

ANIMAL CAVALCADE

SEPT/OCT 1972

60¢



PET HEALTH NEWS

BOWSER goes to college

How Important are Laboratory Tests?

VANISHING SPECIES

NON-PROFIT ORG.
U.S. POSTAGE PAID
PERMIT NO. 242
PICO RIVERA, CAL.

Animal Health Foundation
8338 Rosemead Boulevard
Pico Rivera,
California 90660

EDITOR'S NOTEBOOK

NOTE: We are very sorry the first half of the article on the "Animal Health Foundation" was inadvertently omitted in the July-August issue. It appears in this issue. Ed.

People who are interested in a future professional life which is rewarding and profitable should look into the possibility of entering the "Para Veterinary Medical" profession. During the past two decades there has been a tremendous increase in the demands of Veterinary Medicine, and the profession has been over-burdened trying to fill these demands with graduate veterinarians.

Educational institutions cannot fill these vacancies due to a lack of monies and the faculty necessary to expand and admit more veterinary students each year. The educational committees of the state and national associations have been researching the possibilities of training and licensing persons in the field of *Para Veterinary Medicine*.

Heretofore state laws have limited the type of duties of lay assistants and most of the veterinary duties had to be performed by a graduate and licensed veterinarian. With the modern animal hospitals and clinics organized as they are, there is a feeling that many of these procedures could be performed by a trained lay person if done under the direct supervision of a licensed veterinarian. We have always had lay people to do the menial tasks in these hospitals but most of the training has been on the job and very little formal education was obtained.

The demands at present are great for para medics and when, in the near future, standards are established, there will be even greater demands over the nation for people to fill these newly formed vacancies. There are few schools offering a formal course at this time as a format has not been finalized for licensing. The latter should be completed soon. If you are interested in serving the profession, investigate your junior college, college, technical schools, and correspondent schools and educate yourself in the areas of Anatomy, Physiology, Bacteriology, Zoology, Radiology, Animal Hygiene, Animal Husbandry, Office Procedures, Bookkeeping and any subject in the field of animal science. These are offered in most areas and in most schools. When it is necessary to obtain a license in the "Para Veterinary Medical" field, you will be well prepared.

Many people who have been interested in animal care and veterinary medicine have applied for admission to a veterinary school have been refused for many reasons — lack of space in

continued on page 12

ANIMAL CAVALCADE

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

SEPTEMBER/OCTOBER 1972

Volume 3 Number 5

ARTICLES

- Animal Health Care, *Norene Harris* 6
Health Of The Cat And Its Relationship To The Owner,
Louis J. Camuti, D.V.S. 8
The Man By The Road, *Lee Avery* 10
It's A Dog's Life Underground, *Joe Alex Morris, Jr.* 12
Animals Of The World, *L. M. Fitzgerald* 13
Vixens, Viruses, And Vaccines, *James R. Olson* 14
The Show Must Go On—And Does, *Hilarie Edwards* 16
The City Child And The Zoo, *Ellsworth Boyd* 18
In Search of the Grizzly and Other Vanishing Species,
Thomas Snortum, D.V.M. 20
Bowser Goes To College, *Felicia Ames* 22
How Important Are Laboratory Tests?, *Brian H. Baker, MT* 24
Battle of the Cats, *Ella Duncan* 30

DEPARTMENTS

- Pet Shopper 4
What's New? 26

William K. Riddell, D.V.M. Editorial Director
Norene Harris Associate Editor
Pamela Bradley Assistant
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

Carmie, flower loving Basset Hound/Beagle is the pride and joy of the Sisters at the Carmel of St. Teresa in Alhambra, California. She's heaven scent!
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.

PUBLISHING YOUR BOOK CAN PAY OFF!

Good things happen to authors whose books have been published under our plan. They gain recognition and prestige. **Our full book publishing services**—design, editing, printing, binding, marketing, and distribution—**under one roof means low break-even points, publication in just two to four months.** Two FREE books and literature give details and costs of our subsidy plan, plus success stories. Write or phone Dept. 816.

EXPOSITION PRESS, INC.
Jericho, New York 11753
516 997-9050

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, anesthetics, X-ray and put to use the unique specialized knowledge that will distinguish you as a member of his animal care team.

Which of these ANIMAL CARE CAREERS Do You Want?

- Zookeeper • Humane Agent
- Pet Shop/Kennel Owner
- Laboratory Technician
- Veterinary Assistant
- Animal Hospital Aid



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. 23439
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 _____



NEW AUTOMATIC DOG WATERING BOWL

Putting pets and kennel dogs on the main household or kennel water line, with a water bowl that never goes dry, is now possible with Phill-Fast, an ABS plastic bowl developed by Bowman Plastics Inc., Downey, California. It comes complete with fittings to connect with the ordinary water line, like a garden hose.

The bowl is built to give years of trouble-free service, with the easiest of maintenance, by simply wiping it out as necessary. It is available, postpaid, at \$14.95, from Bowman Plastics Inc., 9375 Stewart & Gray Road, Downey, Calif. 90241.

LEAD FOR LARGE BREED DOGS

A sturdy lead is especially desirable for walking large breed dogs, and this new web training lead is designed for this purpose.

Featuring a chrome-plated snap, it consists of a 10-foot length of firm webbing.

More detailed information is available at: Winsted Division, Lambert-Kay, 3628 Crenshaw Blvd., Dept. AC, Los Angeles, Ca. 90016.

DOGGIE SCOOPS

This handy kit is designed for easy clean-up after the city canine.

Each set includes a scoop, pusher, opaque disposal bag and tie. Everything is placed in the bag after clean-up, sealed with the tie and deposited in a trash receptacle.

Doggie Scoop sets may also prove handy for quick dog clean-up in home yards, inside the house, or when traveling. They are packed seven sets per package.

Doggie Scoops are a product of Spellman and Zenon Products Corp., Dept. AC, P. O. Box 31, Blue Bell, Pa. 19422.

"HOT PANTS" FOR PET SET

A new line of "Hot Pants" for female pets in season and for training pups, features snaps at the waist, lacing up the back, and snap buckles at shoulders to make them completely adjustable. Available in solid black with black check, red/red check, orange/orange check, or lime/lime check. All are made of wrinkle resistant cotton and are hand washable. Available in extra small, small and medium, these "Hot Pants" can also be used on cats and monkeys. Retail price is \$5.95 from Petite Originals, 102 W. Beverly Blvd., Montebello, Calif. 90640.

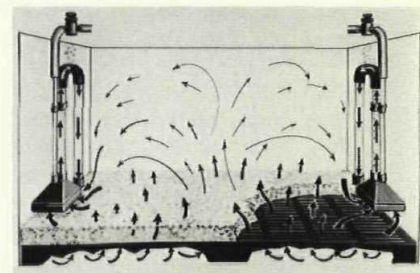
BREEDING GUIDE

If you are interested in learning how to breed dogs, "Dogs, Kennels, and Profits" is a book that may interest you.

The book covers every aspect of breeding and kennel management, and even includes a business section on internal auditing, accounting and operating records.

The 158-page paperback volume features photographs, drawings, and sample accounting forms. The author, Bob Bartos, is an experienced dog handler and director of the Friskies Research Kennels for 25 years.

The guide may be obtained by sending \$1.95 per copy to: "Dogs, Kennels, and Profits," Dept. AC, P.O. Box 350, Pico Rivera, CA. 90660.



UNDERGRAVEL FILTER

A new aquarium device has been designed to purify aquariums by producing a water flow that deposits all waste material below the gravel layer.

The "Reverse Flow Undergravel Filter" carries waste material up collector tubes and down under filter plates at the bottom of the tank. Natural organic decay then removes the waste material.

The filter can clean a 10-gallon tank in a matter of minutes. It is available at all Vortex Products dealers. For additional information write to: Vortex Products, Dept. AC, 3317 Bristol Road, Flint, Michigan.

animal HEALTH care

AN EXPERIMENT IN
JOINT EFFORT AND
PERSONAL CONCERN

by Norene Harris

What is Animal Health Care? Who sponsors it? Am I eligible? These are the kinds of questions which have been directed to our magazine since its inception. To get the full story, ANIMAL CAVALCADE interviewed Mr. Harry Maiden, Executive Director of the Animal Health Foundation. Mr. Maiden not only commented on the what and why of Animal Health Care, but also explained in depth this unique experiment in veterinarian concern - person to person, veterinarians to animals - Foundation to people and their pets.

NH: I want to get right to the heart of the program. Can you explain Animal Health Care to our readers by using some example of an actual case history?

HM: Indeed I can. Let me cite this one: A college student from the University of Southern California was traveling along the freeway on the center lane. Much to his dismay he suddenly saw what appeared to be an injured animal lying on the fast lane to his left. Immediately he went to the nearest off ramp and got off the freeway in order to retrace his steps. This time when he approached the injured dog, he pulled quickly into the emergency parking zone, rushed out onto the freeway and lifted the animal into his car.

NH: He actually risked his own life to save the dog's?

HM: Fortunately, the risk was not in vain. He rushed the dog to a nearby veterinary hospital where the animal received immediate treatment. Surgery was required along with an insertion of a pin into the broken leg.



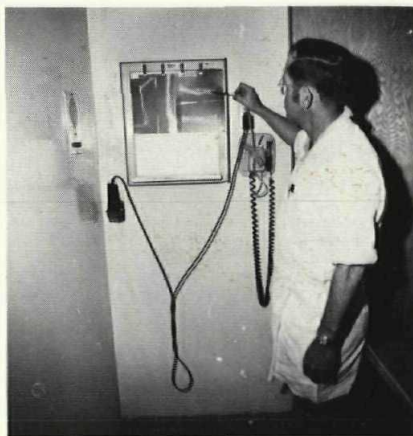
The veterinarian who came to the dog's rescue and the student's aid shows the type of pin used in the surgery.

NH: What would the charge on this treatment normally have been?

HM: In this case the regular cost would have been \$123.50 for the surgery, X-rays, lab, hospital, and nursing cost. Obviously, each case varies according to the services required.

NH: Did the veterinarian receive any compensation from the Animal Health Foundation?

HM: In this case, the student felt so responsible for the dog that despite his own limited income, he actually donated \$35.00 to the Animal Health Care Fund, and the veterinarian absorbed the amount in its entirety.



Checking out the break on X-rays.

NH: In this case then, the veterinarian felt a sense of responsibility both toward the dog and the young man. Perhaps we would do well to back-track for a moment and find out how this program of Animal Health Care began and by whom?

HM: The program of Animal Health Care, administered through the Animal Health Foundation, began approximately three years ago in response to a need for this type of service. There are, of course, other organizations devoted to helping animals, but the Animal Health Foundation is the only one offering aid to sick animals and sponsored by the veterinary profession. It is a pilot program at the present time and one which we hope will extend to other parts of the country.

NH: Who qualifies for Animal Health Care?

HM: Originally, anyone in need. That is, anyone receiving aid under a social welfare program - such as the aged, the sick, children, and the handicapped. We assumed that such individuals had already been screened by professional social workers and were found entitled to receive aid. Further-

more, we didn't have the staff to screen large numbers of applicants.

NH: It sounds as if this original plan did not materialize?

HM: Unfortunately, we quickly discovered that we couldn't handle all the requests on our present budget. Now we only accept elderly citizens who have no other income but social security. In many cases, this individual's pet is his or her only emotional outlet; pets give the elderly something to do each day and someone to whom they can express and from whom they can receive love. Also, in many cases a dog serves as a guardian as well as a companion for an elderly person. For these reasons, we gave this group our first priority.

NH: Are there any other extenuating circumstances which might prompt Animal Health Care?

HM: Yes. We do help out in crisis situations where there is no other source of help.

NH: How does the plan operate?

HM: The Animal Health Foundation originally planned to open an Animal Health Center - a central place in which sick and injured animals would be treated. This plan was abandoned - for the time being, at least - as it is not practical for elderly people. Many of these people are often too ill to travel, many cannot drive and many cannot afford the transportation costs. Our alternative, therefore, was to refer individuals to the nearest participating veterinarian in their area.

NH: How many veterinarians are involved in this program?

HM: In Los Angeles County and Orange County - both in Southern California - there are over 300 veterinarians cooperating with the program. I think it's important for me to say here that the Animal Health Foundation originally intended to implement a fee schedule for these types of cases which would provide free veterinary care insofar as the time and services of the veterinarian were concerned, but assumed that the Foundation would pay for all other costs.

NH: I presume that this original plan has not yet been worked out?

HM: It was decided that such a dual effort would not be practical until the Animal Health Foundation had been able to set aside the sum of \$20,000.00 specifically for Animal Health Care. Keep in mind that this takes some doing since the Foundation is a non-profit organization.

NH: How are costs being handled until such time as you reach this goal?

continued on page 8

HM: So far each case we have taken care of has been *entirely paid for by the veterinarians involved - including outside costs, as well as their own time and services*. These cooperating veterinarians have pledged us this support until we reach our goal.

NH: What is the objection to continuing the program on the present basis?

HM: I believe it's necessary and realistic for people to realize that no community has been called upon to build an animal hospital; this is entirely a personal expense of the veterinarian. To construct and equip a modern private animal hospital today requires from \$100,000 to \$250,000. It's one thing for us to ask the veterinarian to donate his time and services, but quite another to expect him to pay all the other additional expenses for such things as lab fees, medication, hospitalization charges, etc.

NH: Does Animal Health Care pay for neutering and spaying?

HM: Since there are other organizations which provide this service for people in need, we do not offer any *elective surgery*. Our services are limited to sick and injured animals.

NH: What do you estimate the total amount of Animal Health Care given to date under this program?

HM: A 20% random survey was made of all veterinary hospitals in Los Angeles and Orange Counties, amounting to 430 hospitals. On an average each hospital was and is contributing \$52.00 of free work per week. This makes a total of \$22,360.00 of free services per week for this group of 430 hospitals.

NH: That would make an incredibly high yearly estimate?

HM: In point of fact, it amounts to \$1,163,320.00 worth of free service per year. Just project this nationally, and see what the figure would be.

NH: Can you give me another example of the type of case being handled free of charge and the costs which would normally be involved?

HM: Here's a good one. A dog who was blind in one eye and going blind in the other was brought in for examination. The veterinarian handling the case referred it to a colleague who specializes in this type of surgery. The operation was successful and the dog's sight was restored in the one eye.

NH: What did the surgery cost?

HM: It would have cost \$270.00. Remember that surgery to save an animal's eye is a similar operation to one which is performed to save a human eye. In this case, the veterinarian absorbed the entire fee.

NH: What type of emergency case would your program aid?

HM: We had one recently in which a Siamese cat was hit by an automobile

and was found bleeding from the mouth. The mother had six children and was on welfare. The social worker on the case referred her to us and we came to her aid.

NH: I would imagine that there were six very happy children as a result?

HM: For children who are already deprived, pets often have a very special significance.

NH: Do you feel most people who apply for Animal Health Care are sincere?

HM: In my experience, the overwhelming majority have been entirely genuine.

NH: Do the individuals you assist ever try to repay what they can?

HM: They certainly do. In one case, a German Shepherd took ill. His owner had been a heart attack victim for five years and the dog served as both companion and guardian. In appreciation for our help, the owner and his wife pledged \$5.00 per month as a donation to the Animal Health Care fund until such time as they had contributed enough to replenish what they had depleted from the fund.

NH: Any other examples of this type?

HM: Another lady we helped also pledged \$5.00. In the meantime, she moved to another state. Despite this, she has continued to send us \$5.00 each month for 22 months! It's important to remember that any donations to the Animal Health Care Fund are made on a purely voluntary basis. These people don't want something for nothing; they want to donate whatever they can to the Animal Health Care Fund. In this case, the woman has long since repaid to the Fund what she used, and is currently pledging simply to help others.

NH: After your funds have grown, what other individuals do you hope to aid?

HM: We want to extend aid to all truly needy people who are unable to care for their sick animals.

NH: Is this type of program going on in other states?

HM: Many other states and areas of the country are watching our program and receiving reports on its progress. They are doing so with the idea in mind of possibly implementing similar programs in their own locales. There are also other types of veterinary organizations designed to aid the needy getting underway in other states.

NH: Is Animal Health Care the only program funded by the Animal Health Foundation?

HM: No, it is only one of several key programs. But to explain all of them would require another interview!*

NH: Why do veterinarians receive so

little publicity for so much voluntary service?

HM: The truly dedicated veterinarian - quite like the dedicated person in general - does what needs to be done, in this case, giving medical help to sick pets of the elderly or needy. He wants to help the needy, not contribute to the greedy. And he doesn't expect an "Oscar" for his work!

NH: Many people would probably argue that he deserves one!

**ANIMAL CAVALCADE will run the 2nd half of this interview in its Nov./Dec. issue. "What Else is the AHF Doing and Why?"*

THE HEALTH OF THE CAT AND ITS RELATIONSHIP TO THE OWNER

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

The cat has been blamed for a lot of ailments to which humans have been subject for thousands of years. In some civilizations they were credited with being sacred but by and large, the cat was considered more on the negative side. In spite of this poor image, it managed not only to survive for thousands of years, but to reach the heights of popularity it now enjoys, and as far as I am concerned, it will be here for generations to come.

Within my time I have heard the cat accused of being responsible, or partially so, for at least four human diseases.

During 1932, in Metropolitan New York there was a severe outbreak of feline panleukopenia commonly called "feline distemper," which I feel is a misnomer. Soon after the onset of this epidemic, I became greatly disturbed at the frequency with which clients of mine were asking me to destroy their cats. On investigation I found out that some physicians were recommending the riddance of the cat, because—they said—this feline panleukopenia could be a possible cause of a type of human pneumonia which at that time was called "cat pneumonia." Eventually, the name was changed to virus pneumonia. After a while the fear subsided, and the cat was let alone for a while.

Some years afterwards, it was "discovered" that another terrible disease was being transmitted to humans. This disease was called "cat scratch fever", a form of lymphadenitis. Some hospitals organized special clinics for the diagnosis and treatment of this condition. Here again the whole situation was blown out of proportion in the lay media, and in some instances even the professional publications gave it some attention.

But the cat was not long in escaping culpability. This time the poor cat was

involved in causing leukemia in children! While the admission was made that only one-seventh of the yearly incidence of child leukemia could be caused by sick cats, the publicity had serious implications. The original harsh and cold statements were later tempered by the researchers saying that "For the moment at least, much greater study must be made to prove this hypothesis". Here again, I never saw a case of child leukemia in any of the numerous homes that housed the thousands of sick cats I have treated.

In the meantime, the poor cat has gotten another black eye. We will probably hear more on this. The newest condition, which has been given greater publicity than any of the other diseases, is toxoplasmosis. The cause is a protozoan which is apparently common to all warm-blooded animals, wild or domesticated, living in all parts of the world, or on any earth-like planet in the universe! There isn't any question that it existed long before the publicity boys decided to give it a ride. The AVMA, in the February 15, 1970 *AVMA Journal* mentions that an English scientist had discovered the presence of antibodies caused by toxoplasmosis infestation in the blood of human adults having possibly been infected by their cat or dog. Further back, it was established in animals that congenital infection could be transmitted to the fetus when the dam has an acute infection before the antibodies are present. However, infected animals do not seem to transmit the infection in following pregnancies.

While this is all old hat, the tremendous publicity, (including that of the prestigious March of Dimes Foundation) has caused the usually non-committal AVMA to send out a letter on the subject.

I am in no way trying to imply that all these studies are incorrect, or that there is no valid evidence that the cat is in any way associated with these diseases. My point is that the veterinarian, now that the fat is in the fire, in his capacity, should of necessity explain to cat owners that the strong statements and intense popular press publicity should be judged as being written to get maximum public attention and effect. This over-emphasis always has two effects on the public, both of which are extremes: on the one hand, the owners will dispose of the cat; and on the other, completely ignore the warnings. That is where our job comes in. The practitioner should brief them on the common-sense approach toward these reports, so that by proper caution and awareness the owners can obviate these untoward real or suspected effects so that they can live happily with their cats.

Reprinted courtesy: **FELINE PRACTICE**, Mar./April, 1972

*this Christmas... give
a year of*



**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:

additional gift subscriptions (if ordered at same time), \$4.00 each.
\$ 8.00 each.

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 _____"

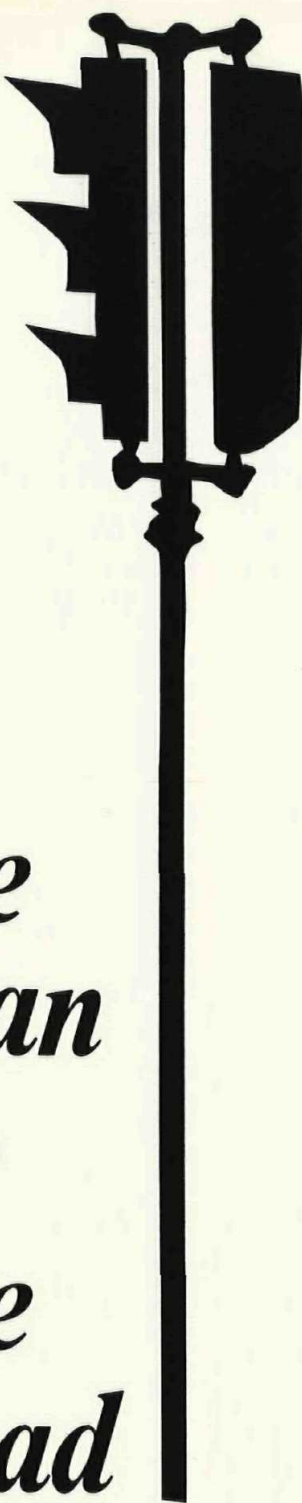
☐ 12 Issues

☐ 24 Issues

I enclose \$_____ to cover _____ subscriptions.

8338 ROSEMEAD BLVD., PICO RIVERA, CA. 90660

the man by the road



By Lee Avery

He was always by the road. No matter what time of day or time of year we passed, (although, of course, we didn't go to the cottage in the winter) he was there. Always within the same mile stretch of road, somewhere between the basket place and the cluster of stores at the pond.

He was a dark, heavy-set man, wearing a fedora, and, except in deep summer, an overcoat over his suit. In very hot weather he'd wear a dark blue suit, with shirt and tie and hat. He would be walking slowly along, or standing, staring at each car as it passed. He always seemed to be chewing — but whether it was tobacco, gum, or merely a nervous habit, we couldn't tell.

Every time my sister and I went to the cottage, we passed him. Sometimes Sally would wave, but there was never a flicker of response. We made up wild stories about him — maybe because he looked like an inoffensive gangster. He had buried his wife, we said, and then the road had been built, and now he was going up and down, hunting for the spot where her body lay. We called him *The Man*. "Look, there he is!" we'd call out triumphantly when we saw him. "There's *The Man*!"

One day we were taking Sally's friend Betty to the cottage, but when she saw the basket shop, she asked to stop. An elderly couple greeted us pleasantly, and the girls were urged to browse around and see everything.

I was standing by the window and I saw *The Man* go by. Curiosity overcame me. I turned to the proprietor, who was sitting by the counter, puffing on a corncob pipe.

"Could you tell me who he is?" I asked. "We see him so often on our way to the beach."

He followed my glance out the window. "That's Joe Herndon."

Suddenly I hated to have *The Man* have a name! Some of the mystery seemed gone... he was flesh and blood! But I had started it.

"Live around here?" I asked.

"Used to," he said. "Sit down," he added, pointing to a chair beside him. "Looks like they'll be a while." (Sally and Betty had followed the woman outside to look at more baskets.) "Used to live right on this road... down a piece. Before the State put the new road in. Lost his house, then. Had to move way across town. Gets up about sunrise every day — hikes over here. Stays till dark. Sometimes after."

"We've wondered about him," I said. "He must have a story."

"Sure," He puffed on his pipe. "Always here. Looking for his dog."

The proprietor's wife and the girls, with their purchases, were coming in now, and the woman spoke as they neared us. "Way you say it!" she snapped. "You have to tell the *whole* story. Poor Joe. Never had nothin'." She rang up the sales.

"Would you tell us?" I asked. "We've been interested in him."

"Well, all right," she said. "Andrew, get a couple of chairs out back for these girls." While he went for them,

she continued, "Nice sunny day. People goin' to the beach don't do much gift buyin' on the nice days... takes a good rainy spell. Course, if anyone comes, I'll have to stop."

"Of course," I said. Sally and Betty were seated now, and our storyteller perched on a high stool by the counter, looking important.

"Well, Joe was the oldest" she began, smoothing imaginary wrinkles in her crisp, printed apron. "His pa was no good. Drank. Ran off. Just Joe left, and his ma, and a bunch of kids. His ma wasn't much, but she was neat and proud. 'Joe', she used to say, 'Even if you ain't bright at learnin', you can *look* like somebody.' People gave them cast-off clothes, and she kept Joe dressed up all the time, never let him go barefoot, or play like the others. 'You're the man now', she'd say, and him only twelve, 'And you got to look like one.' Course he really didn't mind givin' up school - he *wasn't* bright, and he knew it."

"Then, one by one, the little ones died. Puny lot, they was - don't remember how many. Just Joe and his ma left, then. He'd do any kind of odd job to support them - but he was always dressed up - hat and coat, shirt and tie, like his ma told him."

"Finally, his ma died too. And Joe was alone in the house. Never had a girl, Joe didn't. He was scairt of them, I guess. And he had a funny kind of lisp... lost most of his teeth young. No money for dentists. Never could even get drafted. Army didn't want him. What'd they call it, Andrew?"

"4-F," said her husband.

"That's it - 4-F he was. Well, then this dog come to him. It was a real big dog, scrawny thing with a bushy tail - no special kind - Collie, sort-of. But he came to Joe, and Joe fed him, and he stayed. My, I tell you, Joe changed a lot. He'd go uptown and he'd talk to folks - brag about his dog. King, he called him. Said he was a king of dogs."

"Well, he must of had him six years. They was always together, Joe and King... they'd walk all over town, King prancin' along ahead, and then runnin' back to Joe and kind of laughin' like. Made you ache to see them, but it was a good ache, they was so happy. Then one day, Joe let King out in the morning, like always, and he didn't come back. He called and called, Joe did, called King all over town, but no King. The little Currie girl said she'd seen a car stop, and a man get out and drag King into the car. No, King wouldn't-a bitten the man - best natured dog you ever seen.

"Joe was like a wild one for awhile. He'd stop every car, or try to, to ask if they'd seen King. Finally he quieted down. 'I got it figured out,' he says to

Andrew. 'King's a smart dog. Smarter'n me. They can carry him off, but they can't make him stay. King'll come home, no matter where they take him.' So he'd sit in front of his house, or by the window, every day, and he'd watch and he's listen. He never lost hope, 'No knowin' how far they took him,' he'd say. 'Maybe to California, to put him in the movies. He'll come home, King will!'"

"Les Wilkins never liked Joe . . . big, loud-mouthed bully, Les was, and he tried to tell Joe that King wouldn't ever come back. Said King had probably been run over . . . not much loss, a mutt like that! Nobody ever seen Joe so mad . . . he like to have killed Les, took him by surprise, and he made him say it wasn't so, before he let him up. Les wanted to have Joe locked up, but the police talked to Joe, and he promised to leave Les alone."

"Well, then it happened."

"What happened?" I asked.

"The State decided to build this road. We'd been hearin' about it for a long time, Andrew and me, but we wasn't worried - we was far enough back. But Joe's house wasn't."

"They took house, land and all. He stayed 'till the last day, and then they had to make him come out. You saw it, Andrew."

Her husband spoke. "There was two State men, leadin' him and talkin' nice to him. And Joe was cryin' . . . all dressed up, like he'd been taught, but cryin' like a baby. He kept sayin' 'How'll he find me? Smart dog can't find a house that ain't there!'"

The woman picked up the story again. "It wasn't no use. He had to leave. He got lodgin' with some relative of his ma's, across town. He wouldn't work no more, but of course, he had money from the State now. The next mornin' he started . . . hiked way over here, and spent the whole day walkin' up and down. Said he had to be here when King came back. Every day he comes, except maybe in winter, when he can't get through. He'll bring a hunk of bread or a banana or somethin' - don't eat right. Sometimes I give him some of what we have, and he'll rest here awhile, or at the pond below. But he don't rest long. He'll jump up and say 'I gotta be out there, 'case he comes.'"

"Looking for his dog," Sally said musingly. "Poor man! We're pushovers for dogs in our family."

Something bothered me. "But," I protested, "this road isn't new. Hasn't it been here a long time?"

"Twenty-five years," said our hostess.

"But the dog . . ." I blurted out. "The dog *couldn't* come back now!"

The proprietor struck a match and held it to his pipe, puffing. "That's right," he said, blowing the match out.



PETLIFT...

THE PETLIFT is so different . . . so Unique . . . IT HAS BEEN GRANTED AND FULLY PROTECTED BY U S PATENT NO. D-222836.

Presents the Latest Concept in Grooming and Veterinary Equipment.

Hydraulic and Electrical Pet Lifts. With these new and attractively designed tables, quality grooming and pet care is only a toe's touch away.

Single foot control lever which swivels to a full 360° is always in easy reach of your toe. Tables raise from 30" to 38½" and can be locked at any height and position. A conveniently located drawer under table top saves you precious time and steps. Plus a strong, height adjustable holding arm bracket. Petlift is guaranteed for 5 years.

NEW NEW NEW ANOTHER FIRST BY PETLIFT™

PRESENTING NEW CONCEPTS IN PET GROOMING AND veterinary EQUIPMENT. Styled exclusively for the animal handler, our new PET-BATH has all these features for easy handling of your pet, in the Bath.

- Stainless steel tub 13½" deep
22" x 42" inside
24" x 48" outside
36" off floor
- Deck mounted diverter faucet with automatic water mix, and gentle spray
- Deck mount spout for tub filling
- 3½" wide mouth drain, strainer
- & stopper all in one for quick drainage
- Optional feature-dissappearing slide-out tray for drying off your pet.
- Bakelite apron on an attractive open bottom steel stand for easy faucet, trap and drainage hookup ELIMINATES complicated and expensive plumbing work.

PROFESSIONALIZE YOUR GROOMING SALON with PETLIFT

Wholesalers and Jobbers inquiry invited—write:

PETLIFT
1256 MYRTLE AVE., BROOKLYN, NY 11221
Phone (212) GL 5-4907

(Pat. Pding)

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



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



Ace FLEACOLLAR®

FLEA-KILLING COLLARS
FOR CATS AND DOGS

FREE
BOOKLET

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



SAFE — EFFICIENT
THEY WORK!

Lasts
6 to 8
Weeks



SEND \$2.00 FOR 3 ACE FLEACOLLARS (POSTPAID)
ACE FLEACOLLAR, BOX 236, DEPT. AC-5 ROCHESTER, N.Y. 14601

it's a DOGS LIFE underground

By Joe Alex Morris, Jr.
L.A. Times Service



Reykjavik, Iceland

Mischa is a fugitive from justice. He was waiting in the comfortable living room of Dr. Jakob Jonasson, a consulting psychiatrist who has openly flaunted Icelandic authorities by harboring him.

Mischa cannot leave the house, except for furtive rides into the countryside. If he is seen in public, or if a neighbor complains about his presence, it could be curtains.

Mischa is a domesticated version of the fierce Icelandic shepherd dogs. Dr. Jonasson, his owner, is a leader of the movement to give dogs a dog's life in the capital of Iceland.

Now, they don't have even that much. Since 1924, dogs have been forbidden in Reykjavik.

But now, some people want to change all this. Dr. Jonasson is a founder of the Dog Friends' Association, established in 1969 and now claiming some 500 members in Reykjavik.

The association, backed up to some extent by animal lovers' associations around the world, is campaigning to get the dog ban lifted. If nothing else works, it plans to take the case to the Human Rights Courts at Strassbourg, claiming that Article 8 of the European Human Rights Convention is violated by the anti-dog legislation.

Article 8 stresses the sanctity of the individual's right to privacy and property, except in such cases where the commonwealth dictates otherwise.

"You can't say dog-keeping injures the general welfare," says Dr. Jonasson, a balding, smallish man with a trim moustache.

The first steps taken by dog lovers have not been crowned with success. Rather, the reverse has happened, and the illegal dogs in Reykjavik (estimates range from 300 to 2000 in this city of 90,000 people) are now living in the shadow of death sentences.

It happened because of the dog

lovers. They asked the City Council in 1969 and then again two years later, to lift the ban.

They were turned down both times, and the City Council set a deadline of September 1, 1971, for all illegal dogs to disappear. Previously, the dogs illegally in the city had been tolerated so long as they didn't get into trouble.

I regard it as a death sentence for dogs," says Dr. Jonasson, "The taking of a beloved member of the family and sentencing him to death."

Halldor Laxness, Iceland's Nobel Prize-winning poet, compared the campaign against dog owners with the Nazi persecution of the Jews. The World Federation for the Protection of Animals joined in with an appeal to the Prime Minister.

The dog lovers had taken the initiative because the original reason for banning dogs appeared to be outdated.

Back in the last century, Iceland was an impoverished island of shepherds. The Icelandic dogs ran almost wild and often contracted hydatids, a tapeworm cyst, from the sheep. This in turn they could pass on to men, and the disease could be fatal.

Today, the disease has virtually disappeared. But this did not overly impress the City Council: it voted 14-1 against the dog lovers, and set the September 1 deadline last year.

The result was near hysteria, not only in Iceland but throughout the dog-loving world. Especially in Britain, which sent teams of reporters to Reykjavik in readiness for the day of decision or — as they thought — extermination.

September 1 came and went, and there was no mass slaughter. Police told dog owners they would not force them to give up their hounds, but any dog which bites someone or is found loose is liable to be picked up and exterminated.

"We are now doing it by attrition,"

says a councilman. But the fight goes on.

The Dog Friends' Association has filed suit in the local court, basing their case on the European Convention on Human Rights and Freedom. They also got a petition going and claim 6000 signatures — not bad for an island of 200,000.

The brunt of their argument is that the City Council based its rejection of dogs on reports which were "scientifically unsatisfactory, misleading and one-sided." These stressed health, sanitation, and societal problems.

On the crucial issue of litter, these dog lovers said in their second petition: "It is no more dangerous than that of wildcats which abound in Reykjavik."

They also stressed the positive, psychiatric benefit of dog-keeping on the owners, which they saw as an emotional outlet and foundation for good mental health. Many Reykjavik children would be better off if they had dogs, claims Dr. Jonasson.

The Health Council shot back: instead of dogs, give lonely people greater contact with other human beings.

The dog lovers have pulled out all stops. They pointed out that President Nixon likes dogs and that the president of Iceland has one (he lives just outside the city limits).

But they appear destined to remain a small if determined minority. Says one councilman: "We don't have a dog problem here. I can't see why we should create one."

Reprinted From: San Francisco Chronical & Examiner 7/30/72

EDITOR'S NOTEBOOK

continued from page 3

schools, lack of academic requirements or lack of money to spend six to eight years in veterinary school. Many of these applicants eventually turn away from the field. These are the people we will be looking for in the paramedical field and the growing demand will be for persons with an interest and natural ability to handle animals and apply their skills. The educational requirements will be less than the graduate veterinarian but the association and respect involved should be psychologically and financially rewarding.

The medical profession has registered nurses; the dental profession has dental hygienists and assistants. Veterinary medicine is the next horizon.

—William K. Riddell, D.V.M.—

animals of the world ...

By L. M. Fitzgerald

The names of 144 animals of the world are to be found in the maze of letters. They read *forward, backward, down, up or diagonally*. Circle each one as you find it. Check those you circled with the list on page 29

H I P P O P O T U M U S E A L I O N A C I L E P
O E N I R E V L O W O O D C H U C K O A L A O M
O A D N A P H A L A N G E R U M E L E T A R L A
P E N G U I N O I L A N C A M E L E L R C M A R
O C L L E S A E W R G O A T G M O L E U K A F M
E H A T R H C R I U E B R R O O T F P G U D F O
P I Y O A P O E K S R E I A R N X I H N D I U S
O M A R G A Y G A U R P B E I K N S A A U L B E
L P G R U N O I O W L A O B L E Y H N L K L E T
E A N A O T T T A P I R U U L Y L E T M O O S E
T N A P C H E E T A H B L L A M A R A A P P O F
N Z T A H E K N U K S E E L R C V W B N A O O F
A E U N I R E T T O A Z R F B H R O M A Y S G A
N E G G P A N E T R A M R A O I E L O T A S N R
T K N O M U K R E G R U I W C N S F W E M U O I
E C A L U G O E N J D S U N I C O R N E U M M G
A O R I N A B I E A V K Q Q M H O N I H P L O D
T C O N K J M N G C A R S U P I B O B C A T O R
E A G L E M M D I K R A N E A L A A N E Y H R A
R E A R E V A E B A K T R T L L D N F O X T A P
H P L L H A R E B L K V E Z A A G D A S O A G O
A M A C A W C R O G N I M A L F E I L T K B N E
T E G O G N I D N N I C U L P S R H C R S O A L
S E L A N D V E L U M U E L A H W C O I U A K B
H S L O T H E G N I T N A B C E W E N C M R D D
R O T C I R T S N O C A O B A E S R O H O G O E
E S I O T R O T S U P Y T A L P E C C A R Y G E
W I S E N T N A R O M R O C S O R E C O N I H R

VIXENS, VIRUSES, and VACCINES

by James R. Olson



This picture of a dog suffering from rabies need never be taken. Vaccines can protect your dog from this dread disease. Be sure your pet has been properly inoculated!

Photo courtesy: American Veterinary Medical Association

The young boy clung desperately to his father. "No, Dad, no! You can't let Doc kill Rover! Not after he saved me from that skunk!"

The dog lunged forward, restrained only by a heavy chain. His mouth and jaws were flecked with frothy saliva, his eyes savage, not recognizing the boy and man who had raised him from a puppy..

"It has to be done," the father said, gently prying loose the boy's clutching fingers, and putting a comforting arm around his shoulders. "It isn't that I'm not grateful, but Rover has hydrophobia. Doc will put him to sleep. He'd die anyway, but this will save a lot of suffering. A mad dog is a danger to everyone, including himself."

Mad dog! Those words are capable of striking terror into entire communities. Rabid animals are killers, biting everything in their path, infecting other animals with the fatal disease. The famous Pasteur treatment, usually associated with treating the infection in humans, can also cure rabies in dogs. But only if the disease is diagnosed in the early stages. It is simple logic that an ounce of prevention is worth a pound of cure. Anti-rabies vaccines are available to protect your dog before he is infected.

Most pet owners have never thought much about the vaccines that guard their dogs from distemper, hepatitis, leptospirosis, and rabies. However, only a few years ago there were no vaccines against these common canine infections. A lot of hard work, by qualified scientists, was necessary to develop them. This story parallels the history of animal biologics.

When the first live, modified vaccines were produced, the last thing on anyone's mind was protection for dogs. The motivation was somewhat more commercial. The next time you see a sly old fox, tip your hat. That old villain of the local hen house played a premier role in the evolution of canine vaccines.

During the years when silver fox furs were at the height of their popularity, the Fromm brothers of Hamburg, Wisconsin, were one of the world's largest breeders. Unfortunately, silver foxes have an affinity for several deadly diseases. Because they lived in the closely bunched herds common to a fur farm, an infection, once begun, could have disastrous results. For two consecutive years, in the early 1920's, a strange epidemic had been raging through the Fromm Company herds, killing the foxes before their pelts were prime and ready for harvesting. No one knew the nature of the virulent infection. The day of the lone fur trapper had only recently passed, and commercial fur farming was a relatively new enterprise. Medical knowledge concerning the diseases

of previously wild animals was practically non-existent. It was obvious that the fledgling fur industry was on the verge of destruction unless scientific help could be obtained to diagnose the illness and develop a suitable remedy.

In 1924, Dr. Robert Green, associate professor of bacteriology at the University of Minnesota, who had previously done research into fox distemper for the Fox Breeder's Association, heard about the epidemic on the Hamburg fox farms. Dr. Green offered his services to the Fromm Company in return for a herd of red foxes to be used in experimental study.

Assembling a group of expert associates, Dr. Green opened a laboratory on the fox farm, working out of a converted warehouse. The researchers became convinced that the mysterious infection was a virus which attacked the higher centers of the nervous system, principally the capillary bed of the brain. However, it was not until 1927, after three years of intensive study, that a virus culture was isolated from the brain and spinal cord of a dead fox. The disease produced by this virus was named, "fox encephalitis".

With the agent identified and isolated, it was possible to proceed with attempts to produce a vaccine. While this necessarily slow research was begun, something had to be done immediately to arrest the epidemic which was rampant among the foxes. Serums, prepared from hyperimmune red foxes, were used in an effort to save the thousands of dollars worth of silver foxes which were dying.

Serums are fluids obtained from the blood of an animal which had been exposed to a particular virus and survived. This fluid contains substances called antibodies, which have been manufactured by the immune host, to fight and destroy the invading virus. When a serum is injected into an unprotected animal, the borrowed antibodies provide a temporary immunity to the infection. Serums offer only short term protection, and are generally used in the treatment of a disease rather than as a protective or immunizing agent. Obviously only a vaccine would give the long lasting protection necessary to save the silver foxes.

Vaccines are solutions consisting of killed or attenuated (weakened) viruses, which enable the natural body defenses to manufacture their own antibodies, thereby giving the vaccinated individual immunity to any further attacks.

Early in 1930, the scope of the research had outgrown the converted warehouse on the Hamburg farm. The Fromm-Green Research Foundation, located in Thiensville, Wisconsin, was established to investigate both fox

encephalitis and fox distemper.

Shortly after the Foundation began its work, the 1931 depression drastically curtailed the research programs. The project for the development of an encephalitis vaccine was continued, but there were no funds available for further research into distemper. At the time, encephalitis seemed to present the most serious threat to silver foxes.

In 1932, an outbreak of distemper at the fox farms radically changed that picture. Distemper kills at least half of the animals contracting the disease, with the death rate reaching as high as 80% of the young animals. A crash program to combat the distemper menace was inaugurated. Previous research by the Fox Breeder's Association, and by scientists working on canine distemper, had already accomplished a great deal. The disease was known to be caused by a filterable virus, an organism so small that it passes through filters that would stop ordinary bacteria. As a result of this early research, a distemper vaccine, of inactivated virus, was already available for use in dogs.

Because the distemper virus is highly infectious and can be carried by air currents and inanimate objects, a more isolated laboratory was needed. A bankrupt fox farm was purchased not far from Thiensville, Wisconsin.

As the race to produce a distemper vaccine proceeded, the desperate fox breeders used every means available to combat the epidemic. Because dogs and foxes are close cousins, the anti-distemper vaccines and serums produced for canines were tried, but without great success. Foxes continued to die by the thousands.

Even while the scientists struggled to find a defense against distemper, research was continued into fox encephalitis. In 1936, Fromm Laboratories announced a method to give immunity in fox encephalitis by means of three injections given at three week intervals. The first injection was of dead virus to raise the fox's threshold of immunity. The second, of live virus combined with serum from hyperimmune foxes, gave a mild attack of encephalitis. The third injection, of serum alone, was intended to carry the weaker foxes until they developed sufficient antibodies of their own to provide immunity.

In May, 1938, when another serious distemper epidemic broke out among the silver foxes, Fromm Laboratories was forced to attempt to halt the spread of the disease with a live, modified vaccine they had been developing, even though they were not certain it would be effective. Under the most trying conditions, faced with the possible destruction of the entire silver fox herd, vaccinations were begun. The epidemic was slowed, and

finally conquered. The live, modified vaccine was a success. A major advance in disease control had been achieved.

Having developed the first effective protection against fox distemper and fox encephalitis, Fromm Laboratories began to produce their vaccines for use on other fox farms. These hard won successes opened up further possibilities in the field of animal biologics.

Since canine distemper vaccines had not been completely successful for foxes, researchers wondered whether they might not effectively protect dogs. After laboratory and field testing of a canine distemper vaccine, Fromm announced that they could produce a vaccine which would guard dogs against distemper. As a result of the research for silver foxes, the first live, modified, government approved vaccine for use in dogs was available to veterinarians everywhere.

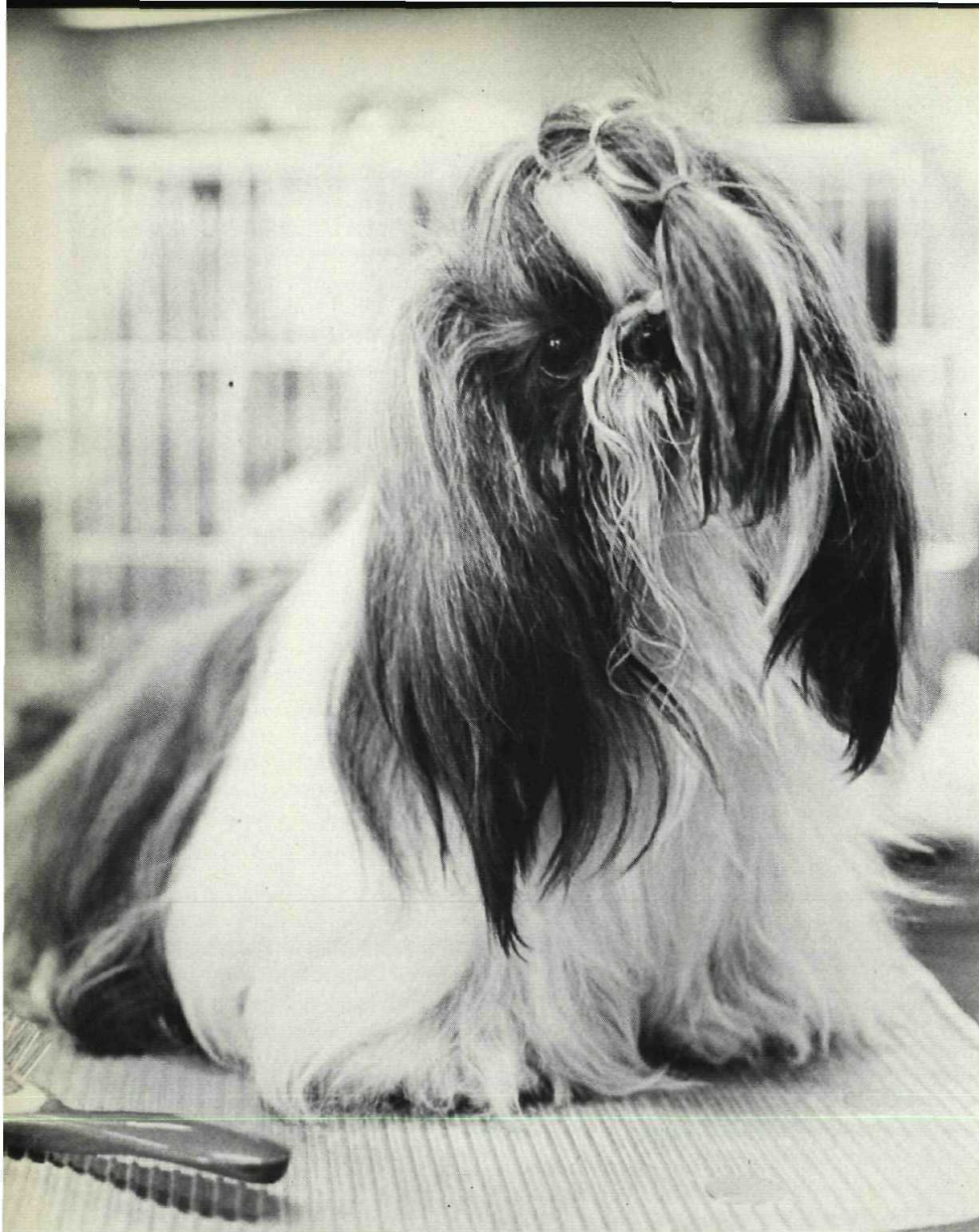
One advance led to another. In the mid-1940's, researchers discovered that infectious canine hepatitis was actually the old culprit, fox encephalitis, except that the canine infection attacked the dog's liver instead of the capillary bed of the brain as in foxes. A vaccine against canine hepatitis was then developed.

A good scientist is always alert to possible new avenues of research. One such researcher noticed that there was a striking similarity between the symptoms of canine hepatitis and canine distemper, which often occur simultaneously in dogs. Research into this relationship resulted in a bivalent vaccine which gave dogs immunity against both diseases with one inoculation. Later, a single vaccine effective against canine hepatitis, distemper, and leptospira was developed.

Today all major biological companies produce the vaccines which were pioneered through this research.

A comparatively recent major breakthrough in animal biologics occurred in the development of a new rabies vaccine. Rabies is caused by a virus that attacks the central nervous system of the affected animal. All warm-blooded animals can spread the disease, usually by a bite which contaminates the wound with the virus in the saliva of a rabid animal. Because rabies remains a potentially dangerous public health problem, considerable work had already been done on combating the disease in domestic animals. Effective vaccines were available, but they frequently had serious side effects. Viruses must have living tissue in which to grow. Since the rabies virus attacks the nerve centers, it had always been considered necessary to produce attenuated viruses in the tissue from the brain or spinal cord. Although extreme care was exercised in the preparation of these vaccines, it

continued on page 30



the SHOW must go on ...and does!

by
Hilarie Edwards

As the American passion for their pets climbs to an all-time high, attendance at dog shows continues to soar. And whatever your preference, big dogs or small ones, long-haired or short, working or sporting, you can take your pick (in terms of participants), particularly at the larger shows.

Depending on the type and size of show, some include both show and obedience trials. Others are limited to one or the other. (The larger shows are often a combination of both.)

The annual Kennel Club of Beverly Hills' (California) All-Breed Show is one of the largest in the country. This year the viewing public had an opportunity to "ooh and aah" over some 3,180 dogs. While a 4-year-old Pekingese did win "best-in-show" out of this considerable number (and quite a tribute it was to its owner), there were also many other fine breeds represented.

A winning poodle claimed a high score of 199 points in obedience, while a German short-haired pointer, a Saluki and a Bedlington Terrier were among other winners.

Taking advantage of the California sunshine, a part of the show was staged outdoors. In addition to watching the dogs compete for honors and attention, visitors had an opportunity to browse in outdoor stands and bring home every conceivable type of doggie accessory and canine equipment. Many a new collar and feeding dish went home to Bowlers who were temporarily upstaged by "competitors" at the show.

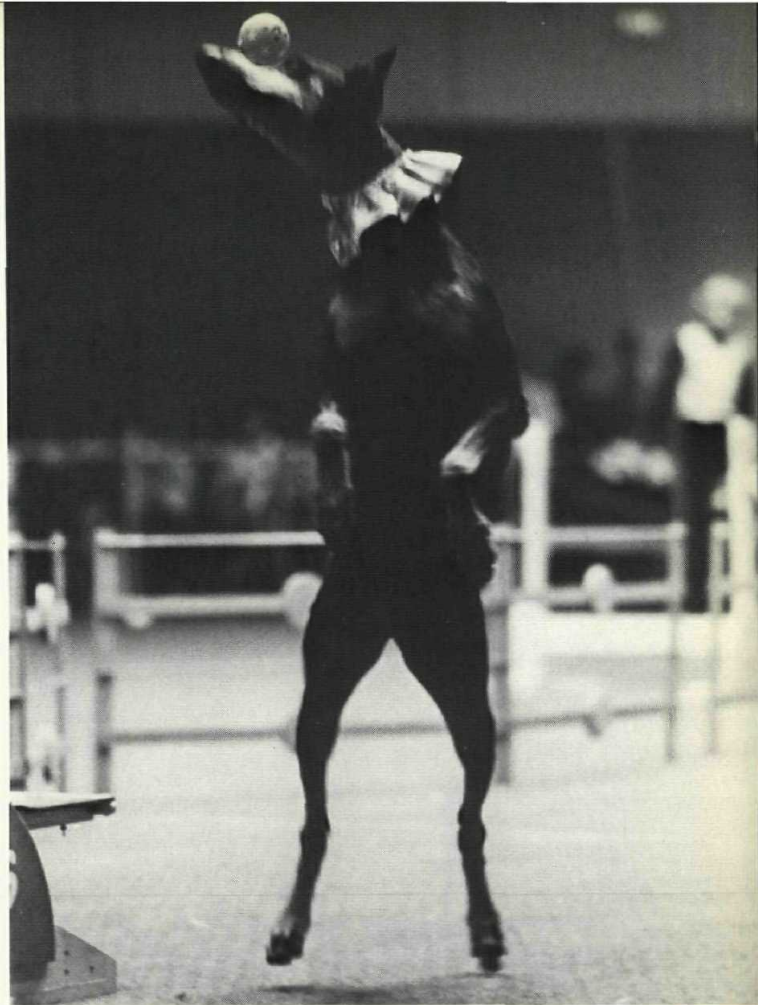
Depicted on these pages are various doggie-participants in the show — some claiming silver bowls, others ribbons, while others patiently wait their turns to compete for honors. Little doubt that many canines enjoy the excitement of enthusiastic fans and a singular spotlight!

If ever they bring back the crew-cut, I'm a gonner! — Photos by John Bright
Dog Show winners come home with ribbons, trophies and silver bowls.





Prima ballerinas have nothing on this canine performer!



As every good dancer knows, it's all in the balance!

These beautiful dogs look a bit forlorn as they await their turn to be judged.



the city child and the zoo

"Can I pet him? Please mister, can I pet him?" A long, lone tear ran down the small boy's face and dropped on the ragged cuff of his jacket.

As the boy's big brown eyes looked up at him pleadingly, the zoo attendant unlatched a gate and let the small lad pet, of ALL things, an ant-eater!

The ant-eater was tame—he wouldn't harm the boy. It wasn't this, about which the zoo keeper was concerned. He was puzzled that of all the animals in the Children's Zoo, the boy seemed to have fallen in love with one of the oddest looking and least familiar pets in the whole place.



The children learned that nanny goats don't have horns, but do have a big thirst!

The small boy petted the appreciative, long-nosed creature, fed him some peanuts, then gratefully thanked the man for this special privilege.

And so it was, a child had undertaken a new experience and found a strange new animal friend—one that he'd never forget and one that he could talk and tell about, and best of all read about.

When he returned to school that day, the small boy approached his teacher and said, "Miss Oleski, I want to read. I want to read *everything* I can about ant-eaters!"

Prior to his trip to the zoo, this boy had absolutely refused to participate in any reading activity whatsoever, no matter who tried to motivate him. His regular classroom teacher, a special reading teacher, the vice-principal and even the principal had failed to do what one crazy looking ant-eater did, and that was to instill in Steve a *desire* to read.

About six years ago, a number of big cities around the country organized themselves into a Great Cities School Improvement Program to see how the cities could attack the many problems facing their schools.

Baltimore was one of the fourteen original cities participating in this study. One of its major objectives was to improve its overall curriculum in light of motivating children to *want* to learn. Another objective was to get the children involved — to encourage them to participate *actively* in various aspects of their school program.

Because of the limited and meager experiences which are characteristic of many children in deprived city communities, educational trips are particularly valuable. For this reason, Baltimore City schools decided to utilize field trips to the zoo to prompt youngsters to "want to learn".

Just reading and talking about animals and the zoo is not enough — "seeing is believing," and in the Children's Zoo of Druid Hill Park, in Baltimore, pupils get to "see" and "feel" and "feed" many interesting and entertaining animals.

Working in a special six week teaching program at P.S. No. 27, a Baltimore City Elementary School, the regular teacher, Miss Joan Oleski, and

I, worked with eight Towson State College student teachers. Together, we planned a field trip for Miss Oleski's third graders to The Children's Zoo in Druid Hill Park.

Most of these inner-city children had never been to a zoo. Prior to the trip, their only experience with animals had been a glimpse of a stray dog or cat roaming the city's streets.

There's no doubt that our zoo trip triggered many thought provoking questions, some before the trip, and even more after it. Before the trip, most of the children wanted to know what they would see. Stressing that we would see only "tame" animals, no "wild" ones, the teachers turned the question back to them: "What would you like to see?"

Immediate responses were: "Lions, tigers, bears and hippopotamuses." Right off the bat we had a general understanding to work on — the difference between "tame" and "wild."

Other questions were: "Where do the animals live? Who takes care of them? What do they eat? Can a peacock change colors? Will we see a cow give milk? There were many others, but the questions asked by most were: "Can we feed them? Can we touch them? Can we pet them?"

To the city child, touching, feeling and examining something is a true learning experience. We later discovered how really observant the children had been after feeding and petting the animals. And we observed first-hand how the visit stimulated a desire to read and discover more about the animals who were their favorites.

The teachers discussed among themselves what should be taught before the trip. First, they decided to record some of the children's questions that were asked, regarding what they would see, whether or not they could feed and pet the animals, etc. Second, for motivation, they showed two films on zoo animals before the trip. Third, they planned to have the children set some goals for their visit.

There was no "planned tour," no special order for seeing the various animals. The teachers felt the children would benefit more from the "discovery" method, whereby they would go where they wanted and see their favorites first. The zoo area wasn't so large that the children couldn't be easily supervised by the teachers at all times.

The big day finally arrived as thirty-eight excited third graders poured into the bus followed by ten eager teachers.

The zoo was everything the children expected it to be and more. There were chickens and roosters, peacocks and parrots. They saw mice and guinea pigs, ducks, rabbits, monkeys, sheep, donkeys, goats, deer, horses, cows, an

ant-eater, and a llama.

Someone very seriously asked, "What dollamas eat?" Laughingly, one of the children replied, "Llama beans!"

Studying these animals from books alone wouldn't have meant nearly as much to the children as actually seeing, feeding and petting them. And feed and pet them they did! Bread and peanuts were a favorite with most of the animals, while everyone, both children and teachers, was surprised when the zoo attendants served dry spaghetti to many of the animals.

One child, while observing the habits of the llama as she fed him, discovered his tongue to be dry and rough.

The donkeys wouldn't stop hee-hawing until the children tossed them some straw.

Some of the pupils wondered how we could get a finished woolen product from the tiny little "curly things" that covered the sheep. (Later, in the classroom, this question led to a detailed study of the processing of wool!)

Many were fascinated with the guinea pigs. One child noted that most of the guinea pigs held a cheek-full of food to one side while they chewed and swallowed the rest.

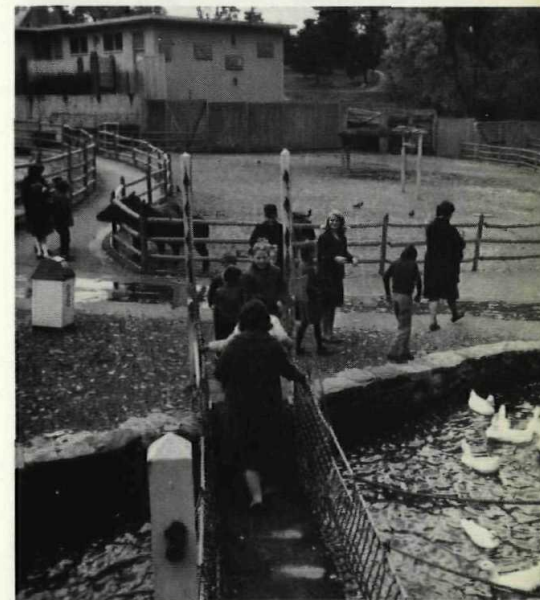
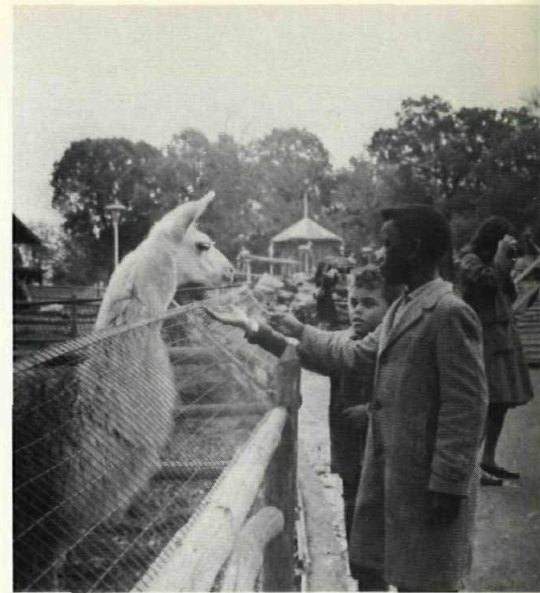
Eating habits were carefully observed, peacock feathers were collected, and yes, we *did* see a cow give milk.

The tame goats were the main topic of discussion on the way back to school. The children loved "Nosey", a big black nannygoat that roams free within the zoo compound. After the boys and girls fed her some salty peanuts, she nudged everyone out of line and treated herself to a drink from the water fountain!

The teachers and children felt closer to one another on the way back, having shared a new and wonderful experience together. The pets paved the way for new understanding, co-operation, and learning between teachers and pupils.

One of the purposes for the trip had been to select a favorite animal that the students, individually, would like to read and learn more about. These were discussed after the trip. A variety of follow-up activities resulted. These included the study of wool, the study of animals of other lands, and the care of pets, including diet and cleanliness.

Teachers in thousands of schools in the big cities throughout the United States are dealing with one of the most important, most difficult, and most rewarding problems in American Education today. It's the problem of motivating and involving children — creating a desire for learning. In this case, a trip to the zoo helped the educators to bridge "the learning gap".



The Children's Zoo, Baltimore, Maryland — a zoo where children can pet the animals.

in search of the GRIZZLY

....and other vanishing species

What ever happened to the Grizzly? Is he becoming extinct? The answer begins in our history books. Let's go there and begin to find out.

The first *recorded* contact with this monarch of the animal kingdom was written during the Lewis and Clark expedition in their westward thrust. This bear was found roaming the plains areas of the Dakotas to the waters of the Pacific.

Scientifically, the Grizzly is known as "Ursus horribilis." Those of you still remembering your high school Latin will recognize the genus "Ursus" meaning bear and "horribilis" meaning horrible. More commonly he is known as "Grizzly Bear" (referring to gray or grisly, gruesome or terrible), "White Bear," "Silvertip," Roachback or Montana Grizzly.

The blunderbuss and flintlock were no more a match for the Grizzly than was the bow and arrow. As you may remember an Indian warrior in "Hiawatha," wearing a bear claw necklace, was held in the highest esteem by his peers. Authenticated records of the strength and speed of this animal are unbelievable. Over a short distance he could overtake an Indian pony, and with one swipe of either paw, fell the strongest buffalo.

In California, an unusually large variety of grizzly was encountered—probably due to the plentiful food supply and mild winters which required short or no periods of hibernation. The Indians worshipped him as the "Great White Bear" and every effort was made to avoid him. Today, as a result of this heritage, California has a silhouette of this brute on its State flag as well as do the UCLA Bruins and the California Golden Bears.

The three main distinguishing physical characteristics of this bear as compared to other bears are 1) unusually long curved front claws, 2) a prominent dorsal border of the shoulder blade or "hump" on his back and 3) the dished appearance of his muzzle as you follow a line from the eye to the button of the nose.

As firearms improved in the late 1800's, and the buffalo (which numbered in the millions) were slaughtered for their hides—with the carcasses left to rot—, the Indian and the grizzly retreated. In place of the buffalo, millions of cattle were brought into the West. A few bears began to kill cattle (as

they did on occasion with the buffalo), and total, massive retaliation began. Poison, traps and trained dogs were employed. Grizzly Bears were killed almost to extinction within the United States. Evidence of this is shown by the dates of the last known grizzlies in the following states: North Dakota, 1870; California, 1922; Utah, 1923; Arizona, 1930; Oregon and New Mexico, 1931. Today only Montana, Wyoming and Idaho have known grizzly populations and these are being threatened by some voices, even in the National Park areas.

The bear population in Yellowstone National Park has been protected since 1886. (Originally by Army troops, due to large scale poaching of buffalo in remote areas.) In 1916 The National Park Service was created; it assumed full control of the park in 1918. Yellowstone today is 100 years old and represents the world's first national park. Before 1930, most visitors arrived by train and stayed at park lodgings, with few individual campers. By the mid-twenties the automobile came into its own. As a result, the tourist population in the park grew. Park facilities were soon overcrowded and needed expansion. Elimination of waste materials and sanitation became a problem. Hence development of the garbage dumps to feed the park bears.

These dumps became quite a tourist attraction and feeding tables with surrounding bleachers for the audience were provided. The once proud monarch was reduced to a scavenger whose job was to entertain tourists and to increase the cash flow at vacation areas. Worst of all, the grizzly lost his hard earned fear and respect of man, and became a dependent victim of the destructive ecological misuse of our natural resources.

Artificial feeding placed this large bear and human populations in close contact. With the bears' protective instincts removed under such circumstances, injuries did occur. Of the 63 known injuries to man during the last 100 years resulting from grizzly contact in Yellowstone, only 3 occurred in isolated back country areas, and all three involved a female in defense of her young. Actual fatalities during the 100 years of history of the park are quite low, a total of five, or one every twenty years. (About 50,000 Americans are killed each year on our highways without much public protest.



Presently there is a movement to establish a purely wild, independent grizzly population within the park, removed and restricted from the general public. All garbage feeding in public places has been discontinued and bear-proof trash cans have been installed at campsites. Dependent bears are moved under tranquilizers to remote areas where it is hoped they will remain. Repeated grizzly violators must be shot or placed in some sort of confinement.

Extensive research has definitely established that the garbage fed, fearless, dependent bear is the dangerous individual. (Scientific papers presented at the International Symposium on Bear Research verified this fact.) When an animal such as the grizzly is potentially dangerous if provoked or frightened, the problem becomes one of maintaining the security of the general public. Isolation of the black and grizzly bears into restricted areas away from campsites will mean fewer individuals to be seen along the roads. This is a price we must pay for a safe park and yet preserve and maintain a native wild bear population. If the grizzly cannot live in a national park, where can he exist in today's pressures of population and technology?

Many other birds and mammals are facing similar periods of crises within the United States and throughout the world.

The California Condor, whose bones have been found in tar pits alongside those of the Saber-toothed Tiger, has been reduced to about 55 or 60 in the mountains above Santa Barbara. Of this number, it is estimated that only eight or ten breeding pairs lay one egg every two years. A proposal has been made to harvest these eggs and raise

them artificially, as the nesting areas are quite precarious and often unsuccessful. Removal of the egg from the nest would also encourage the nesting pair to have another egg the following year. Because the birds' protected range is quite inadequate for feeding purposes, the placing of carcasses in selected areas has been suggested.

There is a herd of Rocky Mountain sheep in the San Gabriel mountains, less than an hour's drive from downtown Los Angeles. These are the last remnants of a vast herd that once roamed Southern California. Their present numbers exist only because of the inaccessibility of the terrain. Population has moved in all around them and their situation is in peril.

The California Brown Pelican, so familiar to the Pacific coastline, may be a thing of the past unless some of its southern relatives move north. The present adult birds are unable to produce successful eggs because of their thin shells — resulting from contamination of their fish diet from polluted waters. The American Bald Eagle, our national bird and also a major fish eater, is facing a similar fate.

Local and State veterinary associations now have special committees dedicated to ecology and wildlife preservation. We hope to harness the knowledge of our profession to that of other research and interested groups and place our environment on a positive instead of a negative plane. Most large cities which support zoos have a citizen zoo association. Membership in this group not only supports the zoo and its animals but also promotes responsible citizens who respect vanishing species. Tremendous enthusiasm has been generated in California by these types of groups towards the study of the Grey Whale, which migrates annually along the coast down to Baja, California to deliver its young, and then back to Alaska with the suckling calf.

Obviously the Grizzly cannot be brought back to such places as the California valleys, but it is still not too late for some of our other animal friends. They don't ask for much — just a place to eat and sleep and raise their young as they have been doing for hundreds of years.

The next time you see Old Glory go by, do me a favor and think about some of the animals I have mentioned. The eagle is always on top of the standard bearer, and if you live in California, the bear state, the flag is a friendly reminder of the Grizzly — if not in body, in spirit. He symbolizes a spirit of courage, determination, and independence, which is the reason our forefathers put him there in the first place.

Ah "Ursus" — you're really not so "horribilus" after all!



PHOTOS COURTESY LOS ANGELES ZOO

BOWSER goes to college...

by Felicia Ames • Consultant Friskies Research Center and author of *The Dog You Care For*

Not so very long ago, when we were young, the only dog we ever saw at school was the team mascot and we saw him only during home football games. Today there is hardly a campus without its supply of canines. We remember a pet mouse in one of the residence halls. That wee gray creature wouldn't stand a chance today, what with the dogs (to say nothing of the cats) who share living quarters with undergraduates, graduate students and faculty members. There are even dogs in classrooms. In a few classes they have been known to outnumber the students and in many they are as familiar as chalk and erasers.

There has been a flood of articles on the subject in recent months, as editors seek answers to the phenomenon. No less a journal than the one from Wall Street had staff reporter G. Christian Hill do a story. Mr. Hill found, among other things, that the dog population at the University of Michigan had increased tenfold in the past five years. "Even at Harvard," he wrote, "a muffled woof is heard from behind the doors of many a student room — where, technically anyway, dogs are forbidden." Mr. Hill discovered that at Amherst, where the number of dogs on campus has presented the authorities with a real problem in control (the case is the same on many campuses), there is little trouble in the classroom. "They're passive learners," reports a dean. One Vanderbilt University student says that dogs "just drop in (to class) and fall asleep like the rest of us." An English instructor at the University of Washington found himself lecturing to a class of three — a girl and two dogs, one of them his own.

Many schools have ruled against dogs on campus but are finding it next to impossible to enforce the order. This is because in so many places faculty members are dog lovers. At Reed College, in Portland, Oregon, for example, one of the most articulate and vehement opponents of any plan to curb the canine is Professor Herbert Gladstone, whose dog, Boots, was a familiar sight in the professor's classes until his recent demise. States the professor, stoutly: "Remember that dog spelled backwards is God."

Many students will tell you the same thing. Or that dogs don't talk back. (Some students do all their studying out loud, for their dogs' ears; the dogs are ever fascinated.) Or that dogs bring people together. Or make people better

people. There are even philosophical theories forwarded, like Albert Schweitzer's on the ethics of reverence for life.

Whatever the significance, how did it start, this dogged surge, this canine population explosion on the college campuses? As nearly as we can fit it together, a few students began bringing their pets to school because, for one reason or another, they couldn't leave them behind. (In one case, the parents of a girl student refused to mind her pet while she went off to classes.) The teachers, being animal lovers for the most part, offered no resistance. Indeed, many faculty members brought their own dogs to class. The practice mushroomed. Boys discovered that Bowser provided a means of reaching girls. Girls discovered the same thing with boys. Love suddenly bloomed and many leashed hands were joined. In other cases, Bowser was found to be good protection against molesters. Groups of students (sororities and fraternities) began adopting dogs. In short order, groups of dogs began adopting students, when the strays, sensing a good thing, found the college cafeterias. The students, perhaps under the influence of Schweitzer, or Zen or Love or whatever, could not and would not turn the dogs away. The dogs stayed.

At the University of Cincinnati, according to a story in the Cincinnati Post and Times-Star, it all started about two years ago when the Theta Chi fraternity acquired Ox, a St. Bernard puppy who now weighs 200 pounds. "In the spring of 1970 a few more animals, including a monkey, made their appearance. Now, animals and owners have found a dog heaven at the University. Even stray dogs have adopted students, who offer their affections during free hours. Well-trained dogs camp for hours near their masters' motorcycles, books or bikes. Students who take their dogs to class claim few hassles. A third-year education major said one instructor would never start a class until he had pet her dog."

What sort of dog finds his way to the groves of Academe? At Cincinnati, which appears to be fairly typical, St. Bernards, Afghan hounds and Great Danes make up the elite. They are favored by the fraternities, perhaps because of their size. Collies and German Shepherds form the middle class, while the small breeds and mixed breeds constitute the hoi polloi.

Many campus dogs have made local headlines and nearly every college has its Big Dog on Campus. It would require a bulky volume to list the dogs known and loved by students on the assembled college greenwards. We'll mention a few, because we think they deserve it.

There was Tripod, the mixed breed on the campus of Centre College in Danville, Kentucky. A student discovered the dog on the side of a road after he had been struck by a hit-and-run car. The dog's leg was broken. He was taken to the Dean of Men, Max Cannes, who had him hospitalized. The dog lost the leg and received a pegleg in its stead. Many are the students who remember Tripod sitting through lectures, especially lectures on Shakespeare. So fond of the Bard was Tripod, he attended a six-week session on his work and showed up for the final exam.

There was J.D., the white German Shepherd and pet of Wayne Trotter, who used to play quarterback for Dodge City Community College, in Dodge City, Iowa. So inseparable were dog and master that when Trotter and a friend stepped out one day, leaving J.D. behind, the dog smashed out of a glass window to join his master. He still bears the marks on his jaw from the cuts but, according to Trotter, the veterinarian did a fine job.

If you had to find a Saluki, where would you go? The University of Southern Illinois has specialized in them for the past several years. One of their number, Cricket, gave birth last spring to six females and two males. The students celebrated the event. Shibui, the nickname of Mongan of Eagle, an Irish Wolfhound, replaced Ralph, a St. Bernard, as the University of Kentucky's "Top Dog on Campus". That was a couple of years ago and we don't know if the situation is still the same. We do know that Shibui behaved beautifully on campus but not so beautifully off. Left for a week at an off-campus house, he destroyed two pairs of slacks, an electric blanket and a chenille bedspread. Arf was Steve Lail's dog at the University of North Carolina at Chapel Hill. He was part Labrador retriever and part hound, but what made him exceptional was his fondness for classes, particularly Professor Byerly's class in journalism, for which he showed a strong preference. Imagine the professor's chagrin when, one day, in the middle of the class, Arf up and walked



Some girls take their mascots to school "by hand, or at least by handbag". Note the glasses – just in case the blackboard's too far away!

photo courtesy: John Bright

out, just like that! There are young journalists still talking about it. Finally, there was Skeezer, "resident canine" at the University of Michigan. Five years ago she was picked to fill a newly created job in the psychiatric hospital – companion to 50 children undergoing extensive in-patient treatment. Shortly after she took the job (one of the requisites was that the dog be a male), she delivered nine puppies. The staff reported that she helped correct many distorted ideas about procreation.

But the most touching campus story we heard involved Rebel, an English Shepherd-Border Collie, owned by Indiana State University student Wib Franklin. The two had never been apart when they arrived at school in Terra Haute. The dog was an immediate hit with the students and the "no dogs in dorms" policy was as unimportant as the weather was mild. Then came the Thanksgiving break and dog and master went home. Rebel was struck by a car

and for a time it looked like he wouldn't live. When he did recover, he couldn't walk. Wib had to go off to school without him. Each time he left he asked the dog if he wanted to come and finally, after many months, and to Wib's disbelief, the dog jumped up and limped after him. After that, the sight of the young man and the crippled dog was a familiar one at ISU. It was a shock to all when the weather turned cold and the school refused to relax the ruling about dogs in dorms. Wib tried to get the Security Police to put up the dog, to no avail. He tried house after house near the campus. No luck. So Wib Franklin took his dog, Rebel, home. But the story has a happy ending. The President of the university, Dr. Alan C. Rankin, learned of Rebel's plight from the students, wrote to Wib and offered his porch.

Some dogs don't get as far as college. At Horace Greely High School, in Chapqua, New York, the principal counted

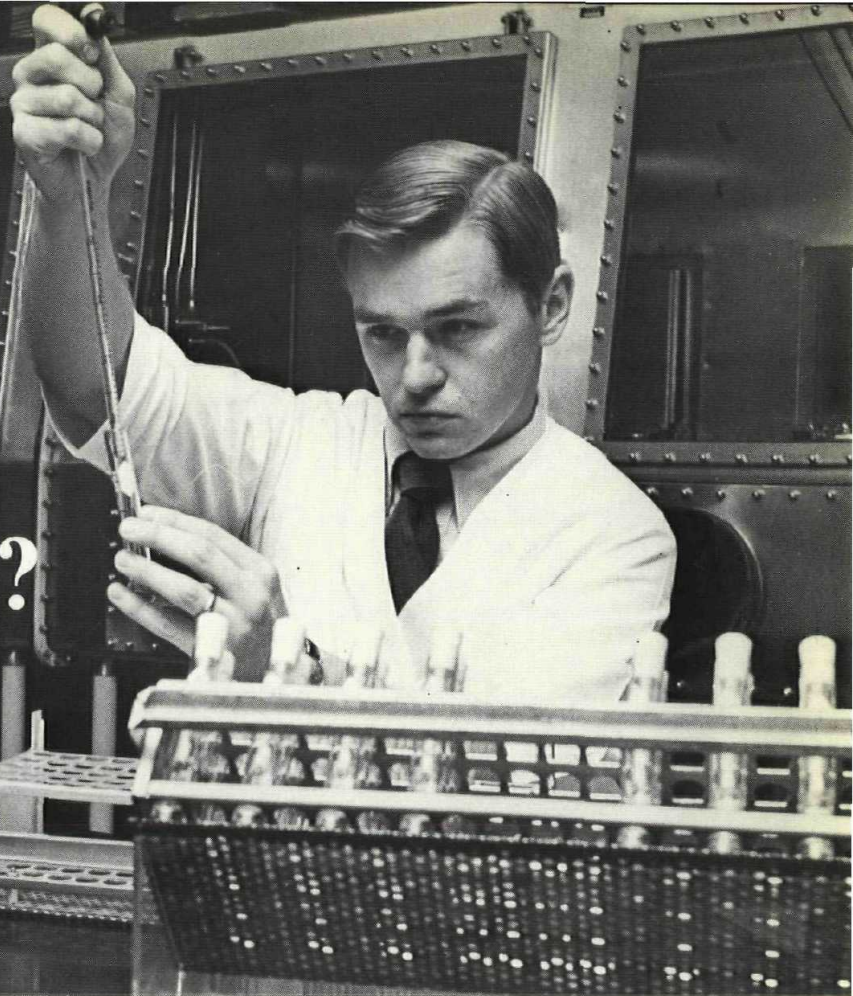
a Basset Hound, a Bulldog, a Great Dane and three Irish Setters in daily attendance. They sat in classes, ran on the field during football games and one of them, Sam Walsh, even got a report card. A room was dedicated to him and his friends. The name of the room? K9.

Some dogs never get out of grade school. In Stockton, California, there was a Pointer-Spaniel named Susie with a preference for the third grade who developed cold shakes and tremors whenever she was kept home from the Adams School.

But getting back to college, there are those dogs with reason to love it. "Where the Boys Are" is a guide to college dating, put out by the girls at Smith and Mt. Holyoke colleges. They described Williams College (Williamstown, Massachusetts) as the "only school where your date will expect you to be snowed, not over *him* but over his *dog*. (Emphasis ours.)

Ad astra per aspera! Bow, wow!

How Important Are Laboratory TESTS?



By Brian H. Baker, MT

A man or woman who feels sick can tell the physician what is wrong and where it hurts. It is not difficult to perceive the task confronting the veterinarian. His patients do not utter a word that can be helpful in solving a medical problem. He can only use the symptoms and behavior of the animal to ascertain a diagnosis. In the case of traumatic injury this can be sufficient. However, when the malady involves a disease or infection, recognizing the symptoms is not always enough.

When symptoms are known, the cause of the affliction can still remain a mystery. High temperature, rapid pulse, and shortness of breath are only vague indicators that something is wrong, but not where. Pain and tenderness can locate the affected part. However, such symptoms do not reveal the cause. A tumor, an infection, or a metabolic abnormality can all produce the same findings. Symptoms can be relieved but, if the cause is not determined and eliminated, they can reoccur. Meanwhile, the disorder is still promoting harm. If the veterinarian is to determine the cause, he needs more information. Often, laboratory tests alone can provide the answer. Even when the cause is known, especially in cases of infection by bacteria or parasites, laboratory examination can still be necessary in order to apply effective treatment.

"What is a blood test?"

A blood test is an examination performed upon a sample of blood, but this term is as ambiguous as the definition. Too often, it is used to encompass ALL tests performed in the laboratory. There are many such tests and not all are performed upon blood. Tests can be applied to any body material such as urine, feces, spinal fluid and even the tissues themselves. When abnormal substances are present, such as excess joint fluid or abdominal fluid, a discharge or pus formation, these too can be examined by the laboratory. A great variety of procedures are available but some used more than others. As a result, one becomes familiar with their terminology, but understands little of their meaning or value.

The laboratory tests performed upon animals are the same as those employed on people. They are utilized for the same reasons and reveal similar information. This can be exemplified by the fact that doctors and veterinarians rely upon one test perhaps more than any other. This is the complete blood count.

"What is a complete blood count?"

A complete blood count (often referred to as a "CBC") actually consists of four distinctly separate examinations. All of these tests reveal informa-

tion concerned with red and white blood cells. Red cells transport oxygen to the tissues and remove carbon dioxide, performing this function with the aid of a pigment called hemoglobin. This substance is contained within the cell and gives it the red color. If the number of red cells is decreased, or the cells contain a lesser amount of hemoglobin, then anemia is present. The amount of oxygen delivered to the tissues is reduced and cell activity hampered.

There are five different kinds of white cells and all of them protect the body from infection and disease. Increased and decreased numbers indicate that something is amiss, that an infection or disease is taking place.

The blood smear is an integral part of the complete blood count. It is stained and examined microscopically. The size and shape of red cells and the different kinds of white cells can be seen in this manner. This provides additional information towards a diagnosis. When the size and shape of red cells have been altered, some abnormal factor is affecting production. A predominating form of white cell, or the appearance of a form not generally found in health, furnishes valuable insight regarding the fitness of the patient and the seriousness of his condition. Parasites sometimes travel in the bloodstream or live in the heart. Some species actually live within the

red cells. When any of these organisms are present, they may be found on the blood smear.

The complete blood count is not always specific enough. Often, it is very important to find the exact cause which the CBC shows to exist. Why is there a reduction in red cell numbers or why do they appear abnormal? Why has the number of white cells increased or decreased and why does one form predominate? Where is the problem and what is causing it? Some of these questions can be answered from the complete blood count alone, but more often additional information is required. Blood chemistries are often performed to seek an answer to these questions.

What are blood chemistries?

Every organ in the body has certain responsibilities. The heart pumps blood, the lungs obtain oxygen from the air, and the stomach grinds food. These are strictly mechanical actions, but there are other organs that function like chemical factories, producing substances for themselves and for use in other parts of the body. From one person to the next there is very little variation in the amount of these chemicals present. *The same is true of animals, except that each species differs from the next. Dogs are similar to other dogs, but not to cats, mice, or horses.*

The bloodstream serves as the major avenue of transportation for many of these chemical products. By tapping this source, it is possible to determine the concentration of any chemical present. This area of study is referred to as "biochemistry." "Blood chemistries" are those tests performed to determine the amount of a given chemical in the blood.

"What can blood chemistries reveal?"

When any part of the body is harmed by injury or disease, it might not be able to function properly. All of us are familiar with the difficulty encountered trying to walk on a sprained ankle or attempting to bend a scraped knee. The same is true of organs, glands and other tissues that are involved with biochemical activity: they are unable to perform their tasks efficiently. This can be noted by a change in the chemical composition of the blood. Depending upon the organ, certain chemicals may be released into the bloodstream in large quantities. Normally, these chemicals are present only in negligible amounts or completely absent. In other cases, there can be a decrease of chemicals. From this information, it is possible to determine which organ is not working properly.

"Why must other biochemistries be performed?"

Even when the affected organ has been recognized, depending upon the symptoms present, it might be important to perform additional tests to determine the cause of such damage. It could be a result of bacterial or viral infection, or an abnormal growth such as a tumor. Another possible cause can be a metabolic defect, when biochemical activity is abnormal due to the lack of a required substance or the regulating mechanisms themselves have gone haywire. Even a parasite could be responsible. Since each of these responds to different medication and therapy, it would be impossible to treat the condition properly without knowing the cause. Additional laboratory procedures are necessary to pinpoint the answer.

"Is the urinalysis really important?"

Urine is a clear liquid that contains a variety of chemical products. The kidneys regulate the amounts that are present. However, when hampered by disease or infection, they do not function properly and the level of these products in the urine is found to be increased. Furthermore, when the blood contains an excessive amount of chemicals — due to faulty activity elsewhere in the body — these are also released into the urine. Disturbances of many organs can, therefore, be brought to attention thanks to the urinalysis.

Both the kidneys and bladder are susceptible to infection by bacteria. If this occurs, pus cells (and sometimes red cells) will appear in the urine along with the bacteria causing the infection. These can be seen under the microscope. Other elements produced as a result of disease can also be observed with a microscopic examination. This supplies additional information towards diagnosing and treatment.

Despite the fact a routine urinalysis can reveal so much information, modern laboratory technology has made this a simple procedure to perform. This explains why it is used so often by the veterinarian. However, the urinalysis, like the complete blood count which is often used in conjunction, is generally regarded as a screening procedure. That is to say, it can reveal many things that are abnormal or unusual, but other laboratory tests must be performed to obtain a more specific evaluation.

"Why should a culture and antibiotic sensitivity be performed on an obvious infection?"

There is more to a bacterial infection than the fact it is present. It is

often important to recognize the species causing the infection and to be absolutely certain of the antibiotics which can destroy them. Certain species of bacteria are susceptible to some drugs while resistant to others. Bacteria can also acquire an immunity to antibiotics that are normally effective against them. Bacterial infection can overcome the patient rapidly and precious time would be lost if the wrong medication were used. To determine which drugs are useful, antibiotic sensitivity studies should be performed.

One could readily conclude that sensitivity testing is the only important part of a culture. Who cares about the organism as long as the treatment is successful? But this is not true for the veterinarian has other aspects of infection to consider, some of which could affect you directly. Certain bacteria are highly contagious from one animal to another. If present, other pets living in the same household, or other animals living in close proximity, should also be treated, even if they appear well. They are in danger of acquiring the infection or may already harbor the organism and can spread it to others. Furthermore, some of these organisms can also be spread to people. This applies equally to infection caused by fungus, viruses, and parasites. The veterinarian not only has to treat the infection, he must also prevent it from spreading, and this responsibility has to extend to his clients as well as his patients.

"Why should parasites be identified when an animal is known to be infected?"

There are many different kinds of parasites. Most of them live in the intestine, but others also inhabit the bloodstream and heart, and other organs, including the liver, stomach and lungs. These are all internal parasites and should not be confused with external ones such as ticks and fleas. Some of the internal parasites are protozoans (one-cell animals); others are worms and flukes. All require different medication to eliminate them. For this reason, they must be identified specifically.

The feces are examined for the evidence of parasites in general since many forms are known to inhabit the intestines. If any worms or flukes live in another site, other than the intestine, their eggs are still passed in the feces. Some protozoans can be found in the bloodstream and a blood test is required to identify them. In the United States, Ascaris, hookworm and tapeworm are the most common internal parasites. They are all worms.

An examination of the feces is the

continued on page 29

WHAT'S NEW?

FOR THE PREVENTION OF HEARTWORM

Until a few years ago, heartworm disease was considered a problem only in the Southern and Eastern coast regions of the United States. Now it can be found throughout the U.S. In the past year, epidemics have occurred in Michigan and Illinois.

The first symptoms of infection are a chronic cough, without signs of upper respiratory infection, which is easily aggravated by exercise. The dog will also tire easily and show a dullness of coat.

Heartworm disease, frequently fatal, is caused by a parasite called *Dirofilaria immitis*. This large, round, white worm which grows to approximately ten inches in length, is most commonly found in the dog's heart or pulmonary (lung) vessels.

Blood must pass these areas to allow the dog to breathe. The worms form a block forcing the dog's heart to work harder to get the blood around the blockage just as a plug in a garden hose would do.

When the block becomes complete, the blood vessel expands and ruptures just as the garden hose would if water were continued to be forced behind the blocked portion. A ruptured blood vessel can cause death within minutes.

Dogs can get the disease only through the bite of an infected mosquito. The mosquito picks up parasites when it feeds on an infected dog. After the parasites mature in the mosquito, small (microscopic) young worms are injected into a healthy dog when the mosquito feeds on it.

Just one bite by an infected mosquito may inject enough young worms to cause a fatal infection.

Dirocide is a palatable heartworm preventative from Squibb which kills the parasites shortly after the mosquito injects them and before they mature and reach the dog's heart.

Puppies may be started on Diroicide at two months. Older dogs must be proved free from infection before they are started on the Diroicide prevention program. A veterinarian can perform a simple, inexpensive blood test to check for infection.

Diroicide should never be given to dogs with active infection, until after they have been treated to rid the dogs of the active infection.

Diroicide should be administered daily because there is no way of knowing when an infected mosquito will bite the dog.

There are no known side effects from long-term administration of Diroicide when it is administered according to the prescribed directions.



Diroicide, a highly palatable, safe and effective prescription medicine for the prevention of heartworm disease in dogs, has been introduced to the veterinary medical profession by E. R. Squibb & Sons, Animal Health Division. A housewife (above) adds Diroicide, a pleasant tasting syrup, to her daughter's pet dog's food ration. Diroicide should be mixed with the dog's food ration once a day.

HORSE BLOOD TYPING SERVICE

It happens on occasion that the owner of a mare with a new foal does not know which stallion is the sire. In fact, he may not be sure which mare is the dam. Or a buyer of a horse may not be sure his new charge is really the horse he paid for.

A horse blood typing service is in operation at the Serology Laboratory, School of Veterinary Medicine at the University of California, Davis, to settle all these questions.

The Serology Laboratory, headed by Dr. Clyde Stormont, is directly supported in this activity by the American Quarter Horse Assoc., Arabian Horse Registry of America, The Jockey Club and the U. S. Trotting Assoc.

Each registry provides the laboratory \$2,000 a year through the Morris

Animal Foundation, Denver, a public foundation which sponsors research into diseases and health problems of the companion animals. The money is intended for further research on horse blood groups, and it provides for up to 20 cases (parentage verification, paternity tests, permanent blood type record of identification on stallions in artificial insemination service, etc.) per registry.

During the past year, Dr. Stormont commented, "we were able to solve about 90% of the parentage cases."



Whose foal is he? The horse blood typing service at the University of California, Davis, can verify who his sire and dam are and answer other questions of identity. The laboratory is supported by various breed registries through the Morris Animal Foundation, Denver.

AVMA AWARDS

NEW ORLEANS, La. — Seven veterinarians were recognized for outstanding contributions July 16 during the Inaugural Luncheon of the 109th annual American Veterinary Medical Association convention in New Orleans.

Winners were: Dr. Robert J. Ausherman of Lexington, Ky., winner of the Practitioner Research Award for conducting outstanding research activities while engaged in private veterinary medical practice.

Dr. Dorsey W. Bruner of Ithaca, N.Y., who received the XIIth International Veterinary Congress Prize for outstanding contributions to veterinary medical science and the veterinary profession;

Dr. M. R. Clarkson of Peterborough, N.H., who won the 1972 Public Service Award for unusual contributions in public health and regulatory veterinary medicine;

Dr. John B. Herrick of Ames, Iowa, recipient of the Borden Award for contributions in research on the control of diseases in dairy cattle;

Dr. John L. O'Harra of Reno, Nev., winner of the 1972 AVMA Award for his contributions to the advancement of organized veterinary medicine;

Dr. Norman O. Olson of Morgantown, W. Va., who received the American Feed Manufacturers Association Award for research on nutrition or diseases related to livestock and poultry production;

Dr. D. F. Patterson of Philadelphia, Pa., recipient of the Gaines Award for outstanding contributions to small animal medicine and surgery made through research during the preceding five years.

NEW ORLEANS CONVENTION

Attendance at the 109th annual AVMA convention held July 18-20 in New Orleans, although subject to official audit, totaled approximately 4,800, including some 2,200 veterinarians.

More than 1,000 veterinarians enrolled in 15 special in-depth seminars. The convention also featured over 300 individual presentations, 40 autotutorial teaching programs and two practical laboratory sessions.

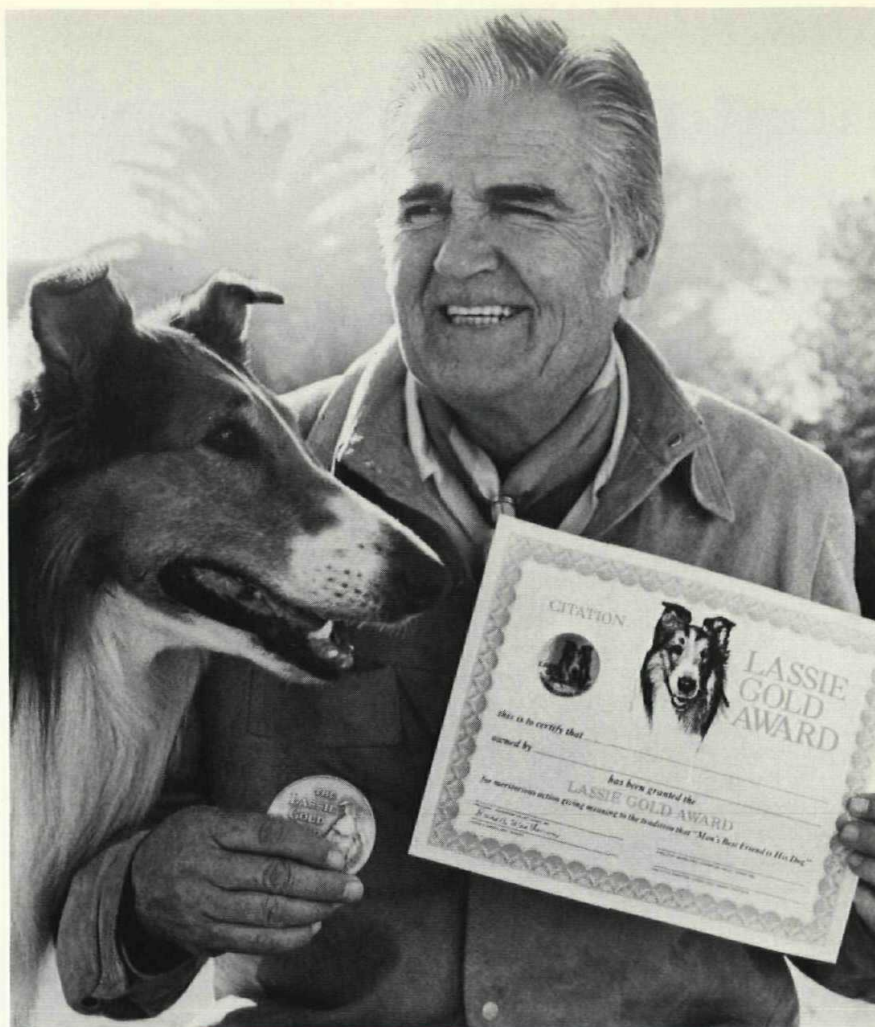
Dr. John F. Quinn, state veterinarian and chief of the Michigan Department of Agriculture's Animal Health Division, has been selected by his colleagues to serve as president-elect of the American Veterinary Medical Association for the coming year.

Dr. Quinn was voted into office July 16 by the AVMA House of Delegates during the opening session of the House, and installed that afternoon at the Inaugural Luncheon of the association's 109th annual convention in New Orleans.

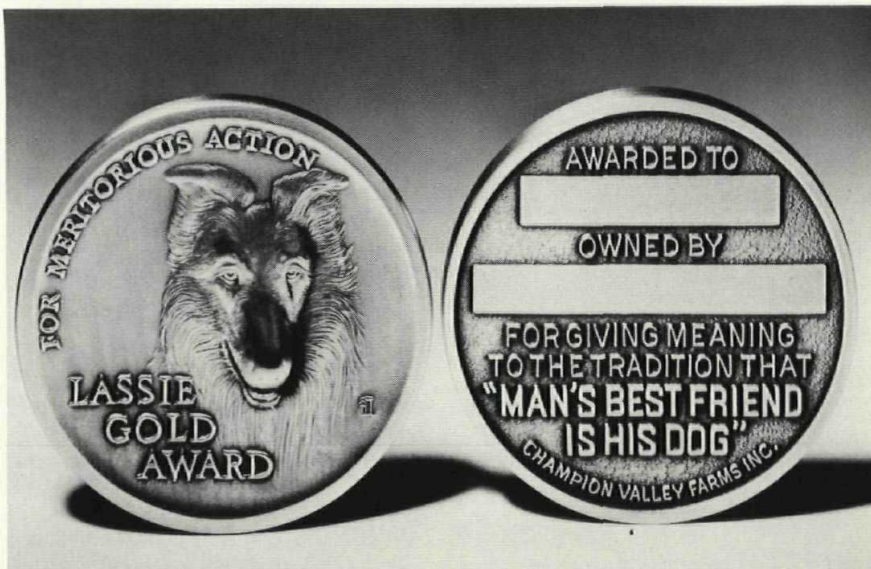
Dr. Roger P. Link, head of the Department of Physiology and Pharmacology at the University of Illinois College of Veterinary Medicine, was handed the president's gavel during the installation ceremonies.

Dr. Iverson C. Bell, Terre Haute, Inc., small animal practitioner, was installed for a second consecutive term as vice president of the 23,000-member association.

Other officers chosen to serve for the coming year include Dr. Donald H. Spangler of Olympia, Washington, a past president of AVMA who was re-elected to his 10th term as treasurer; Dr. Donald A. Price of Chicago, executive vice president; and Dr. W. M. Decker, also of Chicago, assistant executive vice president.



AWARD NAMESAKE AND COMPANION — Lassie, the world-renowned canine, and owner-trainer Rudd Weatherwax were instrumental in founding what has become known as the nation's top award honoring acts of courage and heroism by dogs — — — the Lassie Gold Award.



AWARD FOR DOG "HEROES" — This handsome medallion (pictured front and back, above) is symbolic of the famous Lassie Gold Award, dogdom's top citation for canine acts of courage and heroism "giving meaning to the tradition that man's best friend is his dog." A miniature version of the medallion is provided as a permanent collar attachment for dogs cited in the national program.

Contact: Graham Sudbury, Executive Director - Lassie Gold Award Program, Suite 1100, 1700 Market Street, Philadelphia, Pa. 19103. Phone (215) LO 8-3775.

continued from page 25

best method to prove an animal is infected by any of these worms. It is possible to identify the type involved because each species lay eggs that are distinct to their own kind. With a little practice, it is an easy manner to distinguish the eggs of Ascaris, hookworm and tapeworm from each other. In this manner, the parasite can be identified without ever actually being seen. Specific identification is very important since it is necessary to use specific medication for each of these worms. For instance, medication to eliminate tapeworm will not work against hookworm or Ascaris. Even if your pet clearly exhibits all the symptoms of worm infestation, you can see why parasite identification must still be resolved.

"Why are some tests repeated even when my pet is getting better?"

With effective care and treatment, infection and disease can be cured. Before healing is complete, most symptoms have subsided. However, laboratory findings only return to normal in proportion to the degree of healing. Since observing the patient's progress by the symptoms alone is not practical, current status and improvement can only be ascertained by comparing laboratory findings with those obtained previously.

Laboratory tests performed at regular intervals also monitor the effectiveness of medication and provide an early warning system to detect complications that could arise. When an animal has suffered a serious illness, he is more susceptible to other disorders, especially infection. Laboratory findings can detect these while symptoms are still dormant. The sooner such complications can be recognized, the easier they are to treat.

* * * * *

The challenge facing the veterinarian can be complex indeed. Because he takes care of many different kinds of animals, there are many diseases and infections to keep in mind. Some are more common to one species than another; the same symptoms in two different animals can indicate two completely different disorders. Added to this, the animal cannot complain. Laboratory tests are often indicated if a diagnosis is to be made. Laboratory tests are necessary many times to direct the choice of treatment. Laboratory tests are important for the animal recuperating from a serious disorder, and even for animals that have never been ill if the circumstances warrant. We must be thankful indeed that such tools are available to the veterinarian. By understanding the value of laboratory tests, we can appreciate them as much as he does.

THE PET PRIDE PEOPLE

The Pet Pride People who started to work for the betterment of CATS in July 1961 have come to an interesting and important conclusion about the care of cats. Because of the nature and personality of the Cat it is paramount that every cat have at least one person who will look after his needs and offer him companionship. On this premise the Pet Pride People are now in the process of establishing their first Shelter-Clinic in Los Angeles on a small piece of zoned property. One person who has energy,

strength, enthusiasm and a love for cats can adequately take care of 25 cats when all are healthy. Besides this service, one veterinarian is needed 8 hours a day to take care of their medical needs. These 25 Pet Pride Cats are Orphans waiting to be adopted into permanent homes. As one is placed, another is taken in; the Pet Pride People expect to place 45 cats from one Shelter-Clinic a month year round. The Clinic part of our project (in the space of a double garage) is at present pending. Any local veterinarian who wants to give us advice on the set-up and equipment of our small clinic (for neutering, spaying, grooming only) will be gratefully received.



Celia Heriot, Managing Director
15113 Sunset Blvd.
Pacific Palisades, Ca. 90272

213/459-1703

ANIMALS OF THE WORLD (Answers)

- | | | |
|---------------------|------------------|-----------------|
| 1. AARDVARK | 49. GAUR | 97. OPOSSUM |
| 2. ALPACA | 50. GAYAL | 98. ORANGUTAN |
| 3. ANTEATER | 51. GAZELLE | 99. OSTRICH |
| 4. ANTELOPE | 52. GENET | 100. OTTER |
| 5. APE | 53. GIBBON | 101. OWL |
| 6. ARMADILLO | 54. GIRAFFE | 102. PANDA |
| 7. BABOON | 55. GNU | 103. PANGOLIN |
| 8. BADGER | 56. GOAT | 104. PANTHER |
| 9. BANTING | 57. GOPHER | 105. PARROT |
| 10. BAT | 58. GORILLA | 106. PEACOCK |
| 11. BEAR | 59. HARE | 107. PECCARY |
| 12. BEAVER | 60. HEDGEHOG | 108. PELICAN |
| 13. BOA CONSTRICTOR | 61. HIPPOPOTAMUS | 109. PENGUIN |
| 14. BOAR | 62. HOG | 110. PHALANGER |
| 15. BOBCAT | 63. HOPOE | 111. PLATYPUS |
| 16. BONGO | 64. HORSE | 112. PORCUPINE |
| 17. BUFFALO | 65. HYENA | 113. PUMA |
| 18. BULL | 66. IMPALA | 114. QUETZAL |
| 19. CAMEL | 67. JAGUAR | 115. RACCOON |
| 20. CARIBOU | 68. JACKAL | 116. RAM |
| 21. CAT | 69. KANGAROO | 117. RAT |
| 22. CHEETAH | 70. KIWI | 118. RATER |
| 23. CHIMPANZEE | 71. KOALA | 119. REINDEER |
| 24. CHINCHILLA | 72. KOB | 120. RHINOCEROS |
| 25. CHIPMUNK | 73. KUDU | 121. SEAL |
| 26. CIVET | 74. LANGUR | 122. SEALION |
| 27. COBRA | 75. LEMMING | 123. SERVAL |
| 28. CORMORANT | 76. LEMUR | 124. SHEEP |
| 29. COUGAR | 77. LEOPARD | 125. SHREW |
| 30. COYOTE | 78. LION | 126. SKUNK |
| 31. DEER | 79. LLAMA | 127. SLOTH |
| 32. DINGO | 80. LYNX | 128. SQUIRREL |
| 33. DOG | 81. MACAW | 129. TAHR |
| 34. DOLPHIN | 82. MANATEE | 130. TAPIR |
| 35. EAGLE | 83. MARGAY | 131. TIGER |
| 36. ECHIDNA | 84. MARMOSET | 132. TORTOISE |
| 37. ELAND | 85. MARTEN | 133. UNICORN |
| 38. ELEPHANT | 86. MINK | 134. VICUNA |
| 39. ELK | 87. MOA | 135. WALRUS |
| 40. EMU | 88. MOLE | 136. WEASEL |
| 41. ERN | 89. MONGOOSE | 137. WHALE |
| 42. EWE | 90. MONKEY | 138. WISENT |
| 43. FALCON | 91. MOOSE | 139. WOLF |
| 44. FAWN | 92. MULE | 140. WOLVERINE |
| 45. FISHER | 93. MUSKOX | 141. WOMBAT |
| 46. FLAMINGO | 94. MUSKRAT | 142. WOODCHUCK |
| 47. FOX | 95. OCELOT | 143. YAPOK |
| 48. GALAGO | 96. ONAGER | 144. ZEBRA |

battle of the cats



By Ella Duncan

One of the strangest hoaxes ever fostered on a gullible public was that dreamed up by an unknown prankster of Chester, England in 1815.

About the time of Napoleon Bonaparte's departure for Saint Helena, a respectably dressed man distributed around the countryside handbills informing the citizens that a number of families had embarked at Plymouth, and would proceed with the regiment appointed to accompany the emperor to Saint Helena.

The handbills stated the island was dreadfully infested with rats and that his majesty's ministers had determined that it should be cleared of the noxious pests. For that purpose he had been appointed to purchase as many cats and thriving kittens as possible in a short time. He offered 10s for every adult female cat, 15s for every full-grown tom, and a half-a-crown for every healthy kitten.

On the evening of the third day after this advertisement appeared the people of Chester were astonished to see a multitude of men, women and children passing along the streets carrying wriggling sacks, and baskets—from which issued strange sounds and scratchings. Before long every road and lane was thronged with this burdened possession. By nightfall a congregation bearing some 3,000 cats had collected in Chester. They proceeded to a street that had been designated in the advertisements. There they soon became wedged together.

After a long wait for the bearer of the handbills to appear with the prom-

ised payment for the felines, the restless cats began to mew and yowl. Soon tired and frustrated men and women were shrilling at each other, children began to cry, and the excited dogs of the town joined in with howls and loud barks. Anger and impatience continued to mount until fights grew into a riot with the imprisoned cats sounding the war cries.

The boys of the town had gathered on the outer edge of the motley crowd to better enjoy the excitement. When the cat owners began to fight with each other, the officers of Chester hired these boys to slip through the crowd and release the poor, struggling cats from the sacks and baskets.

The enraged animals bounded to the shoulders and heads of the combatants and ran spitting and clawing along the undulating sea of shulls toward the walls of nearby homes. The town's citizens, attracted earlier by the noise, had opened their windows to view the proceedings.

Now the released cats, with the rapidity of lightning, rushed up pillars, across balustrades and leaped helter-skelter through the open windows. From inside houses came the sounds of broken china, cries of frightened women, barks of dogs, and curses of angry men as the unwelcome visitors were forcibly evicted.

Soon all of Chester had joined the Battle of the Cats. Throughout the night it raged. By morning there was peace and quiet again, but sadly on the river Dee floated the bodies of some five hundred feline casualties. The remainder of the army had hastily retreated to parts unknown. So had the well-dressed gentlemen of the handbills.

VIXENS, VIRUSES AND VACCINES

continued from page 15

was virtually impossible to exclude all nervous tissue cells, or the protein from those cells. Animals vaccinated with these products would not only produce antibodies against the rabies virus, they would also frequently produce antibodies against the nervous protein, causing serious reactions.

Realizing the necessity for anti-rabies vaccines, but not satisfied with the danger to vaccinated pets, Fromm Laboratories conducted research into the problem. What resulted was an anti-rabies vaccine which contains virus attenuated in non-nervous tissue, thereby enabling your dog to be safely inoculated without the severe side effects.

Most of these vaccines give your pet 'lifetime immunity'. But is that protection literally permanent?

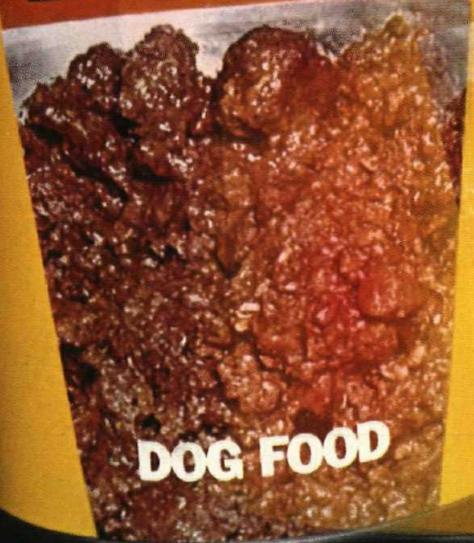
"Actually the term 'lifetime immunity' is a misnomer," explains Dr. George Ott, Ph.D. in immunology and virology, "a vaccine causes an animal's natural defenses to manufacture antibodies which fight infections and protect the subject as long as the antibodies are present in the system. However, the duration of immunity may be influenced by other factors. If, after inoculation, your pet never contacts other animals, thereby not obtaining 'natural booster shots', his system will have no reason to continue producing antibodies, and his immunity is lessened. Say for example, that you keep your dog isolated inside a fenced yard. If he should happen to escape his confinement, there is a good chance that he will contract the disease for which he has a 'lifetime immunity'."

The American Veterinary Medical Association agrees. They recommend that dogs be vaccinated annually against canine distemper and that a veterinarian's advice be followed in regard to rabies vaccinations. Protection for your dog requires the good professional judgment of your veterinarian, based on his experience and the general health of the dog.

Although the research into new and better vaccines is constantly maintained, a tremendous amount of effort is also directed toward assuring the quality, safety, and effectiveness of the vaccines already being produced for veterinary medicine.

Animal vaccines were certainly not developed haphazardly. It took an immense amount of hard work, but it was worth it. The public health threat from rabies in domestic animals is steadily declining. Canine distemper and hepatitis are under control. As long as people take pride in doing an important job in a better way, the health of your pet is in good hands.

**MEATY MEATY
BEEFY BEEFY**



DOG FOOD

DOG FOOD

**MEATY
BEEFY
DOG FOOD**

GUARANTEED ANALYSIS
 Crude protein (min) . 12.0%
 Crude fat (min) . . . 6.0%
 Crude fibre (max) . . . 1.5%
 Ash (max) 2.5%
 Moisture (max) 78.0%

INGREDIENTS
 Beef by-products with gravy consisting of chicken parts, vegetable protein, wheat flour, soybean meal, tomato puree, bacon, salt, vegetable gum, caramel coloring, egg, onion powder, brewer's dried yeast, artificial coloring, garlic powder, sodium nitrate, vitamin E supplement, vitamin A oil, and water sufficient for processing.

© 1972 Allen Products Co., Inc., Allentown, Pa.

From meat to cereal with the flick of a wrist.

That's all it takes to discover if your "meaty" dog food has cereal in it. Despite meaty names, meaty looks, and meaty prices, most dog foods aren't just meat. Their ingredient lists prove it.

How "meaty" do you think wheat flour or tomato puree is?



**NOT A SPECK
OF CEREAL**

ALPO is different. There's not a speck of cereal in ALPO Beef. The label on ALPO Beef will tell you that it's just beef and meat by-products and total nutrition. Period.

If you want all the meat you pay for . . . get ALPO. Because ALPO doesn't just promise meat. ALPO delivers.

Doesn't your puppy deserve ALPO, too? It's complete and balanced for dogs and puppies.