pet to the veterinarian if he appears listless or sick in any way.
- Keep him off tables and other high places unattended for he has poor eyesight and will more than likely fall off.
- 12) As the hamster is an extremely clean animal, there is no need to bathe him.

A final paragraph must be added about the hamster's energy as he gets older. When he is young, he will be up and about from early evening till after dawn. As he grows older, however, the time he spends awake will decrease, with intervals of rest even while up. This is natural and to be expected for he matures and grows old quickly in human terms. Since the lifespan of hamsters is short, (maximum 2 years, average 1 year) take the best care possible of your hamster, spoil him and bask in his affection, and you will have something good to remember all your days.



If given toys, hamsters will invent their own fun.



Looking more like a "ham" than a hamster!



The first stage of my hamster's house, which later included five boxes added to these two cages.

PET CARE



THE CAT

A cat is playful, intelligent, independent, and will be an entertaining companion. Millions of cats and kittens have no home, and are killed in pounds, by traffic, or from starvation. Help stop cat overpopulation: spay your female; neuter your male. A neutered male makes a happier and healthier pet. An I.D. tag will bring a lost cat home more quickly.

DO pick up your cat with one hand under rump, one hand under chest. Brush coat regularly. Check body for cuts and bruises. Provide a scratching post to keep claws worn down.

DON'T pick up a cat by his neck, forefeet, or stomach. (Don't pick up an adult cat by the scruff of the neck.) Don't drop a cat; cats do *NOT* always land on their feet and may be injured. Don't put rubber bands around your cat's neck.

DO serve varied commercial cat foods that have a high-protein, high-fat content. Feed at regular times. Salt your cat's food occasionally. Most cats enjoy beef scraps and dairy products from the table.

DON'T give your cat bones that may splinter (chicken, chop, or cooked bones). Don't feed a dryfood-only diet to a male cat.

DO keep your cat indoors at night. Provide a box with a warm blanket or cushion for sleeping; clean regularly. Keep a large pan in the house filled with commercial cat litter; remove waste daily; clean regularly.

DO let your cat out for exercise if there is no danger of him getting lost or hurt. Have your cat vaccinated for cat distemper and rabies and checked for ear mites and internal parasites. Ask your veterinarian about other shots. If your cat seems to have trouble urinating or is violently shaking his head, call your veterinarian right away. Use cat flea spray, powder, or collar; if irritation develops, stop use and call veterinarian.

Courtesy of THE ANIMAL PROTECTION INSTITUTE OF AMERICA

A LOOK AT CANINE BEHAVIOR

continued from page 17

unstable dogs are people who do not know the needs of their pets. I think a good step in the right direction is that anyone owning one of the larger breeds should have a certificate of handling to show he has been through an obedience school. It is very important, especially when you have crowded, suburban environments and a lot of interaction in animals.

Wolf parents are very loving and very unconditional in that they also discipline the cubs, so the cubs grow up to be socially well adjusted. I think this is a critical thing underlying a lot of dogs that have an uninhibited bite. Owners who indulge them with no discipline will induce canine delinquency. As I mentioned in my book Understanding Your Dog, it is easy to produce a canine sociopath.

Wolves are exemplary parents. The father wolf brings food to the mother in the den. The pack "aunts" and "uncles" babysit and bring food to the cubs, too. It is a sad thing today in male dogs used for stud that they are bred, then taken away. How much parental behavior have we removed in male dogs? It is an interesting question.

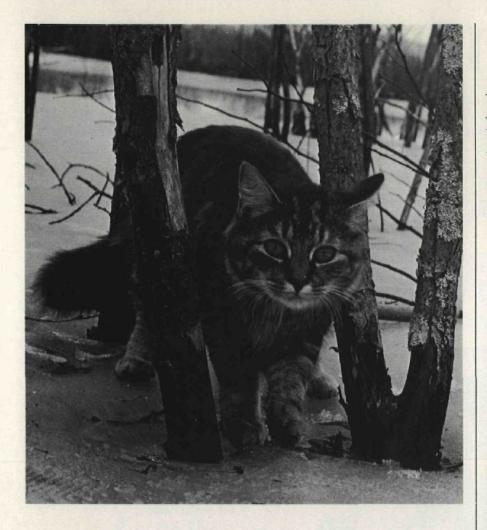
Some breeders are suddenly amazed when they put their male with his own pups, and a beautiful family interaction takes place. It may be good for the puppies, too, especially if the bitch is rather neurotic.

By the way, wolves do not make good pets, although they are not vicious. If you bring them into a house where there is a sofa, they can rip up the sofa in seconds. And if you have a bookshelf, they can bring down every book within minutes. They are curious and love to investigate everything. Wolves' exploratory behavior and inquisitiveness is very difficult to control.

I think part of the conservation and understanding of the wolf lies in appreciating it for itself. Man tends to see the world in terms of his own needs, in terms of how he can use and manipulate it for his own end. He sees the wilderness this way, the wolf and the deer. It is an ego trip.

We need a new set of values something to get people to appreciate the wolf, the dog, another person, intrinsically with its own values and its own rights. Then we will have a better world. But the human ego frightens me now. It is an immature stage of evolution, and we are stuck there right now. We must find the light within our own consciences.

See Jan/Feb 1976 issue for Part II of this interesting discussion.



A MARBLE SARCOPHAGUS FOR A PRETTY CAT

By Mary Wells Geer

Thumbing my way through an old and dusty guide to the city of Paris, I came upon an intriguing epitaph which had been engraved long ago upon an elaborately sculptured tomb for a well-loved cat.

Locating the spot where this tomb was discovered, the faded description reads: "Behind the Boulevard Henri Quatre on the west side of the block. Here Sebastien Zamet, the Italian financier and bosom friend of King Henri IV, built a mansion." Parisians called it "the King's love palace" – for here the King brought his favorite mistress, Gabrielle d'Estrées. Unfortunately, one night after supper here she felt ill and suddenly died. The King believed her to have been poisoned, but alas, she was in labor with his child.

After Zamet's death, this home was sold to the famous Constable Lesdigières; and a century later it was the temporary residence of the Russian Czar, Peter the Great, while he was visiting in Paris.

While this great house was being demolished to make way for a boulevard which would be built across the site, the small but exquisite tomb of "the pretty cat" was brought to light. This pet had belonged to Françoise Marguerite de Dondi, Duchess of Lesdigières. She had commissioned this sentimental and touching epitath to be composed and carved in archaic French upon the stone:

"Cy-gist une chatte jolie; Sa maîtresse, qui n'aime rien, L'aima jusqu'à la folie Pourquoi le dire? On le voit bien." Freely, albeit faithfully translated, it reads: "Here lies the lady's pretty kitty, The doleful subject of my ditty. 'I loved her 'live, I'll love her dead – She's all I'll love,' the lady said."

(Story based upon an item found in WALKS IN PARIS by Augustus Hare, 1888.)

A NEW WAY OF SOLVING Birth Defects in Cattle

According to Kansas State University, Dr. Horst Leipold is a puzzle solver. The puzzles he works with are puzzles of nature, and in solving them – hereditary and birth defects of domestic cattle – Dr. Leipold has become a recognized world authority.

If Dr. Leipold, an associate professor of pathology in the Kansas State University College of Veterinary Medicine, has a basic belief, it is that everything in nature has a meaning.

"Each animal," the husky German-educated scientist lectured in a recent interview, "is a result of one of nature's experiments. When something goes wrong, I try to untangle the web and determine what has happened."

Dr. Leipold's success speaks for itself. In the past decade he has been primarily responsible for identifying and describing 25 disorders and birth defects in cattle. Several are of world-wide concern.

Largely as a result of his leadership, Kansas State University now maintains the only specialized center in the United States (the Laboratory for Hereditary and Birth Defects) for diagnosing and interpreting hereditary diseases and birth defects in cattle.

Just how valuable Dr. Leipold's contributions have been is impossible to calculate, but Dr. Keith Huston, associate director of the Kansas Agricultural Experiment Station, gives this example:

"As much as one per cent of the calf crop is lost to hereditary or birth defects. In Kansas, with 2.2 million head, this means that we would have had an additional 22,000 head of cattle had there been no losses.

"If one figures each calf worth \$50 at birth, this represents a monetary loss to Kansas of more than a million dollars.

"And this doesn't complete the picture," he continues. "In some instances, outstanding bulls may have more than 100,000 offspring, and *continued on page 23*

PET DOCTORS RESPOND AROUND-THE-CLOCK AT ULTRA-MODERN VETERINARIAN CLINIC

At the Crago Veterinary Clinic in Youngstown, Ohio, animal medicine follows human standards -- even to around-the-clock calls. A telephone answering service, after hours, radios a caller's number to the veterinarian's pocket receiver within a 30-mile radius so he can respond.



Doberman awaits surgery for an intestinal tumor. Bandage on forepaw protects incision while intravenous catheter was inserted to administer fluids during and after surgery..

The man and his wife were seated in a restaurant when a buzzer sounded. He flicked a lever on a pocket receiving set and went to a telephone.

"An emergency," he told his wife after completing his call.

"Can't be helped," she said. "I'll see you afterwards."

Dr. W. H. Crago left to perform a hysterectomy on a shepherd dog. Acute pyometra, an infection of the uterus, had developed, and immediate surgery was needed.

With most of the patient's dogs and cats, the practice ranges from x-ray studies for diagnosis of hidden disorders to treatment of cardiovascular ills. The air-conditioned clinic, equipped with an electrocardiograph and other advanced instruments, has two surgery rooms, piped for oxygen, nitrogen, and air suction.

The Crago family founded the clinic in 1937. Dr. W. H. Crago is known as "Dr. Bill" - to distinguish him from his brother, V. G. Crago, clinic director, and T. G. Crago, the director's son. A fourth veterinarian is D. E. Huber. All received their D.V.M. degrees from Ohio State University, except Dr. Huber who earned his at Auburn University.

In Youngstown, a strict leash law reduces the number of fractures treated. Hence, most of the clinic's diagnostic x-ray is devoted to soft tissue structures, including heart and blood vessels. X-raying such tissue demands the highest standards to register sufficient detail. In examining animals, some 200 radiographs are produced each month.

With Dr. Bill, there are no half measures. A former president of the American Veterinary Radiology Society, he also has served as chairman of the radiology review board for the Standards Committee of the American Animal Hospital Association.

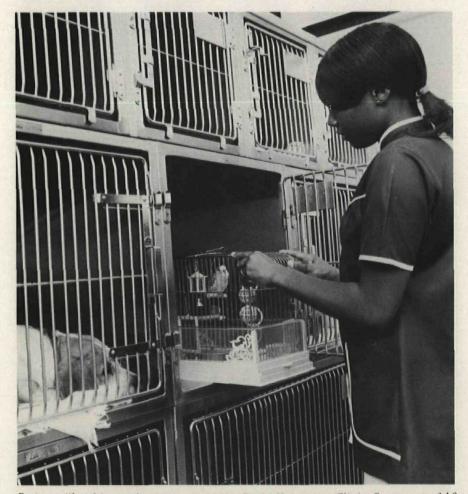
"It's sometimes difficult to make a proper interpretation with a good radiograph," he says wryly. "With a poor one, it's nearly impossible."

The inpatient area includes 16 compartments for small animals and three runs, incorporating a dental alcove and two preparatory areas. Arranged for efficient traffic flow are four examining rooms, a pharmacy, and laboratory, in addition to surgery and radiology.

Although cases of cardiovascular ills are treated in dogs and cats, Dr. Crago says no open-heart surgery has been performed yet. He refers such cases to his Alma Mater, the Ohio State University School of Veterinary Medicine.



W. H. (Bill) Crago, D.V.M., discusses radiographs of dog patients at the Crago Veterinary Clinic. At lower right of viewer is a 14 x 17-inch radiograph containing four successive exposures. Through a method devised by the veterinarian, it is possible to expose four x-ray views -- dorsal-ventral, slight oblique, more oblique, and lateral -- on the same film within 30 seconds.



Patients like this parakeet are rare at the Crago Veterinary Clinic. Seven out of 10 patients are dogs, while cats make up most of the balance.

BIRTH DEFECTS IN CATTLE

continued from page 21

through sons and grandsons be responsible for a fifth of the individuals in a single breed.

"Losses can be catastrophic. In the 1940's, for example, when dwarfism became the scourge of the Hereford breed, even entire herds were liquidated so that breeding lines could be eliminated."

Huston says that today, thanks to the work of Dr. Leipold and his associates in the KSU Laboratory for Hereditary Diseases and Birth Defects, scientists have a lot better idea of how to control genetic miscues,

This past year, for example, the KSU Laboratory worked with six of the nation's purebred beef and dairy cattle registry organizations and with seven of the largest artificial breeding organizations in the country. As a result of these meetings, six bulls were removed from studs in a selective effort to solve breeding problems.

To control in this fashion is important, Huston notes, because if an outstanding individual has to be removed from stud this particular bull's outstanding qualities may be lost, with tremendous unseen economic consequences.

"Calculate for yourself what it means if offspring of one bull are 10% more efficient in using feed than the offspring of another bull," Huston adds.

Dr. Leipold's work also is of interest in human medicine. Many of the defects with which he works have their counterparts in humans. And since these defects are difficult to study in humans, Dr. Leipold's investigations take on added interest for those in human medicine.

One of these diseases is "arthrogrypossis," which leaves its victims with crippled, deformed, limbs.

"This is one of the scourges of modern medicine," comments Dr. Leipold. "It is a worldwide problem in all breeds of cattle, and a problem in human medicine as well."

Another disease important in both humans and animals is osteopetrosis (marble bones).

"The offspring are born with solid bones which contain no bone marrow so that there is no way for red blood cells to be formed."

Dr. Leipold and associates also have described three new, and different, types of albinism. These are of special interest because one type is close to human conditions.

Among other important diseases of cattle that have been identified and described are syndactyly (mulefoot), continued on page 26



when PETS were



By Letha Curtis Musgrave

The Egyptian Cat Goddess, Bast or Bastet, Mansell Collection, London.

Every year dozens of brightly garlanded boats bore pilgrims up or down the Nile to a very special island. Making merry music all the way women singing and clapping, men playing flutes - the voyagers stopped at every town and village along the river to watch the townspeople perform dances on the pier as their part in the festivities. Having docked at the island at last, the pilgrims walked through sacred groves to a huge, red granite temple, there to make sacrifices, drink wine and enjoy a memorable feast. The occasion? The annual festival of the Cat goddess Bastet, favorite deity of the Egyptians 3500 years ago.

Bastet, represented as a cat or a woman with a cat's head, was goddess of many of the best things in life-motherhood, fire and warmth, fertility, the hunt, and indeed of happiness itself. She was also goddess of the moon. In many ways her cat nature fitted her for this role best of all--and not just because cats are active at night when the moon goddess reigns. The Egyptians believed that the pupils of a cat's eyes grew larger and smaller as the moon waxed and waned. Also, a sleeping cat curled into the form of a crescent of a full circle seemed an ideal symbol of the moon.

As moon goddess, Bastet was not altogether gentle. She had to protect the Egyptians from the dread serpent of darkness. They believed that Bastet held the serpent's head in her claws all night, tearing it if he moved, so that he could not keep the daylight from dawning.

Cat worship took a different form later in Egyptian history, when the sun god, Ra, was supreme. Ra was praised as "the Great Cat, the avenger of the gods, and the judge of words, and the president of the sovereign chiefs and the governor of the holy circle." Ra took the form of the Great Cat mainly when fighting his arch enemy, that same old serpent of darkness, Apep. The ancient Papyrus of Ani shows a cat with a large knife in his paws

cutting off the head of a python symbolic of Ra's victory over his foe.

By far the most dramatic battles between Ra and the serpent took place in the daytime, when Apep tried to devour the sun, causing an eclipse. On those rare but memorable occasions, the Great Cat leaped to the rescue, outdoing even himself in the ferocity of his struggle. At last Apep, badly wounded, gave in. The sun shone once more! In the unbounded rejoicing that followed, all the cats in Egypt, from exalted temple cats to lowly alley cats, received special honor.

On lesser occasions too, the people's gratitude to the gods often took the form of homage to cats, especially those which roamed freely through the temples of Bastet. Since Bastet was the protectress of children, whenever a child recovered from an illness his mother and father thanked her by rewarding the temple cats. The grateful parents shaved the child's head, weighed the hair, and gave an equivalent weight of silver to the Keepers of the Sacred Cats to be used for extra food for the revered animals.

Even cats not privileged to live in the temples were regarded as sacred. No one could harm or kill them. If he did, he risked death himself at the hands of the enraged people. Even as late as 50 B.C., according to the Sicilian historian Diodorus, anyone in Egypt who saw a dead cat would hastily withdraw and shout, "with lamentations," that he had found it already dead. One of the Pharoahs made provision in his will for what was probably the world's first animal shelter, the "Cats' Orchard," a garden where homeless cats could find food and shelter.

Besides taking good care of all the cats at home, Egyptians looked out for feline welfare in other lands. Soldiers on campaign would gather up cats and take them back to Egypt so that they might enjoy their rightful privileges as gods. Thus, in one way and another, Egypt became heavily populated with cats. No wonder a Greek traveler wrote that Egypt was a land where it was more common to meet a god than a man!

But Egyptian cats were not only gods, they were also pets, loved as dearly as we love our pet cats today. Thus human feeling toward them was twofold in nature, a mingling of worship and affection. A thousand years before Bastet's shrine was built, a cat was listed in an inscription as "a little royal favorite." Later many of the scenes of domestic life painted on the walls of fombs included cats. Their playfulness and the affection their masters felt for them clearly show in the paintings, in spite of the highly stylized form of Egyptian art, which seems rather stiff and formal to our modern taste. Even more appealing are the many carvings, often made of gold, which show cats tied to chair legs by ribbons, eating fish, holding mice, nursing their young - doing all the things our cats do.

Apy, an Egyptian sculptor who died about 1400 B.C., was a cat lover immortalized, along with his pets, in a large tomb painting which shows his whole family. He and his wife (also dead) sit quietly while their son and daughter approach bringing gifts - a bouquet, jars of water, a pretty headband. Apy holds a tawny kitten which is playing with his sleeve, while a blue-eyed, spotted cat with a silver ring in its ear sits under his wife's chair.

Another cat lover, Nebamun, made use of his pet as a retriever. Apparently Egyptian cats commonly performed this service, as hunting dogs do today. In a way, this is not surprising, for modern cats often lay dead mice or birds proudly at their masters'feet. But Nebamun's cat went into the water after dead waterfowl! Nebamun (in his tomb painting) stands in a papyrus skiff, his little daughter holding onto his leg, while his cat pounces on two waterfowl, seizing a third in its mouth. Nebamun has just killed the birds with a stick shaped much like a boomerang. Like most other Egyptian cats shown in paintings, his pet is tawny, but with a white face and chest. Spots or stripes rather than solid colors seem to have been characteristic of the cats of that time.

People like Apy and Nebamun loved their cats so much that they went into mourning when their pets died. In fact, the whole family would shave off their eyebrows as a sign of grief. A favorite cat was mummified, just as a person was, and often had a tomb of his own, with his picture on its walls. His master would put little pots of milk in the tomb so the cat would not get hungry in the afterlife or feel neglected. If he could not afford a tomb for his pet--and of course most people couldn't--the bereaved master might save the cat's mummy until the next feast of the Cat Goddess and then bury it in a special place provided at her temple. Or he might take it to one of the many cat cemeteries, the largest of which held hundreds of thousands of cat mummies. Thus he paid his sacred little friend the final tribute of preserving its remains.

After more than 3000 years it is impossible to say which emotion the Egyptians more often or more strongly felt toward their cats - a worshiper's adoration or a master's affection. But it does seem certain that, whether sitting on the god's throne or the pet's cushion, a cat in ancient Egypt enjoyed a twofold love.

ANDM	AIL SIMILES
V	Dr

by Phyllis L. Talbot

We use many figures of speech in our daily lives. A simile is a figure of speech that compares one thing with another. Example, "Spry as a chipmunk." Listed below are others. Can you name them?

- Sly as a - -1. Strong as an - -2.
- 3. Cute as a - - - - - - -
- Quiet as a - - -4.
- Quick as a - -5.

 - Big as an - - -6.
 - Fierce as a - - -7.
 - 8. Busy as a - - - - - -
- 9. Stubborn as a - - - -
- Greedy as a - -10. 11. Meek as a - - - -
- Laugh like a - - -12.
- 13. Wise as an - - -
- 14.
- Silly as a - - -Faithful as a - - -15.

- 1. A wild animal of the dog family
- 2. Bovine beast of burden
- 3. Young cat
- 4. Small rodent
- 5. Feline
- 6. Native animal of Africa
- 7. Native animal of Africa
- 8. Builder of dams
- 9. Long eared quadruped-equine
- 10. Young swine
- Young sheep 11.
- Cowardly animal of Asia and Africa 12.
- Night bird of prey 13.
- 14. Barnyard fowl
- 15. Canine

ANSWERS ON PAGE 29

It		year o MALCA
J.E	2	AVALCA
Le	K	_
□ 12 Iss	ues	\$6.00
24 Issu	Jes	\$10.00
ADDITIONAL PO		America & Spain \$2.00, r Foreign \$4.00 per year
Your Name	One	r orongin galoo per yedi
Street	1 Light Childs	1920 T. T.
City	State	Zip
		t same time), \$4.00 each. \$8.00 each.
То		
To Street		
	State	
Street City	State ad: "From	\$8.00 each. Zip
Street City	ad: "From	\$8.00 each. Zip
Street City Gift card to re □ 12 Issues	ad: "From	\$8,00 each. Zip
Street City Gift card to re □ 12 Issues	ad: "Froms	\$8,00 each. Zip
Street City Gift card to re D 12 Issues To	ad: "Froms	\$8,00 each. Zip
Street City Gift card to re D 12 Issues To Street City	ad: "Froms	\$ 8,00 each. Zip 24 Issues Zip.
Street City Gift card to re D 12 Issues To Street City	ad: "Froms State ad: "From	\$ 8,00 each. Zip 24 Issues Zip.
Street City Gift card to re □ 12 Issues To Street City Gift card to re □ 12 Issues To To City	ad: "Froms State ad: "Froms	\$ 8.00 each. Zip 24 Issues Zip. 24 Issues
Street City Gift card to re □ 12 Issues To Street City Gift card to re □ 12 Issues To To City	ad: "Froms State ad: "From	\$ 8.00 each. Zip 24 Issues Zip. 24 Issues
Street City Gift card to re □ 12 Issues To Street City Gift card to re □ 12 Issues To To 12 Issues To	ad: "Froms State ad: "Froms	\$ 8,00 each. Zip 24 Issues Zip. 24 Issues
Street City Gift card to re □ 12 Issues To Street City Gift card to re □ 12 Issues To Street City City	ad: "Froms State ad: "Froms	\$ 8.00 each. Zip 24 Issues Zip. 24 Issues Zip.
Street City Gift card to re □ 12 Issues To Street City Gift card to re □ 12 Issues To Street City City	ad: "Froms State ad: "Froms State ad: "Froms	\$ 8.00 each. Zip 24 Issues Zip. 24 Issues Zip.

WHY NOT GIVE A MEMBER OF YOUR FAMILY "ANIMAL CAVALCADE" AS A VERY SPECIAL CHRISTMAS GIFT?

AS A COURTESY TO ITS SUBSCRIBERS, CAVALCADE IS MAKING IT POSSIBLE FOR YOU TO GIVE INDIVIDUAL GIFTS OF A TWO-YEAR SUBSCRIPTION FOR \$4.00.

BY DOING IT IN '75, YOU CAN SAVE MONEY ON THE '76 SUBSCRIPTION INCREASE.

CATTLE

continued from page 23

which features fusion of two toes in cattle; hydrocephalus (water on the brain), of which two types have been identified and described; and adactyly (no feet).

Dr. Leipold's successes culminate more than half a century of effort by KSU scientists and geneticists to solve hereditary disorders in livestock.

"It's been a persistent, dogged, effort to keep seeking solutions to these problems," says Huston. "Now, with Dr. Leipold's leader-

"Now, with Dr. Leipold's leadership, some of these problems are being solved. You've got to be patient," Huston continues. "You may have to wait for 15 years to know what you're doing. This whole area remained underdeveloped until Dr. Leipold came along with his special pathological skills.

"Many others had made the same observations he had, and many others had the same information to work with that he has had to work with. But, for one reason or another, no one prior to Dr. Leipold had the interest, dedication, or ability, to solve these problems."

IN THE NEWS continued from page 6

CALIFORNIA VETERINARIANS ANNOUNCE PROGRAM TO SOLVE PET OVERPOPULATION PROBLEM

Dr. William B. Wetmore of Modesto, President of the California Veterinary Medical Association, announced today that the veterinary profession in California will launch a major drive to combat pet animal overpopulation problems in the United States:

"Millions of dollars are spent each year on the wanton destruction of pets and yet no major national campaign has ever been launched to prevent this waste of life and money," Dr. Wetmore noted in addressing his fellow practitioners by letter this past month. "We must take the lead in providing the avenues to bring this national problem under control."



Shirley Jones Serves on Committee

Motion picture actress and television star, Miss Shirley Jones, shared in the opening announcement of the campaign with a special report from her home in Beverly Hills.

"As with all pet owners, and I have four pets of my own, the problem of unwanted and uncared for animals in the United States is enormous. I am delighted to share with the veterinary profession in this drive to provide a birth control answer and to help establish guidelines for responsible pet ownership."

Foundation Formed

An educational foundation has been established, called the ANIMAL BIRTH CONTROL RESEARCH FOUNDATION, holding a tax exempt status, and located in Moraga, California (1024 Country Club Drive).

A steering committee, under the direction of Chairman Dr. Stone and Co-chairman Dr. Donald Blomberg of Antioch, with the guidance of H. Don Mahan, Executive Director of the Southern California Veterinary Medical Association, has been working for more than one year to develop a program that would satisfy the demands of both the profession and the lay public, and meeting the most important goal of an inexpensive product for mass consumption.

DR. VAN PELT TO HEAD SUB-COMMITTEE

Dr. Lloyd Van Pelt, former president of Animal Health Foundation and active supporter of the Animal Cavalcade, has been selected to chair the sub-committee that will be responsible for preparing research grants for the new foundation. Dr. Van Pelt is director of the Animal Care Facility of Harbor General Hospital in Torrance.

EXTENT OF PROBLEM

Major publications in the United States have quoted figures of 55,000,000 to 75,000,000 unwanted pets in this country. Some estimates have put the annual cost to control or destrov unwanted animals at \$500,000,000. This, along with an increase in animal bites (over 1,000,000 reported last year alone) and problems in local communities with leash laws and animal droppings, makes the need for "some action" more imperative than ever.

Progress reports will be found in subsequent issues of Animal Cavalcade.

PROFESSOR OF PARASITOLOGY WINS AWARD

A man whose basic research has resulted in procedures which enable development of parasitic worms (nematodes) in a synthetic environment, Dr. Stanley E. Leland Jr., has been selected by Kansas State University colleagues to receive K-State's "Distinguished Faculty Award" this year.

Dr. Leland, a professor of parasitology in the College of Veterinary Medicine's department of infectious diseases, was the first to culture *in vitro* (in an artificial environment outside the living host animal) from egg to reproductive maturity several species of parasitic worms of domestic animals and the first to develop a practical procedure for using *in vitro* cultures of such nematodes for preliminary screening of potential remedies.

Commented one colleague: "These have been important accomplishments and provide experimental tools to approach biochemical, pharmacological, and immunological problems which are most essential to an understanding of host-parasite interactions."

The "Distinguished Graduate Faculty Award" recipient is chosen by the KSU Graduate Faculty on the basis of "eminent achievements in research, scholarly work, or creative accomplishments." The 49-year-old KSU researcher

The 49-year-old KSU researcher holds B.S. (1949) and M.S. (1950) degrees from the University of Illinois and his Ph.D. (1953) is from Michigan State University.

During his career he has received several hundred thousand dollars in research support. The National Science Foundation, for example, has provided continuous support for his *in vitro* studies since 1959. This research has resulted in more than 100 publications, most of which have appeared in national or international peer-referred journals.

Although his studies have been highly technical, they have important economic consequences world-wide:

- Losses by the American cattle industry from worm parasites alone have been estimated at \$100 million annually. As a member of a research team, and as an independent investigator, Dr. Leland was responsible for original testing and evaluation of several drugs used successfully for combatting parasites in horses, sheep, and cattle. For example, use of piperzine in foals makes losses due to Ascaris infection unnecessary. The K-State researcher also is responsible for the latest, and most complete, cattle parasite surveillance for Kansas.
- Dr. Leland's basic research is making studies not previously possible. For example, as a new tool, *in vitro* cultivation will result in study of marine parasites whose hosts take extensive and unknown global migrations.
- In studies with S. ransomi Dr. Leland reported the first drug treatment procedures to be effective against this parasite which accounted for more than 40 per cent of baby pig mortalities in Florida and surrounding states.

Dr. Leland is presently developing a vaccine against parasitic worms in domestic food animals. This vaccine, which may very well be the first worm metabolite vaccine applied to food animals, is prepared by very sophisticated technology from the metabolites of worms living in test tubes. continued on page 29

"GIVING POWER"

continued from page 16

many variations of a life insurance plan integrated with a program of charitable giving. Only the major areas are dealt with on the theory that these are the plans that are most often used, and on the theory that once these are understood, variations may be devised to suit the particular needs of any individual.

THE GIFT TO CHARITY

An individual taxpayer may, in any given year, donate as much money or other property as he wishes to a qualified charity; there will be no gift tax incurred no matter how large the gift. What is important, however, is the maximum that may be deducted for Federal Income tax purposes.

With respect to Federal Estate Taxes, there is no limitation on the deduction for contributions made to a charity. Thus, for example, an individual could leave his entire estate to a qualified charity and be entitled to a complete Federal Estate Tax deduction for the full amount. As will be seen, it is frequently the interplay of the Federal Income Tax deduction and the Estate Tax deduction which demonstrates the absolutely superior position that the life insurance vehicle occupies when contemplating a program of gifts to charity. Remember, the whole problem of gift taxes has nothing whatever to do with the concept of charitable giving.

Accordingly, there are two areas that must be borne in mind, simultaneously, when a charitable contribution is contemplated:

- (a) The income tax deduction;
- (b) The estate tax deduction.

Both deductions are not always present under every type of arrangement, but some plans can be erected so that both an income and estate tax deduction will accrue to the insured donor.

Charitable contributions must fall into one of two categories:

- 1. Lifetime donations
- 2. Testamentary gifts

LIFETIME DONATIONS

A life insurance gift to charity is generally thought of as being a substitute for a testamentary bequest under a donor's Will. Life insurance can, nevertheless, be integrated with lifetime giving where the projected donations are significant enough to warrant such a course of action. The life insurance concept, coupled with the pledge to be fulfilled during the donor's lifetime, in all probability, is a significant area which is overlooked. That is to say, the life insurance vehicle is usually not programmed with a gift to charity that is to be completed during the donor's lifetime.

It appears, however, that a life insurance vehicle can play a unique role when coupled with a pledge to be fulfilled pursuant to a series of annual lifetime donations or a single sum donation to a charity.

The usual form of a lifetime donation is the pledge under which the donor promises to contribute to a selected charity a specific sum and undertakes to fulfill this promise by programming a series of periodic gifts each year until the pledge is fulfilled.

For example: if a donor has pledged \$10,000 to a charity, (such as the Animal Health Foundation), payable over a ten-year period at \$1,000 per year, it may be infinitely preferable for him (and for the charity) to purchase a ten-year endowment policy in the amount of the pledge (i.e., \$10,000) and vest the policy in the charity.

If the donor should die before the pledge is fulfilled, the charity is assured of collecting the entire amount of the projected contribution. In addition, with a Waiver of Premium Benefit, the donor's promise would be complied with should he become disabled during the term of the pledge. Moreover, by placing the projected gift on such a formal basis, the likelihood of the donor completing the arrangement is immeasurably increased.

If the donor should, on the other hand, cease to continue making his contributions to the charity, the charity would merely surrender the contract. It is to be noted that the amount the charity would derive from the cash surrender value of the contract would usually be only slightly less than the amount it would have had, had the donor made cash contributions to the charitable organization. It appears that the positive factors of this arrangement far outweigh this insignificant disability which would be incurred by the charitable organization.

Naturally, when the donor purchases the policy contract and gives it to the charity, he will be entitled to a charitable income tax deduction against current income for each premium payment made, just as he would be entitled to a deduction for cash contributions. By using the insurance medium as a vehicle for his lifetime donations, it would usually not cost the donor\$10,000 to make a \$10,000 donation, even if he makes the premium deposits for the full term of the endowment.

The estate tax aspects would not be a factor here, as the extent of the gift is relatively small.

TESTAMENTARY GIFTS

The utilization of a life insurance medium as a vehicle to make a gift to charity that will take effect at the donor's death, without question, is the best method of making a contribution to charity at death.

The small annual premium payment can result in an exceedingly large gift to a charity at the insured-donor's death; life insurance assures the charity of the receipt of a definite amount when the donor dies. In addition, the insurance method of giving is vastly superior to a testamentary gift to charity for the death benefits will not pass via a donor's Will, are not part of his probate estate, and will not be effected by administrative problems that could arise, e.g., Will contests, claims of creditors, state statutes restricting bequests to charity, (1) or delays in administration. When added to all this, the tax factors are considered, there is no comparison between a gift to charity made at the death in the donor's Will and a gift to charity made at the donor's death via a life insurance policy contract. It is here that the tax factors assume significant proportions. Indeed, under various arrangements, the insureddonor may derive a full income tax deduction for each premium payment made, as well as a Federal Estate Tax deduction for the life insurance proceeds.

HOW YOU CAN HELP THE ANIMAL HEALTH FOUNDATION

As a subscriber to the Animal Cavalcade, we would like you to become fully aware of the Animal Health Foundation and consider your present and future allocations of charitable contributions. Such charitable contributions may of course be made without any consideration or thought of personal gain or benefit. Nevertheless, in this era of high taxes, substantial charitable contributions are feasible only when full advantage is taken of all benefits — tax and otherwise.

For years, the Animal Health Foundation has explored the feasibility of providing a charitable giving plan that is flexible enough to accommodate all of its members and subscribers, and enabling them to take advantage of both favorable personal estate planning and favorable current income tax advantages.

Particularly at this time, with the tax year nearing the close, it might be desirable as well as profitable and satisfying to investigate the advantages of this program. For full details-CALL OUR OFFICE - 213-682-3080 (and ask for Jack Wambold); of course, there is no obligation. IN THE NEWS

continued from page 27

CAGE BIRDS NEED SPECIAL ATTENTION NOW

by Maxwell Riddle Reprinted courtesy Pets/Supplies/Marketing October 1973

This is the time of the year when days may be still warm but nights are cold. It is therefore a bad time for cage birds — parakeets, canaries and finches. Since many homes have not yet turned on winter heat, there is a great variance in temperature between night and day. It is your responsibility as a retailer to warn your bird customers about the dangers their birds are susceptible to now.

The most important point to stress is that cage birds are not wild and therefore need extra health care. In all cases, the bird owner should try to precent radical changes in home temperature between night and day. The bird should be kept away from drafts at all times. Although it's fine to move a cage near a sunny window during the day, provided the bird can perch out of the sun if it desires, a cold night wind blowing against a window can create a chilling draft.

Many owners cover their bird cage at night and this is a good practice. It not only prevents night drafts, it also cuts out night light and helps give the bird a closer approximation of the seasons.

I know of one budgie which has survived several years of Ohio winters by adapting to the life of a flock of sparrows. But this is one isolated case. The wild birds get a far greater variety of foods than do cage birds. In many

ANSWERS TO ANIMAL SIMILES

from page 25

1.	Fox	9.	Mule
2.	Ox	10.	Pig
3.	Kitten	11.	Lamb
4.	Mouse	12.	Hyena
5.	Cat	13.	Owl
6.	Elephant	14.	Goose
7.	Tiger	15.	Dog
8.	Beaver		

Reference:

Webster's New American Dictionary

cases, this food is also fresher and may be richer in essential nutrients and vitamins. Wild birds also get sun and rain (which helps them clean and preen themselves) so the greater variety of weather may contribute to greater health. For example, winter heat in homes is often too dry for good bird health. For many birds, a fair amount of humidity is necessary for feather growth.

Cage birds also get about the same amount of light the year around, which is not necessarily good for them since light is apparently the key to molting and skin problems. In addition to this, cage birds, even when given flying freedom, are weak flyers.

Another important practice your customer should be reminded of is that cage birds often require trimming of the beak. These birds often suffer from a bill which is either overgrown, horny or distorted.

At least one probable cause of this is the failure of the owner to give the bird something upon which to "sand paper" its bill. You should have some type of "rubbing stone" in the store to help solve the problem.

There are several methods for correcting this overgrown bill. The least desirable is to file the bill, either with a metal file or with an emery board. However, most birds do not like this method since they need to be handled longer than is really wise.

A better method is to cut and shape the bill with a razor blade, but your customer should be encouraged to have a reputable veterinarian perform this for at least the first few times.

Last, but not least, encourage your bird customers to invest in some type of "how to" book on the care and feeding of birds in general or of their particular breed of pet bird.

NURSERY SCHOOL ZOO INFO

The Anti-Cruelty Society is pleased to announce a new publication on the study of live animals for young children. Called "Nursery School Zoo," this 86-page illustrated manual was recently published by the Day Care Council of New York. The manual covers four live animal projects. These projects were designed specifically for teachers in early childhood classes but are easily applicable for home use by parents with young children. The projects emphasize proper animal care and guide the children so that they may learn many interesting facts about animal behavior by direct observation.

Project 1, The Mealworm, describes how to set up cultures for this insect larva. Various behavior studies focus the children's powers of observation on discovering facts about the animals such as how they move, what they eat, and how they respond to a directional light source. During the course of the project children will discover the miracle of insect metamorphisis on their own as the mealworms transform first into pupa and then into adult beetles.

Project 2, Guinea Pigs and Rabbits, describes the proper care and feeding of these furry, warm blooded companion animals. Of particular note are instructions on how to train a free-roaming classroom rabbit to use a kitty litter pan.

Project 3, The Land Snail, is the authors' favorite. Land snails, which can be obtained from Italian fish markets, are strange and bizarre creatures whose unusual behavior patterns can be easily observed and recorded by children. Following a discussion of the primary senses of man, the children undertake studies of snails in an attempt to determine whether they too can see, smell, taste, hear and feel. The snail's unusual anatomy is studied, as well as its incredible ability to travel over tightropes and sharp surfaces. This project will also be the subject of the Amateur Scientist column in the February issue of "The Scientific American."

Project 4, The Aquarium, describes the steps necessary to set up a successful fresh water environment for tropical fishes. Emphasis in the project is on study of the behavior patterns of a variety of fishes, and on the ecology of the aquarium, particularly how respiratory gases are exchanged and how nitrogenous wastes are eliminated.

Throughout the projects the anatomy and behavior of the animals in question is compared directly to that of the children themselves. Every attempt is made to utilize the animals under the children's care in reinforcing learning in a variety of subjects. For instance, by tracing the path traveled by mealworms over lettered squares, children are provided with a learning experience in letter recognition and word formation.

Development of these projects was originally sponsored by the New York Zoological Society and the Day Care Council of New York. Funds for publication were obtained by a grant from the Federation of Protestant Welfare Agencies of New York and for the illustrations from The Anti-Cruelty Society in Chicago. Copies of this manual may be obtained by writing the Day Care Council of New York, Inc., 205 East 42nd Street, New York, NY 10017.



CAN CATS BE TRAINED ?

By Louis J. Camuti, B.S., D.V.S.

In my opinion, nothing is more pitiful than a dog—or bird, monkey, seal, bear, or what have you—going through a series of contortions that people call tricks. I don't feel sorry for the animal. He doesn't know or care that he's being made to look not like an animal but a grotesque reflection of a person. Some of the ''trainable'' animals even seem to enjoy it. My pity is for the human who feels driven by some inner compulsion to make himself master over these animals and to prove it by teaching them things no animal would even consider if left to his own devices.

All cats can sit up and beg, walk on their hind legs, roll over and play dead; if they feel like it. My own cats have gone through as many routines as a vaudeville hoofer, especially at mealtime. But no cat will do anything consistently on command. I'm glad of that. Somehow it pleases me to know that I'm enjoying the company of an animal who doesn't feel obliged to show his affection by serving me, or winning my food and favor by playing the clown.

The nearest thing to a "trick" cat I've seen was Beebe, a female Siamese kept by Earle Larimore, a stage star. Larimore had just come back from Hollywood when I first met him. He was fed up with the place, disgusted with most of the movies being turned out, content to live quietly away from the whole business. He spent much of his leisure with Beebe; the cat and the actor seemed to have reached some deep and secret understanding. I shall never forget Larimore's expressive face when he looked at Beebe, as if he and his pet were communicating wordlessly, sharing private jokes and mutual opinions of the world.

Larimore and Beebe made a great team. When Larimore bent down and held out his arms in the form of a hoop, Beebe came racing up and jumped through. Another act starred Larimore and Beebe in a colossal production called "Bumpsy."

In this, Larimore played straight man or second banana. While Beebe watched him from one corner of the room, the actor knelt and bent his head toward the floor.

"Bumpsy!" he called.

Reprinted courtesy of FELINE PRACTICE – Jul/Aug '74

Beebe would crouch for a moment, wiggle her hindquarters, then run at top speed toward the actor. The cat skidded to a stop a few inches from Larimore, and the two of them would gently bump their heads together.

Larimore's favorite routine involved a verbal command. As soon as he was sure of Beebe's attention, he would crouch slightly, hands on his knees.

"Go Hollywood, Beebe," he ordered. "Go Hollywood!"

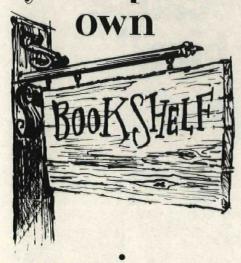
Beebe, with a look of utter abandon, flopped to the floor, rolled over, all paws up, and wriggled back and forth.

Larimore unquestionably had a way with Beebe. He was also a master showman with a perfect sense of timing. Without detracting from Larimore's skill as an impresario of cats, I suspected that Beebe might have done the tricks anyway and that Larimore, an instinctive trouper, knew just when to go along with them.

There's a difference between tricks and training. If cats refuse to compromise their dignity by doing tricks, they are the easiest of all animals to train, if you consider training the ability to fit into your environment. Most cats practically housebreak themselves. Show them their toilet pan a few times—sometimes once is enough—and they will use it from then on. Cats have adapted happily to living with newspapermen, theater people, and writers, most of whom live on the weirdest routines and schedules I've ever known.

But cats agree to discipline only when they feel like it. Basically, a cat will do what he wants. Punishment, with cats, is not only cruel, but stupid and useless. The old wives' recourse to ''rubbing his nose in it'' is insulting to a cat.

Cats can be trained. However, it's much easier to let the cat train you. He will, in short order, let you know exactly how things should be arranged, what he expects you to do to suit his convenience, how he likes his food served, and where he chooses to sleep. It is surprising how quickly humans can learn. The result will be a harmonious, happy relationship. your pet's



YOUR PET'S SECRET LANGUAGE: HOW TO UNDERSTAND IT AND SPEAK IT

by Jhan Robbins Introduction by Cleveland Amory Peter K. Wyden, Publisher \$6.95

Have you ever wished you could talk things over with your pet... but dismissed the thought as impossible? This book tells you just how ...

The Fund for Animals has as its proud slogan, "We speak for those who can't." Now, it appears animals not only *can* speak, they *do* speak. The trouble is, we haven't learned to listen.

For the first time, a book shows step-by-step how to tune yourself in to understand your pet's sounds and signals, and even carry on two-way "conversations" with your favorite animal. Based on clinical research and interviews with dozens of scientists and perceptive owners of dogs, cats, birds and horses, it documents that dolphins and chimpanzees are not alone in using extensive vocabularies.

Originally skeptical, the amazed author discovered pets with sophisticated responses and true comprehension. He reports how the owners lives were enriched by adding this most exciting dimension to the relationships with their animals. Your Pet's Secret Language contains a wealth of practical information to insure your success:

Communication aptitudes of 21 leading dog breeds including mongrels Communication talents of six lead-

ing breeds of cats How to unlock the mysteries of pet language through the proven principle called R.A.P.

Lists of Do's and Don'ts for communicating with your pet

A complete Pet Communication Dictionary for verbal and nonverbal communication between animals and their owners.

Jhan Robbins has owned a total of 13 dogs, three cats and five horses. He is a former President of the Society of Magazine Writers, and his articles, particularly in the fields of science and health, have appeared in several national magazines. His book, *Eight Weeks to Live*, was nominated for a Pulitzer Prize, and he has been a consultant to the Association for the Advancement of Psychoanalysis.

IF YOU HAVEN'T SUB-SCRIBED TO ANIMAL CAVAL-CADE – ASK YOUR VETER-INARIAN FOR A COPY TO READ.

AN EGG-CITING MALLARD

By Guy J. Ruston

There's a domestic mallard in Loughborough, England that's a real supporter of Ducks Unlimited. She hatched her first clutch last June; but no sooner were the ten little ones in the farm pond than she began laying again. Her owner, believing the little mother had enough to do with ten lively youngsters, gave some of the next seventeen eggs to a broody hen and the rest to another mallard.

Still the eggs kept coming.

Our heroine is now setting on a clutch of ten more eggs, having produced her first thirty-seven in six months.

(A re-write of a report in New Reveille, London, England)

AN OLD DOGS' TALE

Several hunters were sitting around one night bragging about the dogs they owned. Noting that an elderly native was listening intently, they laid it on thick. "Take my setter," said one man. "When I send him to the store for eggs, he refuses to accept them unless they are fresh. What a nose that dog has!"

"That's nothing," boasted another. "My springer goes out for my cigars and refuses to accept any but my favorite brand. Not only that, he won't smoke any until he gets home and I offer him one."

"Say, old timer," said another man, turning to the native, "did you ever hear of any dogs as smart as ours?"

"Just one – my brother's dog," was the reply. "I think maybe he's a little smarter."

"How?" he was asked.

"Well," replied the native, "he runs the store where your dogs trade."

Animal Health Foundation

8338 Rosemead Boulevard, Pico Rivera, California 90660

BOARD OF TRUSTEES (who serve without remuneration)

Howard A. Weyker, D.V.M., President Richard S. Glassberg, D.V.M., Vice President W.A. Young, D.V.M., Secretary Foster A. Lasdon, D.V.M., Treasurer Nino Aloro, D.V.M. Clinton M. Baxter, D.V.M. Richard B. Fink, D.V.M. William A. Grant, D.V.M. Richard D. Macy, D.V.M.

Harry Maiden, Executive Director

William W. Putney, D.V.M. William K. Riddell, D.V.M. Thomas N. Snortum, D.V.M. Arthur W. Stone, D.V.M. Delbert A. Thomas, J.D.

"I feed my dog ALPO" because I know meat's good for him."

Allen Products Co., Inc

"Meat is a dog's natural food. It's full of protein, energy and nourishment. And meat's what he loves most. That's why I feed my dog ALPO. ALPO Beef Chunks Dinner is meat by-products and beef—without a speck of cereal. And ALPO's all a dog ever needs to eat.

I spend a lot of time working for the proper care and protection of animals, and when it comes to feeding my own dog, I know there isn't a better dog food than ALPO."

formegreene