

ANIMAL CAVALCADE

JAN/FEB 1972

60¢



EDITOR'S NOTEBOOK

ANIMAL CAVALCADE is edited for the pet owners who want information on subjects related to the health and care of their pets. All department editors are veterinarians. Feature articles give special emphasis to pet health problems, care nutrition, grooming and training.

The staff of ANIMAL CAVALCADE has endeavored to fill the void that has previously been neglected.

Our sole aim is to bring you information and articles of interest that are abreast of the times. We will always endeavor to keep our information factual and in the language of the layman, and never intentionally be slanted in our approach to any subject.

ANIMAL CAVALCADE is not oriented to treatment or diagnosis of individual cases. Undoubtedly, questions will arise on which you will want more information. If you do not have a personal veterinarian, or do not want to take his valuable time to discuss a subject in which you are personally interested, we encourage your inquiries to the office of ANIMAL CAVALCADE. In these cases, we will endeavor to obtain the most recent information and report it as a factual matter in the next issue.

It is our firm belief with the wonderful help of the Animal Health Foundation, willing and capable lay writers interested in our approach, and the support of many interested veterinarians in all fields of endeavor we will be able to serve the animal owner in a more efficient manner.

In the last issue of "Animal Cavalcade", we printed a guide of recommended vaccinations for cats, dogs, and horses.

It was not our intent to prescribe any specific type of vaccine or any procedure as to their administration. We wished to inform the animal owner that these vaccinations are available and should be given at specific intervals.

We are aware that each veterinarian has his own tried and proven method that he has found successful in his practice. We do not want to convey any thought that we were invading the prerogative of the veterinarian.

The method chosen by your personal veterinarian is the one he has found to be the most effective in his hands, and area of practice, for reliability.

Our objective is to inform the readers that these vaccinations are available and imperative that they be given to protect the health of the animal.

—William Riddell, D.V.M.—

ANIMAL CAVALCADE

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

JAN/FEB 1972

VOLUME 3 NUMBER 1

ARTICLES

- | | |
|-------------------------------------------------------------------------------------------------------|----|
| New Approach To Training Veterinary Assistants | 4 |
| Your Dog's Best Friend, <i>Edwin F. Alston, M.D.</i> | 8 |
| The Morgan Horse, <i>Helen Claire Howes</i> | 14 |
| What Can We Do About Oscar? <i>Linda Harding</i> | 16 |
| Big Change in Veterinary Medicine's Image | 19 |
| Eye, Eye Sir, <i>Felicia Ames</i> | 21 |
| Compulsory Rabies Vaccination Does the Job,
by <i>Edward Aaron, D.V.M., and H. Don Mahan</i> | 23 |
| The Heart In the Older Dog, <i>Robert E. Simpson, D.V.M.</i> | 24 |
| Contraceptive Vaccine Viewed As Final Answer
to Stray Dog & Cat Problem | 28 |

DEPARTMENTS

- | | |
|--------------------------------|----|
| Pet Shopper | 12 |
| Your Pet's Own Bookshelf | 11 |
| Animal Fun | 18 |
| Doctor's Advice | 25 |
| Animal Health News | 26 |

William K. Riddell, D.V.M.	Editorial Director
Harry Miller	Editorial Consultant
Millwood A. Custer, D.V.M.	Small Animals Editor
Charles H. Reid, D.V.M.	Equine Editor
Robert J. Schroeder, D.V.M.	Ecology & Public Health Editor
Oscar W. Schalm, D.V.M.	Research Editor
Wesley A. Young, D.V.M.	Exotic Animals Editor

Bill Williams	Art Director
Laura Tracy	Advertising Director

Address all advertising and editorial communications to ANIMAL CAVALCADE, 11926 Santa Monica Blvd., Los Angeles, California 90025. Area Code 213, 826-3647. All editorial correspondence and manuscripts must be accompanied by a stamped self-addressed envelope.


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.

COVER:

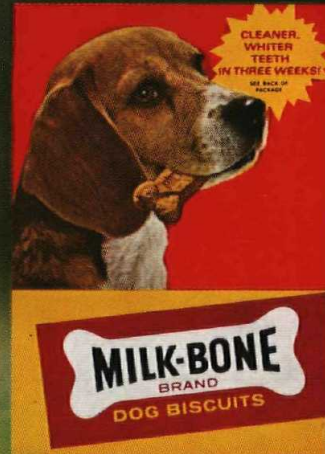
This playful Silver Persian was photographed "doing its thing" by Victor Baldwin, Beverly Hills, Calif.

ANIMAL CAVALCADE is published bi-monthly by Continental Publishing Corp. for 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 same time), \$4.00 each. Copyright, 1972, Continental Publishing Corp.



**“How I got
cleaner whiter teeth
in just three weeks.”**

I had dingy teeth. And doggy breath. Nobody kissed me twice. Even my best friend wouldn't tell me why. Then I discovered MILK-BONE Dog Biscuits. Hard crunchy nourishing biscuits that scraped away unsightly stains and tartar (from my otherwise sound and healthy teeth). Removed particles of soft food. Actually helped strengthen my gums. And made my breath almost human again. And best of all, with Milk-Bone® Dog Biscuits, I got cleaner, whiter teeth in just three weeks!



© 1972 NABISCO, INC.

NEW APPROACH TO TRAINING VETERINARY ASSISTANTS

by Eugene Auerbach, Ph.D.

How will your veterinarian meet the demands of the pet explosion? He'll depend more and more on assistants. Where will the doctor get trained help? That's a perennial question.

The veterinary profession, has, as yet, not developed a comprehensive program for training assistants. Many "starts" have been made in this direction—but most of the training still is carried out on the job by the doctors themselves.

Training of personnel by practicing doctors becomes more and more difficult as heavy demands are placed on the time of the D.V.M.'s. For years the profession has been exploring various ideas for assistants' training programs. At the present time, a handful of community colleges offer one-year and two-year programs. But now a quick-learn course for animal care assistants has been developed by the North American School of Animal Sciences (4500 Campus Drive, Newport Beach,

92663). The new course is an updated version of a tried and true method—education by correspondence.

In regard to the one year and two year programs, a list of the colleges offering such training is available from the American Association for Laboratory Animal Sciences, P.O. Box 10, Joliet, Illinois, 60434. As its name indicates, the AALAS is largely concerned with the care of laboratory animals—those kept for research in universities and pharmaceutical companies.

The new North American course was designed for students who could not afford the time and money involved in attending a resident school for one or two years. The North American method utilizes the principles of programmed learning: subject matter is organized into small, discrete units; there is constant reinforcement of learning; there are numerous checks on the student (the student cannot go ahead until he has mastered the previous instruction); there is corrective

feedback; there is a great deal of self-testing; and the education is student centered. A built in "variable speed" factor enables the student to go as fast or slow as his ability and time permits.

With a program developed in accordance with the ethical standards of the American Veterinary Medical Assoc., the North American School of Animal Sciences plans a three-phase program: 1) the development of a 50-lesson general course (home study); 2) the development of advanced courses in anesthesia, laboratory testing, post-operative care, surgical assisting, small animal hospital accounting, and vivarium technology; and 3) the establishment of a resident training program.

The 50-lesson general course provides a foundation for a cluster of positions including receptionists in animal hospitals, kennel men, animal shelter attendants, general veterinary assistants, zookeepers' aides, pet shop

continued on page 6

SAN FRANCISCO, CALIFORNIA'S



VAN NESS HAS
Van Ness
MOTEL

2850 Van Ness Ave. (U. S. 101)
one block from Van Ness and
Lombard Intersection.

• Telephone 415/776-3220

- LOCATION
Walk to Fisherman's Wharf
 - FREE COLOR TV
 - FREE CONTINENTAL
BREAKFAST
 - FREE PARKING
 - FREE AM/FM RADIO
 - FREE ICE
 - MODERATE RATES
- Most Credit Cards Honored
Bank Americard • Master
Charge • American Express
Diners Club • Carte Blanch
Mobile • Petrofina
Atlantic/Richfield

THE PET PRIDE PEOPLE

Pet Pride's greatest aim is to promote CATS to a high place in our culture. The steps we are taking in this climb are now in process, namely: getting control of the population, educating the public about cats, urging man to share his own environment (when pleasant), developing respect for the cat's intelligence and his well being, and seeing to it that he is living the GOOD LIFE.

We constantly tell our prospective Cat People that their Veterinarian is their cat's greatest friend and that their cat must have his yearly health-check just as people do. Our best seller HANDBOOK FOR CAT PEOPLE is now available 213/459-1703 or write 15113 Sunset, Pacific Palisades, Ca. 90272.



continued from page 4

assistants, vivarium technicians, and so forth.

The executive director and senior author of the general course of the new school is Dr. W. A. Young, former director of the Los Angeles Zoo. Dr. Young was awarded the Gaines "FIDO" for his humane work; he has served as president of National Dog Week and is president of the American Cat Association. He has received numerous awards for his work with animals.

Assisting Dr. Young will be an active faculty composed of teachers who have also had experience in training in the animal care field and an advisory faculty consisting primarily of D.V.M.'s. The Advisory Faculty includes:

Lester E. Fisher, D.V.M., Head of the Lincoln Park Zoo in Chicago
Floyd W. Frank, D.V.M., Ph.D., University of Idaho, College of Agriculture

Duane Gray, D.V.M., Orange Villa Veterinary Hospital in Orange, California

William K. Riddell, D.V.M., of Palos Verdes, California

Robert H. Haight, D.V.M., R.S., Director of the Orange County Veterinary Public Health Division

Mr. George Crosier, Executive Vice President of the Los Angeles SPCA

R. L. Burkhart, V.M.D., Animal Industry Department, American Cyanamid Company

Among the subjects covered in the North American course are; handling and restraint of animals, first aid, medical terminology, anatomy, office procedures, drugs and medicines, immunity and vaccination, grooming, bacteriology, pathology, x-ray, assistant to the veterinary surgeon, laboratory tests, anesthesia, microscopic and similar topics.

North American Correspondence Schools is one of the world's largest home study schools. It is a subsidiary of National Systems Corporation, a publicly-held educational corporation traded on the American and Pacific Coast Stock Exchanges.

March 1, 1972 has been set as the date when the new school will enroll its first students. The veterinary profession will watch the development of the North American School of Animal Sciences with great interest. It is hoped that the new school will fill a void in the training of veterinary assistants. By operating on a national level and with educational innovations which are features of other North American courses, the new school may indeed provide training that no other segment of the educational world has been able to develop thus far.



BE SURE WITH
THE ORIGINAL
AND PATENTED
FLEA-KILLING
DOG & CAT
COLLARS



Ace FLEACOLLAR

FLEA-KILLING COLLARS
FOR CATS AND DOGS

Lasts
6 to 8
Weeks



SAFE — EFFICIENT
THEY WORK!



FREE BOOKLET
This informative booklet contains important facts every pet owner should know about fleas and flea-control. Write for your FREE copy.

SEND \$2.00 FOR 3 ACE FLEACOLLARS (POSTPAID)
ACE FLEACOLLAR, BOX 236, DEPT. AC-1, ROCHESTER, N.Y. 14601

by Edwin F. Alston, M.D.

I SHOULD MAKE IT PERFECTLY CLEAR that, while I am talking about man and dog, I personally hold no brief for dogs. I have no use for them. I think they are a bad lot. I have never known a dog who wasn't either a bitch or a son of a bitch. Truly, the case against dogs is a really grim one. One charge I would level against them is that they are too possessive and presumptuous.

I once had a dog named Tam who not only took possession of my home, but took it upon himself to protect my wife from all comers. He tried to keep me at bay for more than sixteen years. He hardly ever allowed us to be in the same room alone. Dogs are fickle. While Tam swaggered around the house ignoring me most of the time, it was a different matter when he wanted to go for a walk. Then it would seem from his behavior that he and I were the best of fun loving chums. Dogs have no hesitation in taking over everything. When we would have a party, for which we would have to pay, incidentally, Tam appropriated for himself the role of host and hypocritically greeted every guest as a long lost friend whether he had ever met the person or not.

Dogs are expensive. Forget the costs of feeding them, remodeling the house because of what they have done to it, buying new wardrobes, and just consider the cost in terms of the time you have to spend with a dog—it's staggering. The cost in time, of course, is related to how much you make an hour. For instance, if what you make averages ten dollars an hour and you have to spend at least an hour a day walking your dog, responding to his whims, etc., your dog will cost you three-thousand six-hundred and fifty dollars a year (more for leap year). If you make thirty dollars an hour, it will easily cost you three times more. And this calculation doesn't include over-time pay!

Dogs are great masters of reproach and guilt provocation. I am sure you all know what it is to be reading your paper or whatever, minding your own business, and feel the heaviness of some big sorrowful eyes aimed at you, or how it is to have a dog nose suspiciously going over you upon returning from an evening out. It would be easy to bring other charges against dogs, but why waste the time. Let it be said they are busybodies, they are

boring, they have sickening winning ways, and let it go at that.

I would like to add one additional charge having to do with the direction in which dogs are developing. I predict that dogs are going to be your worst TV watchers. I have a dog now whose case I should report in the scientific literature. His name is Phillippe a la carte. We call him that because he prefers to eat a la carte rather than menu du jour, tout compris. Anyhow, Phillippe has developed the habit of gluing his eyes all day and evening to the TV set. He has two favorite commercials. One is of a Volkswagen beetle fleeing from a foot that is trying to stomp it out. The other is an advertisement attempting to illustrate the realistic reproduction of a certain TV set. It shows a picture of a bird on this set with a cat stalking through an adjacent window to catch the bird. Each of these programs really turns Phillippe on and whenever either appears he jumps off the bed and charges the set with ferocity. No. Considering everything, I swear you couldn't give me another dog. I already have two.

Dogs have tricked us into thinking they are our best friends, that we love them dearly. To understand the true

nature of affairs, I think you have to go deeper than the superficial presumed popularity of dogs. I think we can go deeper by referring to the comments that have been made about dogs by some of the great minds of the past and also by considering briefly current language usage. A lot of literary comments show clearly how dog-like some of man's more base activities are. For instance, in Proverbs it is said, "As a dog returneth to his vomit, so a fool returneth to his folly." There are many references to dogs in Shakespeare, James and O'Henry but I have never found a single complimentary one. To be sure, Mark Twain did utter some very faint praise for the dog when he said, "If you pick up a starving dog and make him prosperous, he will not bite you. This is the principal difference between a dog and a man." One final quote from Veblen's *Theory of the Leisure Class* should be enough to prove my point. He said, "The dog... commends himself to our favour by affording play to our propensity for mastery, and he is also an item of expense, and commonly serves no industrial purpose..."

But we don't have to confine ourselves to the comments of great minds



your dog's best

friend

to realize what our true feelings about dogs are beneath surface pretensions. In our every day language, there are countless expressions of scorn and contempt achieved by attributing some dog trait to a person. We may call him "dog!", "dirty dog", "drunken dog", "mad dog", "a cur of low degree", or "bitch". We may speak of "dogged devotion", a "dog's life", complain of being "hounded", moan about "the hair of the dog that bit us". We could go on adding to this list. I challenge you to think of a single trait identified with the dog that can be attributed to a person as a compliment!

And yet there must be *something* good that could be said for dogs. It's clear that dog's relationship to man goes back into prehistory. Even today, I am told by a friend of mine who works with cannibals in New Guinea that these stone age men have their dogs. From the beginning of recorded history there is more than ample evidence of the symbiotic relationship between man and dog. On ancient tombstones in Egypt, Greece, Persia, China, there are representations of the deceased often showing a dog at the feet. Alexander Pope remarked that

man "But thinks, admitted to that equal sky,/His faithful dog shall bear him company." Elizabeth Barrett Browning wrote of her dog, Flush,

"Therefore to this dog will I,
Tenderly not scornfully,
Render praise and favor:
With my hand upon his head,
Is my benediction said
Therefore and forever."

And Kipling wrote about the departure of a dog in his poem on "The Power of the Dog,"

"When the body that lived at your single will,
With its whimper of welcome is stilled (how still!),
When the spirit that answered your every mood
Is gone—wherever it goes—for good,
You will discover how much you care,
And will give your heart to a dog to tear."

In ancient times dogs were deified. Even today consider what dog spells backwards. Through four-thousand years or more dogs have always sat or laid beside the seats of power. Kings and presidents have cherished and relied upon their dogs for companionship and loyalty. In the homes of

ordinary men all around the world dogs have been and are all but essential to the warmth and joy of the hearth. And any man, no matter how lowly, lonely, and isolated he may be, can feel something like a god if he only has a dog. William Crosswell Doane put it very well:

"I am quite sure he thinks that I am God—

Since he is God on whom each one depends

For life and all things that His bounty send—

For dear old dog, most constant of all friends."

In general, dogs for hundreds of centuries have given generously of themselves to men and women and children. They have provided warmth, devotion, constancy, loyalty, understanding, and joy. Man's world is without doubt a far better world than it would be without his dog. There are moments when his dog makes life endurable, there are moments when his dog helps him find again the love and joy in life. Jealously protective of the dog's power to cast his spell, I would like to take a look at a few of the factors that give the dog his benign power over man.

CoatasheenTM

**THE QUALITY CONDITIONING
SPRAY FOR YOUR DOG**

COATASHEEN is the quality coat conditioner used by professional breeders and handlers to bring out the "show-ring look". Adds sheen and gloss to your dog's coat.



**CONDITIONS
THE COAT
RESTORES
MOISTURE TO
DRY & BRITTLE
COATS**

**LUBRICATES &
PENETRATES
COATS & SKIN**

**DEODORIZES
NON-IRRITATING**

Available at better
pet shops and
pet departments.

ST. AUBREY DIVISION OF 8 IN 1 PET PRODUCTS, INC.
100 EMJAY BLVD., BRENTWOOD, N. Y. 11717

Viking Introduces: MACHINE WASH & DRY

:: Pet Pillows ::

- * New Filling!!
- * Bright Durable Fabrics
- * Popular Priced

Give your pet a clean bed

For Information Contact



P.O. Box 5087
Sacto., Calif. 95817

A few words about the dog may suffice. Every dog comes into the world with his life plan, limits, and potentials pretty well laid out for him by nature. A dog can learn, of course, and change within a narrow range as a result of his learning or training. But the dog's potentialities for learning are severely limited in comparison with man. Accordingly the dog lives and finally dies with the clear, simple, and basic values given to him by nature. What is valued by the dog from the very beginning is eating, sleeping, companionship, and having a leader. All of these values prevail in his wild state and they persist in his domesticated state. His playfulness, needs for companionship and leadership are transferred from pack and pack leader to his master. The dog is simply incapable of becoming fouled up by the abstract values that so torment man, the values of power, money, fame, conspicuous consumption, and the like. The dog never asks, so far as we know, whether he is worthwhile or whether life is worth living. A dog's worth and life's worth are given so far as he is concerned and there is no need to worry about them. The dog is above all a pragmatist. He almost always has four feet on the ground.

It is possible with man's ingenuity to break or crack the great natural simplicity, the loyalty, the devotion, and the constancy of a dog by extremes of cruelty, deprivation, neglect, or spoiling. It happens occasionally as one of the tragic failures of man.

Through ages of training and selective breeding the modern dog, especially the pet, has pretty well left behind his ability to fend for himself. He has become almost totally dependent upon man, but in return for this he has shown his willingness to give back in more than full measure.

The human being is a far more complicated animal than the dog. Nature does not preset his way of life and his behavioral patterns as tightly as it does for the dog. Instead of having instinctual behavior patterns which all of the lower animals have, the human being has an almost infinite capacity to learn and to modify his environment. This state of affairs is a mixed blessing. While man has an almost unlimited potential for development and adaptation, there are an almost infinite number of ways in which he can go wrong, getting out of balance in one way or another, and he seldom fails to do so. Every human being has three great problem areas which overshadow all others. These involve his values, his relationship to himself, and his relationships with other people.

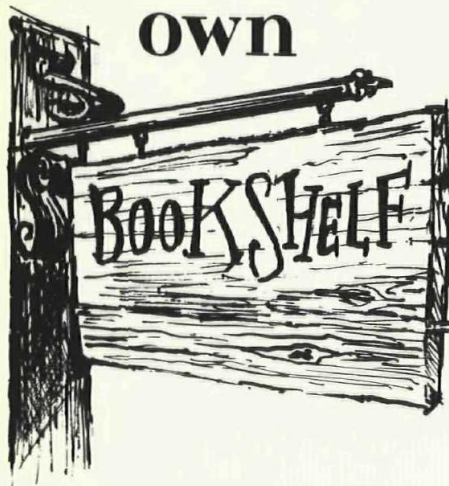
A child's feelings about himself are influenced by a diversity of factors. First and foremost among these influ-

ences are the feelings and expectations of his parents and siblings as he perceives them to be. There are the feelings he has toward his parents and these influence not only how he interprets their gestures toward him but also how he feels about himself to the extent that he takes after his parents. For instance, if a child is angry and distrustful toward his parents, he may not be able to accept or utilize their love in his feelings about himself; and if he identifies with his parents, as he inevitably must, he may have little tolerance for their likenesses within himself. Still another influence in the child's feelings will be the extent to which he is able to fulfill his own wishful images of himself. In order for a child to develop a relatively stable, realistic, and workable set of feelings toward himself there must be a finely balanced relationship among all of these factors. It is not difficult to understand that many things may go wrong. As a result it can be said without fear of serious contradiction that every living child and adult has at least some problem in regulating his self-esteem. There can be few people in the world who haven't wondered at least once in a while if they are really worthwhile to themselves or anyone else.

At first a child's relationship with its parents, especially the mother, is an extremely dependent one. He is absolutely helpless and every effort is made to anticipate his needs and to protect him from discomforts. No matter how careful and solicitous the parents are, they can't avoid unintended departures from optimum nurture and protection. Frustration, anger, and resentment then inevitably rise in the child and these have sufficient strength to interfere with his relationships with his parents. As he continues to grow and develop, he becomes subject to additional sources of anger, rivalry with brothers and sisters, rivalry for one parent against another, and so on. He may hit upon any number of ways of coping with these negative feelings. Some of his coping mechanisms may work quite well and promote decent relationships with his parents and siblings. Some ways of handling negative feelings only make them worse and interfere more or less seriously with these relationships. To the extent that the child fails in his handling of his first personal relationships, his failure reflects back upon his image of himself. This provides a basis for further disturbance. A vicious circle is established. The patterns of relationship established within the family tend to be transferred over to other peers. His successes and failures in his relationships with his family tend to repeat

continued on page 22

your pet's own



THE COMPLETE WEST HIGHLAND WHITE TERRIER—Third Edition by John T. Marvín. Published by Howell Book House. Available by mail from Continental Publishing Corp., 11926 Santa Monica Blvd., Los Angeles, Calif. 90025. \$7.95 Plus 25¢ postage & handling.

Here's your chance to tour some of the finest Westie kennels in America, England and Canada right from your own easy chair. More than 175 photographs of great Westies have been used to illustrate this new edition to show the development of the breed.

A valuable, new grooming chapter that features easy-to-follow drawings of proper equipment and procedures has been added to this edition. Another chapter covers Raising, Training and Conditioning and even gets into ear taping.

Other chapters include: The Background of the Westie, The Westie in the Ring and Kennel, The Best-in-Show Winners, The Value of Dog Shows, Breed Bloodlines.

Whether you are a Westie owner or just a dog fancier, there's a lot of enjoyable information in this popular, new book.

PETS—How to choose, care for, and enjoy the right pets for you and your family by Leon Whitney, D.V.M. David McKay Company, Inc. 750 Third Ave., New York, N.Y. 10017.

\$6.95

One of America's best known experts on pets tells most of the things you'll need to know when you choose a family pet. He describes every differ-

ent kind of pet and every breed, tells how they act as pets, and explains the kind of care each one needs. This book can be a valuable guide to finding the pet you'll be happiest with.

THE INTERNATIONAL ENCYCLOPEDIA OF DOGS, just published by Howell Book House. \$19.95

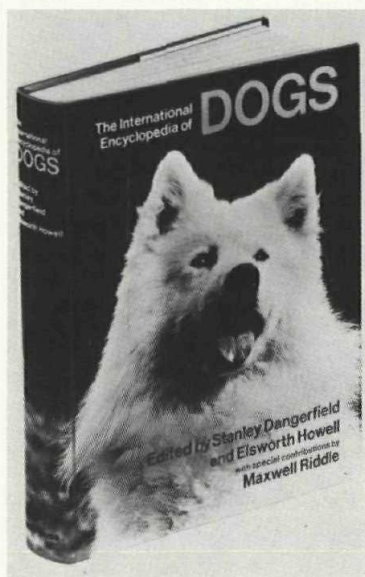
This is truly a unique, five-pound fortress of knowledge, expertise and sheer, exquisite beauty that everyone interested or professionally involved in dogs should break down doors to own.

A one-of-a-kind king of a book, is the *only* Encyclopedia of dogs with spectacular, vivid *full-color close-ups* of over 125 breeds.

Now you can learn about—and see—all the breeds now recognized by the kennel clubs of America, New Zealand, England, Canada, Australia and other British Commonwealth lands plus such rare, extraordinary breeds as the six-toed Puffinhound, the Anatolian Karabash, Lowchen—the Little Lion Dog, the Steenbrak, Karelian Bear Dog, Nova Scotia Duck Tolling Dog—to name just a few.

This book is more than an all-inclusive photo-library of the world's dogs.

It's DOGS, inside and out; it's quantity and it's quality in words and in pictures. Over a QUARTER OF A MILLION words, hundreds of fact-packed entries, and hundreds of pages of photographs, drawings, sketches,



PITTMAN'S HIMALAYANS

Kittens for sale:
all colors

1621 North Lindendale Avenue
Fullerton, California 92631
Telephone (714) 871-9590

sculptures, paintings and charts to clearly guide the way.

From Aberdeen Terrier to Zygoma, from occiput to paw pads, from the Stone Age to the present day, **THE INTERNATIONAL ENCYCLOPEDIA OF DOGS** tells all—and shows all—to make it the ultimate source of information...

...and the easiest to use! All you need to know is the alphabet. All entries are alphabetically-arranged and cross-referenced so that any information on dogs you seek is at your fingertips in seconds!

Worldwide in scope, worldwide in content, and universal in its application to dogs, **THE INTERNATIONAL ENCYCLOPEDIA OF DOGS** also boasts international origins. It is the result of the finest efforts of professional dog experts from all over the world, including six veterinarians (some, like author Dr. R. H. Smythe, with a specialty in such areas as anatomy, or nutrition), representatives of the kennel clubs of the leading dog nations (like Dr. A. Barone Forzano, just-elected President of the Federation Cynologique Internationale and C. A. Binney, recent Secretary of England's Kennel Club), trainers, field trial experts, International Show Judges (like Douglas Appleton and Robert James), kennel management experts, geneticists, racing and coursing masters—and the finest photographers of dogs (Sally Anne Thompson, Thomas Fall, Joan Ludwig, William Gilbert, Evelyn Shafer, many more).

Spearheading their efforts were: **MAXWELL RIDDLE**, an All-Breed American Kennel Club Judge, nationally-syndicated columnist and author of many books and articles on dogs; **STANLEY DANGERFIELD**, internationally-famous All-Breed Judge from England, television commentator of over 250 programs on dogs and author of nine books; **ELSWORTH HOWELL**, 1970's "Dog Man of the Year." A breeder and exhibitor for over 30 years, an AKC Judge and Delegate.

THE INTERNATIONAL ENCYCLOPEDIA OF DOGS is available by mail from Continental Publishing Corp., 11926 Santa Monica Blvd., Los Angeles, Calif. 90025. The price is just \$19.95 plus 50¢ postage & handling, indeed a small price for a book that deserves the top spot on the bookshelf of everyone with an interest and an eye for dogs.

"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



"DOG EXERCISER LEASH" WITH TRAVEL CASE

Martin Reel Company, Mohawk, New York, has introduced a new "Dog Exerciser Leash", Model 30, designed to make training and exercising a dog easier and more efficient.

The "Exerciser Leash" is equipped with a 16 foot, 285# test braided nylon lead with snap lock swivel end



for attachment to the dog's collar. A comfortable vinyl coated wrist grip is attached to the reel unit which also has a lock bracket for use when a non-retracting-expanding lead is desired. The reel unit measures only 2 3/4"



Hang In There, Baby

"Chinning Kitten" POSTER 2x3 feet, says "Hang In There Baby". Rolled in mailing tube, yours for \$2.10 incl. tax & postage. Send cash or Money Order to CHINNING KITTEN, P.O. Box 2461-AC, Hollywood Station, Hollywood, Calif.

in diameter by 2" deep. The entire leash weighs only 9 ounces.

The "Exerciser Leash" is a great assist in training a dog in various commands especially to "come." When on free expanding-retracting, it also enables the owner or trainer to exercise the dog up to the 16 foot range without moving or by following at a leisurely pace. Tension on the lead can be adjusted easily to suit various conditions.

Suggested retail of the 30-C, which includes a Naugahyde® travel case, is \$12.95. The 30 (without case) is \$10.95.

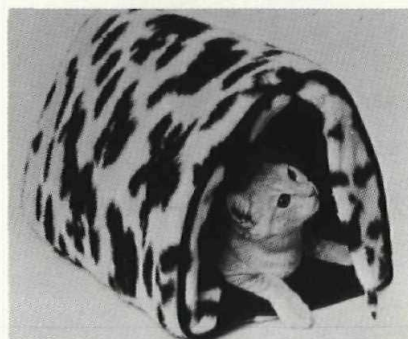
For more information on this and on new Martin "Safety Dog Sitter Exercise Systems", contact: Consumer Products Department, Martin Reel Company, P.O. Drawer 8, Mohawk, New York 13407.

PET COMFORT LINE

Here's a pair of decorator designed goodies guaranteed to delight both pet and master. These custom pillows boast 100% urethane foam comfort, they are washable, color fast, non-allergenic, flea and scratch resistant and reversible.



The "Pet Corral" has a shredded foam filled ring around the cushion to give your pet more comfort and a sense of protection.



The "Kitty Kave" is the "cat's meow"! It has a shape that cats enjoy with the extra addition of front flaps which allow the cat to peek out or hide playfully.

Both the "Pet Corral" and "Kitty Kave" are available in either decorator prints or a deluxe acrylic pile for real luxury. Additional information is yours by writing Advanced Animal Aids, Inc., Dept. AC, 2924 Main Street, Dallas, Texas 75226.

PUPPY PIDDLE PADS

Puppy Piddle Pads are training pads which simplify housebreaking puppies. They are specially scented to attract the dog and are made of highly absorbent material. The pads are plastic lined to prevent staining floors and carpeting and clean-up time is made much easier.

Puppy Piddle Pads are easy to use. Simply place the pad on the floor in the area where the dog is confined (plastic side down). When the pad becomes soiled, simply deposit it in the rubbish leaving the area dry and odor free.

Puppy Piddle Pads are specially designed for housebreaking puppies but have other uses as well. They are excellent for apartment dogs and for animals confined for long periods of time. They are good for use when traveling with dogs. They make excellent cage liners and are particularly good for use when animals are caged for shipping.

Puppy Piddle Pads are packed ten pads to a package. For more information contact: Spellman & Zenon Products Corp., Dept. AC, Box 31, Blue Bell, Pa. 19422.

DOG TRANSPORT CAGE

A new heavy duty cage large enough for dogs weighing up to 100 pounds, but which can be folded flat for shipment, has just been introduced by Central Metal Products, Windfall, Ind. 46076. It is 48 inches long, 28 inches wide and 36 inches high. It stands on 2-inch reinforced legs.

This large cage can be shipped in a carton 48 in. x 38 1/2 in. and 3/4 in. thick, thus reducing shipping costs drastically.

The cage is designed for use in dog shows, pets shops, grooming parlors



and veterinary hospitals. Show dog owners like the folding feature because they can lay it on the floor of a station wagon or van enroute to or from a show.

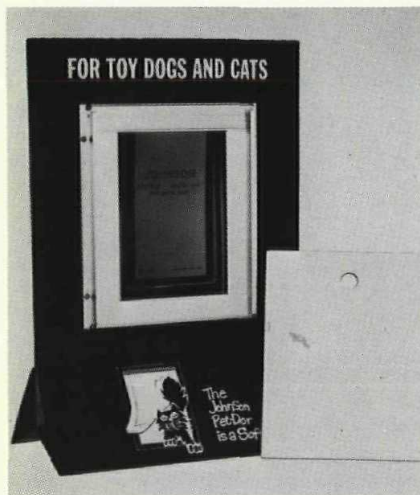
The cage is triple-plated, first with a flash of copper, followed by a coating of nickel, and then with a durable

coating of chrome which withstands abnormal handling and weather exposure.

The floor is a 24-gauge galvanized steel pan. All doors have a special escape-proof lock.

FOR CATS AND SMALL DOGS

Johnson Pet-Dor, Inc., have announced the development and availability of a new door specifically designed for cats and small dogs. This new model, designated the Model S-4, features the same all-extruded anodized aluminum frame that is used on the larger pet doors but has an overall size of only 8 1/4" x 10" and an opening measuring 4 3/4" x 7-1/8". The flexible two-way door panel is made of strong smoked-blue translucent vinyl which is specially formulated to provide dependable service for the lifetime of the door. The special formulation makes it



easy to keep clean and to stay flexible under severe climatic conditions. Permanent magnets keep it shut when not in use, and an attractive panel can be inserted on either side of door when desired. It can be installed in door panels or walls.

As with all Johnson Pet-Dors, this new model saves pet owners door tending... stops whining and door scratching... keeps out insects and drafts.

The owners of cats and small dogs have for many years indicated their interest in the development of a pet door especially designed for their particular pets. As a result of these many requests, Johnson Pet-Dor embarked upon a program to develop the new Model S-4, involving not only design but also the use of aerospace engineers to create a door using the most advanced production techniques and materials.

For additional information—contact: Frances H. Johnson, JOHNSON PET-DOR, INC., P.O. Box 643, Northridge, Calif. 91324.

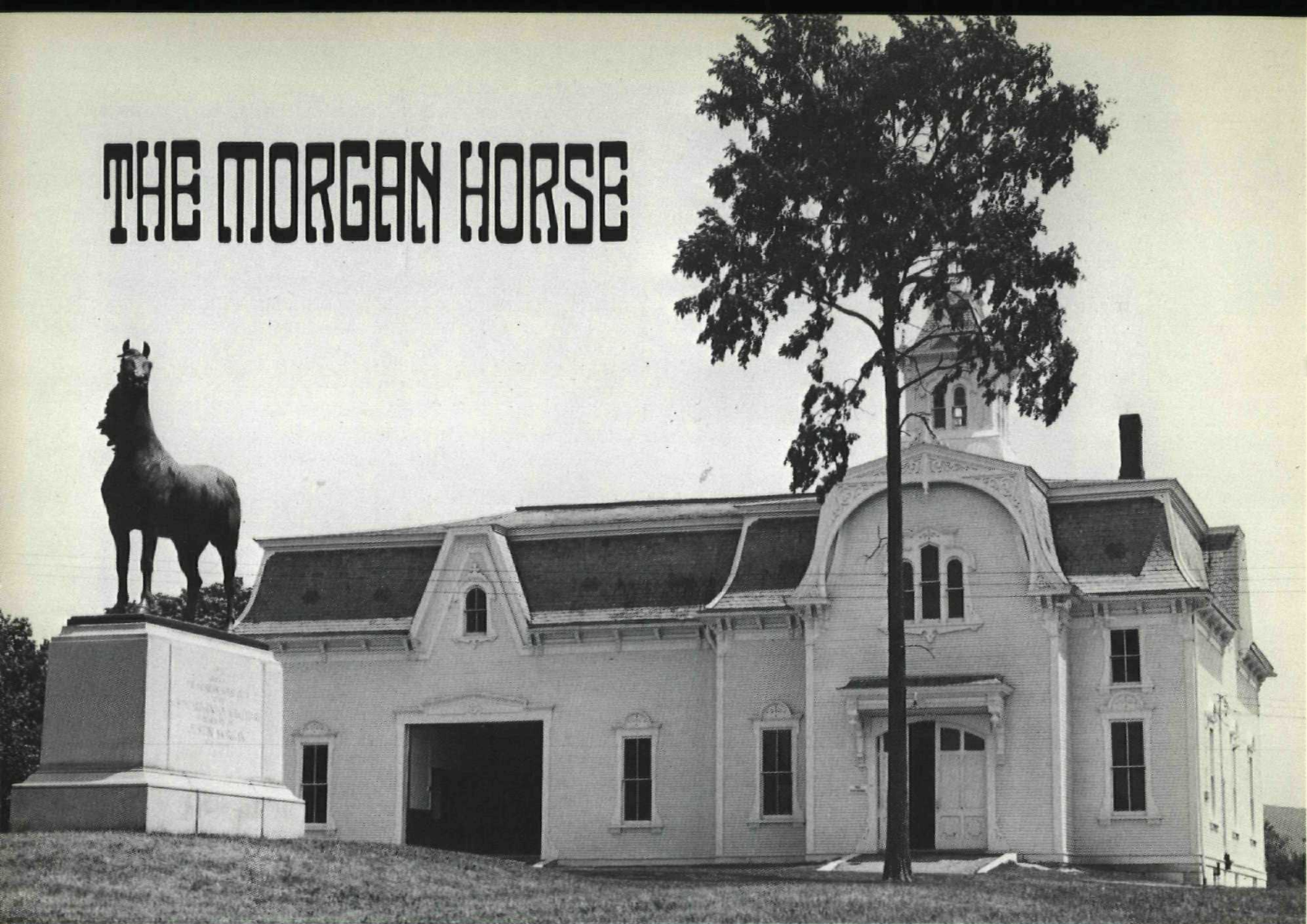


Dispense with dry skin...

and dull coat, excessive shedding and scratching. Linatone Skin and Coat Conditioner aids in preventing skin conditions which may produce these symptoms. Professional breeders use and recommend Linatone, the world's largest selling pet food supplement. Unconditionally guaranteed to produce noticeable results within two weeks. It works, or your money back from Lambert-Kay. Available in 4 oz, 8 oz, (with pump), 16 oz, 32 oz, and gallon (with pump) sizes from pet shops and pet departments. Write today for a FREE taste-test sample of Linatone to: LAMBERT-KAY, Div. of Carter-Wallace, Inc., 3628 Crenshaw Blvd., Los Angeles, CA 90016. Dept. AC



THE MORGAN HORSE



By Helen Claire Howes

Main horse barn, University of Vermont Morgan Horse Farm, Waybridge, Vermont. In front is statue of Justin Morgan. Photo courtesy of Vermont Development Department.

ONE SUNNY OCTOBER day, when the maples were a riot of crimson and orange and the white birches stood like ghostly sentinels among the dark pine and spruce of the Green Mountains, we drove to the Morgan Horse Farm at the University of Vermont, the state where the breed originated.

In 1791 a bay colt was given in payment of a bad debt to a poor singing teacher, Thomas Justin Morgan, whose name was later given to the stallion, then referred to as "the wonder horse from nowhere". It is generally felt now that he was the son of True Briton (Arabian or Thoroughbred) and "the Wildair mare", also Arabian or Barb.

Justin Morgan was a biological sport, who left his stamp on all his get, so that today his descendants show the same compact body, clean lines and small beautiful head. They possess the same stamina, intelligence and playful but gentle spirit. Moreover, the breed has contributed much to the American Saddlehorse, Standardbred, Quarter Horse, and Tennessee Walking Horse.

Although small (14.1 hands and 950 lb.) Justin Morgan was leased to a farmer (for \$15 a year) to haul logs and pull stumps. A veritable dynamo, legends grew up about him: how he pulled stumps all day, won pulling matches and races in the evening, ploughed on Saturday and went to church on Sunday. Bred to nondescript mares, his offspring invariably resembled their sire. He died in 1821 from an untreated injury, remarkably youthful in appearance at 32.

The records of many sons were traced by D. C. Linsey in his book about Morgans which appeared in 1857. Woodbury, Sherman and Bulrush founded families of their own. In the mid-1800's, a demand for fast roadsters encouraged breeding to rangy mares which produced large, fast foals. Black Hawk, Sherman's son, was never beaten in a trotting race. Sherman's greatest son, Ethan Allen 50 was the most famous horse of his day for beauty, symmetry and lightning speed at the trot. At four years he was named Champion of the World, defeating Dexter. Ethan Allen sired 70 trot-

ting winners and was sold for \$7,500. Currier and Ives prints and weather vanes portray his brilliant action. The other two famous families of Woodbury and Bulrush passed on to their heirs their special characteristics.

By 1870 there were Morgans in every state. Beauty, good temper, stamina and, above all, their versatility have made the Morgan the best known and best loved breed in America. Although today bred primarily for the saddle, the Morgan can be harness racer, roadster, jumper, stock, police or trail horse, parade mount, pleasure horse and children's pet; he is an ideal family horse. Their innate sense of showmanship brings cheers at every public appearance.

At the St. Louis World's Fair in 1878 a pair of Morgans won over all-comers in the harness class pairs and one was sold abroad for \$10,000. At the same fair, Indian Chief won the Champion Sweepstakes against 63 entries. His daughter, Lady de Jarnette, "the most perfect show mare of all time," was barred from competition by her continued success, and ap-

peared only to be admired, at \$500 a week.

Government Steps In

After 1900 the development of the auto and the American craze for speed almost proved the undoing of the Morgan. In 1907 the U.S. Government helped to establish a 950-acre breeding farm at Weybridge, Vermont, and in 1951 transferred the Morgan Horse Farm to the University of Vermont. Included in the gift were 500 acres of good soil, pastureland and woodland, and 36 buildings.

The first National Morgan Show had been held in 1939, having grown out of Morgan participation in the Annual 100-mile Trail Ride in which this breed consistently won. By 1952 the Show boasted 51 classes with 100 Morgans on exhibit.

When Dr. Donald J. Balch assumed responsibility for the Morgan program in July, 1952, many problems had to be faced. The farm was in bad condition, buildings and fences requiring repair and paint. Also, there was a general lack of appreciation as to how important the Morgan program was to the people of Vermont, to horse breeders throughout the U.S.A. and in other countries. The University-owned animals are also used in demonstrations for adults and 4-H groups as well as for instruction at the college level. Student interest in horses is greater than ever before and the courses taught are filled to capacity.

Also, the Farm lacked personnel with the know-how in breeding horses, handling and training them. The fact that some of the best breeding stock had been given to other universities was also a set-back. And even up to 1963 the Farm was dependent upon the Vermont Legislature for financial support and if this failed to come through every two years there was danger of having to give up the Farm.

Col. Joseph Battell, who gave the original land to establish the Farm, stated in the deed: "... I am actuated in a large measure by a desire to encourage the breeding of Morgan horses and to effect a restoration to their former leading position..." If it had not been for the farm, the Morgan horse would probably have died out.

The continued improvement of the breed being a primary responsibility, the objective of the present management of the farm has been outlined by Dr. Balch: "To improve the Morgans through proper mating systems and rigid selection of points of excellence that would win the admiration and support of all who saw them. This goal necessitated a long period of time. It meant that the best breeding stock must be kept and not sold to obtain money to paint a barn or buy a tractor."

Included was the intention to use the Morgans effectively from an educational standpoint. The aim is to develop "a uniform group of brood mares excelling in Morgan type, conformation, quality, disposition and correct action... We like our mares to be 14.3 to 15.1 hands in height. We want them so bred that they will transmit consistently to their sons and daughters their uniformity of excellence." The stallions used must also be able to consistently transmit their desirable traits. 15.2 hands is considered the ideal height for a stallion.

Morgans of Different Types

The current plan is to develop pleasure Morgans as well as those more suited to perform in fine harness or performance saddle classes e.g. dressage. Buyers very often have definite ideas of the kind of Morgan they want, e.g., a 14.3 x 1000 lb. black 3-year-old mare "with an obvious performance look to her style of going," whereas another buyer may demand a 15-hand x 1100 lb. bay mare with a distinctive "pleasure way of moving". At the Farm they mean to produce both types and others as well, yet all Morgans with the same bone conformation, elegantly shaped head, sound feet and legs, fine gait, enduring qualities and sweet disposition.

Since breed improvement is a very slow process and some of the best Morgan stock was turned over to other universities and Vermont had no money to buy breeding stock, management decided to breed their best mares to outstanding Morgan stallions elsewhere. They continue to search for superior related sires with which to breed a few top mares each year in order to discover better genetic com-

binations. Dr. Balch says: "The above philosophy is based on the theory that new genes introduced must not come from totally unrelated sources or the dilution of desirable genes in the herd will be detrimental to consistent production of desired Morgan type..."

That this breeding program has proven successful is evident by their animals' consistent success in the show ring from year to year. At the National Morgan Show in Northampton, Mass. in 1970 (the largest one-breed show in the world) 700 Morgans were shown. The UVM Morgans won 15 ribbons and trophies including 3 Blues and one Championship. Another indication of success of breeding is the excellent sales record. Morgans have been sold in practically every state in the Union, in South America, Canada, China, Puerto Rico, Israel, etc. About 12-15 are sold annually, their price ranging from \$1000 to \$5000 each. There is always a waiting list for Morgan colts.

Administratively, the Farm is now integrated with the University Farm in Burlington, under the Department of Animal Science, Dr. A. M. Smith, Chairman. The present Superintendent of both Farms is Mr. Francis Haggarty, while Dr. Donald J. Balch directs the Morgan Program.

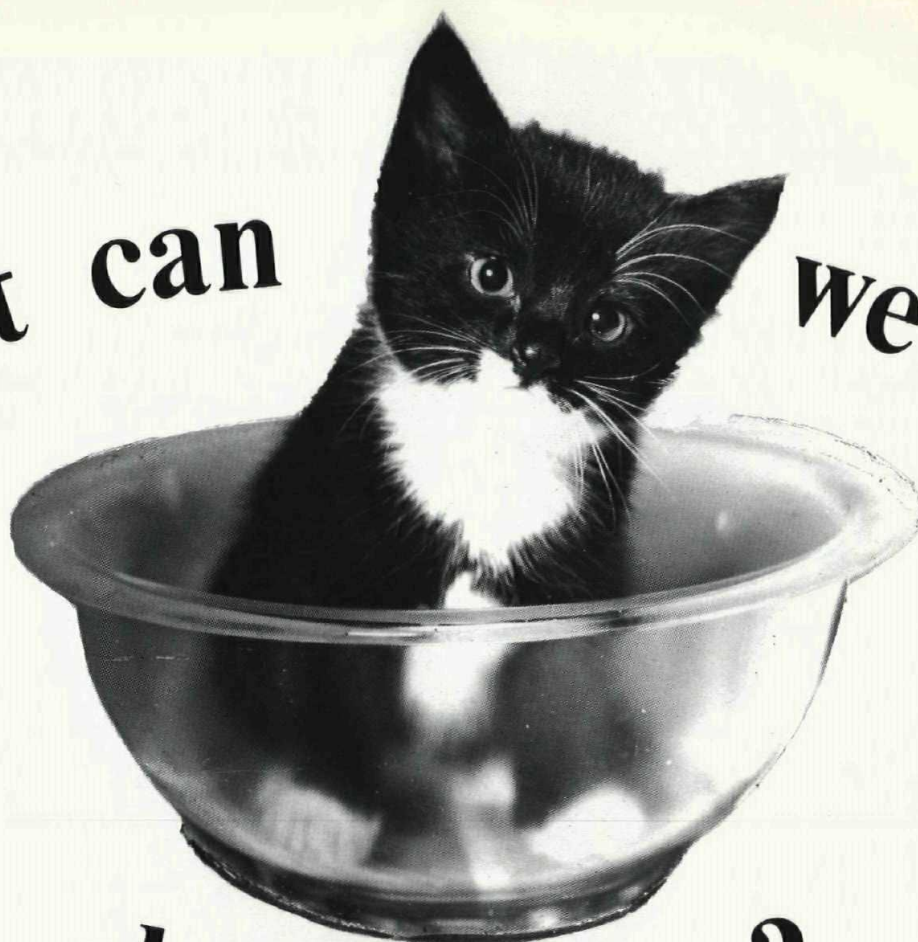
Visitors are always welcome. After you have admired the beautiful Morgans in their stalls, and the mares and foals in the pastures you will probably be invited into the Farm Office for a proud showing of the stud books and photograph albums. The walls of the office are literally lined with trophies, ribbons and other awards won by Morgans—America's most versatile breed.



Morgan mares and foals, University of Vermont Morgan Horse Farm, Waybridge, Vermont. Photo courtesy Vermont Development Department.

what can

we do



about oscar?

By Linda Harding

The scene is focused on a young couple. The wife has just learned she is pregnant. And they have a lovable, enticingly proud cat named Oscar.

Their gaze rests on the plump cat sprawled leisurely in front of the fireplace. Oscar has just imbibed on his nightly feast and sauntered over to his favorite resting spot. The husband and wife wonder anxiously if Oscar might be a transmitter or potential victim of toxoplasmosis.

They have read about toxoplasmosis in several magazines, including *McCall's*, *Family Health*, and *Newsweek* which, among other publications, have given it much coverage, stoking the fires of a toxoplasmosis scare.

They know the disease in humans may be so mild as to go unnoticed, may appear influenza-like, or may seem to be mononucleosis with feverish, fatigue symptoms and swollen lymph nodes. And they know it can potentially victimize a woman's child if she contracts the disease after four months of pregnancy by coming into contact with raw meat—or with infected cat feces.

The cat owner who inquires about the toxoplasmosis situation is in an

emotional dilemma. He does not want to be told to give up his cat and yet he understandably does not wish to risk repeated miscarriages, the possibility of a stillborn baby, a baby born blind, or whose brain, spinal cord, and nervous system are subject to attack at birth or twenty years later, if presence of a cat will lead to these tragedies.

Until recently, toxoplasmosis was thought to be transmitted from raw meat. Cities are not so vulnerable but sophisticated cultural habits of wealthier women in the urban environment make up for this—usually these women prefer rarer meat and delicacies such as steak tartare (*Newsweek* describes it as “a kind of uncooked spicy meatball” concocted of raw chopped beef, a raw egg, chopped onions, capers and freshly ground pepper) while the less affluent purchase meat that has been solidly frozen for weeks and tend to like their meat well done.

But in 1971, Dr. J. K. Frenkel of the University of Kansas confirmed the work of Dr. W. M. Hutchinson, a Glasgow researcher, and another scientist working independently in Copenhagen, that would incriminate the cat which, through its feces, can transmit the disease. The cat victimized by the

disease appears depressed, inappetent, and may have inflammation of the retina or show signs of neurological disorders.

Basically, the disease is more prevalent in tropical than in colder climates, probably because the tiny, breeding oocysts (egg-like forms of the *Toxoplasma gondii* organism) live in moist, warm soil where the cats bury their feces, and the children make mud pies or scratch playfully in the ground.

Another study showed that under experimental conditions common houseflies could transfer *Toxoplasma gondii* organisms from cat feces to milk. Mice fed this milk developed toxoplasmosis, indicating that this may be another of many diseases transmitted by flies. Some scientists suspect that contaminated dust particles and sprays of water also may carry the parasites to man, but no one has proven it. Most significantly, however, *only the cat appears to breed* as well as carry the organisms.

Transmission

Frenkel, Hutchinson, et al, indicate that man and other vertebrates acquire *Toxoplasma* in their adult form—crescent-shaped protozoa about four one-hundred-thousandths of an inch long

which invade cells, multiply, then form cysts deep in the body tissues.

In the digestive tract of the cat, however, the parasite goes one step farther, completing a cycle that produces the previously mentioned tiny fertilized eggs encased in cells called oocysts. Although these oocysts are harmless when first excreted, they become infective two to four days later. A cat will start eliminating them in its feces three to five days after becoming infected, and while the number of oocysts passed begins to taper off after about 12 days, no one is sure exactly how long a cat will continue to excrete them. In any event, the deadly little organisms live in the feces for months, perhaps even years, waiting for another cat, a rodent, a gardener or an attentive, litterbox changing cat lover to release them by disturbing the feces. At that point, the oocyst might become airborne and be inhaled into the mouth and swallowed, setting off a new infection.

Schanche reports that the normal host usually reacts by developing a mass of antibodies. The *Toxoplasma* organisms retreat in the face of antibody attack and form colonies of from 100 to 3,000 organisms surrounded by tough, defense shelters. There they hibernate in a jelly-like substance within the cyst and usually stay. But sometimes, perhaps years later, they may reactivate to destroy body tissue, showing a particular tendency to invade vital, nonregenerative nerve cells of the brain, the spinal column, and the eyes.

History and Incidence

In a recent study, less than one third of a large group of stray cats had toxoplasmosis antibodies indicating previous infection, and only about one-half of one percent were eliminating oocysts.

Results have varied widely among groups of animals surveyed in different parts of the United States, but in several studies the proportion of cattle, sheep, and swine with *Toxoplasma* antibodies has ranged from 40 to 50 percent. One survey of 184 cats showed 62 percent had the antibodies in their blood.

Although the disease is rarely diagnosed, various serologic studies have shown that perhaps 20 to 30 percent of the people in this country have *Toxoplasma* antibodies in their blood. In some tropical countries the figure may run to 100 percent.

Whether you take the lowest or the highest figure, however, toxoplasmosis undoubtedly is one of the leading causes of birth defects, outranking rubella, cystic fibrosis, muscular dystrophy, congenital syphilis, or phenylketonuria (PKU), a disease for which all newborn infants are now tested.

According to an article by Schanche which appeared in *McCall's*, a study by Drs. Anne Kimball, B. H. Dean, and Fritz Fuchs of Cornell University Medical College which took place at New York Hospital working under a grant from the National Foundation (March of Dimes), it was shown that the chances of catching toxoplasmosis during pregnancy are slightly more than one in a thousand and passing the infection along to the infant are half that. But other research projects in Europe have revealed as many as six babies with congenital toxoplasmosis for each 1,000 live births. Kean believes that this higher incidence may result from the fact that Europeans eat more undercooked pork and veal—both heavy sources of the parasites—than Americans do. Kimball, Kean, and Fuchs also point to the possibility of the "silent" effects of toxoplasmosis—that is, a significant number of the women in their study group who had spontaneous miscarriages showed signs of recently acquired toxoplasmosis.

Although the disease was identified as early as 1908 in a North African rodent called the gondii, only 27 cases were reported by 1948. A Czech ophthalmology professor named Dr. Joseph Janku found the first positive human case in 1923—the blinded, mentally retarded, 11-month-old son of a Prague carrier driver. But his momentous discovery, as reported in a Czech medical journal, was ignored until someone got around to translating it into English in 1937.

A year later, Dr. Abner Wolfe of Columbia University identified the first case since Janku. During the early 1940s, Kean turned up several more cases in Panama where he was serving in the wartime U. S. Army.

It had long been suspected that people probably picked up the parasite by handling or eating raw and undercooked fresh meat that contained one or more of the tiny cysts. Well-cooked meat was positively ruled out because the cysts were extremely sensitive to temperature changes and die when well cooked or when solidly frozen for a long period of time. But if fresh meat was a source, then slaughterhouse workers and butchers should have been vulnerable. Indeed, they were! Old-time slaughterhouse men in Japan were tested and it was found that almost 90 percent of them had at some time had toxoplasmosis.

Another study by French researcher Dr. Georges Desmonts with hundreds of children after they entered a tubercular sanitarium where raw mutton and raw horsemeat were part of the therapeutic regimen indicated that the more of it they ate the more quickly they caught toxoplasmosis.

One study by Dr. M. H. Jones revealed blood titers for toxoplasmosis in 25% of 3,796 women of childbearing age in the Los Angeles area. A significantly greater incidence of abortion occurred in patients whose postpartum blood sera had a high antibody titer for toxoplasmosis than those with low or negative serum levels.

Eckerling, et al at the Tel Aviv Medical School in Israel recently demonstrated the ability of *Toxoplasma gondii* to infect the fetus in both humans and animals—resulting in abortion, postpartum death of the infant, stillbirths, and brain damage including mental retardation. Emphasis was placed on toxoplasmosis as a cause of infertility.

A serological survey of toxoplasmosis was conducted over several years by staff members of the Los Angeles County Veterinarian and reported in 1969. In all, 1,309 blood serum samples were collected from cattle, monkeys, cats, dogs, horses, goats, and swine. Test results were expressed in percentages of all sera reacting at 1:2 or higher.

What To Do and What Not To Do

There is no drug that will cure the disease, but there are drugs that will suppress it. Many people who have displayed the bewildering symptoms of acute toxoplasmosis have been helped immeasurably by an antimalarial drug called pyrimethamine in combination with massive doses of triple-sulfa. The drugs also help newborn infants with congenital toxoplasmosis, provided the parasites have not already destroyed too much vital brain and nerve tissue. The drugs, however are only beneficial against the proliferative forms of *Toxoplasma* and will not eradicate the encysted form of the parasite.

American doctors are wary of giving the same treatment to pregnant women because the drugs themselves are toxic and have been known to cause birth defects in laboratory mice. Some European physicians, however, have reported successful treatment with the two drugs among pregnant women without damage to mother or child.

The search for a vaccine has continued to challenge researchers. Fuchs has suggested that the cat's oocysts, which contain so few *Toxoplasma* that they may be able to stimulate antibody production before there is enough toxoplasmic proliferation to do serious damage, might be adapted as sources of vaccine. In Britain, Beverley, Archer, Watson, and Fawcett experimented with a killed *Toxoplasma* vaccine which may be of some value although its overall effectiveness is questionable.

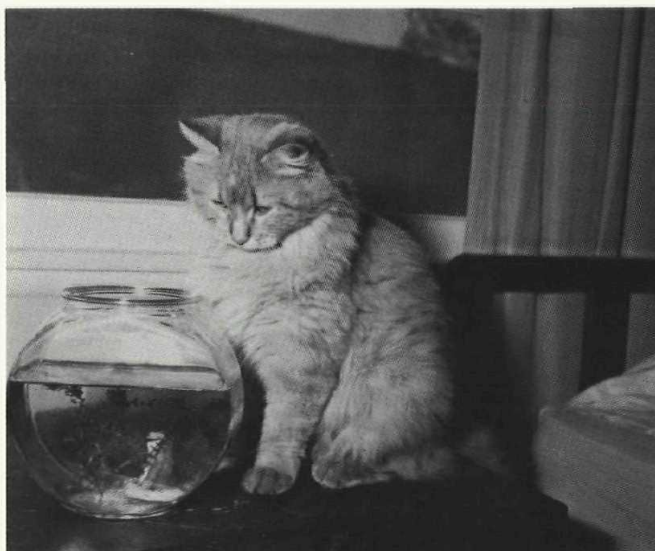
Because treatment of the disease is so very uncertain, then, what is the

best course a couple might take to ward off the threat of toxoplasmosis? The answer is *not* necessarily to get rid of Oscar—but simply to play it safe.

While the woman should avoid close contact with cats unless a blood test early in her pregnancy shows she has *Toxoplasma* antibodies which will protect her, there are procedures she can follow to ensure against the disease.

Basically, if a pregnant woman does not already own a cat, it would seem better not to acquire one, at least for the duration of her pregnancy. Dr. Dennis D. Juranek, Veterinary Epidemiologist at the National Center for Disease Control, Atlanta, Georgia, suggests that a pregnant woman take the following precautions:

1. She should be urged to get a blood test for toxoplasmosis. If the test is positive, she need not



worry about the cat because her antibodies will protect her and the child from the disease. A second test, about three weeks after the first, should be taken to confirm this.

2. She should not eat raw meat products.
3. She should not feed her cats any raw meat products. Everything should be cooked well done.
4. She should delegate responsibility of cleaning the cat's litterbox to another member of the family.

The American Veterinary Medical Association stresses the importance of sanitation in avoiding toxoplasmosis. The cat's litterbox should be changed at least every other day since oocysts passed in the cat feces become infective in two to four days.

Using a highly absorbent litter that helps dry the feces is also a good idea. In addition, it is advisable to use a pair of boxes or pans in rotation. While one is in use, the other should be dried thoroughly to kill any of the *Toxo-*

plasma gondii organisms that might cling to the container. Better yet, a disposable box can be used. The litter should also be disposed so that others will not be likely to come into contact with it. If possible, it should be buried or incinerated.

Cat owners should, of course, wash their hands thoroughly after taking care of a litterbox or playing with a cat—particularly before eating or putting their hands to their mouths for any reason—and they should insist that their children do the same.

Covering children's sandboxes when not in use should help keep them from becoming potential sources of infection. And if your uninfected Oscar runs loose outside where he is more likely to come into contact with infected cats or eat contaminated meat scraps, infected rodents, or birds that are carrying the disease, it might be

well to consider keeping him inside the house as much as possible (that is, if you think you can quell his libido).

Available Tests

Although testing Oscar might seem almost futile because he may pick up the disease a week after his test, tests can be obtained for both human and animal sera.

The emphasis, of course, is on the woman getting a test to determine her toxoplasmosis antibody status during pregnancy. Jones argues further that *even if a woman's toxoplasmosis antibody status is positive* she should have the cat tested and if the cat is positive it should be taken out of the house.

Three tests that can determine toxoplasmosis antibody status are:

1. The Sabin-Feldman dye test;
2. The hemagglutination inhibition (HAI) test; and
3. The indirect fluorescent antibody (IFA) test.

These tests can be obtained by contacting your private physician and veterinarian.

animal FUN

Instant Success

We know a geneticist who is trying to cross a kangaroo with a mink. He wants to produce fur coats with ready-made pockets.

Name Dropper

"What's your dog's name?" the veterinarian asked the little boy. "I'm not sure," the child answered, "but I think it's DOWN BOY."

—Veterinary Medicine/
Small Animal Clinician

Orderly Conduct—

A fellow who has been riding a horse through downtown St. Paul was warned by a policeman that he could be arrested for disorderly conduct and disturbing the peace. The young owner, Thomas Mudek, said his horse, "Sugar" likes city traffic, stops at red lights, moves through tie-ups faster than cars, and "tickles the daylights out of youngsters, some of whom have never seen a horse before."

—Editor & Publisher

Fishy Story—

Syndicated columnist Earl Wilson reports Sam Levenson hearing this supermarket dialogue: "I don't like the looks of this codfish"... "Lady, for looks you don't buy codfish, you buy goldfish."

TV Addict—

A dear old lady brought in her dog to be boarded while she went on a holiday. On the way to the kennels, she related the dog's entire history and list of his many likes and dislikes with regard to bedding, furnishings, food, the weather, etc., and concluded with, "He usually watches television in the evenings."

—"The Animals Come In,"
by John Hughes

big change in

veterinary medicine's image

The surgeon in green cap and gown carefully probes the incision he has just made. The patient is elderly, his heart is weak, and there is a question whether he can withstand the strain of open-heart surgery. The surgeon meticulously inserts a forceps into the right ventricle and slides it up into the pulmonary artery. In an hour he is finished. The operation is a success.

The patient is a brown-haired dachshund suffering from heart worms. The surgeon is a veterinarian. He has never operated on any creature higher up the evolutionary scale than a dog or a cat. Yet everything connected with his clinic, from his technical skill to his gleaming operating room, suggests sick animals these days are in as competent hands as sick people. Veterinarians have come a long way since the days when they were barnyard practitioners carrying huge pills and maybe even a gun to dispatch injured horses.

Today, animal doctors aren't much different from people doctors in skill, training and pay. Today's veterinarians attend four years of veterinary medical school. Many accept residing appointments in large hospitals as advanced educational training.

"For years there was much art and little science in veterinary medicine," says Mark Allam, dean of U of Pa. veterinary school, "but we've come a long way in the past 25 years, and today we stand shoulder-to-shoulder with the rest of the medical profession."

The growing enchantment of Americans with pets, chiefly expensive dogs and cats, has helped enrich veterinary medicine. About one-third of the 27,000 practitioners in the U.S. limit their practice to pets. Thousands more engage in research and teaching. (And some veterinarians are playing an increasingly important role in experimental work that may help further human medicine.) Other veterinarians, many of them employed by large commercial farms and ranches, special-



ize in treating cattle, swine and horses. A look at a veterinary practice tells a lot about how far the veterinarian has come, medically and economically. He is also the administrator of a pet hospital employing other veterinarians, kennel keepers, receptionists and a bookkeeper.

Doctors work in glistening examining rooms that look like small, deluxe kitchens. Each has a refrigerator filled with drugs, a sink and counter area, cabinets packed with more drugs, and a stainless steel examining table.

In most practices, about half the animals are here for vaccinations. Puppies need distemper shots at six, 10 and 14 weeks of age, and a rabies shot at six months. Kittens get distemper shots at 10 and 14 weeks and a rabies shot at six months. The animals need yearly boosters thereafter. Simply giving a shot can turn out to be a major production when the patient is, say, an exuberant 80 pound Old English sheep dog. The doctor calls for reinforcement in the form of a burly kennel man who hoists the creature up on the table and bear hugs it while the doctor

feels for a vein in the front leg.

Doctors spend some of their time on problems that aren't purely medical. Emotional owners, especially youngsters and older people who have become attached to long-lived pets, often must be calmed when the doctor's prognosis is euthanasia. "It helps to be a psychiatrist."

On the other hand, some owners shockingly and callously mistreat their pets. The local Society for the Prevention of Cruelty to Animals urges veterinarians to report cruel or negligent owners, but, as one veterinarian puts it, "You never see the owner, and there are just too many cases that have been mistreated."

Doctors will handle all surgery for the day. Unless it's something as complicated as open heart surgery, he works unassisted. On a given day there are likely to be two or three neuterings, a hernia or cartilage operation, and some teeth cleanings with ultrasonic sound and water. Before surgery, the veterinarian is helped into surgical gowns before scrubbing up, first in soap and water and then in a chemical solution. His hands are powdered and gloved, his face masked. The patient is pre-anesthetized with an injection, and a gaseous anesthetic is administered through a tube which keeps him asleep during surgery.

Like most medical professionals, veterinarians have to contend with increasing costs and demands on their time. Their patients' owners, consequently, have to contend with bigger fees. In 1952, to enter school, only 54 applicants out of 700 were accepted by one veterinary institution. Today, some 20 years later, the odds against getting in are still big. For every applicant accepted, four or five are turned away by the country's 18 veterinary schools. The schools say they simply don't have the money to educate more veterinarians; it costs the schools as much as \$45,000 for a student's four years of graduate education, and they can get only part of that from tuition revenues.

Today, thanks to equipment and drugs adapted from human to animal medicine, the practice is far more sophisticated. Innovations range from new and safer anesthetics to artificial respirators. A common vaccine against dog distemper was developed from human measles vaccine, and drugs to prevent heart worms came from drugs to treat elephantiasis and other parasitic diseases in man. To keep up with like developments, each veterinarian is required to take advanced courses at nearby colleges and special clinics whenever offered.

*Excerpts from an article by Bill Paul
staff reporter of
The Wall Street Journal*

By L. M. BOYD
Creator of the "Pass It On" press feature

AMONG THOSE FAMILIES who own dogs, two out of 100 keep four or more, four out of 100 keep three, 15 out of 100 keep two, and 79 out of 100 keep one . . . AMONG NEWBORN GUPPIES, the females outnumber the males by two to one, always . . . WHY I DON'T KNOW, but cats are said to be better air travelers than dogs. Airlines people say cats do not seem to get as shook up when shipped . . . AMONG PET LOVERS, it's said, introverts buy birds, extroverts buy fish . . . AM ASKED if a raccoon is rated among the 10 most intelligent animals. That it is . . . A PENNED DOG always barks louder than a dog turned loose . . . IT'S THE LENGTH of their legs that shows you the difference between English Cocker Spaniels and American Cocker Spaniels. The shorter-legged Cockers are American . . . MOST CATS are right-pawed . . . Q. "Are cats colorblind?" So it's said. Likewise dogs, pigs, sheep, cows, horses and frogs . . . Q. WHAT COUNTRY has the most horses? A. Brazil. After that, in descending order, come Russia, Mexico, China, Argentina and the United States . . . WHY CAN'T THE MONKEY TALK? That's what the science boys at the University of Connecticut wanted to know. So they examined a monkey's mouth and throat with great care. The larynx is different. The tongue doesn't move. The vocal chords aren't in control. That's why, they discovered . . . FOUR OUT OF FIVE dog bites occur in the afternoon . . . Q. CAN A GREYHOUND catch a jackrabbit? A. No, but two Greyhounds can . . . YOU WON'T FIND one person in a thousand who can tell you how many toes on an ordinary housecat. There are 18 . . . NOW IT'S REPORTED all split-hooved animals, not just pigs, are immune to rattlesnake venom. Is that right? . . . WHAT PIQUES the curiosity of

feline lovers, it's said, is why the Bible mentions dogs but not cats . . . WHO REMEMBERS the old Packard cars? All right, back in 1902 an accessory Packard offered its customers was an ammonia gun. To spray discouragement at dogs that nipped tires . . . Q. CAN A DOG be identified by its paw print? A. Certainly can, just like a fingerprint . . . MOST ANY STALLION has 40 teeth while most any mare has 36 . . . WHEN CANINE JUDGES test trained dogs in leash control, the breed that repeatedly comes out best is the Beagle . . . Q. WHY IS DOGWOOD so named? A. Because out of the leaves somebody once cooked up a flea remedy to be used on dogs . . . SAY TWO DOGS are walking towards one another. One starts to wag his tail slowly. That doesn't necessarily mean a fight. But if the other one also starts to wag his tail slowly, that does indeed mean they'll fight. Or so says a canine expert. The slow tail-wag, he contends, is a dog's declaration he intends to be boss . . . Q. HOW LONG IS MY GOLDFISH supposed to live? A. About 25 years . . . IF YOU WANT TO keep the neighborhood dogs off your lawn, contends a veterinarian, sprinkle a thin line of tobacco all the way around your yard . . . Q. How many whiskers on a cat? A. Maybe 25 to 30. Arranged in four rows. Middle two rows are the longest . . . Q. BIRDS CAN IDENTIFY colors, can't they? A. Except for blue, they can . . . Q. WHICH IS USUALLY the better behaved, the male dog or the female? Many veterinarians contend the female is 50 per cent more apt to bite somebody than is the male . . . Q. WHEN DOES A CAT PURR, while exhaling or inhaling? A. Both . . . "OUR DOG HAS LEARNED how to turn on our remote control TV set by rattling his choke chain," writes a gentleman subscriber. "Frequently, after turning off the TV and leaving the house, we come home to find the dog has turned it back on and has settled down in my chair to watch it."

ANIMAL MISCELLANY

Eye, Eye Sir

by Felicia Ames, author of *The Dog You Care For*



Dogs are subject to almost every disorder affecting the human eye, plus a few of their own (they have three eyelids). You have to know what to look for, and even then you can't be sure.

Are Bowser's eyes watery, inflamed, swollen about the lids? He may be reacting to air pollution or he may be coming down with a respiratory ailment, with all the signs of the human common cold. Maybe he's suffering from an infection, or he may have picked up some foreign matter. If only one eye appears affected it's safe to say that's the problem. If the eye is badly irritated, make a mild salt-water solution and wash it with a piece of moist cotton.

Dogs who live in the city, by the way, stand less chance of getting things in their eyes than their rural relatives, although they are always open to dust and smoke. Open-space dogs are also more susceptible to scratches, from brush or other animals. If the scratch is slight, call the veterinarian and, as you wait, keep the eye moist with cotton and warm water.

If you think the trouble is something more systemic, you should take the dog's temperature. It's very simple, really. Use a regular rectal thermometer and lubricate the tip with vaseline. A reading above 101.5 F. (102 in the small breeds) indicates fever and serves notice that you should call the veterinarian.

Is there a discharge in the eyes that you haven't seen previously? Among other things, it could be a lack of Vitamin A. This can be easily remedied by adding vitamins and minerals to the diet, but only according to your veterinarian's prescription. A lot of eye fluid could also be a sign of glaucoma (of which, more, below).

Any condition that persists past a few days requires professional attention. Sometimes, what looks simple may actually be quite serious. A puppy, for example, in the early stages of distemper, may have ocular dis-

charge.

Does Bowser scrape at the eye, paw at it? It could indicate a foreign particle, an inflammation of the eyelids or a scratch on the eye, among other things. It might even be conjunctivitis. (See below.) If the dog is scratching continually he is surely going to make matters worse than they are. Make an Elizabethan collar. It looks like one of those ruffs of Old Globe days and can be made simply by cutting a circular piece out of some heavy cardboard and fashioning a hole in the middle to fit snugly about Bowser's neck. Its purpose is to keep the dog's paws away from his eyes. If you can't be bothered, or find the task impossible, ask your veterinarian where to acquire one. They are available in plastic and inflatable rubber.

We have referred in passing to conjunctivitis and glaucoma, which are two of the more serious eye problems facing Bowser. Among the others are cataracts, opacity, PRA (progressive retinal atrophy), keratitis, and an assortment of eyelid disorders.

Conjunctivitis is an inflammation of the mucous membrane of the inner surface of the eyelid. The dog may show a strong sensitivity to light, and his eyes may water and become irritated. It is essential that you call the veterinarian.

Glaucoma is an increase of internal eyeball fluid which has no way to get out. It causes the eyeball to expand and usually means loss of sight if not corrected in time. Sometimes the surgeon is able to save one eye, and sometimes the condition will respond to treatment.

Cataracts are opacities of the crystalline lens, occurring most frequently in older dogs and giving the eye a bluish cast. Surgery is sometimes successful, if there are no other pathological problems present. In recent months there have been some experiments

with contact lenses but the results are, as yet, inconclusive. There is another condition, called opacity, in which the transparent part of the eye is covered with a white cast. It is usually the result of an injury and requires prompt attention. The dog must be kept from rubbing until the veterinarian arrives. Unlike cataracts, many times it will disappear with proper treatment. Progressive retinal atrophy is the degeneration of the retina and leads to permanent blindness. It is a hereditary condition.

Blindness in dogs, by the way, is not as tragic a development as it is with humans, due to the dog's extra-sensitive sense of smell, together with his acute hearing. As a matter of fact, some owners don't know when their dogs are blind, unless they happen to change the furniture around and find the dog bumping into things.

Keratitis (or Blue Eye) often accompanies a virus infection, and is distinguished by a blue-white cornea. The condition involving the gland of the third eyelid which causes the gland to swell is not normal. It shows up like a little blob of red on the inside corner of the eye. Both conditions require professional help, at once.

Among the eyelid disorders are entropion, or inverted eyelids and its opposite, ectropion, both of them usually congenital, the first more apt to occur among Pekingese and Boxers, the latter among Great Danes or St. Bernards. Dischiasis is a condition caused by extra hairs on the eyelid.

When all is said and done, the best approach to Bowser's eyes, should they be in trouble, is to take him to the veterinarian for an examination. Whatever you do, don't poke anything in his eye and don't try any of those salves and ointments you have stashed away in the medicine chest. They may be all right for you, but they're worthless for your dog.

and perpetuate themselves with other people. Here again, there can hardly be a human being, child or adult, who has escaped the development of more or less faulty patterns of relating to others.

The development of an adequate, balanced, well-grounded set of values poses some of the same complicated problems for the child and adult that are involved in the development of his self-image and his relationships to others. The dog has his basic values set for him by nature and he seldom departs very far from them. The child starts off with these values but they are more flexible in him and more accessible to modification and displacement. Thus it is much more likely that a child will become inhibited in the pursuit of these values. It is much more likely that the emphasis placed on these values can be transferred on to more abstract values. The human being's capacity for developing abstract values at best makes it possible for him to develop values which serve

as constant guides for his behavior, as commonalities around which social structure can develop. They also may free him from domination by the immediacy of his needs and insecurities. Nevertheless, this potential of developing abstract values can easily miscarry with three main dysfunctional consequences. The abstract values may become so dominant that the more basic values are lost sight of. Thus a man's pursuit of money, fame, ambition, power may exclude his personal needs and his needs for other people. Values may easily develop out of balance. An individual may pursue humanitarian values so far as the whole race is concerned while neglecting, or ignoring his family and friends; he may so value his family and friends he forgets everyone else. Needless to say, one can also develop extremely conflicting values paralyzing thought, feeling, and behavior.

The dog in his dependence, his need for love and nurture, in his devotion and loyalty, and in his involvement with basic values offers to man, woman, and child a link with nature, a

stabilizing and balancing influence, and often provides his master a chance for expression that can hardly be achieved in any other way. No matter who his master is, there are hardly ever the conflicts of interests that invariably exist to a greater or lesser degree between any two people. It is only in the extreme case that a dog will judge, reject, or leave a person. A person's ability to care for his dog, to experience his dog's love and devotion can hardly fail to make him feel at least a little better about himself. A good relationship with a dog, often so much easier to attain than a good relationship with another human being, can provide the experience and confidence and basis in trust that enhance relationships with human beings. Finally, a good dog is always there when we get carried away with our various hang ups and far out values to prompt us into a romp, to exchange affection, and otherwise to remind us of the things in life that really count.

Of course, all values a dog may have for us are dependent upon our not interfering with his dog nature by forcing him to conform to our twisted expectations and demands. As hearty as any dog may be, it is possible to ruin him with cruelty, neglect or spoiling. And that is a truly sad ending for any dog and his master.

At the beginning of my remarks I pointed out how dogs have also been held as objects of scorn and contempt. Dog qualities, when attributed to human beings have always had a derogatory meaning. How can we understand such attitudes? I am sure this is a complicated question which we can't go into here at any length. I would suggest, however, whenever a dog goes bad, the fault is most likely to be found not in the dog but in the way he has been treated. In addition, I would suspect that often when there has been scorn and contempt for a dog, the basis for the scorn and contempt lies in the subject rather than the object.

I would like to conclude with a quotation from Lord Byron in case you have not heard it. Byron had a beloved Newfoundland dog and on his monument Byron placed the following inscription:

"Near this spot are deposited the remains of one who possessed Beauty without Vanity, Strength without Insolence, Courage without Ferocity, and all the virtues of Man, without his Vices. This praise, which would be unmeaning Flattery if inscribed over human ashes, is but a just tribute to the Memory of Boatswain, a Dog."

He added,

"The poor dog, in life the firmest friend,
The first to welcome, foremost to defend."



Screen star Donald O'Connor and his pet pal

Compulsory Rabies Vaccination Does The Job

By Edward Aaron, D.V.M., and H. Don Mahan

Los Angeles was enjoying a rare, Indian summer day on October 1, 1955, and the second graders at one of the city's largest elementary schools were gleefully responding to the close of another day of reading, writing, and arithmetic. Mary Taylor, age 8, skipped from the school grounds with three classmates on her way to her home three blocks away.

Less than two blocks from the schoolground, Mary and her friends found their pathway blocked by a large, nondescript dog, who appeared to the innocent Mary and her friends as a large bundle of fur, just asking to be loved. The excited and trusting Mary threw her arms around the neck of dog, without noticing that something was different about this dog. This difference was that this dog was rabid. Driven insane by the torment of the disease, the dog no longer recognized that Mary and her friends were dispensing only love. Tortured by unrelenting pain, frustrated and suspicious, the dog responded to the children's advances by savagely inflicting a bite that tore a six-inch gash across Mary's face. Following the attack, the confused animal staggered down the street to be absorbed by the city.

Rushed to an emergency hospital, Mary's wound was treated, and a search for the attacking dog was made. The search ended when the dead animal was found eight blocks from the site of the attack. Laboratory tests confirmed that the dog had died from rabies. The Pasteur treatment, a series of 14 inoculations in the abdominal area, was administered to Mary Taylor. And because treatment was started early, Mary Taylor lived.

Mary Taylor was one of more than 1000 persons bitten by rabid dogs in Los Angeles County back in 1955.

Over 250 laboratory confirmed cases of canine rabies were logged during that year.

Since the first case of rabies was recorded in California in 1898, this fearful disease has been intimately associated and identified with southern California, and especially with Los Angeles County. For years, individuals and organizations, interested in the community's public health, had urged that a rabies control program, requiring the vaccination of dogs, be instituted. But, due to the vehement protests of groups who feared the vaccine would prove harmful to the dogs, legislative bodies declined to enact anti-rabies ordinances.

The facts in the Mary Taylor case, as in other cases, were now getting through to such organizations as the PTA, chambers of commerce, labor unions, etc. These organizations threw their support back of the public health officials, the veterinary profession, the medical profession, and others who had labored unceasingly to eradicate this most menacing disease.

Late in 1955, the Southern California Veterinary Medical Association, representing Los Angeles and Orange counties, took a position that caused elected officials to move toward compulsory vaccination of all dogs. The position taken by the SCVMA was, that the Association would, with its own money, purchase the necessary equipment, supplies, and vaccine, and the members of the Association would donate their time to staffing public vaccination clinics. The cost to the dog owner, to have his pet vaccinated at a public clinic, would be cost on a nonprofit basis—low.

Following the veterinarians' offer to staff public anti-rabies vaccination clinics, and contribute their time, oth-

er responsible groups also volunteered their time to handle registration and other tasks required by the program.

With a few of the smaller cities within the county taking action by passing ordinances requiring all dogs to be vaccinated against rabies, the City of Los Angeles followed suit and passed its own ordinance. In early 1956, the County of Los Angeles passed a similar ordinance, as did the state of California.

In the meantime, public anti-rabies clinics were being run almost every evening in parks, fire stations, school grounds, and parking lots of shopping centers. These clinics were being staffed by volunteer veterinarians, using the Association's supplies and vaccine. At the end of 1956, the public saw the results of this program—*cases of rabies had fallen to 12 cases from the 255 cases of 1955*. And, of equal importance, not a single animal showed any serious consequences from vaccination as had been predicted by opposing groups.

For the past 16 years, this program has remained unchanged. Veterinarians annually contribute more than 1,200 hours to this vital public health program, and in many cases, the veterinarian uses his own equipment. Since 1955, veterinarians have vaccinated almost one million dogs at public clinics.

The test of any program's success is in its final results. The results of the local rabies control program have exceeded its planners' most optimistic hopes. Rabies has virtually disappeared in dogs and cats in Los Angeles and Orange counties. And this is truly remarkable when you consider the abundance of wildlife, in which rabies is prevalent, that shares the Los Angeles basin with the one million dogs.

Vigilance against rabies cannot be let down for a minute. For several years not a single case of rabies had been found in Los Angeles and Orange counties. Then, in October of 1971, an isolated case occurred in the community of Hawaiian Gardens, L.A. county. Due to the high level of protection of other dogs in the community, the disease did not spread but remained a single isolated incident. Again the vaccination program proved successful and a great comfort to the public, the veterinarian, the public officials—as well as to the animals themselves.

The SCVMA program has been adopted by communities throughout the United States, and is now also part of the World Health Organization's suggestions for effective rabies control. There is no calculating how many agonizing experiences of other Mary Taylors have been prevented by the SCVMA action of putting the public interest first.

the heart in the OLDER DOG

by Robert E. Simpson, DVM

As dogs are living longer, one of the common problems encountered is the older dog with a leaky heart. These dogs are either starting congestive failure or are in congestive failure at the time they are presented.

The most common heart problem in the older dog is presented to the Veterinarian with a history of a chronic persistent cough that often is noticed particularly after exercise. The dog tires easily and is very restless, particularly at night.

This condition is brought about in most cases from the valvular disease and hence the heart doesn't pump a sufficient volume of blood for the body to carry on normal physiological functions. The heart muscle becomes flabby and the heart chambers are enlarged and when the valves do not completely close it causes a leakage or back-flow.

This cardiac insufficiency results in several things happening to the body:

First: Kidney function is changed and the body doesn't eliminate sodium and water properly and there is a rise in venous pressure.

Second: This results in an accumulation of sodium and water in the tissues around the various body cells. Most commonly, this occurs in the lung tissue.

This fluid (edema) and the enlarged heart pushing on the trachea contribute to the cough.

The initial diagnosis can be made with the good use of a stethoscope, and often the leakage can be felt by placing the hand on the chest.



Elderly Basett Hound in bed

In order to determine just how extensive the involvements of the other parts of the body are it is a good practice to do several things:

First: A good radiograph of the heart and lungs is taken in order to help us to determine how much enlargement of the heart has occurred; if indeed other parts of the heart are also involved.

Second: Laboratory examinations to determine renal function. A urinalysis and some blood chemistry particularly a B.U.N. (blood urea nitrogen) give a good general indication of how well the kidneys are functioning.

Third: Many times an electrocardio-

gram is done to give some idea of the valvular and myocardial functions of the heart and as well as a record of rate at the time of the start of treatment. Often a subsequent E.K.G. will give valuable information in determining how well treatment is progressing.

Therapy in these cases is basically four fold. (1) Digitalization: This usually consists of giving oral digitoxin or digoxin in order to cause the heart muscle to contract more forcibly, thus increasing the heart's output and to cause the valves to close better. (2) Diuresis: Give medication to cause the kidneys to secrete more sodium and water. (3) Rest. The dog should not be induced to exercise too much. And (4) Diet: He should also be on a low sodium diet (salt free). There are several excellent such diets available, especially prepared just for this purpose.

A dog will need re-examining after being placed on medication and diet. The dosages of these medications often have to be "tailor-made" for each individual case.

Many times the response to therapy is quite dramatic and the tendency for the owner to stop treatment is understandable. In many cases, after a short time these animals are worse than before.

It should be understood that once an animal is digitalized the heart muscle becomes dependent on the added stimulation and when deprived of it, the muscle is in worse condition than it was previously. Radical changes in medication in these cases should be closely regulated and the response closely observed by your Veterinarian.

Often these cases will need to be maintained on medication for the rest of their lives.



Elderly Pug still loves to sit up

DOCTOR'S ADVICE

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

EAR WAX IN CAT

Q. My cat seems to be suffering from an excess of ear wax. What can be causing it?

A. Like other animals and man, cats have ceruminous glands in the skin lining the ear canal, and these normally produce wax (cerumen). Sometimes irritation of the lining by dirt or infection causes these glands to secrete excess wax, which may require softening to be removed. This can be done by swabbing the ear canal liberally with light mineral oil on a Q-tip and then massaging it gently. After this the cat will usually shake its head to expel the material, but the process may have to be repeated several times. If this does not correct the condition, your veterinarian should be consulted.

CANINE CAVITIES

Q. I have been led to believe that dogs don't get tooth cavities, yet my veterinarian found a number in my pet.

A. Dental caries (tooth cavities) is an extremely rare condition in dogs; in a recent survey, 34 of 51 veterinarians said they saw such cases, but in only 1 to 5 dogs a year. This can probably be explained by the absence of starch-splitting enzymes in the dog's saliva, which is also highly bactericidal. Sometimes simple erosions of tooth enamel may simulate cavities, but the latter would be deeper and almost always on the table (chewing) surface of the molar teeth, whereas erosions are equally likely to be on the sides of the tooth. Because they are so rare in dogs, veterinarians have had no reason to learn how to fill cavities, and the usual treatment, when such is required, is extraction.

Subscription Order Form



ANIMAL CAVALCADE

☐ 12 Issues \$6.00

☐ 24 Issues \$10.00

ADDITIONAL POSTAGE: Canada, Latin America & Spain \$2.00;
Other Foreign \$4.00 per year

Your Name _____

Street _____

City _____

State _____

Zip _____

☐ Enter a new subscription in my name

Please Enter the Following Gift Subscriptions:

To _____

Street _____

City _____

State _____

Zip _____

Gift card to read: "From _____"

☐ 12 Issues

☐ 24 Issues

To _____

Street _____

City _____

State _____

Zip _____

Gift card to read: "From _____"

☐ 12 Issues

☐ 24 Issues

To _____

Street _____

City _____

State _____

Zip _____

Gift card to read: "From _____"

☐ 12 Issues

☐ 24 Issues

I enclose \$ _____ to cover _____ subscriptions.

8338 ROSEMEAD BLVD., PICO RIVERA, CA. 90660

ANIMAL HEALTH NEWS

INSURANCE FOR DOGS AND CATS

In years past, there have been many attempts to offer an insurance policy to cover illness and accidents for dogs and cats. To date, there hasn't seemed to be a realistic program presented to the pet owner that was truly protection oriented without some satellite gimmick to sell the policy.

Animal Cavalcade wishes to make this information available to the pet owning public as a public interest announcement:

The Midwest Mutual Insurance Company, Dept. AC, 1111 Ashworth Road, West Des Moines, Iowa, 50265, is now offering a new policy for dogs and cats. This policy offers a varied type of coverage and can be tailored to the individual demands and needs of the pet owner. It covers hunting and racing dogs and has a clause to cover room and board in a veterinary hospital while the animal is being treated for an illness or injury.

This policy has been examined by the Southern California Veterinary Medical Association and the California Veterinary Medical Association insurance trust committees. They are not in a position to sponsor any pet insurance plan, but both associations have stated that the Midwest Mutual Insurance Company's policy is equitable and fair to the pet owner and recommended for personal investigation.

VIRAL DISEASE IN CATS SUBJECT OF NEW STUDY

Scientists at Cornell University, Ithaca, N.Y., have found that viruses are at least one of the causes of urinary obstruction in the cat.

"At this stage we think a virus

causes the disease in some cats," reports James H. Gillespie, V.M.D., coordinator of a program in its eighth year at Cornell's New York State College of Veterinary Medicine to study feline viruses.

Investigating viruses as a possible cause for urinary obstruction is a "relatively new approach." A former Cornell veterinary scientist, Dr. Lon Rich, a veterinarian now on the faculty of the Department of Veterinary Medicine at Colorado State University at Fort Collins, Colo., first felt that viruses might be a cause of urinary obstruction in cats.

Since that time, these Cornell scientists have been able to establish a definite link. They have grown a virus in cell culture, put it into the cat and successfully produced urinary obstruction.

There may be more than one virus involved, Dr. Gillespie said. One virus, which he found induces the disease, is now recognized as principally causing respiratory disease in cats. The scientists believe this virus finds its way into the urinary tract where it produces cellular changes which trigger the development of obstruction.

SODA A HELP IN REMOVING PORCUPINE QUILLS

How do you help a dog that's tangled with a porcupine? First, don't let anyone go near the dog except its master, advises *Field and Stream* magazine. Then make a solution of one cup vinegar and 2 teaspoons baking soda and stir well. Put this solution on all protruding parts of the quills. Wait ten minutes. Apply again and wait ten minutes more. Now you can pull the quills without hurting the dog. Porcupine quills are composed of lime and calcium. The combined action of soda and vinegar softens the lime and calcium deposits in the quills, causing them to shrink, so removal becomes painless.

"IT'S BACK TO SCHOOL" FOR VETERINARIANS

Be sure to mark your calendar April 10th, particularly if your veterinarian is member of the American Animal Hospital Association. That is the week that the AAHA will be its thirty-ninth annual meeting in Las Vegas. And chances are that the man who has been looking after your dog, cat and other small animals will be in attendance. If the service that week is not all that you have come to expect from your veterinarian, just remember he's "away at school" boning up on new developments that will make him an even better practitioner in the future. The veterinarian profession is one of the

very few that places great emphasis on continuing education by its practitioners, and meetings like the one at Las Vegas are programmed to keep him abreast of the newer knowledge in his field. Sixty-eight seminar courses will be presented during the week. In-depth sequential courses in seven different subjects will be continued, and new courses offered in pet associated zoonoses, nutrition, malignancies, allergy and immunology. Featured at the general sessions will be symposia on intestinal nephritis and feline urolithiasis.

EQUINE PRACTITIONERS HEAR RESULTS OF RESEARCH

Reports of research and more research featured the meeting of the American Association of Equine Practitioners, held recently in Chicago. Nutrition was a prime topic especially the information stressing the importance of food analysis. New worming products and their administration came in for considerable discussion as did the value of prophylactic vaccinations of certain infectious diseases. Bandaging procedures, restraint and humane euthanasia were portrayed, and presentations given on better planned and built hospitals, new anesthetics and other modern methods of diagnosis and treatment. Other subjects coming before the meeting included legislation concerning certain infectious diseases, the problem of possible international transmission of same, and the need for "awareness" in order to obviate possible "disease disaster."

NEW FEDERAL REGULATIONS ON ANIMAL TREATMENT

New government regulations to ensure humane treatment of most performing and zoo animals—including lions, tigers and elephants—have been proposed by the Agriculture Department.

The rules, growing out of a new animal welfare act adopted in 1970, would extend protection formerly limited to six species—dogs, cats, rabbits, hamsters, guinea pigs and primates.

The new law, primarily designed to protect animals kept in carnivals and roadside zoos, would broaden the humane treatment requirement to cover most wild, warm-blooded animals, including performing, pet and research animals.

Research institutions, under the regulations, would be required to report annually that animals used in studies received drugs to avoid pain and anxiety. Where pain is an unavoidable part of the experiment, reports will be required to explain why.

Contraceptive vaccine viewed as final answer to stray dog and cat problem

The problem of stray dogs and cats has long been recognized. Strays or otherwise uncontrolled animals pollute the streets, disturb sleep, damage property, kill other animals, frighten people, spread rabies and often cause traffic accidents injuring or killing people.

The strays themselves are usually destined to live with cruelty, disease and starvation, either dying young or being put to death.

But relief may be on the way for the strays and the people and organizations who bear their expense.

Lloyd C. Faulkner, D.V.M., Ph.D., is head of a team at Colorado State University, Fort Collins, investigating better ways to sterilize dogs. His team comprises physiologists, microbiologists, biochemists, biophysicists and veterinary specialists.

It is hoped that the information the scientists develop will be useful in controlling the population of stray cats as well as dogs.

The studies, underway for four years, are sponsored by Morris Animal Foundation of Denver. The public foundation is supported by more than a thousand animal owners and organizations, all interested in better health for animals. The Foundation's Advisory Board of highly specialized scientists evaluates each phase of the study.

The seriousness of the problem is highlighted in California, where in 1970, according to an animal control survey sponsored by a Los Angeles councilman and coordinated through the California Humane Council, more than one million dogs and cats passed through state and private animal shelters at a total cost of almost \$9 million. These figures do not include the Los Angeles and San Francisco Societies for the Prevention of Cruelty to Animals.

Counting only those shelters which reported data to the state, 374,993 dogs and 403,955 cats were destroyed in California that year. That means 68 percent of the dogs captured and 89 percent of the cats had to be killed because no homes were available for

them.

It also means that nearly 800,000 animal carcasses had to be disposed of, creating economic, sanitational and ecological problems. The effort cost California taxpayers and patrons \$8,987,815.

On a national scale, the American Humane Association has estimated that it costs state and local governments and humane societies \$65 million a year to pick up unwanted cats and dispose of them through adoption or other means.

With the dog population increasing by 40 percent each decade as compared to a 10 percent increase for humans, birth control becomes even more essential for animals as for people. One source estimated 12,500 homeless puppies and kittens are born each hour.

The most common technique of attempting to control promiscuous breeding is through surgical spaying of the female, removal of the reproductive organs by surgery.

A survey of San Mateo County of California shows that the average cost of a spay operation is \$42.50, and that the cost is one of the major deterrents for many owners who do not have females altered. Much of the money being invested in the problem by humane organizations is to build and operate spaying centers where pet owners may have their animals spayed at "budget" rates.

Unfortunately, the spaying centers can be no more than stopgap measures.

"Spaying is just not a 1972 technique," Dr. Faulkner said.

One veterinarian working full-time at a spay center can do no more than 24 animals a day, and often no more than eight operations can be performed in one day. The animal owner pays only a portion of the cost for the operation; the complete cost must be made up by the state or some other agency.

The survey in San Mateo County revealed other common reasons for not spaying. These included the belief

that the females' heat was no inconvenience and the dogs were confined to yards, possible discomfort or danger in the operation, and the argument that spaying can make animals fat or change their dispositions.

If these unspayed females have puppies or kittens which the owners are not able to care for, they may give them away to people who don't really want them; sell them, unwittingly, to dealers who get animals for laboratories; or give them to the already overburdened animal shelters.

Part of the problem in rendering females infertile is that little is known about the reproductive biology of dogs and cats. Researchers at several universities are studying the points at which the reproductive cycle may be safely and simply interrupted. Programs are underway at the University of Virginia, University of Georgia, and Cornell University, as well as at Colorado State.

Male dogs, traditionally, have been castrated. Some veterinarians now perform vasectomies, an operation which makes the male sterile but leaves the social problem. Costs of vasectomies generally are cheaper than castrations.

The Colorado State University team believes that some non-surgical procedure to produce sterility (safely and effectively) for a cost of less than \$20 is the only answer.

The CSU scientists are committed to developing a chemical means of animal birth control that will ease the plight of stray animals and end the problems they create for society.

Dr. Faulkner originally was a cattle physiologist. Ironically, it was an experiment with cattle at Colorado State that led to the team's first interest in animal birth control, and from that knowledge grew his interest in canine reproduction.

In 1967 a graduate student from Chile, Dr. Mauricio H. Pineda, was experimenting with reproduction in the cow and stumbled onto a fascinating phenomenon.

He found that rabbits which had been inoculated with bovine luteiniz-

ing hormone (LH) became sterile. LH is a hormone which all mammals, male and female, are thought to produce and is responsible for triggering the reproductive process.

Dr. Faulkner began to wonder if the LH inoculation would have the same effect on dogs and cats. If it did, he thought, it might be a means of animal birth control.

Since the pituitary gland is where LH and other reproductive controlling hormones are produced, he tested blood from the sterile rabbits on the pituitary tissues of several animals.

He found that the rabbit antiserum, carrying the LH antibodies, cross reacted with pituitary tissues from cats and dogs.

The findings seemed to be a clue that could lead to a chemical means of animal birth control. Excited with the possibility, Dr. Faulkner submitted a research proposal to the Morris Animal Foundation and received a grant through the Foundation from Seeing Eye, Inc. of Morristown, N.J. Additional grants have since been issued from the Sarah Mellon Scaife Foundation, the Allegheny Foundation, and the American Humane Association.

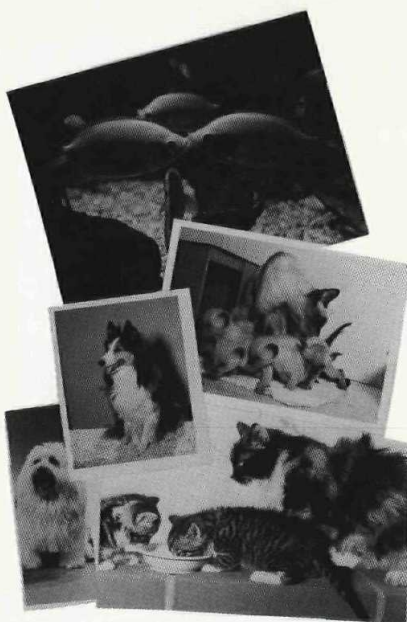
Four male dogs were immunized for study, since the male reproductive process is almost continuous. Over a period of 94 days, the dogs received injections of bovine LH. All four dogs became sterile, and three of the four remained sterile for the full year they were observed.

Although the process was successful, it was not practical for use as a means of mass birth control because of the repeated injections needed. If a procedure of implantation of the anti-fertility hormone can be developed for a "one-shot" method of producing sterility, repeated injections will not be necessary.

Although testing is not complete, "We are encouraged by results," Dr. Faulkner said.

Working with Dr. Faulkner, professor and chairman of the Department of Physiology and Biophysics at Colorado State, is a capable group of veterinary scientists including David C. Lueker, M.S., Ph.D., associate professor of microbiology; M. Lloyd Hopwood, M.S., Ph.D., professor of physiology and biophysics; Robert D. Phemister, D.V.M., Ph.D., associate professor of pathology; James F. Masken, M.S., Ph.D., associate professor of physiology and biophysics; Robert P. Tengerdy, Ph.D., associate professor of microbiology and biochemistry; J. Emmett Simmons, M.S., Ph.D., assistant professor of physiology and biophysics; Phil G. Squire, M.S., Ph.D., professor and chairman of biochemistry, and George E. Seidel, Jr., M.S., Ph.D., assistant professor of physiology and biophysics.

new PHOTO CONTEST for AC readers



Here's an opportunity for animal lovers who are handy with a camera to win valuable prizes and have a good time doing it.

Animal Cavalcade is pleased to announce a continuing Photography Contest. There are separate categories for amateurs and professionals, with top prizes of \$25.00 Savings Bonds in each group, and several \$10 awards also will be given in each category. Winners and runner-ups will be featured in every issue.

The theme of the contest is "the relationship between animals and man," although it isn't necessary that people be shown. Photos of dogs, cats, horses, birds—any animal—are eligible. Any number of entries may be submitted, and new contests will be held for every issue in 1972.

Entries should be unmounted and black and white or color prints enlarged to either 4x5, 5x7 or 8x10 inches. Color transparencies of any size may also be entered. Contestants must specify whether they are amateur or professional. A panel of photographic and animal experts will select the winners, based on photographic quality, composition and appropriateness. Entries cannot be returned and all pictures submitted become the property of Animal Cavalcade.

Wonder Fluff

THE SHAMPOO THAT LEAVES
YOUR DOG "GLOWING" CLEAN

Wonder-Fluff Shampoos are truly unique. They unsnarl tangles, kill fleas and ticks—end "doggie odor".

Your dog will be huggable again—use Wonder-Fluff, America's leading fine shampoo.



Available at better pet shops and pet departments.

8 IN 1 PET PRODUCTS INC.
100 EMJAY BLVD., BRENTWOOD, N.Y. 11717

Help those who can't help
themselves... Train At Home to be a

VETERINARY ASSISTANT

Doctors of Veterinary Medicine are overwhelmed by the growing flood of animals needing health care. This is your opportunity to combine your love of animals with a rewarding career—and work side-by-side aiding a man dedicated to helping those who can't help themselves.



Thanks to the intensive training you will receive from North American School of Animal Sciences, you will be able to earn the trust of this man. He will come to depend on your skill and knowledge to assist him.

Your training can qualify you to help him in examination, treatment and laboratory work—to assist in surgery, anesthesia, X-ray and put to use the unique specialized knowledge that will distinguish you as a member of his animal care team.

Study at Home. Keep your job and paycheck—learn in spare time. Thousands of others are doing it... so can you! If money is a problem, you may even qualify for government help.

Find out today! Accredited Member, National Home Study Council

Mail Coupon Now for FREE "Career Kit"

North American School of ANIMAL SCIENCES Dept. 23433
4500 Campus Dr., University Plaza, Newport Beach, CA 92663

Rush me free "Career Kit" telling me how I can become a VETERINARY ASSISTANT.

☐ Mr. ☐ Miss ☐ Mrs. _____ Age _____
Address _____
City _____ State _____ Zip _____



ALPO gives it to you straight.

Beef and meat by-products without a speck of cereal. Without a drop of "gravy" that's mostly flour and water. So why pay meat prices for cereal, when you can get ALPO? And every

can of ALPO has all the vitamins and minerals your dog needs for a complete and balanced diet. So get it straight.

Get ALPO. The one with more meat.