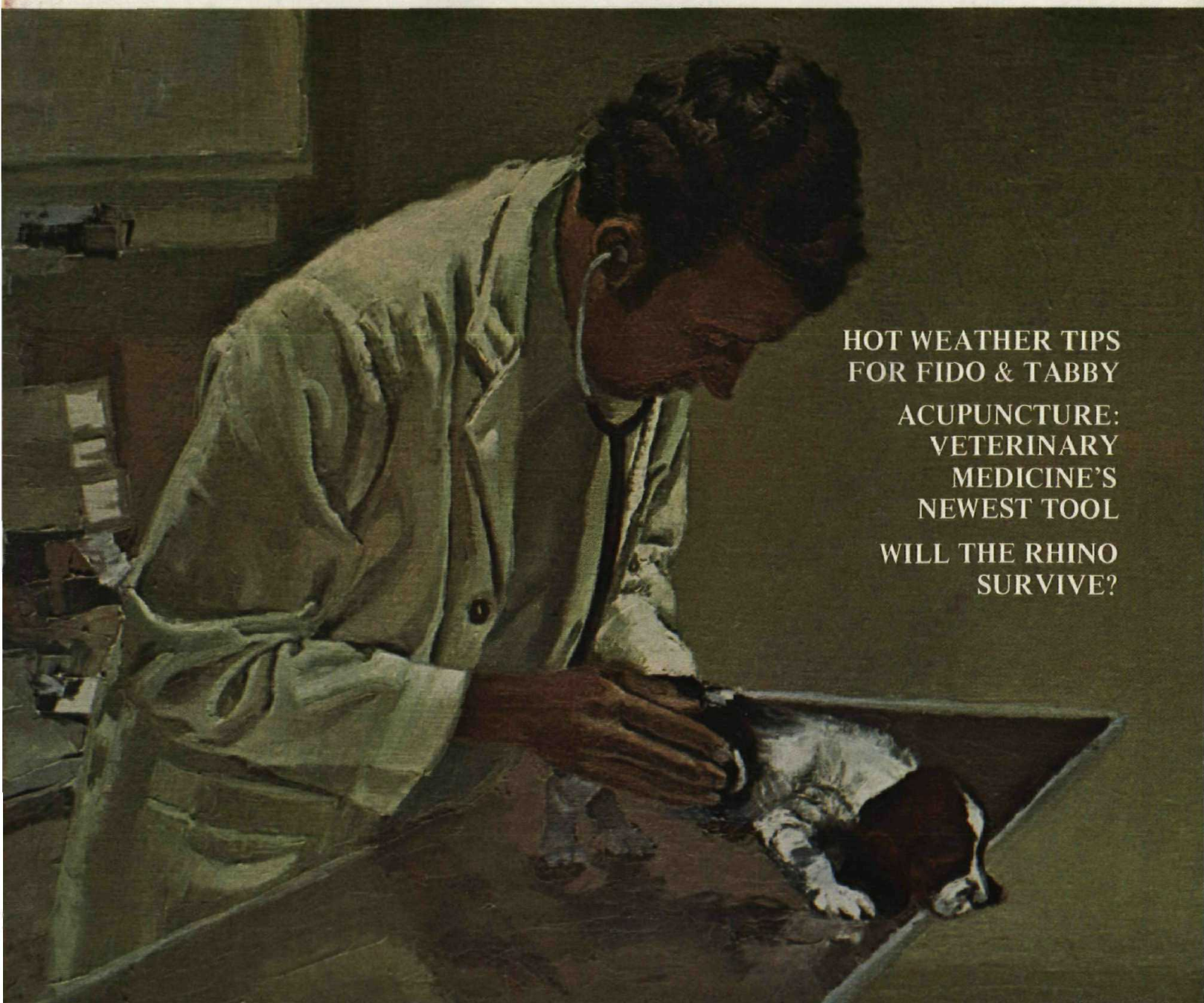


ANIMAL CAVALCADE

JULY/AUG 1975

60¢

THE ANIMAL HEALTH MAGAZINE



HOT WEATHER TIPS
FOR FIDO & TABBY

ACUPUNCTURE:
VETERINARY
MEDICINE'S
NEWEST TOOL

WILL THE RHINO
SURVIVE?

EDITOR'S NOTEBOOK



WHAT DO VETERINARIANS DO AT CONVENTIONS?

The annual meeting of the national veterinary organization — The American Veterinary Medical Association — will be held this year at the Disneyland Convention Center, July 14-17. This will be the 112th annual meeting and it promises to be one of the best. There will be about 200 presentations of topics of professional interest to the 3000-4000 veterinarians in attendance.

Veterinarians attend these conventions with their families and it is often considered their only "vacation" for the year, although they are kept on a very intense schedule during the three days of presentations. The doctors going to these meetings are there to get the very latest information in veterinary medicine. Any procedural or political activity by the members is done on days and times other than the July 14-17 seminars and scientific sessions.

A member of the Animal Health Foundation board of directors, who was a former president of the Foundation, is on the convention advisory board. He is Dr. Richard B. Fink.

The President of the A.V.M.A. is Dr. John B. Carricaburu of Santa Ynez, California. Dr. Carricaburu is an equine practitioner highly respected for his expertise in equine medicine. He has been a valuable member and chairman of many state and national committees in the veterinary field.

You are doing yourself and your animals a service by encouraging your veterinarian to attend his professional meetings.

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

ANIMAL CAVALCADE

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

JULY/AUG 1975

VOLUME 6 NUMBER 4

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CAVALCADE NEWS

LOS ANGELES REDUCES LICENSE FEES

Los Angeles city dog owners are taking advantage of the license fee reduction for their pets if they are spayed or neutered.

The yearly mandatory license fee, collected fiscally, for dogs living in the city is \$7. The fee is cut in half for owners who have their pets altered. The \$3.50 license fee is one reason dog owners are taking in their pets for spaying or neutering.

DR. S. M. DENNIS WINS AWARD

Dr. S. M. Dennis, head of the veterinary pathology department in the Kansas State University College of Veterinary Medicine, has been awarded the annual "Brandy Award for Excellence in Veterinary Medical Writing" at KSU for 1975.

The award was presented by Dr. Neil V. Anderson, president of Phi Zeta, as the climax to the annual Phi Zeta Research Day of the College of Veterinary Medicine recently.

Dr. Dennis is author of more than 100 scientific articles on veterinary pathology and neo-natal diseases.

Featured speaker for Research Day was Dr. Horst Leipold, winner of the 1974 Veterinary Medical Award for "Excellence in Research."

Awards for excellence in undergraduate research were presented by Phi Zeta to Denise Kibuszewski, Tuttle

Creek Court, Manhattan; Marc Rachofsky, 1616 Fairview, Manhattan; and Fred Erickson, Rockport, Maine.

AAHA NAMES DR. OSBORNE 'VETERINARIAN OF THE YEAR'

Dr. Carl A. Osborne, associate professor at the University of Minnesota, was honored as "Veterinarian of the Year 1974" at the American Animal Hospital Association's annual convention in Cincinnati on April 22.

Dr. Osborne, who holds a joint appointment as an associate professor in the Department of Veterinary Clinical Sciences at the College of Veterinary Medicine and in the Department of Pediatrics in the College of Medicine, was selected for the honor by the Awards Committee of the AAHA.

A specialist in internal medicine with emphasis on urology, Dr. Osborne has been a guest speaker and seminar participant at more than 80 state, regional and national meetings of the AAHA and the American Veterinary Medical Association during the last seven years. He also has written or co-authored more than 30 books and almost 100 scientific papers.

"He has given unselfishly to better our profession and the practice of small animal medicine," declared Dr. Stanton Williamson, Director of Education and Publications for the AAHA.

RECENT VACCINATION REQUIRED FOR CANADA-BOUND DOGS

Americans planning to take a dog with them on vacation to Canada this summer are reminded to have the dog vaccinated against rabies before leaving. A recent certificate of vaccination and a health certificate should be kept handy.

Unlike the United States, where a rabies vaccination within the previous three years is sufficient to gain entry,

dogs entering Canada must show recent certificates of vaccination for entry.

Many American vacationers have arrived at the Canadian border only to be turned away because they didn't have a certificate or because the certificate wasn't dated within the previous 12 months.

EQUINE RESEARCH GIVEN SUPPORT

A National Ride for Research on Saturday, Sept. 20, with Penny Tweedy as chairman, will give horsemen an opportunity to inform the public of the importance of the industry and to raise funds for equine research.

The National Ride for Research will comprise separate rides throughout the United States conducted by clubs, organizations and any groups that want to participate.

While Rides for Research have been sponsored since 1972, the National Ride is the first time they have been coordinated into one big effort. One



"Ride for Research" will be led by Mrs. Penny Tweedy.

of the most popular women in the horse world, Mrs. Tweedy, breeder of Triple Crown winner Secretariat and champion Riva Ridge, was unanimously selected as chairman.

Patterned after walk-a-thons for charity, Ride for Research is a project which sponsors research at veterinary schools to benefit horses.

Suggestions and procedures for participating in the National Ride for Research are available from Morris Animal Foundation, 531 Guaranty Bank Building, Denver, Colorado 80202.

Mrs. Tweedy indicated the importance and impact of National Ride for Research. "Horses are important to their owners for many reasons — some economic and some emotional. I know how important it is for us to be able to treat and prevent diseases of horses,

Continued from Page 27

DOCTOR'S ADVICE

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

Q. What is coprophagy? Is this a condition of all kinds of animals? Is there anything to be done about it?

A. Coprophagy means eating feces, usually by the animal that just produced them. It is usually a problem only in dogs, though other species may do so at times. The problem is usually with the diet, which may be unbalanced or fed in excess. One successful program is to make up a diet of cooked beef and beef byproducts half and half with a good dry dog meal (without garlic, which appears in the feces and appeals to some dogs). This is substituted in 25% increments daily for the present diet, so on the 4th day only the new diet is fed, in a lower total amount than formerly, until the dog's stool is firm. Increase the amount if it is too hard, decrease it if too loose, and feed the dog 2 or 3 times daily on a regular schedule — with no between-meal tidbits. Teaching it to Come, Sit, etc., is good discipline.

Q. Every summer, some of my friend's horses get what he calls "dry land Distemper." Could you tell me something about it?

A. This may be so-called "bastard strangles." However, I'd need to know area of the country for usage of term and to possibly be able to identify it.

Q. Is it possible for a healthy horse to spread swamp fever? If a horse is positive to the test, what should be done with it?

A. Yes, a horse may appear to be healthy, but if it is a carrier of the virus (detectable by blood test) it can infect other horses, usually by way of biting flies or mosquitos, and an infected mare can transmit the disease to her foal in the uterus. At the very least, a positive horse should be kept in a screened stable, away from other horses. It may seem cruel (and expensive) but some authorities recommend destroying such horses. I would suggest you consult your veterinarian, who may want to confer with the County or State Veterinarian. Most states require a negative test before allowing a horse to enter.

Q. My dog gets "foxtails" (wild oats) in his ears. Is it necessary to call the veterinarian on an emergency basis to care for him?

A. If the dog is obviously in great pain I would certainly suggest calling your veterinarian and let him decide how urgent it is. How severe it would have to be to warrant emergency service probably depends to some extent on how much it disturbs you.

Q. Do you have any suggestions for keeping my male dog home? He jumps the fence, then just stands waiting at the gate to come back in.

A. A not entirely facetious suggestion might be to raise the fence, at least temporarily, to see if he will give up. The basic problem, however, is most likely that he wants attention, and he certainly should not be punished for this. Try keeping an eye on him and distracting him the moment he starts to jump, then praise him if he will come to you when you call. Teaching him to Come, Sit, Stay, etc., will help if you will run him through a short series of commands daily and reward him with praise when he performs correctly. This apparently gives a dog the sense of being "needed" and may be all the attention he requires.

Q. Do cats have anal glands? If so, do they need any care?

A. Yes, cats do have anal glands which secrete into anal sacs as in dogs, and impaction or abscessation can occur, though these problems are rather rare — so rare that people tend to forget that cats can occasionally be affected. A crust appearing on the thighs may indicate a need to have the anal sacs expressed.

Q. Should cats be bathed? Should they have their nails trimmed?

A. Even a cat that generally keeps itself well groomed may get into a mess now and then and need a bath, for which baby shampoo is good. An outdoor cat tends to get dirty and may need regular baths, perhaps once a month. The cat's nails should be trimmed whenever they get too long or sharp — which may be every few weeks — especially if they are around young children.

Q. If I have my dog spayed, will she likely become fat?

A. There is no need for a dog to get fat after spaying, although some may become a little less active and will put on weight if they are fed the same amount as formerly. If they get fat, however, it is not because they were spayed but because they were allowed to eat too much.

Q. Do rabbits need any inoculations?

A. The only rabbit disease for which a vaccine is available is myxomatosis, but it would rarely be needed except in commercial rabbitries. The best way to keep rabbits (or any other animals) healthy is to provide good sanitation and nutrition; if one should appear ill it should be isolated from the others immediately.

Q. I have a pair of gerbils which I do not wish to let breed. Is there a way to have them neutered?

A. Probably few veterinarians have had experience with gerbils, but castrating a male should be a relatively simple operation for one who has dealt with other such animals. Neutering the female would be more difficult — and unnecessary if the male is castrated. No one has developed a "pill" for gerbils. Incidentally, you might check to see if it is legal to keep gerbils in your state; California and some other states have recently put gerbils on the prohibited list.

Q. I have a neutered male cat, and other males are constantly roaming around our house. Can anything be done to prevent this?

A. First, don't get the idea that your cat might be "queer." Neutered cats produce very little sex hormone, which is one reason why they are more docile, even to the point of allowing a more aggressive male to mount them. Some neutered males produce additional female sex hormone, which would be what attracts other males, and in some cases an injection of progesterone may help alleviate this problem. You might ask your veterinarian about this possibility.

by Malana Mercurio

WILL THE Rhino SURVIVE ?

The awesome Rhinoceros, a timid, near-sighted creature on earth for sixty million years, may shortly pass out of existence. Though it is true the early Rhinos disappeared through the slow process of evolution, if the Rhino should disappear today, man alone is accountable.

Today's animals have to face man. In earlier times, the Rhino was very common, a shaggy animal that roamed across Eurasia during the Ice Age. One ancient Rhino skeleton reveals a height of 18 feet — the largest land mammal yet known. Today, only 5 species are left — 3 in Asia and 2 in Africa. The apprehensive Rhino is shot, speared, and trapped in wire nooses that slowly strangle them. How heartless man's actions appear when we learn that they are killed for only one thing — their horns.

Since prehistoric times, men believed that the Rhinoceros horn had magic powers. Native chieftains prize it as a symbol of prestige and use it as a scepter or a walking stick. There are other primitive people who carve it into drinking cups, believing that it will save the person who uses it from poison. In the Orient ground Rhino horn is used frequently as a medicine.

Aged men look upon ground horn as some handy elixir that will recapture youth. Those so misled are willing to pay half of the Rhino's horn-weight in gold. The outrageous Rhino slaughter is most unfortunate when we realize that the horn is useful for one thing only — to protect the Rhinoceros on whom it grows. Man's conduct may become more reasonable when he realizes it isn't even a true horn.

Other horned animals, such as cows, have horns that grow from their skulls. All such horns are composed of material much like fingernails. But the Rhino's "horn" is attached merely to his skin. The horn is made up of a substance like hair that is glued into a solid mass. Unlike a true horn, which reaches only a certain length, most Rhino horns never stop growing.

To a white Rhinoceros, and a female, must be awarded the prize for having produced the longest horn known. This enormous horn, collected in South Africa, is 62 and 1/4" in length, and it has a maximum girth of 22 and 1/4 inches. It is considerably longer than its nearest competitor, also from a White Rhinoceros, which has a length of 56 and 1/2 inches. The horns of other species are shorter than those

Though the Rhino is hardly fair
At his shape, long shall you stare.
For the Rhino is a marvel to behold;
Such a reservoir of strength untold.
Yet the Rhino is not long to stay,
Unless man quickly mends his way.
And wouldn't it be a shame to part
From a priceless gift of Noah's Ark!

of the White Rhinoceros, but one Black Rhino horn of 53 and 1/2 inches is on record.

There has been considerable debate among big game hunters over the pugnacity of Rhinoceroses. There are those who believe they are the most dangerous of all animals; many others insist that they offer no more danger than hunting ducks. Whom do we believe? Obviously, hunters who have had a harrowing experience with a particularly ill-tempered specimen consider the Rhinoceros more dangerous than do sportsmen who have been more fortunate. A sage observation of one hunter may help. He reported that the great danger of the Rhino was in coming upon him suddenly, for a Rhino waked out of a sound sleep will often charge without looking to see whether he has anything to charge or not.

Rhinoceroses seem to be suspicious of anything new. When roads were first built through Rhinoceros country, there were cumulative reports of Rhinos blindly charging automobiles and reducing the cars to wreckage, and there is at least one record of an irate Rhino actually attacking a train. The

Continued on Page 31



TAKING YOUR DOG TO ENGLAND? . . .



Learn What Quarantine is All About . . .

A true story
by Brooke Oliver

The decision to leave behind an animal one has loved for a number of years is a difficult one to make. But this was my dilemma. I learned that, for family reasons, I would have to move to Great Britain. Because of its strict laws concerning the importation of domestic animals, I would have to place my dog in quarantine for six months. Leave her behind or take her with me?

A few days later, running in the fields with Bambi, I made my decision. Bambi would go to England with me.

What do you do first?

From the British Consulate in Chicago, I got the necessary forms to fill out. Through them I applied to the Ministry of Agriculture, Fisheries and Food for a license to import a grey miniature poodle. The Ministry sent a reply fairly quickly, granting permission, together with a list of approved quarantine kennels to choose from. At the same time I also had to choose an approved quarantine "carrier" whose job it would be to pick Bambi up upon landing and transport her to the kennel. On the same day I wrote to the kennel manager and to the carrier. Both answered promptly, requesting confirmation, a week or so before arrival, on the date of arrival, flight number and time of arrival.

Most people I spoke to in Chicago, as well as in England, about the quarantine laws, knew little about them and particularly why the quarantine should be so long. I discovered, while doing some research on the subject at that time, that since 1922 there had been no cases of animal rabies in Great Britain outside quarantine, while there had been between 1922 and 1970, twenty-seven con-

firmed cases in animals in quarantine! Twenty-five of these were dogs, one a leopard imported from Nepal, and one a cat imported from Kenya. *The period of six months quarantine was decided upon when it was found that in the quarantine cases analyzed in Great Britain 50% of them occurred within one month of importation and 80% within four months.*

Beginning the trip

It is best to make the trip from home to plane as comfortable and as least traumatic as possible. Your dog will need a container, or a cage large enough to stand up in and be able to turn around. It will have to be open enough so he will not feel too locked in, yet protected enough so he cannot see everything going on around the secluded world of the cage. It is good to have the dog get used to the cage by putting it in it for longer periods each day. A reward or a caress should be given after each such ordeal. Bambi was taken for rides in the car while in the cage to prepare her for the movement and the noise she would encounter in the plane.

When the day of the departure came she was given little food and taken for a long walk. After all, this would be her last one for six months.

Your dog may be frightened as the engines roar and the plane shakes at take-off. This is why the preparatory training before the departure is so important. The animal has to know, because you have never left him alone in the cage, that you are there and make the association that, *since he has been taken out of the cage, he will be again.*

Landing

Before landing, the dog might be somewhat more restless. With his animal instinct he might feel that something which he has not been prepared for is about to happen.

Like me, you will probably find that everything happens too quickly,

before one has even had the time to feel really sad or worried about the dog. Upon disembarking, a man in a navy blue uniform will take the cage out of your hand, have a look at the importation license, and before you can ask "What is going to happen now?", your dog is off, the cage dangling at the end of someone else's arm. My last glimpse of Bambi was of her frightened eyes peering at the strange noisy world of an airport.

Beginning of quarantine

I called the kennel early next morning. I was told by the manager that Bambi had received a rabies vaccine (which would be repeated a month later) and a distemper shot and that her feces had been analyzed. "And would you please come and see her today. She is feeling miserable," I heard. My heart fell.

Visiting hours in kennels vary, but you will be told that they all close on Sunday, since the kennel's personnel works on a shift basis and therefore cannot handle the care of the 80 odd dogs and cats and the flow of visitors.

The Ministry of Agriculture regulations demand that each dog have his own cage connected to his own run. There is, quite obviously, to be no contact whatsoever with other dogs or cats. It is in that run, or in a larger one reserved only for visitors, that you will see your dog.

Upon seeing me, Bambi wiggled around in ecstasy, in typical poodle fashion. Then, those preliminaries out of the way, the ball I had brought for her to play with ignored, all she wanted was to be close to me as possible. I held her in my arms. *It took her about a month to stop wanting only to be cuddled, but all dogs react differently, of course.* However, not at any moment did she seem to mind the cage nor the noise all the other dogs made. After the first month she played with the ball; sometimes, when Spring came and sunshine poured into her run, she would even sleep while I sat and read a book during my bi-weekly visits to the kennel.

Coming Home

Six months later I came to pick her up and take her home. She walked out of the kennel, wagging her tail, jumped into the car and as I sat at the driver's seat, she put her paws on my shoulder and licked my cheek. I took her for a long walk in Richmond Park. Nothing about her seemed changed, neither in her appearance (the dogs are trimmed in the kennels, if owners request it), nor in the way she ran and sniffed the grass. She came when called as obediently as she had always done. *The six month British quarantine had not changed this happy little American dog.*



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

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

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

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

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

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

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

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THE USE OF

RADIOLOGY

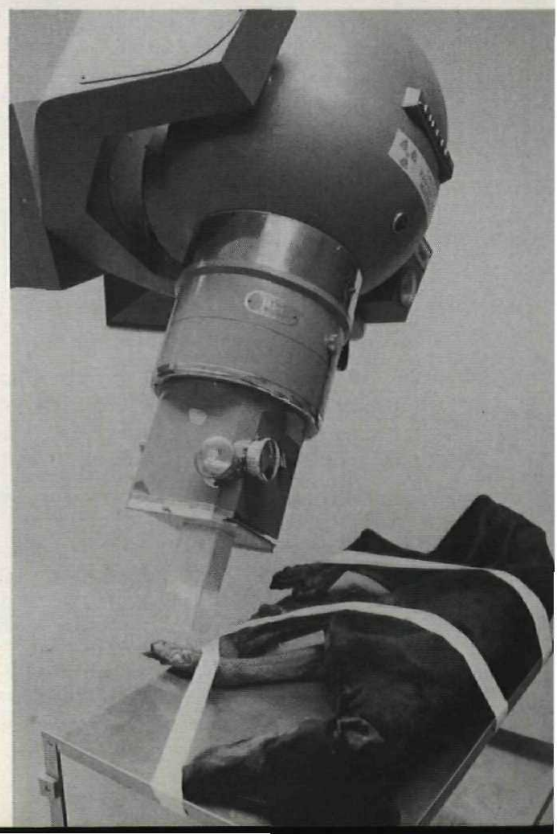
IN VETERINARY MEDICINE



A Doberman, with a tumor in its left forepaw, is led into the radiation therapy "cave" at Texas A&M University's College of Veterinary Medicine. In background is a 250-kV x-ray machine used for bombarding tumors with radiation. For deeper penetration, the unit at right is a cobalt-60 teletherapy machine. After the animal is positioned beneath one of the units, exposure intensity and duration are operated by controls outside of the chamber, where the radiologist is safely insulated from radiation.

Photos courtesy Eastman Kodak Company

Sedated with pentathol and halothane, the dog is taped into position to receive radiation from a cobalt-60 unit at Texas A&M University's College of Veterinary Medicine where human methods are used for treatment of tumors. The unit is designed with an adjustable head so the stream of gamma rays can be pointed at different angles from a downward direction to a horizontal one.



A pet cougar blissfully devoured a foam-rubber pillow and developed stomach pains. Taken to Texas A&M University's College of Veterinary Medicine, the cat was x-rayed. The radiograph showed several inches of metal zipper from the pillowcase, caught inside the animal.

After routine surgery, the recovered cougar went home, minus the zipper.

Whether the patient is a cougar or Siamese cat, Hereford steer or Palomino pony, its treatment at A&M upholds human standards of practice. The veterinary college is among the most advanced in the country and is noted for its work in diagnostic x-ray. It also is the only one in the nation teaching deep therapy and radiation of animals by means of cyclotron.

The cyclotron, an ion-accelerating device, preceded the atom smasher in the history of nuclear discovery. A unit was acquired by Texas A&M two years ago and was installed at the College Station campus, 95 miles northwest of Houston. Neutrons yielded by the cyclotron were added to the other tumor-bombarding radiation equipment which already included x-rays generated by a 250 kV Picker unit and gamma rays emitted by cobalt 60.

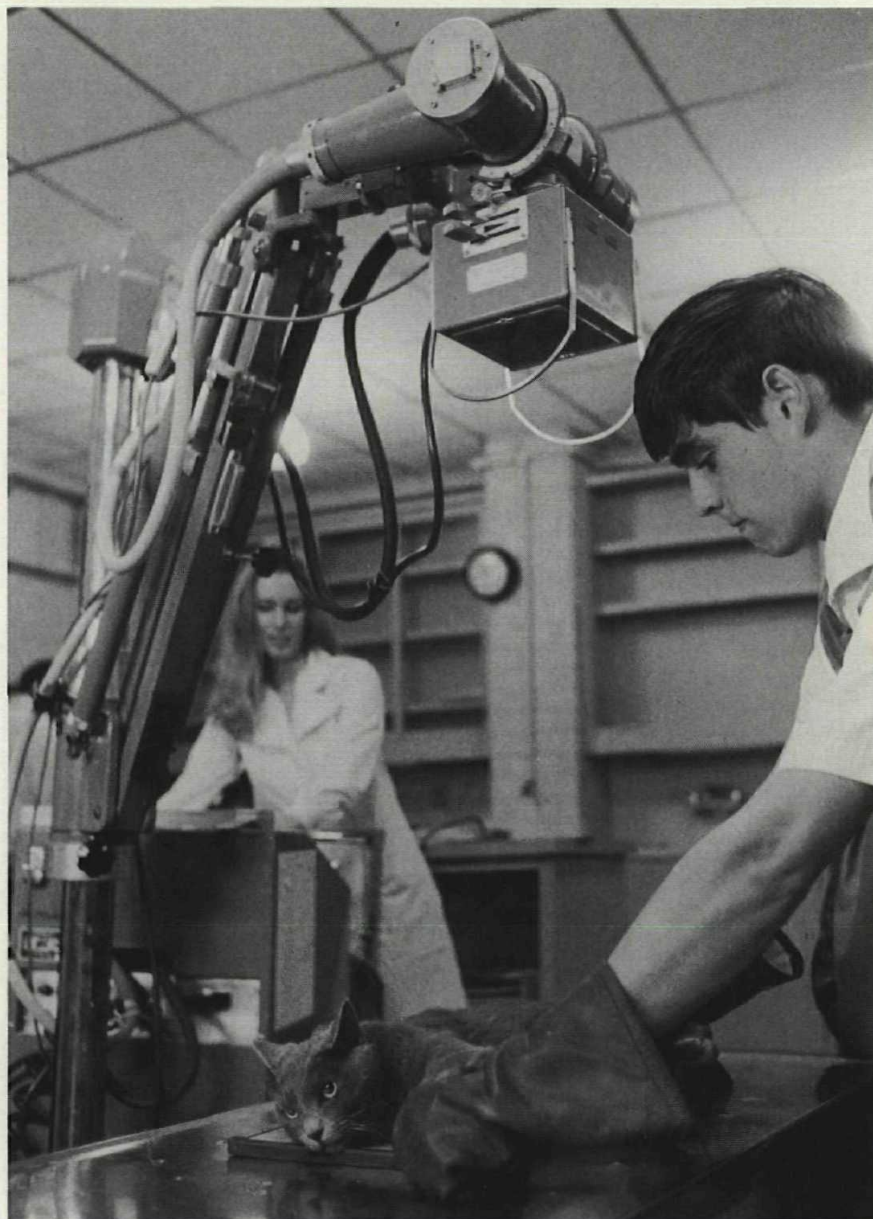
Dr. W. C. Banks, chief radiologist of the College of Veterinary Medicine, says the stream of neutrons produced by the cyclotron are several times more powerful than the other rays, thus shortening the time required for exposure. Dr. Banks explains that its RBE (relative biological effectiveness) factor is 2.2 times greater than the x-rays or gamma rays used.

While radiation therapy is performed on three to four animals per week, diagnostic radiology is used for 20 to 30 patients a day. Radiographs — like the one that disclosed the zipper inside the cougar — are produced on Kodak X-Omatic G film, the same film used for radiographing human beings.

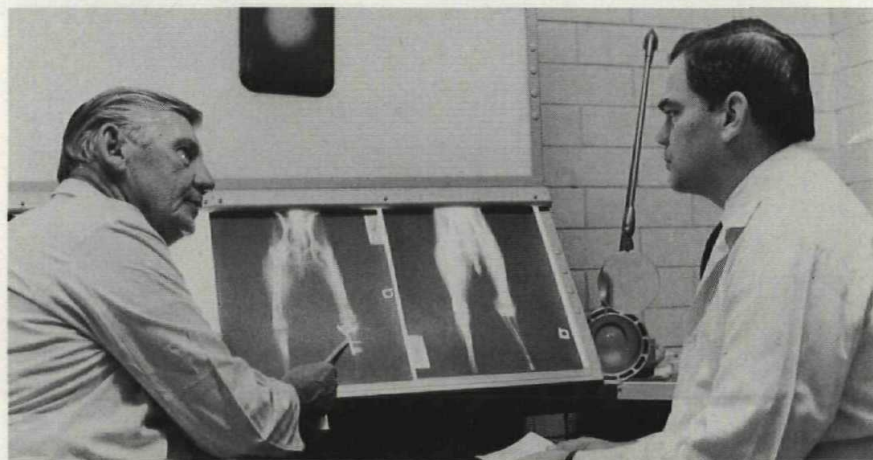
Dr. Banks has seen a significant improvement in the readability of the radiographs. "Bone detail is better than we've ever obtained before," he says.

Dr. Banks is dedicated to producing radiographs of the best possible quality. In 30 years of teaching, he finds the most arduous part is drilling his students in how to *make* a good radiograph.

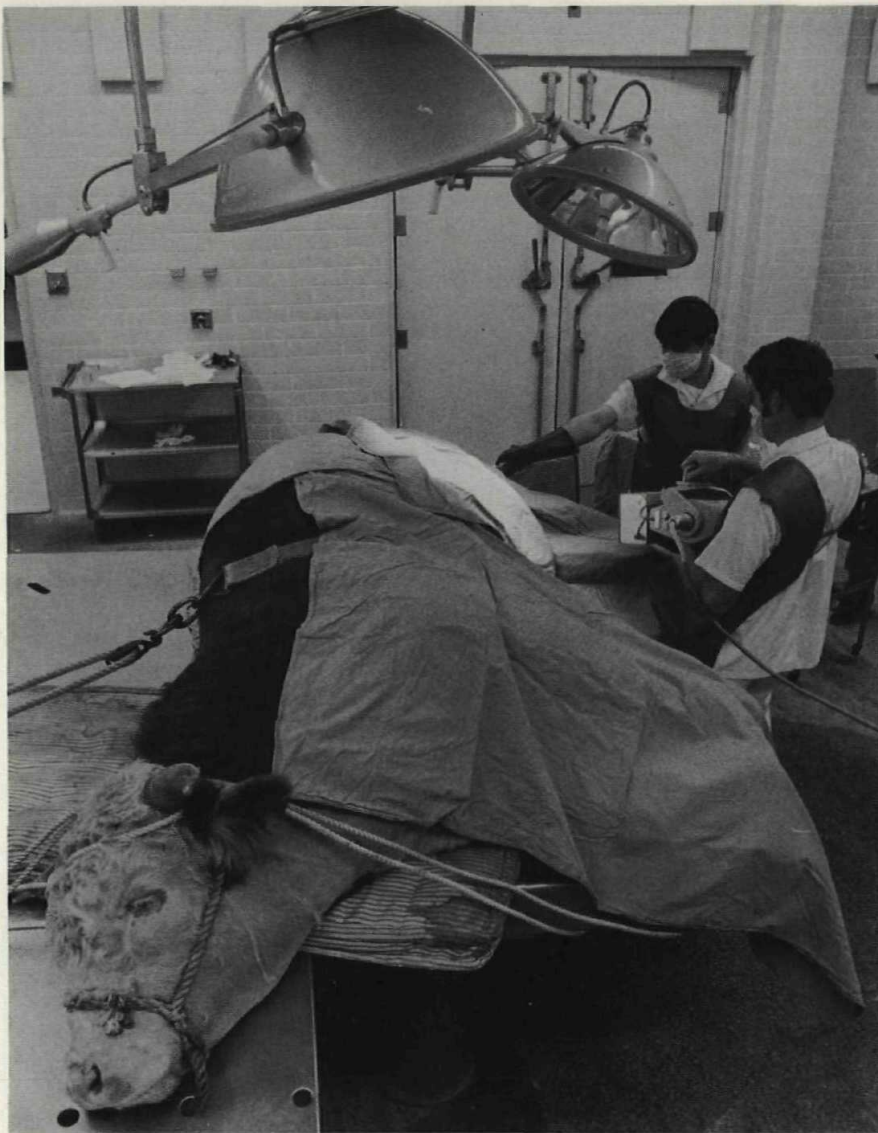
"They usually are too eager to get to the diagnosis phase," Dr. Banks says with a grin. "We have to impress them with the importance of preliminaries — positioning the animal properly beneath the x-ray source and deciding the intensity and duration of exposure. Unless the radiograph is pro-



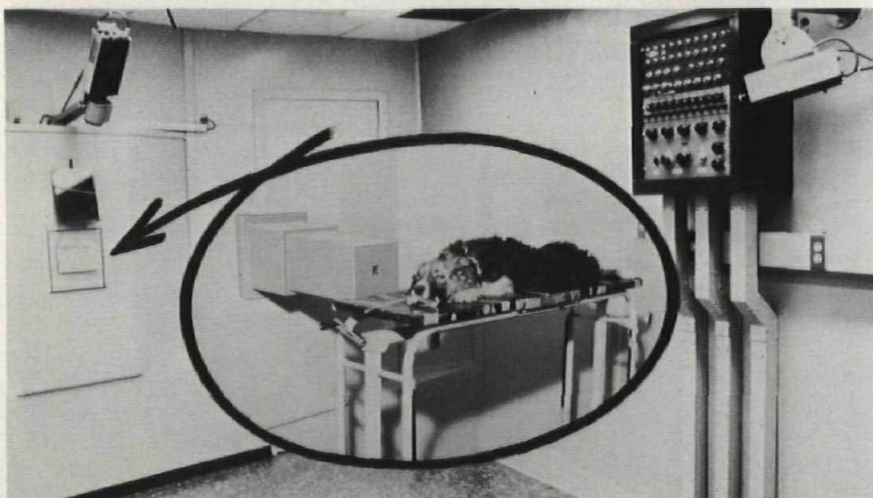
A cat, tranquilized with acepromazine, undergoes radiographic examination of a neck ailment, common to cats and dogs. Positioned on top of an insulated x-ray table, the cat is resting on a cassette with Kodak X-Omatic G film, such as is used in human hospitals. The x-ray tube head is set for a source-to-film distance of 40 inches.



Examining a fracture by a radiograph, Dr. W. C. Banks (left), chief radiologist, confers with Dr. Earl Morris, at Texas A&M University's College of Veterinary Medicine.



A Hereford bull, sedated for surgery, is undergoing x-ray examination for a possible fracture. Protected against radiation by insulated gloves and aprons, the student on the left positions a film cassette while the other controls the exposure.



A cyclotron, contained out of sight by insulating walls, is used for maximum penetration in radiation treatment of tumors. Small door in left wall opens during treatment (as inset shows) and its aperture serves as a collimator to focus the stream of neutrons to the dog's head. Closed-circuit television cameras, upper left and right, enable the radiologist to monitor the treatment from outside. Texas A&M University's College of Veterinary Medicine is the only school in the nation teaching deep therapy of animals by means of a cyclotron.

duced correctly, it never will show the detail necessary for making an accurate interpretation."

Dr. Banks earned his diploma in 1941 at Texas A&M. After five years in clinical pathology, he devoted the next 25 years to specializing in radiology. He's a charter member of the American Board of Radiology. He is assisted at A&M by Dr. Earl Morris and Dr. Charles Quick, resident radiologists. Susan Gary serves as technician and Dianne Cannon as assistant technician.

Radiology is taught in the last year of the six-year course leading to the Doctor of Veterinary Medicine degree. There are 128 students in the senior class, including 35 women, studying diagnostic x-ray and radiation therapy.

About half of the graduating veterinarians enter a mixed practice, treating both small animals, such as dogs and cats, and large animals, such as horses and cattle. The other half tends to specialize in one or the other. Dr. Banks has seen the emergence of subspecialties, too. One is limited to beef steers in feedlots. Another maintains the health of laboratory animals, such as guinea pigs and white rats.

Preparing the future veterinarians for whatever practice they will follow is the aim of the comprehensive program at A&M, balancing study with practical experience. The number of large animals treated here averages between 6,500 and 7,000 within a single year. A recent visit to the cattle pens showed a variety of in-patients: Hereford, Brahman, Angus, Charolais, and Santa Gertrudis, the only breed that originated in the United States. Even a Texas Longhorn steer, descendant of the picturesque "grassers" of the Old West, stood chewing his cud.

Comparable varieties of horses, dogs, and cats also are treated here, referred by their owners and by veterinarians.

Referrals for physical checkups are growing common as veterinarians — and pet owners — become more mindful of the health similarities between animals and people.

Lungs and reproductive organs are areas to watch for tumors, particularly in dogs and cats, Dr. Banks warns.

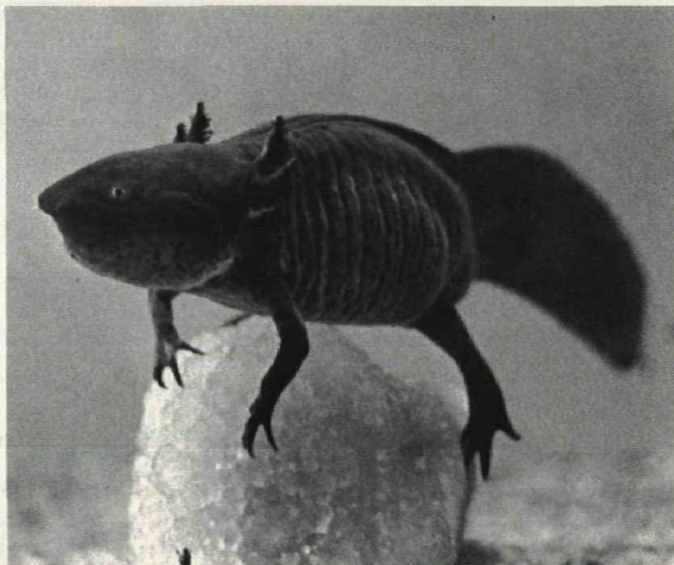
"Big dogs tend to have more tumors than small dogs," he says. "The Boxer, for example, seems especially susceptible."

Small dogs have their ailments, too, he adds. The Dachshund, because of its elongated frame, often contracts disc diseases, he says. Cats, as well as dogs, are prone to head and neck conditions that require treatment.

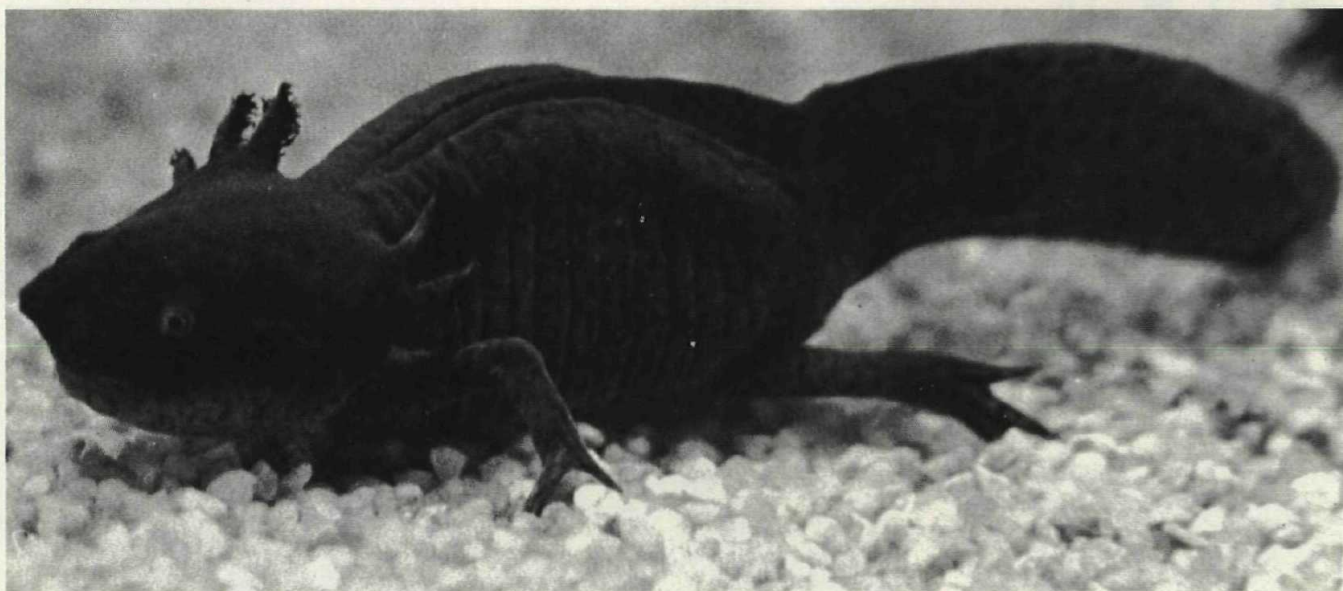
And the importance of x-ray as a diagnostic tool is never more obvious. To detect an ailment in its early stages could save the animal's life — an adage long applied to its owner.

MEXICAN WATER SALAMANDERS MAKE ODD BUT FASCINATING PETS

by Patricia Zimmerman



A two year old axolotl



Whenever I smugly announce I am one of a small group of people who owns a pet axolotl, I am generally greeted with blank, ego-deflating stares. "Axo-what-l?" they say. It seems to me all too few people have heard of this underrated, underpublicized animal.

Axolotls are unique water salamanders which exist naturally in only one spot in the world — Lake Xochimilco in Mexico. The name "axolotl" originated with the Aztec Indians, and is most often interpreted as "servant of the water." In Aztec myth, the god Xoltl was believed to have transformed himself into the water salamander to escape his enemies.

Spanish explorers during the sixteenth century were the first to write of axolotls. The creatures were not noted in print again until 1863, when a shipment of axolotls was sent to the Natural History Museum in Paris. The offspring of these axolotls, and of a second group shipped to Paris in 1866, went to laboratories all over the world for study. Axolotls in most experi-

mental colonies today are descendants of the Paris axolotls.

Related species of salamanders found elsewhere in Mexico and the western United States are sometimes also referred to as axolotls. Most naturalists, however, restrict the name "axolotl" to the Lake Xochimilco salamander because it is the kind the Aztecs generally spoke of, and it is the species which scientists have studied extensively.

Axolotls are genetic oddities. Unlike many salamanders, which lose their gills and crawl onto land at maturity, axolotls live full lifetimes under water. This condition, called "neotony," is the result of hormonal deficiencies in the axolotl. Scientists have been able to change axolotls into land dwellers by injecting them with thyroxine, a growth hormone.

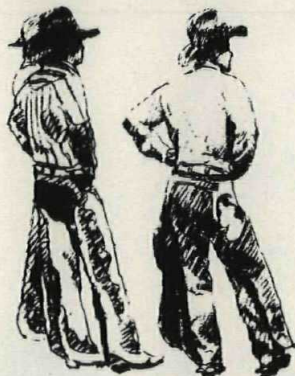
In many Mexican villages, axolotls have been sold for centuries as food. While they were once commonly consumed, axolotls are now considered delicacies. Because axolotls are plentiful breeders and easy to raise, some

naturalists have in the past considered establishing them as a food source in other countries. This market was never developed due to lack of demand for axolotls as food. Apparently few people have considered commercially breeding axolotls for sale as pets.

Axolotls are seldom available to the consumer in the United States. Most pet store personnel are unfamiliar with them. Distributors of aquatic pets don't carry axolotls, nor do any I have contacted know how to get them. Almost all axolotls now in this country live in university research colonies, which are often the results of years of breeding. Occasionally, a pet store will get a few axolotls from a researcher who is discontinuing his work. (This is how I got mine.) Most researchers, unfortunately, destroy axolotls they do not need in the colony.

For anyone who is lucky enough to acquire an axolotl, they make delightful pets. While most people think of salamanders as slimy denizens of the shadows, the axolotl is totally unlike
Continued on Page 23

"the VET?...you bet!"



A Personal Comment
by Drake Seaman

Many times over the past years, I have been asked : "Why do you continue to paint the practicing veterinarian?" The answer is always the same.

The practice of a veterinarian offers endless situations which make for fine painting; along with these are the added factors of integrity and dedication by the veterinarian himself. For me, it is hard to understand why so little has been "said" in the arts about this profession.

As a painter observing this practice, I have been very moved by the following:

the fantastic differences in subjects

the tremendous play of the operating room lights and their reflectors
catching unbelievable color patterns of the surgeons below them

the suggestion of gestures in the surgeons' robes, evident while they are operating

the racing quality of light running down a surgeon's arm during surgery

color harmonies, dramatic shapes, strong and subtle value contrasts.

All of these are elements which make for strong painting.

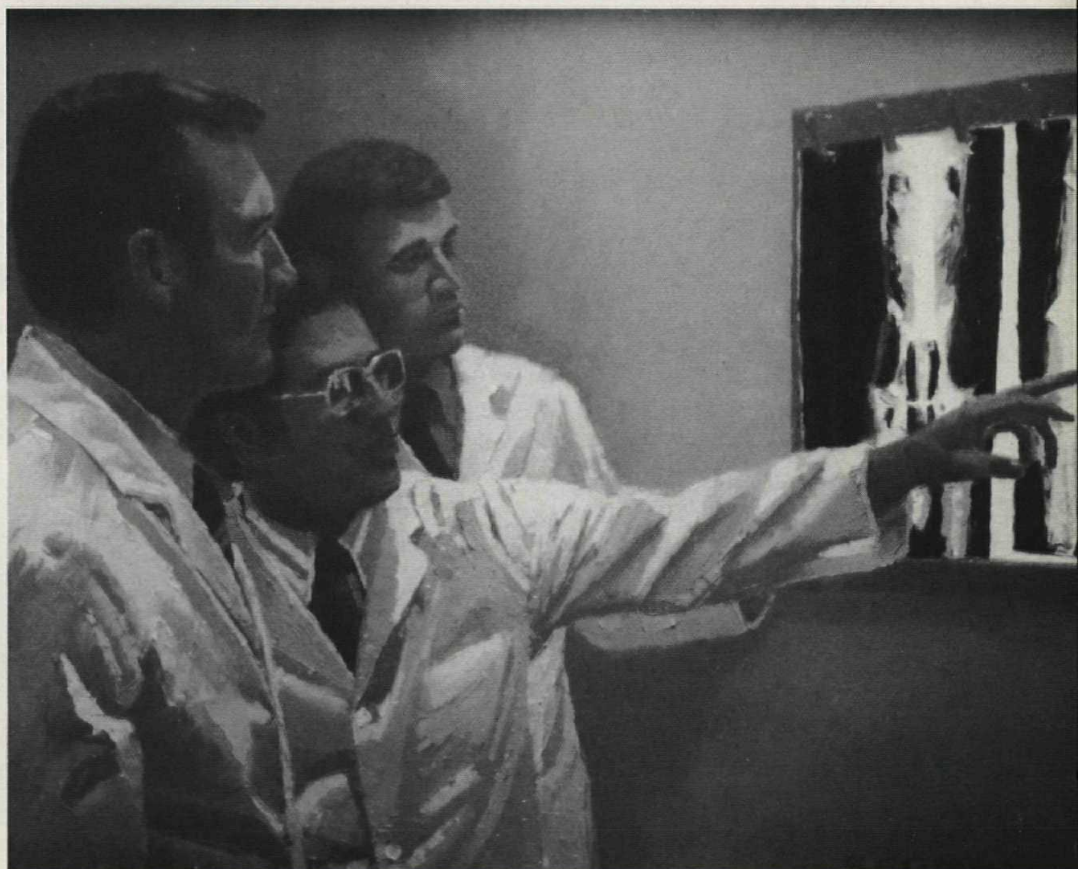
Each practice has its own unique qualities; it is this very thing that makes the veterinary profession so interesting to portray.

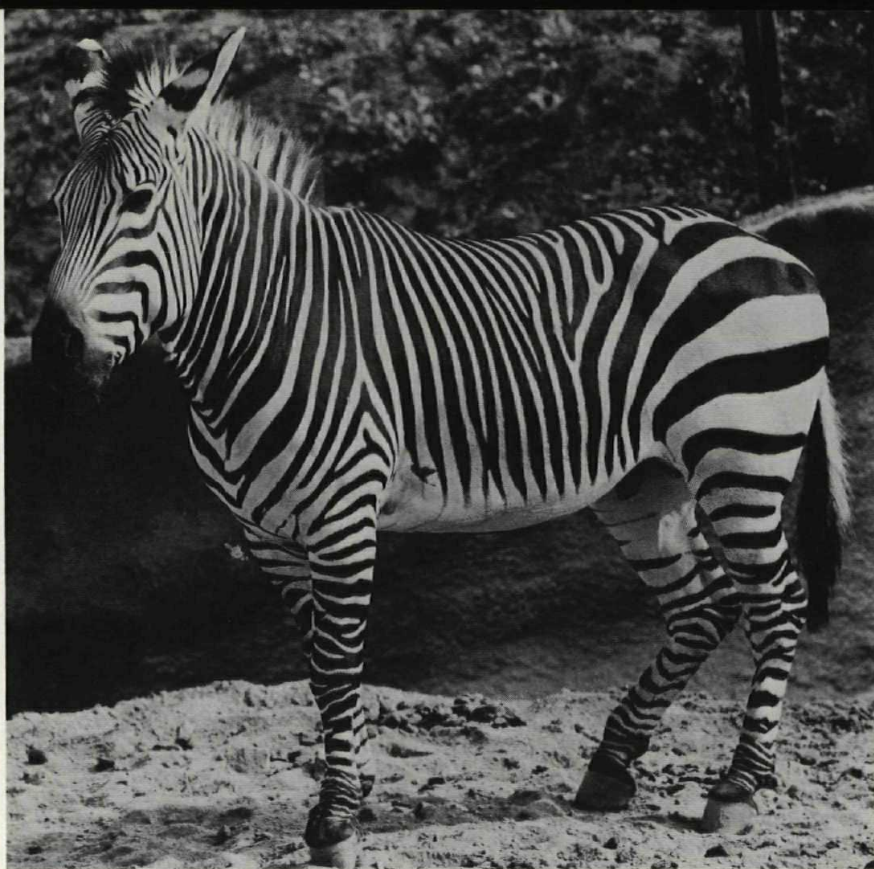
One can paint seascapes and landscapes as well as contemporary ranch life – however, it is hard to find more excitement in these than the endless variety of circumstances in the veterinary profession.





OIL PAINTINGS BY ARTIST DRAKE SEAMAN, WILLIAMS, ARIZONA





Hartman's Mountain Zebra — from the mountain areas of western, southwest Africa and Angola.

A beautiful creature, the small Arctic Fox is a dweller of the far north. Its coat changes color from season to season — dark brown in summer to blend with the barren tundra — lightening through the fall until it reaches a pristine whiteness in winter.



A REALISTIC
VIEW OF THE
MODERN

ZOO

PART II OF AN INTERVIEW WITH
MRS. FREDERIC GIER SCH, JR.,
PRESIDENT OF THE GREATER
LOS ANGELES ZOO ASSOCIATION,
(GLAZA) BY MEMBERS OF THE
ANIMAL CAVALCADE STAFF,
NORENE HARRIS AND BARBARA
SWEENEY.

Photos courtesy Los Angeles Zoo.



The Laughing Gull

"Time to phase out a zoo? Only if you can justify phasing out probably 80% of all animals in the world. I don't think that's justifiable in any way, shape or form. What you would do to the whole ecological system would be the most dangerous thing in the world." — Mrs. F. Giersch, Jr.

AC What about other differences — in attitude, for example, between zoos today and those of many years ago?

G There has definitely been a change of attitude within zoos. Years ago, if you had a certain kind of gorilla, you would say, "This is mine." Now there is a terrific exchange program, this old theory no longer exists. We have about 87 animals or reptiles now at other zoos in the country because we've had successful breeding. When one zoo has a breeding male or female and other zoos are unsuccessful, they share these breeding animals with other zoos.

AC What prompted this change in philosophy?

G The more knowledge and improvements you get, the better. *Zoos of today have learned that if we are to save animals, everyone must work together and have a common pool of knowledge.* Hopefully, one day all zoos will be able to dial the word "giraffe" and get all the information from any zoo in the world about how it reproduces, how long it took, what the problems were, any diseases, treatments, medication given. Probably someday, somewhere, somehow, there will be a world semen bank for the artificial insemination of animals.

AC We understand that the design concept of the Los Angeles Zoo is quite different from other zoos. Could you give us some of the details?

G This zoo was built on a very costly premise: to divide the land into continents. This way people learn that the tiger comes from India, not Africa, and that marsupials come from Australia. This is costly to run because you have a compound that mixes many animals from different continents. This requires different feedings, cleanings, trainers and keepers. It is very avant-garde. But it is way too spread out. We should have something like they have in San Diego that lets you come near all the exhibits by an aerial tram or an inner ride. However, our streets are too narrow to do that along with the walking public. *It would*



THE ZOO COMES TO YOU

The ZOOMOBILE is a tractor-trailer unit that has been on the road visiting Los Angeles schools since last September. Canopies on either side of the trailer can be raised. On the left side, students can view the animals in their cages. On the right side, a teaching platform allows the Driver-Keeper to handle and display whatever animal is being introduced or used for illustration. Two of GLAZA's (Greater Los Angeles Zoo Assn.) docents accompany the ZOOMOBILE on each visit to the various schools: including most of L. A. County schools and schools for the visually, aurally and orthopedically handicapped. Both of these volunteers have had from 5-8 years of teaching at the zoo. The students are involved in a questioning, investigative type of instruction designed to motivate them and to create an enthusiasm for learning.

Feathers, eggs and skeletal material may be handled and examples of paralleled evolution can be observed. Vultures, foxes, monkeys, snakes and farm animals are often included in the presentations.

Four schools are visited each week, two classrooms at a time. Sessions are from 30-40 minutes and study materials are supplied in both English and Spanish.

Dr. Warren Thomas, Director of the Los Angeles Zoo, supplies appropriate exotic animals when the occasion demands. The zoos' Curator of Mammals is assigned to oversee the selections, and assists the Science Center in their proper maintenance.

At the close of each presentation, each child receives an invitation to the Zoo.

be marvelous to have an overhead conveyance where the public is caged and the animals below are not bothered!

We have a tremendous record for birds. Our animal nursery is fascinating. Our endangered species list is very high.

AC How big is the Los Angeles Zoo?

G More than 1,000 acres. And if you walk around the zoo you can see some of the greatest planting. We have plantings from Africa, Asia, Europe, all of which is marked. This is a botanical garden except that we don't do research on the plants.

AC Keeping in mind that a zoo is always changing, how can a zoo like this one plan for the future?

G One of the great things about this zoo is that we have another 150 acres that we can develop. A great deal of that would be a huge common enclosure with different species that would mix compatibly. Again, you would have a train ride or some other conveyance around the periphery.

AC You see zoos then, moving in that general direction?

G Oh yes, you will always have some small enclosures, *but I think very*



This Lesser Panda is a near relative to the Giant Panda, though its appearance is quite different. They hunt for food only at night.

The Red-Crowned Mangabey is from equatorial Africa and is known for its white eyelids, normally hidden. It is believed that the whites are bared as a signal device to other members of the group.



definitely that we're moving away from the small cages. And, as animals reproduce, there's almost no enclosure that's large enough. There's no zoo that ever stops, like your own household. You're never finished. As soon as you get it cleaned enough times, it's worn out. Then you have to replace it or paint it again or something. Zoos continually keep going. They are continuing to improve. And sometimes, as soon as you start to build something new, it is already obsolete. Someone has thought of something better. And, basically, now the ideas are on the right track.

AC Do you have an area here for children where they can be right in among the animals?

G Oh yes, our childrens' zoo. We have a childrens' zoo and pet area with smaller animals. The children are free to wander around with the animals.

AC Is there ever a problem with cruelty toward these animals?

G There is not tremendous cruelty, although we did have a few problems when we opened. *But the problems were never with the children, only the adults!* In one case, it was a 40 year old gentleman that was pulling the horns of a goat. I said, "Please don't do that;" he stopped. I asked him why he was doing it. He said it was because he'd always heard that the horns came off. You must educate the adults as well as the children.

AC Would it be helpful to have a film clip or something before you entered the zoo to help a little with showing people what is expected of them once they're inside?

G We do have docents to take visitors on tours. These women are highly trained. Sixteen weeks of very hard work in a concentrated course. On the tours people learn not only where the animals come from, but their gestation period, eating habits, whether they are nocturnal, diurnal, etc. In addition, we have many volunteers in the childrens' area. They always have adult supervision. If there are ever any problems, our keepers are able to handle them. We are very careful about that. There is certainly no cruelty to the animals.

AC We were wondering if you could comment on the "Eli and Sally" controversy?

G Eli and Sally, the orangutans — well, you've read all the stories.

You know the controversy on it. It was quoted that their quarters were dark, dirty, and that they had not seen sunlight for 7 years, etc. *That's totally inaccurate.* However, there is no denying that their quarters were way too small, and that we did not have the funds to do a better job for them. The awful thing is that you can hone in on Eli and Sally — and I don't deny for a minute that they did need better quarters — but when you're dealing with about 2,400 animals, including the reptiles and the birds, you just can't spend every penny on one pair. Everything has to be taken care of.

Eli and Sally and their offspring are now in a large open grotto. We are presently working toward a primate village of several acres.

In many ways the accusations were fallacious and unjust. Unfortunately, we've lost members and donations because of it. *In other ways, I always think that any kind of controversy can bring forth a productive, fruitful avenue for thought, word and action. I think we have been able to turn this thing around to our benefit.*

AC How do you see your role in terms of encounter with the community?

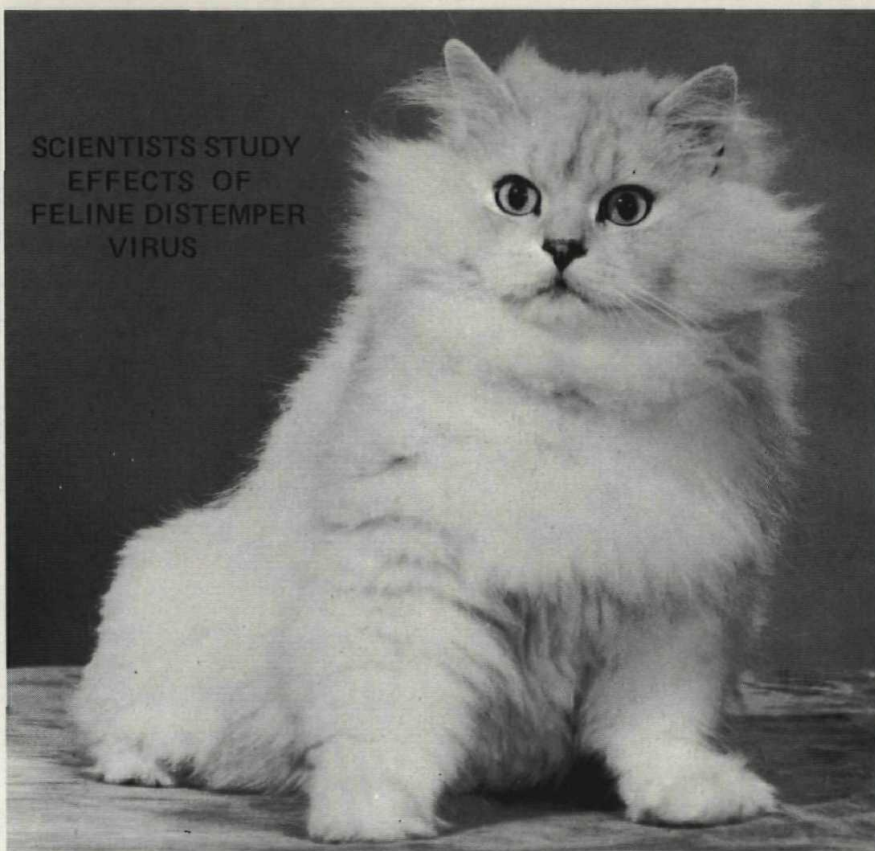
G GLAZA is formed by a group of philanthropic citizens. We are a completely non-profit organization, and our one main objective is to care for and maintain the animals in every way. We do this by raising funds. We aid the city in any way we can from getting hospital equipment to raising funds for a compound to having a compound donated. We help in these ways because the zoo budget is extremely low, and in fact, inadequate.

AC As we see it, though, part of the problem is to get the community to feel a greater sense of involvement with the zoo?

G You hit the nail on the head. If the millions of people who could *would* walk through these gates did so, they *would* get involved, get to know this zoo, and *love it!*

EDITORS' NOTE: Mrs. Giersch is a marvelous spokeswoman, who because of her own enthusiasm and knowledge is deeply involved with the Los Angeles Zoo and with zoos throughout the world. We thank her for her time. Anyone wishing to contact the Los Angeles Zoo for information may do so at: 213-666-4650.

SCIENTISTS STUDY EFFECTS OF FELINE DISTEMPER VIRUS



Feline distemper is a dreaded, complex and highly contagious disease. Although it has been widely studied for many years, scientists are continuing to find different ways it affects cats; the latest is the possibility it infects the eyes and can lead to impairment of vision.

While examining the eyes of approximately 800 cats who were patients at the Veterinary Medical Teaching Hospital at the University of California, Davis, scientists found that 45 of them had degenerative disease of the retina, the light-sensitive membrane lining the inside of the eye.

One kitten had many areas of abnormal development of the retina. Two mature cats had degeneration of the retinas characterized by wasting away of all but the inner layers of the retinas. In the young and adult cats the retina around the degenerated areas was normal.

The high incidence of such a problem in cats which came from various sources suggested to the scientists that it was caused by some infectious disease, probably one that attacked the nervous tissue. They knew the virus which causes feline distemper (infectious panleukopenia) met this description and that, as a disease present at birth, it can cause brain damage to kittens.

With funding by the Robert H. Winn Foundation for Cat Research, the scientists lead by Alan MacMillan, D.V.M., and Robert M. Cello, D.V.M., set out to find out if the distemper

virus was affecting the nervous part of the eye and if cats with the brain disease also had the retinal disease.

Twenty-six cats with the brain disease were examined, and 10 had visible areas of retinal degeneration. Some effects on cells of other organs which are known to be caused by the distemper virus were also found in cells of the retina. These findings were considered significant enough to justify beginning an investigation to determine the role of the panleukopenia virus in causing the retinal problem.

The eyes of cats infected with the distemper virus were studied weekly, beginning at age three weeks. Abnormal portions of the retinas were found in several of the kittens. The study also confirmed the findings of previous investigators which showed the feline distemper virus could cause degeneration of parts of the brain. All but one of the cats with eye abnormalities also had brain damage.

"The initial studies, viral isolation and identification have been rewarding," the scientists reported. "There is evidence that the eye may harbor the virus for a considerable period of time."

At this stage of the study, they said, it appears that the developing retina of cats in the uterus and of new-born kittens is susceptible to the feline distemper virus. Infections acquired in the uterus may lead to nonfunctional areas of the retina, while an infection of early new-born life may cause a less severe degeneration of the retina.

The BLACK BEAR...

hero,
villain
or
Comic

by Evelyn Witter



In stories and cartoons he alternates as villian, clown and hero. This is not surprising since the Black Bear may, on different occasions, be any of these.

If you have ever visited the national parks, game sanctuaries, or summer resorts, you became familiar with one side of a bear's nature. The canny black bear realized early that exploiting his natural talents as a comedian brought rewards in handouts and tid-bits from admiring tourists.

Settlers in the backwoods country and ranchers have seen the less pleasant side of black bear's nature. They have had calf corrals entered and cattle on the range attacked. In fairness, though, these happenings are the exception. Normally black bears are not cattle killers. On the other hand, few black bears can resist a tender, young pig or lamb when they have the opportunity to have them.

Woodsmen are often annoyed by their camp-robbing activities. *Bears eat anything at anytime.* They are interested in food even up to late fall when they are as fat as a "tub-of-lard" and ready for their long winter's sleep.

The black bears's heroic side isn't seen often, but see a battle-scarred old male defying a pack of dogs or a mother defending her cubs and you'll have a new respect for their bravery.

OLD-FASHIONED BARNYARD GAME

by Carsten Ahrens

In the barnyard of our old farm are these 12 animals:

- | | |
|----------|------------|
| A. Cats | G. Mice |
| B. Cow | H. Pigs |
| C. Dog | I. Rat |
| D. Duck | J. Rooster |
| E. Goose | K. Sheep |
| F. Horse | L. Sparrow |

Authors have written about them. See if you can place each one in the proper blank in the quotations below:

- | | |
|--|---|
| 1. "I never saw a Purple _____
I never hope to see one;
But I can tell you, anyhow,
I'd rather see than be one" | 7. "All along the back water
Through the rushes tall,
_____ are adabbling,
Up tails all" |
| 2. "This is the _____
That ate the malt
That lay in the house
that Jack built" | 8. "The Union's too big a
_____ to keep changing
the saddle
Each time it pinches you" |
| 3. "Those who'll play with
_____ must expect to
be scratched" | 9. "Who killed Cock Robin?"
"I," said the _____
"With my bow and arrow,
I killed Cock Robin." |
| 4. "I think _____
Are rather nice.

Their tails are long,
Their faces small
They haven't any
Chins at all" | 10. "The time has come," the
Walrus said,
"To talk of many things:
Of shoes — and ships — and
sealing wax —
Of cabbages — and kings —
And why the sea is boiling
hot —
And whether _____ have
wings" |
| 5. "How proud we are! how
fond to show
Our clothes, and call them
rich and new!
When the poor _____ and
silkworm wore
That very clothing long
before. | 11. "Red _____ in your gray
coop,
O stately creature with tail-
feathers red and blue" |
| 6. Love me, love my _____" | 12. "The _____ hangs high" |

ANSWERS ON PAGE 29

SALAMANDERS — from Page 15
this image. Its brownish, black-speckled skin is actually very sleek and soft. While axolotls may seem unattractive at first glimpse, they come to have an unusual beauty. These agile amphibians are extremely graceful swimmers, and they glide about the aquarium in swirling underwater gymnastics.

Axolotls which have been raised in captivity show no tendency to scurry away in fear at the sight of a person. In fact, they quickly begin to associate people with feeding, and often swim over to peek through the aquarium glass in a very friendly manner. Some axolotls can even be hand fed. They will swim to the top of the water to take bits of food from an extended finger.

An axolotl is quite easy to care for — ideal for the person who lives in a small house or pet restricted apartment. It can be kept in any kind of aquarium, but the tank should be large enough to give the axolotl adequate swimming space. The water must be dechlorinated by leaving it stand a few days; chlorinated water can damage the axolotl's skin and gills. It is also essential to keep the water as clean as possible. A good filtering system supplemented by one or two large scavenger snails in the tank will do the job. Several healthy water plants will not only make the tank more attractive, but will also help oxiginate the water.

Water temperature in the aquarium does not require any particular regulation. It should be maintained at room temperature (approximately 68 degrees), which presents no problem in most homes. Water warmer than 80 degrees can kill the axolotl, and very cold water will cause it digestion difficulties.

Axolotls are meat eaters, and the most common food researchers have found they enjoy is beef liver. — one teaspoonful of liver every other day. It is best to buy liver in small quantities.

However, their meals can be varied. Axolotls will eat earthworms, tiny fish, and tubifex, small fresh water worms often used to feed tropical fish.

A well-fed axolotl in a clean, properly outfitted aquarium will probably stay healthy. Occasionally, however, it is plagued by body fungus. It is fairly simple to cure by putting some good tropical fish fungus solution in the water. A good prevention measure is to keep a little of the solution in the aquarium water at all times.

If you want an unusual pet which is hearty, gentle, and easy to care for, perhaps you should look for an axolotl. Should you be fortunate enough to find one, you'll join the small group of people who are owners of these entertaining and fascinating water pets.

Acupuncture . . . Part II

D.V.M.'S WORKING WITH ACUPUNCTURE: VETERINARY MEDICINE TAKES ANOTHER STEP FORWARD . . .

More on how all of our animals are being helped using acupuncture as an adjunct to Western veterinary medicine. Presented here is a discussion with Richard Glassberg, D.V.M.; Horace Warner, D.V.M.; Mayo Steigler, M.D.; Acupuncturists, John Ottaviano and Ellie Stonequist and Barbara Sweeney, Animal Cavalcade staff. The discussion centers around the work being done by all these people at the National Association of Veterinary Acupuncture in Anaheim, California (NAVA).

EDITOR'S NOTE:

Veterinarians attending the AVMA Convention in Anaheim July 14-17, 1975, are invited to visit the NAVA Clinic. Call (714) 630-6970 or, if no answer (714) 871-3000 for directions.

BS Are veterinarians in the United States receptive to acupuncture as a tool?

DG I think that it's been accepted very well by veterinarians. Probably better than it is by M.D.'s, as a whole.

BS More in Southern California than in other places around the country?

DG I think it's well accepted everywhere. There are a few people who are opposed because they can't understand it, but I don't think it receives as much organized resistance as it has in the human field. I think one of the reasons is that it hasn't been exploited in veterinary medicine like it has in human medicine.

BS Do you see acupuncture as a veterinary tool in normal practice or do you think it will continue to be used as a last resort?

HW I think it will really become a part of normal practice. I think we as practitioners will learn how to evaluate whether a condition is

most likely to respond to Western medicine or to acupuncture. I really believe that in 10 years or so we're going to be in a place where if somebody doesn't refer a case out for acupuncture after it has had all the Western medicine, that it's going to be a ground for malpractice. I think it's going to go that far.

BS Do you think it will ever be a first thing to do instead of a last thing?

HW I think that will depend on the condition. There are some — yes — for example, hip dysplasia, possibly some of the disc syndromes in Dacshunds. Yes — I think as time goes on and I feel more confident, you can bet I'll use acupuncture first.

DG I think that conceivably acupuncture could be as important in practice as antibiotics and cortisone are. And those are practically basic principles of medicine. I think those were big, huge steps for medicine. I may be wrong about that, but I think that we've just barely begun to scratch the surface. For instance, I have never seen anything as remarkable as the results shown by the horse we recently treated for emphysema.

MS I agree with Dr. Glassberg that certainly in the particular case of the horse with chronic pulmonary emphysema, that the results of acupuncture were dramatic. This was borne out later by autopsy findings. I personally heard a tape of the respirations of the horse which were dramatically altered with nothing more than the acupuncture therapy.

BS Are many veterinarians learning to do acupuncture or are they relying mostly on acupuncturists?

JO I think probably 50% of all the veterinarians in the United States are teaching themselves. About 25% of that 50% will turn out to be competent acupuncturists. This is because it is possible to learn acupuncture through textbook study if one is sincere and fairly bright. The other 50% is composed of people who are studying

in symposiums or groups where experts lecture to them. Maybe 25% of those people will understand something about acupuncture. At least enough to carry on themselves. The other 25% will end up just learning a very limited amount about it and using just what they've learned. They will keep their ideas very stodgy. The end result being that 50% of the veterinarians who are into this will know acupuncture.

BS Going back to the horse with emphysema, can you give us some details on that case?

DG This was one of the first cases we treated. However, this horse had had pulmonary emphysema for some time — well over a year — and had been kept alive because she was a potentially valuable brood mare if she could be gotten in foal. Dr. Shin treated this horse. It was the first horse he treated with us. I think he treated some in Korea. When Dr. Shin looked at the horse, I asked him if it was difficult to treat emphysema in people. He replied that it was quite difficult and required many treatments.

MS In conjunction with what Dr. Glassberg said, it's noted that in human medicine, treating chronic end-stage emphysema patients is very difficult, and if it were applicable, it would be of great benefit to proceed with the techniques of applying acupuncture to human patients to improve their breathing.

DG When Dr. Shin said it was a very difficult condition to treat in people and took many treatments, I wasn't too optimistic about the future of acupuncture in veterinary medicine. We were really being put on the spot. We were being observed by a number of other veterinarians and horse trainers. Dr. Shin treated 6 points on the horse and the horse continued to have tremendous expiratory distress. About 5 minutes after the treatment the horse abruptly began to breathe normally. It was not a gradual im-

provement, but an abrupt improvement — as if the horse had been given an intravenous injection of atropine (a drug which will make horses breathe easier when they have emphysema). The horse was breathing completely normal and everybody was saying, "Look at the horse." Dr. Shin looked over and said, "What's the matter with the horse?" And everyone said, "Look, it's breathing normally." And he said, "Of course, I treated it. What did you expect? But don't worry, it will relapse." After about 20 minutes, the horse relapsed. It was probably 3/4 as bad as it was originally. He said it would be necessary to treat it the next day. So he put big X's on the horse so one of the veterinarians could treat it the next day since he couldn't come. The horse again improved, except this time it improved while it was being treated.

BS How about another unusual case?

DG Primarily at NAVA we treat dogs and horses. However, we have treated rabbits, cats, sheep, rhinoceri, birds, goats and snakes. There's only one meridian to the snake. Ellie treated the snake.

ES The only snake that has been acupunctured as far as I know was acupunctured for a growth that it had on the back of its head. We put 4 needles around this growth and by heating the needles with moxa, the growth slowly started to disappear. It took about 3 weeks for the growth to disappear. It was a boa constrictor about 6' long.

JO With regard to snakes, the interesting thing about acupuncture is this: let's say a doctor has to treat an unusual animal like a parakeet or an iguana or an alligator. Maybe he won't know certain things. Like horses don't have gall bladders or appendices. He just wouldn't know certain things. *In my study of acupuncture, I found that my teacher prepared me to deal with how a life force comes through the body. It doesn't matter what you're treating as long as there's life in it. I've even treated plants with acupuncture. As long as something is alive, you have a basic idea of how it stays alive. Acupuncture deals with the basics of life.*

BS Let's say someone is practicing acupuncture who doesn't really know what they're doing. Do the animals suffer from mistakes that are made?

JO The first phase of suffering would be from the needle therapy. From



Dr. Shin, a master acupuncturist, treats a horse, while owner calms the animal.



John Ottaviano, acupuncturist, performs treatment under the supervision of the D.V.M.'s at N.A.V.A.



Many horses are treated at the N.A.V.A. Clinic in Anaheim, CA.

just having needles put into the body. But I don't think they're going to hurt an animal by just putting in a needle. It's a very difficult thing to do — unless you're dealing with a complicated organic problem to actually kill an animal or create a disease with acupuncture. It's a very hard thing to do. It's much easier to cure than to make a disease.

BS What is a regression? Why does an animal regress?

JO *An animal will regress for maybe two reasons. First, is the incompetence of the practitioner. a practitioner who doesn't know much will use — say — a formula on an animal, and without understanding how it can reverse itself, he'll start to get a reverse effect. He'll keep using his formula until he brings the animal to its original state. An intelligent practitioner will know that he has a cyclic movement to use with acupuncture. If he continues using some memorization or cookbook formula, he'll fall into a trap. That trap of regression. Another thing is that if a person can keep attentive enough while he's performing acupuncture, keep up with his case, be aware of what he's doing, he can't fall into that trap of repeating himself.*

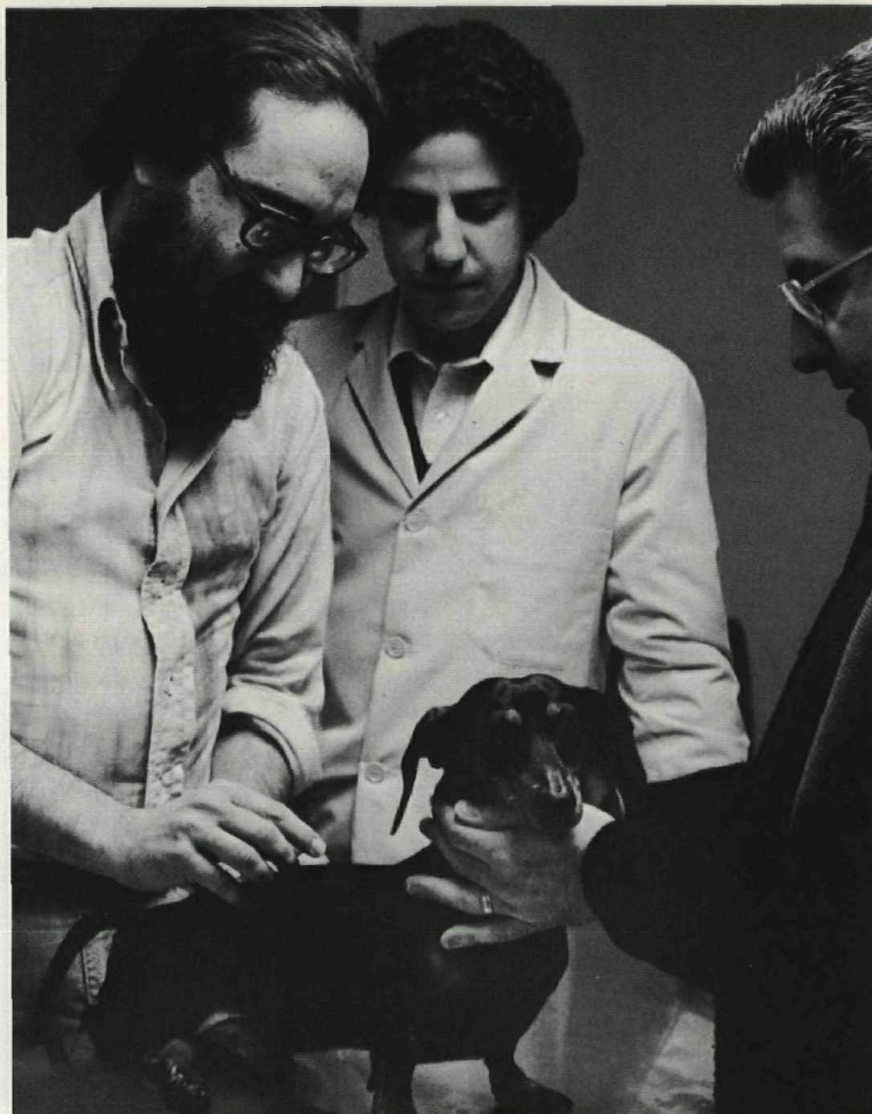
DG What about the case that's going to regress no matter what you do?

JO I've had cases where I've seen right from the beginning that I can't help the animal. But when an animal comes into the clinic, it's a very difficult thing to tell the veterinarians that it's a hopeless case. It's also a very difficult thing to tell yourself. But there have been cases that I've known have been beyond help. There are definite signs within every organism that tell you it's about finished, and there's nothing you can do, particularly with meridian therapy of drawing this energy. Because the energy in the organism is almost depleted. You may cause a phenomena of going downhill, coming uphill slightly, going downhill and coming uphill a little higher until the animal eventually fades away.

HW What about the ones you've seen respond quite well for two or three times and then regress for a short period and then come back up?

JO Why does an animal that we've treated conscientiously with all the precepts of acupuncture regress? If it isn't our mistake, it's a

Continued on Page 30



Dick Glassberg performs acupuncture — hoping that this dog will regain use of its hind quarters.

Acupuncture therapy rushes energy to the needy part of the body through points that often seem unrelated and far away. ▽



△

D.V.M., Alice De Groot, utilizes acupuncture in her large animal practice.

whether they are valuable horses like Secretariat or pets," Mrs. Tweedy commented.

"And," she continued, "the horse industry must make the nation aware of its economic and recreational impact. One way we can do this is by working together on something like National Ride for Research. Many people do not realize what our needs are and what a strong force we horsemen can be."

"When a community has a Ride for Research, the people who do not own horses will become more aware of the importance of our industry," Mrs. Tweedy added.

Ride for Research is designed for large clubs and organizations or for a group of friends who want to get together for a fun ride to raise funds for research into equine diseases.

PETS IN JETS

An article in the March issue of Consumer Reports, "Should Your Pet Travel by Air?", implied that, when animals are flown, their chances of surviving the trip are slim.

"That is simply not true," says Bruce Gebhardt, director of cargo sales and service for United Air Lines, which carries more pets than any other airline in the world.

Gebhardt explains that each of United's 362 jet aircraft has a cargo compartment or compartments designated specifically for the carriage of live animals. These compartments are heated and pressurized. While temperatures fluctuate in unheated, unpressurized compartments, animals are not carried in them.

According to Gebhardt, the inflight temperatures in the compartment designed for the carriage of live animals vary from a low of 40 degrees to a high of 90 degrees, with a norm of from 50-65 degrees in Boeing equipment and from 50-70 degrees in McDonnell Douglas equipment — a perfectly acceptable environment for dogs and cats.

"United carries about 1,000 pets, primarily dogs and cats, every week," Gebhardt says.

Gebhardt offers a primer for the first-time or infrequent shipper of animals, and a review for the professional:

- A dog's number one enemy is heat. Heat problems are encountered when aircraft are subject to long delays on the ground during hot days. We rely on the outside air to cool our compartments during flight, but have no way of cooling them on the ground. During the hot summer months, therefore, we advise our shippers to choose late

evening or early morning flights to avoid such a heat build-up problem resulting from take-off delays.

- Be certain the kennel is large enough for the dog. United has both purchase and rental kennels available, but none which will accommodate an animal heavier than 80 pounds. Shippers of larger animals must provide their own kennels.
- Know your dog. Like people, they have different temperaments. An easy-going dog will usually take a flight well, whereas a nervous dog may become agitated and try to escape the kennel, harming himself in the process. In consultation with their veterinarians, owners may want to tranquilize an excitable animal before the flight.
- A health certificate is required, primarily for each animal's safety, but also for the protection of any other animal with which it might come into contact.
- Puppies should not be shipped before they are 6 to 8 weeks old — and only after weaning. They should also have their distemper inoculation before shipment.
- If possible, let your pet get acquainted with his shipping kennel several days in advance.
- Don't feed your pet for 6 to 12 hours before departure; but some water is all right.
- Notify our reservations (if you are traveling with your pet) or air freight (if you are sending your pet unaccompanied) office as far in advance of shipment as possible. We'll help you decide on the details.
- Check your pet in early — 45 minutes before departure when he is traveling with you, 2 hours before departure when he is traveling as air freight. When picking up a pet as air freight, allow between 1 and 1½ hours at the air freight office after his flight arrives.
- Be certain that names, addresses, and telephone contacts for people who will be responsible for the pet at both origin and destination cities are clearly indicated and that those who are to receive the animal have been apprised of its time and place of arrival. It's a good idea, too, to call ahead to be certain the pet has indeed arrived.
- At the airport, never take a leashed dog on an escalator. Use an elevator or the stairs.
- Stop and allow your pet to exercise a bit on the way to, or at, the airport.

- For your pet's comfort and general safety, you must place him in the kennel at the airport and take him out — or arrange to have this done — at the destination.
- After the trip, help your pet quiet down. Keep his food and water to a minimum for at least two hours.
- Guide dogs for the blind travel free, at their masters' feet, in the cabin.
- The longer a dog's hair, the more difficult it is for him to breathe when he is agitated or uncomfortable.
- The shorter a dog's nose, the more difficult it is for him to breathe when he is agitated or uncomfortable.

"Hundreds of professional breeders and handlers, with very valuable animals, use our service on a continuing basis," Gebhardt says. "Would you ship a dog valued at \$20,000 with an airline you didn't trust? I wouldn't. Yet these dogs get no extraordinary handling — we handle every animal with the realization that he is very valuable, regardless of market price, to his owners. A 'Heinz-57' can be just as well loved as the 'Best in Show' at Westminster. Tens of thousands of first-time or infrequent shippers every year get the same expert handling of their house pets as the professionals get. We're professionals. We're proud of our people; and we're proud of our record.

"To sum it up, a little planning and some common sense on the shipper's part goes a long way toward insuring the routine, safe flight of an animal."

FOR HIM OR ME?

by Louise Snow

Four-year old Scott wanted a dog for his birthday and his parents agreed that this was an ideal gift, to be chosen with great care.

Scott had second thoughts when faced with his gift, however. He peered up at the young Great Dane fearfully then asked in a trembling voice:

"Am I for him or is he for me?"



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SUMMER PET PRECAUTIONS

Animals, like humans, enjoy physical comfort. And animals, like humans, can suffer from excessive heat, such as that generated by the blazing sun on a clear summer's day.

However, simple precautions and the exercise of good judgment can alleviate many of the hot weather traps that might prove fatal to pets or cause painful animal discomfort.

1) Parked cars with windows closed are potential death traps for animals locked inside. If an animal is left in a parked vehicle, two car windows should be opened slightly, at least one inch, to provide cross ventilation. The car should be parked in the shade, and the driver should make a mental note of the shade duration. The travelling sun can quickly dispel the shade and convert a comfortable car interior into a lethal hot box for the trapped pet.

On a hot day the inside of a car heats very rapidly. On an 85 degree day, for example, the temperature inside the car, even with the windows slightly opened, may reach 102 degrees in 10 to 20 minutes. In 30 to 40 minutes it may rise to 130 degrees. On warmer days, it could go even higher.

2) Heatstroke is a perennial danger to dogs and cats during periods of tropical weather. Causes of heatstroke include high temperatures, high humidity, lack of adequate ventilation, excessive physical exertion, obesity, heavy coats of hair and lack of water. Heatstroke strikes suddenly with exaggerated breathing, vomiting and subsequent collapse. Cold water should be applied instantly to the heat stricken animal. Small animals respond best to immersion in ice cold water. If at all possible, get the animal into shade.

3) In the area of animal exercise during hot seasons, late evening or early morning hours are best suited to pet comfort and safety. Late evening feeding is recommended. Dogs tend to eat lightly during hot spells. Food containing carbohydrates should be limited or completely eliminated. Cool clean water should be available to the pet 24 hours a day.

4) Veterinarians subscribe to a reduction of heavy fur animal coats

under hot weather conditions, but warn against clipping too close to the skin. Nature has provided the hair as a protective covering to shed the sun's rays, and some of the hair should remain intact.

5) Pets fortunate enough to enjoy an air-conditioned environment should not be allowed to remain in the direct draft of any cold air fan. This caution applies particularly to a female and her pups.

6) If it is absolutely necessary to ship a pet during times of peak temperatures, make sure the crate is properly ventilated. Attach a full itinerary to the shipping crate with instructions to water the animal at intervals. Never start a shipment to arrive on a Saturday, Sunday or holiday. Express offices in many towns are closed on weekends and the pet may be neglected.

7) For dog owners planning a travelling vacation, it's a good idea to check the pet into a boarding kennel. The pet will be happier, probably, and the owner can leave with the knowledge that absence makes the heart grow fonder.

However, if the dog is penciled in as a travelling companion, have it checked by a veterinarian for good health. Make sure the dog has had its rabies and distemper shots. Bathe and groom the pet for the trip. Pack a separate suitcase for the dog, including a favorite toy and blanket. Buy bottled water to avert diarrhea, and take along the brand of dog food generally provided at home. If flying, try to ship the dog as excess baggage on the same plane on which you travel. Custody of the dog, on arriving at a destination, is expedited.

8) Persons taking pets abroad should check the local home-based consulates of the country to be visited for the rules and regulations governing the conduct of animals on foreign soil.

by Robert I. Rush
General Manager
Los Angeles City
Dept. of Animal Regulation

ACUPUNCTURE

Continued from page 26

mistake that's been made by the people who are watching the animal. Because acupuncture is such a subtle system of medicine. We often say, don't wash the animal after treatment for 36 hours. Don't give the animal cold water. These things can change what we've just done and give an opposite effect. Again, it can be the fault of the practitioner. Maybe he's tired. It's not a good thing to work and work and work to a point where you know you're tired because you can no longer think about what you're doing. *With acupuncture, it's really necessary to be able to change your ideas. You can't say - "Well, this worked last week. I might use it this week." That's where your mistake might be. Because you're not thinking you'll get an opposite effect.*

DG In talking about regression, we often see these animals 3 days after treatment. They get worse. Dr. Shin has told us that this is sometimes a *good* sign, and indeed it turns out that it usually is. Invariably it seems that by the fourth or fifth day the animals are showing good improvement. That is a form of regression I would say. Can you explain why that happens?

JO We only see what you're talking about with a blockage of energy. We'll use definite techniques of bleeding and other forcible techniques of drawing this energy to a certain point. When you have a blockage of energy you know that the phenomena is not going to have a natural tendency by itself. That's why you're using the needle in the acupuncture. Once you get the animal to respond, it takes about 3 days, in my estimation, for that energy to hit the actual point you've been manipulating. Once it hits that point, all the symptoms that the animal has

HAVE PET WILL TRAVEL OR HAVE BOA NO GOA

by Lori Ann Jones

In the travel industry we receive so many inquiries from people wanting to travel out of the country with their pet. My advice to anyone wanting to travel with their pet is, don't do it. If you love your animal, leave it in a kennel or with a trusted friend.

One lady traveler wanted to take her pet out of the country and after I explained the many problems and laws of quarantine she did decide to leave the pet with a neighbor, however, the family pet turned out to be a 5 foot long boa constrictor. *Now can you imagine a 5 foot boa constrictor loose on a 747 over the mid-Atlantic!*

had will suddenly manifest. To explain it physiologically is really hard to do. But once the energy has arrived at the point where you inserted the needle, the animal will actually suffer those effects because it will intensify those effects. It's hard to really explain why this happens.

DG *As if the energy breaks loose at that point and hits the point.*

JO Like the energy breaks loose and hits the animal. For example, let's say you were drunk for 5 days and suddenly you were sobered up. That soberness would shock you if you were accustomed to being drunk. It's the same with the animal. Suddenly the energy arrives at the point to which it was called. The animal is not accustomed to it. It's a shock to the body. So the animal regresses even more. Covers himself. It takes a few days to accustom himself to it. That's why we say on the fourth or fifth day you'll see the animal get better. The animal will understand that he is better.

DG What happens in cases where the animal is treated every single day? Do you still see this regression?

JO Not as much. We don't usually have the opportunity as acupuncturists to see an animal every day. If you did you'd have a much closer view of what's happening to the animal. So, every time you treat the animal you look at him. You notice the state he's in. We usually only get to treat an animal once a week. During the week the animal has been through a number of things that we never find out about.

EDITOR'S NOTE: Thanks to the cooperation and assistance of NAVA, Animal Cavalcade was permitted to further pursue its research into acupuncture as a tool of veterinary medicine. The conclusion of this story will appear in Part III, Sept./Oct. issue.

RHINO

Continued from Page 8

passengers were alerted to attention by a tremendous jolt, and looking out of the windows, they saw a Rhinoceros scramble to its feet and stagger off with much snorting and head shaking.

We may conclude that what is occasionally reported as a Rhino charge is a desperate attempt by the frightened Rhino to escape the unfamiliar. We know the Rhino suffers from poor eyesight and may run toward the hunter accidentally. Any man or animal in the path of such a charge would likely be spitted by a horn or trampled in the dust. A great deal of the ferocity of the Rhino is made up of fear. They have the habit of charging because they have very few natural enemies. Any animal that sees a Rhino coming, sensibly gets out of its way. And it is advisable to move with lightning speed where charging Rhinoceroses are concerned!

The hoofed Rhinoceroses certainly aren't pretty animals, but they are wonderfully odd. The Black Rhinoceros of Africa really has a dark brown skin whereas the White Rhinoceros of Africa isn't white at all, but grayish black in color. Rhinoceroses are big, heavy, stout and awkward-appearing animals. Their legs are ungainly, short and stubby. Their armor-plated skin glistens and the bumps, called "tubercles," stud their shoulders and flanks. You won't overlook a pair of oversized ears. They are fringed with stiff black hair, sprouting from the head. A short hair-tipped tail hangs in a groove on the rump. You may not believe it the first time, yet it's really there: a single foot-long horn sprouts from the nose. The peculiar head is almost unbelievable, revealing a long-lipped, quizzical, nightmarish face. Each foot has 3 toes, marking the Rhino a member of the greatest of animals called PERISSODACTYLS, meaning uneven-toed. Animals having an even number of toes, such as cows, are ARTIODACTYLS or even-toed.

An arresting feature about the

Rhino is its "tick" birds. These are small birds that roost on his back picking away at the lice which always inhabit his thick hairy hide. The minute anyone comes around to disturb the timid Rhino, the tick birds act as an excellent guard. They begin to hop off and on and screech a warning.

A Rhinoceros usually lives alone. In striking contrast with most gregarious animals of the wild, he is a solitary creature. The Rhino wanders peacefully in the grasslands of India or in the thick brush of Africa. Sometimes he lumbers over to the water hole. There he drinks and rolls in the muddy water. When darkness settles over the land, he may be seen feeding amiably on green shoots and branches.

The female Rhino has a single young one at a time. When some kinds of Rhinoceroses travel, the calf follows right behind its mother. But in other species, the mothers drive the young one ahead of them, and poke it with a horn if it goes too slowly.

Today, the only hope for the Rhino's survival seems to lie in zoos. One of the most successful breeding colonies is at Basel, Switzerland, where 3 calves have been born. Fairly recently, a shy little male named Lasai, meaning "Fat Boy," was shipped from Basel to the zoo at San Diego, California. A year later he was joined by a one-thousand pound female who had been captured in Nepal. When these 2 youngsters mature, perhaps they will have babies, giving the gentle-natured Indian Rhino another chance to live.

Should these fascinating, ancient-looking creatures vanish from the earth, our children will be the greatest losers. Man is responsible for the disappearance of many irreplaceable Rhino species. Man's needless slaughter of so many animals of the earth is staggering. Some of our wild animals are lovable and many more are curious, wonderfully curious. Let us do what we can to preserve our wild life. Let us try to keep our interesting animals with us always. Not only do animals have the same right to live as ourselves, they are of vital importance in the balance of nature.

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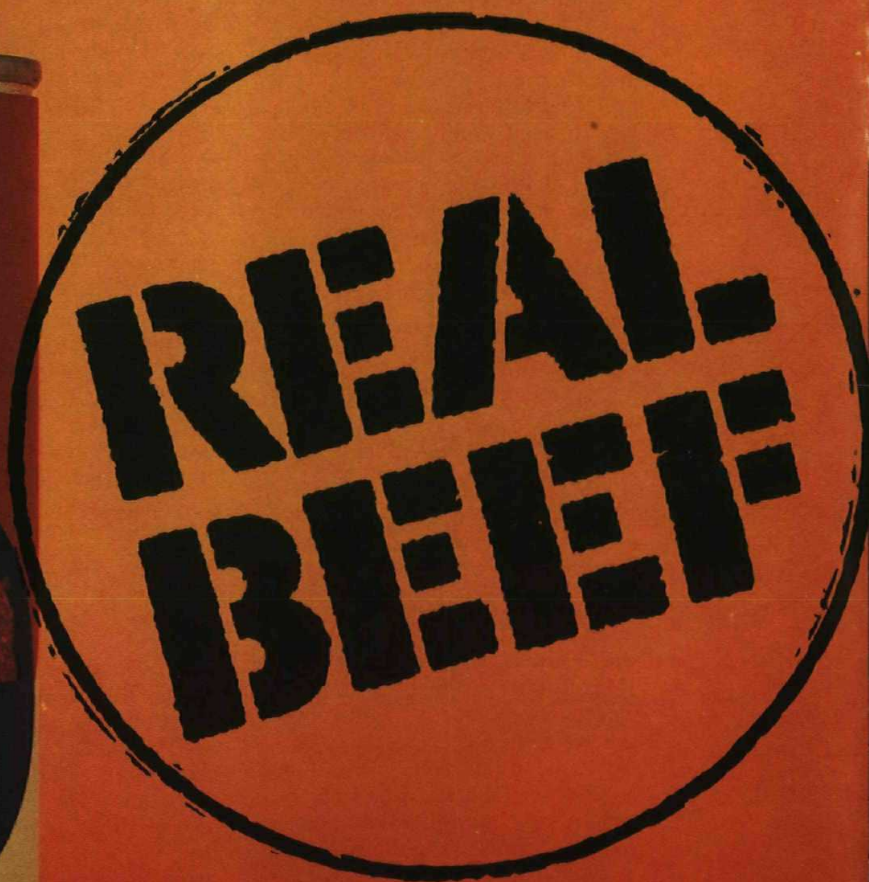
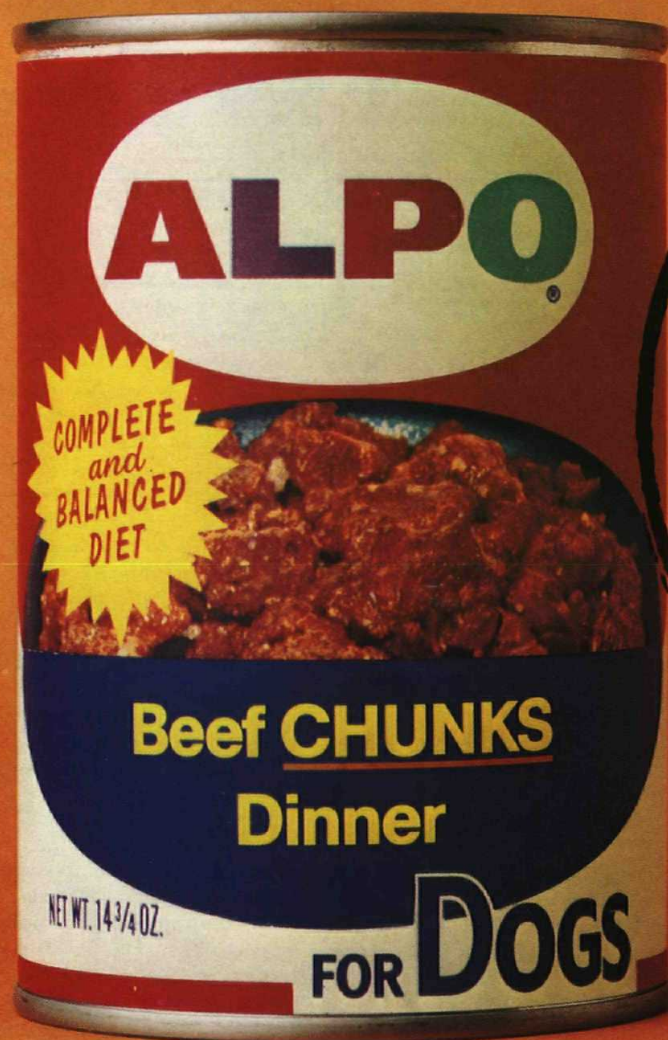
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