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Animal Health

Volume 9/Number 6

November/December 1978

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TODAY'S ANIMAL HEALTH is published bi-monthly by the nonprofit charitable Animal Health Foundation 8338 Rosemead Boulevard Pico Rivera, California 90660. Single copies \$1.25. 6 issue subscription, \$4.50. Copyright, 1978, Animal Health Foundation.

TODAY'S ANIMAL HEALTH is published to inform animal owners about responsible animal ownership and animal health. There are subscribers in all 50 of the United States and in 17 foreign countries. The magazine is used as a tool for client education by veterinarians and for educational purposes in classrooms and school libraries.

The ANIMAL HEALTH FOUNDATION supports research in animal health and pet population control. The Foundation also provides free veterinary care to pets belonging to elderly persons living entirely on social security benefits and those living on Aid to the Totally Disabled in the Southern California area. This program is made possible through the cooperation of local veterinarians. These activities are supported by donations from the public and can be maintained only through your continued financial support. Your contributions to the Foundation are tax deductible.

COVER PHOTO:

Compliments of Norden Laboratories

Today's Animal Health 3

dialogue

In the May/June 1977 issue of T.A.H. you published my letter in 'Dialogue', on pets and travel. I mentioned the Airlines and their uncompromising regulations for pets. So I stayed at home with my four legged friend, until June of this year, when we were invited to join friends and another Dog Person, to travel by automobile to Oregon.

Mr. and Mrs. Rob't Pick and Bitsy! Bitsy is of Poodle & Dachshund origin and a more cuddly animal has never been born! My friend 'Pepi', is a 14 lb. Cocker-Poo, who exudes love and affection for me every day of her life. The other four wheeled animal was a big Buick Wildcat, called 'Kitty'! She too performed magnificently. Bob drove and Bitsy rode between her two owners in the front seat. Pepi and I had the whole back seat to spread out, and we surely took advantage of that!

Now comes what appeared to be a problem for me, in that Pepi is a heart patient. Her Veterinarian has put her on a restricted diet of Vegetables, no fat — no salt, meat, chicken & fish. This included some starches such as rice, noodles, etc. She has thrived in her advanced age of 12 years on this diet.

We drove about 12 hours each day, including all of the necessary stops for food and to replenish the ice to keep Pepi's prepared food cold. Kitty was a cool cat, so we were comfortable when the weather turned hot outside. Pit stops were easy to find for our pets, and so were the brief dining stops for us. At no time were our dogs out of our sight. Polite demands of restaurants to seat us within view of the car and animals were easy. Overnight stops welcomed us going and coming. The accommodations were very nice, clean, and comfortable, and there were areas for walking our dogs.

Pepi and I were dropped at Eugene Oregon Airport, where a cousin met us, and we drove to her home in Florence, near the coast. Bob, June, and Bitsy went on to Portland for their visit. Our vacation included long walks on the beautiful white sand beaches along the Pacific Ocean, viewing the grotesque but art form driftwood washed in by storms. Residents in the area use the smaller pieces to decorate their gardens and to act as address posts, or just rustic decor around their homes.

Our walks also included the trails through massive growth that is spellbinding. The weather was perfect, and the one night of rain put a new brightness to all outdoors.

Pepi and I enjoyed every minute of our stay, and were again picked up at Eugene Airport for the trip home. The two dogs were remarkable travelers. Because of their training, their owners' love, and planning for their needs, their lives and habits were kept as near as possible to what they were used to at home! It can be fun to travel with animals, if thoroughly planned for their safety and comfort, and it relieves your worry of what might happen to them when left with someone else or in a strange environment.

Betty Sparks Long Beach, California

I am writing in response to Dr. Plamondon's article in the July-August issue on **Urban Pet Overpopulation: The Responsibility of the Owner.** As a part-time employee of an animal shelter which is run partly by the city and partly by a non-profit organization dedicated to finding homes for these homeless animals, I can certainly vouch for the terrible truth of this article.

The shelter where I work offers a very low cost spaying and neutering service in conjunction with a local veterinarian. In fact, we pay the actual cost of the operation, requiring the pet owner to make only a small donation to help meet our expenses. In spite of this, all of us who work there find ourselves constantly trying to convince prospective pet owners that it is not necessary to Tabby's or Fido's physical or mental health to have "just one litter." We do manage to get through to some of these people, but there are times when we are just too busy to sit every adoptive owner down and explain the harm he or she is doing by letting their new pet reproduce unnecessarily.

Would it be possible to purchase reprints of Dr. Plamondon's article? I'm sure if we could hand these out routinely to every person who adopts an animal from our shelter, along with our own forms explaining our spayneuter service, we would get this very vital message across to many more people than we are now reaching. If reprints are not available, could you let me know how I might contact Dr. Plamondon to obtain permission to use part of his article for an information sheet we could make up ourselves?

In closing, I wish to **thank you** for a very fine magazine. Your articles have helped me not only in my job, but also in my college studies, as I am a pre-vet major. I have been a subscriber for the past four years, and plan to remain a subscriber for a long, long time to come!

Marie B. Kintaro Schertz, Texas

We don't have reprints, but you may feel free to reproduce the article and use it in your program.

- Editor

Enclosed find my check for 1 year's subscription to Today's Animal Health.

Your magazine is great!

Pat Wright Alta Loma, California

Thank you for the reprint of Dr. Ryan's article. It was very interesting to see you face the same problems I do in practice.

Sherman Chessler, DDS Northridge, California

I noticed in reading the July/August 1978 issue of Today's Animal Health that the Animal Health Foundation supports research in animal health and pet population control. I would be interested in obtaining information, deadline dates, and application forms for applying for such support.

For the past two years we have had a pilot study underway at the Cornell Feline Research Laboratory to Continued on page 23

HEARING AND EAR PROBLEMS OF DOGS AND CATS

PART VI EAR DRUGS by W. R. Rose, D.V.M.

A nimals with special disorders must be treated with A extreme care (e.g., heart disorders, kidney problems, breathing problems and allergic conditions). Animals can have many adverse reactions to drugs just as people can. They can go into shock and die from penicillin or aspirin! Cats are especially sensitive to drugs such as aspirin, penicillin and other antibiotics.

If you know of any history of a drug reaction in your pet, be sure to inform your veterinarian before he prescribes a medication or gives an injection. It is a good idea to keep the name of the drug with your pet's medical record because the specific name of the drug can be very helpful.

Most drugs have several names:

- A. The Generic Name this is the actual chemical name of a drug. Example Tetracycline hydrochloride.
- B. The Brand Name this is a simpler name bearing the manufacturer's trademark. Example Tetrashel.

Other names are of little value in identifying a specific drug. Two pills may look very much alike but be entirely different in strength and composition. It is for this reason that it is a good policy to have the name of the drug placed on the label by the veterinarian or pharmacist.

Be sure that you understand the directions given on 6 Today's Animal Health the label. Keep all veterinary medications out of the reach of children. Label all veterinary drugs for veterinary use only. Always read the label before giving a drug. Give only as directed — more is not always better. Do not keep left over drugs because they may lose their potency. Do not use a neighbor's animal medicine just because it looks like a drug you once used.

The number of drug remedies for treating ear diseases in dogs and cats is astounding. A drug can be broadly defined as any chemical agent that affects living tissue. Drugs may come from many sources, mineral, animal, vegetable or synthetic. Most drugs today are compounds synthesized in the laboratory. The study of the composition and action of drugs is called pharmacology. Pharmacy is the art of preparing drugs for use.

Drugs available for medical use can be divided into several categories:

- A. Over the counter drugs, nonprescription drugs: these preparations can be purchased by anyone without a prescription.
- B. Prescription drugs: dispensed by a pharmacist under the direction of a licensed practitioner of veterinary, human or dental medicine.

Because of the bewildering array of drug preparations, the pet owner needs some guidelines for choosing the best drug for a given ear problem. Not only is the specific drug important, but the dosage form. A drug is only good if it is used as directed. If you can not get a pill or capsule in a dog or cat, it is of very little value. There may be another dosage form that can be used. The common dosage forms found in veterinary preparations used in treating ear diseases today are:

- A. Topical preparations
 - 1. ointments
 - 2. lotions
 - 3. drops solutions or suspensions
- B. Oral Systemic preparations (solid)
 - 1. tablets
 - 2. pills
 - 3. capsules
 - 4. powders
- C. Oral Systemic preparations (liquid)
 - 1. waters
 - 2. syrups
 - 3. suspension
- D. Parenteral preparations (injection)
 - 1. intradermal (in the skin) injections
 - 2. subcutaneous (below the skin) injections
 - 3. intramuscular (in the muscle) injections
 - 4. intravenous (in the vein) injections

Parenteral preparations should only be given by a licensed veterinarian or under his direction. Many injections must be given in a specific manner to be effective or to prevent severe tissue reactions. Convulsions and death of the animal can result from giving the wrong drug or wrong dose by injection.

Some solid oral preparations can be given in or with food. This may facilitate the taking of a drug by the animal. If you know that you are going to have trouble giving an oral solid preparation, ask your veterinarian or pharmacist if there is another dosage form that the drug comes in. If there is no other dosage form, ask your veterinarian how you can get the drug into the animal. There are some tricks that can be used.

All drugs can produce undesirable side effects (contraindications). That is to say that the drug itself can cause illness. A pet owner who is medicating a sick animal should be aware of these contraindications if they should occur. Some of the common reactions to veterinary drugs are:

- 1. nausea and vomiting
- 2. pain, redness, irritation
- 3. intense thirst
- 4. allergy reactions, itching
- 5. salivation
- 6. ravenous appetite
- 7. frequent urination
- 8. diarrhea
- 9. bleeding
- 10. balance and/or hearing problems
- 11. central nervous system signs (seizures, convulsions, loss of consciousness)

The veterinarian should be notified if any of the above contraindications occur. Stop treatment until professional advice can be obtained.

One more precaution should be mentioned here. Be very cautious of home remedies. The ear is a delicate structure and can be damaged by caustic drugs.

Treatment (therapeutics) for ear disease should be specific. No one drug will cure all problems. This is why it is good to have a diagnosis before treatment. Topical ear preparations have specific actions.

- 1. Ear cleaning preparations
- 2. Those that kill or inhibit bacteria
- 3. Those that kill or inhibit fungus
- 4. Those that relieve pain
- 5. Those that reduce swelling and inflammation
- 6. Those that kill parasites (mites, ticks).

If you are using an ear cleaning or antiparasitic drug to treat an ear infection caused by a bacteria, chances are that you are wasting your time and money. If you wish to buy an over-the-counter preparation, ask your veterinarian if one is available. Some drugs are not available except by prescription. If your veterinarian hesitates to recommend a product, it may be because he feels a controlled prescription drug is best or he may fear misuse of the nonprescription preparation. If you are already using an over-the-counter preparation, show it to him and ask for an opinion.

Antibiotics are drugs that kill or inhibit the growth of bacteria. Some antibiotics are very specific in their action against certain types of bacteria only. No single antibiotic will kill all types of bacteria that infect ears. An earlier section discusses the value of laboratory cultures and a specific diagnosis. Some commonly used antibacterial agents used in ear medicines are:

- 1. Penicillins
- 2. Dihydrostreptomycin
- 3. Chloramphenicol
- 4. Neomycin
- 5. Sulfonamids
- 6. Tetracyclines
- 7. Nitrofurazone
- 8. Bacitracin
- 9. Gentamicin
- 10. Polymyxin B

Some commonly used antifungal agents used in veterinary ear medicine are:

- 1. Nystatin
- 2. Amphotericin B
- 3. Griseofulvin
- 4. Cuprimyxin
- 5. Thiabendazole

Some commonly used agents that reduce swelling and inflammation in veterinary ear medicine are:

- 1. Prednisolone
- 2. Prednisone
- 3. Triamcinolone
- 4. Methylprednisolone
- 5. Dexamethasone
- 6. Hydrocortisone
- 7. Cortisone

Some common pain killers used in veterinary ear preparations are:

- 1. Tetracaine HCL
- 2. Metycaine HCL
- 3. Phenacaine HCL
- 4. Lidocaine HCL
- 5. Butacaine Sulfate

Some common mite killing compounds used in veterinary ear preparations are:

- 1. Rotenone
- 2. Benzene hexachloride (BHC)
- 3. Pyrethrin
- 4. Ronnel
- 5. Methoxychlor

This last list of compounds are all poisons (toxins). They kill the parasitic mites by causing convulsions and paralysis. Some of these preparations should not be used in young animals or cats. So be sure to read the label before administering. *Continued on Page 30*





by D. C. Blenden, D.V.M. Photo: Norton Laboratories

> The veterinary medical literature has for over a decade contained editorial advice against the veterinarian encouraging or participating in the ownership of skunks as pets by descenting or vaccinating against rabies. We have had some close calls in Missouri on this subject, and considerable expense, time and anxiety have been expended. Fortunately, nothing more was lost.

> Recently, the Oklahoma Department of Health Laboratory diagnosed rabies in three separate pet skunks in unrelated situations, two on the same day. The first case was a typical story of a skunk kitten, estimated to be two months old, which was captured in broad daylight. The kitten was taken to a place of business where several employees were placed in contact, and then to a home where several children had contact, one being bitten. The kitten promptly died and was confirmed as having rabies.

The second skunk was captured as a kitten, descented and given a modified live virus vaccine. Two years later the skunk became ill, bit one man and exposed two children to a lesser degree. The skunk was then confirmed to have rabies.

The third skunk was purchased at an open market in Texas, and had been vaccinated and descented. The owner thought the skunk was completely safe. But after coming into the owner's household, that skunk developed rabies.

In the first two incidents, 15 persons received antirabies prophylaxis at an estimated

direct dollar cost of \$7500. The third skunk exposed 27 persons to the disease. The hidden costs of work time lost, travel, etc., made the overall cost larger. The risk of a human rabies infection is real and the anxiety produced is tremendous.

These episodes, again, emphasize the fact that the skunk is a potential source of rabies, regardless of its age and geographic location. The "pet" skunk developing rabies usually exposes many persons because people are generally curious about these unusual pets, even when they get sick. Vaccination of skunks against rabies is a totally untested procedure. We do not know whether any vaccine produces immunity, whether the natural onset and clinical course of rabies may be masked or modified by vaccination, or whether a live virus vaccine can in fact produce typical or atypical rabies in the skunk. The owner is provided with a false sense of security when a veterinarian encourages domestication by providing vaccination, descenting or other pet care. Further, the normal behavior of the wild skunk provides direct clues as to its health in an accidental bite incident. The semidomesticated skunk does not behave normally and this indication is lost.

The skunk is a wild animal even though he is easy and enjoyable to domesticate. The skunk should be allowed to remain and be enjoyed in the wild. The veterinarian should play no role in encouraging people to have skunks as pets.



Reprinted from the University of Missouri Veterinary Medical Review Dr. Koch is a trustee of The Foundation for Veterinary Ophthalmology, a non-profit, tax-exempt organization. The goals of the foundation are to raise funds to train people in the field of veterinary ophthalmology by making fellowship and residency programs available to them. The training is available at selected centers in the United States. The work of the Foundation is supported completely by donations from people who are interested in the welfare of animals. If you would like to help, your tax deductible contribution can be sent to: The Foundation for Veterinary Ophthalmology, 'c/o Dr. S. Koch, 6223 Richmond Highway, Alexandria, VA 22303. An annual report will be sent to all contributors when it is available.

DISEASES

Drawing by Kate Cameron, A.H.T.

IRIS

CORNEAL ULCERS

By Seth A. Koch, D.V.M.

The cornea is the front window of the eye, the clear section that we see the pupil through. It is beyond the scope of this paper to explain all the mechanics of the cornea and its role in the functioning of the eye, but when the cornea isn't clear, no matter what the cause, it is an abnormal situation.

PART II

PUPIL OPENING

RETINA -CHOROID

SCLERA

IENS

CILIARY BODY - CILIARY (LENS) HUSCLES

The most common corneal disease that the ophthalmologist (and probably the general practitioner as well) sees is the corneal ulceration. An ulcer is a loss of the very superficial layers of skin, no matter where that skin is. For example, if the skin of the intestinal tract is lost, we have a stomach ulcer. The skin of the eye (which happens to be the clear cornea) can be lost partially as well and we then have the formation of an ulcer. The ulcer occurs because of a scratch or a germ getting in the eye or a virus. In any event the eve then becomes uncomfortable because the loss of tissue becomes an

irritant and the nerves of the eye become sore. Then they react to the irritation and the dog or cat walks around with his eye at half-mast. The eye becomes full of matter and the cornea is not clear. Don't waste time at this point. Get your pet to the veterinarian.

In most cases, early recognition of the problem and early treatment allows the eye to become healed and back to normal. Sometimes, though, it requires much more extensive treatment including surgery.

Don't be your own doctor. Just make sure that when you see a "cloudy" cornea that you immediately take your pet to your veterinarian for care. If the doctor thinks that the problem is more than just a "simple" ulcer (which incidentally, should heal in 48-76 hours), then hopefully you will be sent on to a specialist. FOR YOUNG PEOPLE

The Akita is a hardy, canine species that originated in Akita Prefecture, Japan over 100 years ago. Although the breed was originally developed as a fighting dog, they also make excellent family dogs and are now used almost exclusively as watch-dogs. Their devotion to their master, gentle nature with those they know and ability to live outside all year round make them a most prized breed in Japan. Hachi was an Akita born late in 1917.

Early'in 1918 Hachi, as a puppy, was presented by a friend residing in Akita to Professor Eizaburo Ueno of Tokyo University.

Shibuya, which is one of Tokyo's highly developed commercial areas today (shops, department stores, theaters, bars, cabarets, restaurants, etc.) was, in 1918, considered to be "out in the suburbs." Therefore, it was natural for domesticated dogs to roam free at their master's discretion. There were very few main roads, almost no traffic, not many people . . . in fact, Shibuya Station was the biggest building in the area at that time.

It became Hachi's duty to accompany his master to the station every morning, and every evening, without any prompting from the professor's wife, Hachi would return to the station and wait in order to guide the aging teacher home safely.

Then in May of 1921 Dr. Ueno died suddenly one afternoon during a lecture at the university. However, it wasn't until long after the professor died that Hachi and his actions began to attract any real attention.

For you see, Hachi kept on making that trip to Shibuya Station every evening, where he would wait patiently for his master to return. Long after night fell and the roads became deserted, Hachi would return home and sit by the "genkan" (front gate) until called for dinner. After eating, almost reluctantly, Hachi would resume his vigil at the gate and wait until all the lights were turned out. Then, and only then, would he retire to his little house in the garden.

In the spring of 1927, a local newspaper featured Hachi and his

devotion. For six long years (that's some 2,190 times for trivia fans), Hachi had waited at the station for his master. The dog became the talk of Tokyo.

- (

While Hachi was still alive and making his daily trips, Japanese folk singers began to stage his story. Soon many movies depicted Hachi and several even used the dog as their main theme. Hachi was even written into children's textbooks and school teachers told their students about Hachi in classrooms all over the country. Even today there is not one schoolchild in Japan who does not know Hachi's name and his story.

A wave of donations came to Shibuya from well-wishers from all over Japan, the wealthy and poor alike. The Mayor of Shibuya decided to use the money to build a statue of Hachi for all people to remember. It was completed and unveiled in 1930.

Yes, Hachi had become so loved and enamored by humans that a memorial to him was built during his own lifetime. A life-sized statue which he occasionally sniffed at with curiosity.

In the spring of 1931, Hachi, then 14 years old, died a quiet death of old

age at Professor Ueno's home. It has been reported that the good professor's wife held Hachi in her arms during those last moments. "I knew where Hachi wanted to go; I could tell it in his eyes . . . he wanted to make one last trip to the station. Fortunately Hachi died before I did. If I'd gone first after my husband, I am sure the poor dog would have been completely lost."

By Bob Dunham

MESA

During the war years the statue of Hachi-koh ("koh" is a Japanese form of endearment) was scrapped and melted down to make parts for train engines. However, Shibuya Station did not lose the statue for very long. It was recast in 1944, a year before the end of the war, and there Hachi still sits to this day.

The latest formal tribute to Hachikoh was his 37th anniversary held in 1968. On that day Tokyo and even the whole of Japan honored Hachi and his faithful heart by decorating the statue with lanterns, cherry blossoms and carnations.

In recent years Shibuya residents honor Hachi every March 8th. "I'll meet you in Shibuya in front of Hachikoh" has become a by-word for millions of Japanese sweethearts.



A DESPICABLE PHENOMENON

By Bruce Kaplan, D.V.M. © 1977 The Courier-Journal Louisville, Kentucky

"Puppy Mills" are one of the most despicable phenomena on the American scene of cruelty to animals. These operations are where individuals or kennels breed or massproduce animals indiscriminately, often under inhumane conditions. The object — to have as many animals as possible to sell for profit.

Inspections by the United States Department of Agriculture (USDA) and by humane society officials have uncovered numerous substandard conditions. These include poor breeding stock with inherited defects, lack of proper housing, food and medical attention and so forth.

This practice adds to the surplusanimal problem. It also deprives consumers of their right to the quality pets they think they are paying for.

"Puppy Mills' have been located all over the country. A few have been reported in this region. However, they appear to be concentrated in Kansas, Missouri and Iowa. Philip E. Steward, field services investigator for the Humane Society of the United States, says this is because "land is inexpensive, there are open, wide areas and laws are not restrictive."

The humane society's information director, Guy R. Hodge, says that although distribution of these puppies is widespread, "a substantial portion goes to the east coast, to large population centers like New York, 12 Today's Animal Health Philadelphia and Boston." In an effort to curtail this, the humane society has begun taking offenders to court. It has also instituted an important publicity campaign.

Hodge suggests this is a deeply entrenched form of cruelty going back 25 to 30 years.

The humane society is critical of USDA. Steward says: "The crux of this particular problem is not lack of funds for the United States Department of Agriculture; they have the funds to send inspectors to the facilities and approve them. USDA seems bent on avoiding a confrontation that would put a small businessman out of business, regardless of how many animals suffer if the USDA inspectors were doing their job, the puppy mills would be forced to comply with the Federal Animal Welfare Act or close up shop."

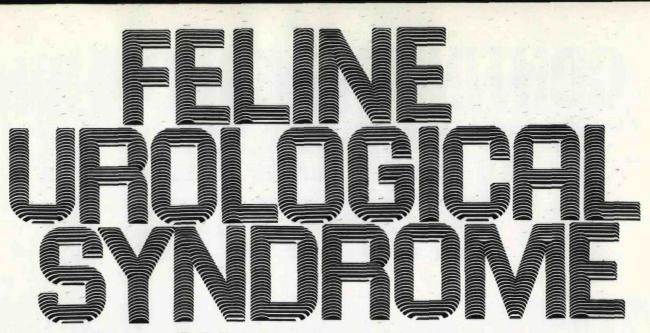
Dr. Robert D. Whiting, animal-care veterinarian for USDA, in Hyattsville, Md., says this criticism is an oversimplification of the problem. "Our people in the field do other work. Ninety per cent of it is involved with the top priority of our department, namely animaldisease-eradication programs for the nation's livestock. Only seven to eight per cent of the worker's time is devoted to animal-welfare work. Of course, we have to be careful to protect the interest of these small businessmen in our free-enterprise system. Many are conscientious, with a small number giving the others a bad name."

The Hyattsville office has five staff veterinarians. As of December 1976 there were 514 veterinarian-inspectors for the entire United States available to inspect dealers. There are also 563 "animal-health technicians" (trained non-veterinarians) who investigate dealer premises. Kansas alone has more than 1,300 dealers.

Dr. Whiting is sympathetic to the problem. But he went on to point out that "we need additional personnel. And the government, at this time, is reducing employees due to budget allowances." Apparently, some of the inspections have been less than satisfactory in the eyes of USDA and the humane society.

USDA is presently considering trying to make a separate animal-care unit under the "Veterinary Services" branch in an effort to "administer the Animal Welfare Act and the Horse Protection Act more efficiently." Presumably this would mean better trained personnel with more consistent, fair inspections.

In this columnist's view, humanitarians can help by supporting the humane society's important efforts. The USDA should be strongly encouraged to continue improvement of its enforcement procedures.



By R. G. Lanfranchi, M.Sc., M. Med.Sc.

The Feline Urological Syndrome (FUS) occurs when a blockage is formed in the urethra (the tube through which urine is discharged from the body) due to the accumulation of "gravel" and mucoid material. The "plug" which forms inhibits the normal passage of urine, preventing the animal from excreting the body's metabolic wastes (mostly by-products of protein metabolism). This in turn will cause the kidneys to dysfunction and "spilling" of these waste products into the blood stream will occur causing internal poisoning (uremia).

The etiology of FUS is still under scientific investigation. Viruses, bacteria, metabolic imbalances, neglected infections elsewhere in the body, male cats licking at their penes and numerous other potential causes are being examined. To date none of these have proven to be the sole cause. It may be that there is no single cause but a combination of factors.

CLINICAL SIGNS

- 1. Housebroken cats suddenly change their habits, urinating on the floor, rug, etc.
- Frequent visits to the litter box where the cat will squat and strain trying to urinate. Unfortunately many pet owners initially mistake this sign for constipation.
- 3. Traces of blood in the urine are found and may be accompanied by a strong ammonia-like smell.
- 4. Lethargy and anorexia (loss of appetite).
- 5. Excessive licking at penis.
- 6. When the condition becomes more serious:
 - Vomiting
 - Depression
 - Dehydration (loss of skin elasticity)
 - A urine-like smell from the mouth

DANGERS

Once the animal becomes blocked and cannot urinate, there is a possibility of convulsions, coma and death within 36 hours. It should be remembered that the animal suffers severe pain from the onset of the condition.

YOUR JOB

Take your cat to a veterinarian as soon as possible. If the condition is not attended to immediately, the cat will become uremic and secondary kidney degeneration will occur. At this point the prognosis is poor.

THE VETERINARIAN

Once the diagnosis of the condition is confirmed, relief is absolutely essential. This is accomplished by catheterization (passage of a fine tube into the urethra) and flushing with sterile fluids and antibiotics. This method is usually sufficient. The catheter is temporarily sewn in place, making the bladder accessible for treatments and allowing passage of the "gritty" material.

SURGERY - YES OR NO?

If your cat suffers from frequent episodes of FUS, your veterinarian will recommend a surgical procedure (perineal urethrostomy) which consists of widening the end of the urethra so that the "plugs" may be passed and blockage cannot occur. The effectiveness of this procedure is 85-90%. It must be remembered that this procedure will NOT cure the condition but will allow passage of the plugs.

PROGNOSIS

Future recurrences of FUS should be expected. The owner must be aware of this possibility and present the pet to a veterinarian as soon as the condition occurs. Again, if the epiosodes are frequent, surgery will be advised.

MEDICATION

The prescribing of medication usually varies in each individual case. Usually a bladder infection (cystitis) exists. A urinary tract antibiotic and urine acidifier for a variable amount of time is prescribed, depending on the severity of the condition. Frequently we will continue the animal on the acidifiers indefinitely as a preventive measure. Increased water consumption is also very important. This may be accomplished by adding some table salt to the cat's diet thereby stimulating thirst and causing a "flushing effect."

CONTINUING EDUCATION FOR ANIMAL HEALTH TECHNICIANS

UPGRADING THE QUALITY OF ANIMAL CARE

By Kate Cameron

When you visit your veterinarian, you probably see many busy people working. Chances are some of those busy people are Animal Health Technicians, a relatively new breed of state-licensed "professionals", whose range of hospital duties includes basic kennel sanitation, clinical laboratory tests, assistance with surgical procedures and innumerable other tasks. Recently, in many states, licensing procedures have been established for thoroughly trained and experienced technicians, much the same way in which veterinarians become licensed to practice in a particular state. Groups of AHT's have taken it upon themselves to organize local associations to further their knowledge and skills and to improve their image as the real backbone of veterinary practice. One of the most significant manifestations of the AHT "movement" has been the incorporation of seminars especially for AHT's in the major national veterinary conferences.

The Western States Veterinary Conference is held yearly in Las Vegas, Nevada. Programs specifically of interest to AHT's are included during two days of the conference while

the regular veterinary presentations are taking place. This year the variety of seminar topics included beginning and advanced levels, large and small animal topics, X-ray techniques, laboratory testing methods, EKG and anesthesia monitoring, pharmacology, cardiopulmonary resuscitation, surgical assistance, restraint of exotic animals, plus paraprofessional topics like client-technician communication, medical/legal aspects of AHT work and hospital administration. Most of the speakers were themselves AHT's with many years of experience working with veterinarians. Many of the presentations provided written notes for AHT's to take home for reference. In general, the quality of the presentations for AHT's was equal to those given to the veterinarians. In addition to the medical and para-medical presentations, there was a panel comprised of AHT's, AHT educators and veterinarians who discussed with conference participants what the goals of the AHT should be, including: supporting local AHT organizations and activities, keeping informed about state legislation regarding AHT's and proving one's competence as an assistant to employer veterinarians in order to achieve better pay and status.

The AHT conference in Las Vegas was a terrific opportunity to learn, to communicate with AHT's from a wide geographic area and from different types of veterinary practices. There were presentations of interest and exceptional educational value for every person working in a veterinary hospital, from the "rookie" to the highly-trained technologist. AHT's could browse through the large exhibitors' display area, where all the large pharmaceutical firms and veterinary products companies were showing their latest items, offering armloads of samples and literature. Activities such as this conference can only improve the quality of health care for animals. Veterinarians have begun to acknowledge AHT's as one of the most significant new resources in the veterinary profession in many years. Hopefully new Animal Health Technicians will continue to take advantage of such activities to broaden their education and strengthen their position as dependable, competent veterinary assistants.



Mother Cecilia visiting some of her charges at the Mill Bay site, the present location of the Good Shepherd Animal Shelter.

Twenty miles north of Victoria, British Columbia, on 60 heavilyforested acres at Mill Bay, lies the Good Shepherd Animal Shelter. It is a monument to the devotion of an 89-year old London-born nun, Mother Cecilia Mary, and home for more than 400 abandoned, helpless and, often, direly-ill creatures of nature.

The shelter's motto is "To Seek and To Save." Here Mother Cecilia lives the life of an outcast, a maverick who defied the Vatican to save the animals she loves.

Ethel Cecilia Dodd's story began in Victorian England. The eldest of seven brothers and sisters, she grew up near the tough, grimy northern industrial city of Birmingham.

Of her childhood, she recalls:

"They told me a lot about what I did as a baby and how, one morning at breakfast, I began to cry. "Whatever is the matter?" my parents asked. I said "the poor birds have no toast." From that moment on, I refused to have my breakfast until the birds were fed.

"From the beginning, I never seemed to be a child. I don't know why. When I was quite small I began to take hold of things in the house. I began to manage things for my mother and, when I was nine years old, she said to the family "I don't believe that child is nine years old — that child is 99 today." I've always stood apart. Mother and I were very, very good friends. As long as I was with Mother, everything was all right with me.

"As a little girl I used to think how great and wonderful God was. How absolutely pure and holy, and I thought I must be very bad in His sight and I was sure to go to Hell.

"But then I comforted myself with the thought that when I go to Hell there will be someone there that loves God and if I love God in Hell that might change Hell a little bit."

At the age of 19, Ethel Dodd entered the Anglican convent of the Society of the Precious Blood in Birmingham, and later ran a mission house in the city's slum area.

"Life in those days wasn't like it is today. I remember a young boy lying dead in a house for over a week before I could get him buried. I can't describe what the poverty was like. A great many people earned their only living by chopping little sticks of wood and selling them three-a-penny. But, oh the poverty! And the drunkeness. And the awfulness. It was beyond words."

Poverty was still her constant companion in 1921 when Mother Cecilia arrived in Vancouver, B.C., to become the first Anglican nun to serve the western province and to found the order of the Sisters of the Love of Jesus.

For days at a time her diet consisted solely of oil and dandelions mixed in sparse salads, and the occasional meals of macaroni left on her doorstep by her equally-poor neighbours.

Soon, she founded a hostel for the children of working mothers; then an orphanage school for homeless youngsters and, in 1925, a private girls' school, St. Anthony's College, through which more than 1,000 young women would pass in the following years. By 1939, the Community had built a Priory and guest house for the elderly. But then came a spiritual crisis.

Secretly, Mother Cecilia had always wanted to be a Roman Catholic, a desire she had kept within herself since childhood. In 1937, she asked Archbishop William Duke of Vancouver to accept her Community into the Catholic church, thus incurring the wrath of her Anglican archbishop, Adam de Pencier, who insisted she hand over the assets of the college. But she refused.

She was quickly becoming a maverick in the view of both churches. Her new Catholic superiors ridiculed Mother Cecilia's pursuit of Benedictine Orders and warned that she might be replaced with a new mother superior more closely aligned with established church authority.

Furious, she wrote the Pope directly and received permission to retain her orders but, by now, it was obvious the church had within its ranks a woman of very strong will and one who was determined to go her own way. The Second World War was in progress and Mother Cecilia was able to sell her school property to the Canadian Department of National Defence, enabling her to remove herself and her nuns from the direct influence of the archbishop in Vancouver, and establish a new Priory and nursing home on the outskirts of Victoria, the capital city of British Columbia on Vancouver Island. Shrewd in business transactions, she was later to be dubbed the "Real Estate Nun" by the press.

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the mayerick nun

By Ron Baird Photos by Jim Ryan

the maverick nun

Early in 1960, Mother Cecilia recalls, "one of our nurses at the Priory told me about some kennels nearby where the animals were treated very cruelly. She kept saying 'Mother, please do go.' At last I went and saw a sight which filled me with horror. I picked out the first dog I saw and told the kennel owner 'will you give it to me?' 'No, he replied. I would rather kill it than give it to you.' You're making a very good job of that now, I told the man. The dog was in a state of starvation and filth. It was a terrible sight."

Within a week she had persuaded the man to sell her the remaining dogs and took them to a retreat used by the nuns of the Priory.

"That's how it all started," she recalls.

For nearly half a century, Mother Cecilia had cared for the young, the sick and the aged and, on her retirement as superior of the order in 1961, she turned her tireless devotion to the care and protection of animals.

Taking a handful of nuns with her, she moved further out from the suburbs and established the Good Shepherd Animal Shelter at Metchosin. But now it was the beginning of a difficult struggle for Mother Cecilia.

"All went well, except we had some very troublesome neighbors," she says. They took up petitions to have the shelter operation banned by the authorities. This was only part of the problem. The doughty nun was already in difficulties with the Roman Catholic church and, in 1965, was ordered by The Vatican to abandon her animal work and return to the Priory.

The issue, according to the church, was a simple one: Mother Cecilia and her nuns must continue to live in conformity with the type of religious life demanded by the Benedictine Order. **18** Today's Animal Health The care of animals was not acceptable to the church, or the Catholic archbishop of Victoria, Remi de Roo.

"They said it was the wrong kind of work for sisters to do," recalls Mother Cecilia. She was shortly and abruptly given five days notice to vacate the shelter and disperse the animals, now numbering more than 100 dogs, cats and goats.

Her response was typical: "I wouldn't trust the animals to the archbishop. They sent a Benedictne priest to persuade me to give up the shelter work. He asked me 'if you had to choose between being excommunicated or giving up the shelter, which would you choose?' I replied I would choose excommunication for I would not be responsible for the death of my animals. I couldn't have lived with myself if I had obeyed that order."

In defiance, Mother Cecilia called in the press and broke the story. Soon, thousands of letters and telegrams poured into the shelter, all but a handful praising her single-minded stand.

"I never thought I would do it. I really had no plans," says Mother Cecilia today.

Pressure from the church and her neighbours continued and soon she was forced to seek other quarters for the animals. Using money from a family inheritance, she bought property at Mill Bay and in a massive, daylong move early in 1966, dubbed Operation Ark by the news-papers, transferred not only the animals but the buildings in which they were housed.

Although she now laughs at the events of more than a decade ago, Mother Cecilia recalls that "Archbishop de Roo's theme at the time of our removal from Metchosin was that caring for animals was not suitable work for sisters; they should be caring for people. I must have educated more than a thousand girls in my time and taken care of hundreds of old people. Now, I'm taking care of animals and that is just as important in my eyes as all the other things."

"We realize that animals are truly a part of Creation. We and they share the same life, and killing life kills a part of God. To manifest itself, life must be embodied. The body is not the life but the house of the life. In animals, as with humans, where there is life there is feeling and, perhaps in that sense, it is correct to say that animals and men are souls together; souls embodied."

"Pope John — John the 23rd was a lover of animals and he had ordered that a book be written on their care and circulated throughout the world, but he died so suddenly that it was never completed. I wrote to the present Pope once and scolded him that if he would allow animals to come into this world and suffer all the traumas put on them by humans and not give them a happy afterlife I couldn't believe in the justice of God."

Recalling her troubles with the church in the early 1960s, Mother Cecilia remembers: "The pressure from Rome about closing the shelter was funny. One of our sisters, Mary Agnes, begged to be allowed to go there. I knew it would be hopeless but she insisted and I knew Sister Agnes would be happier if she could go. We found a companion for her and she went with a letter to the Holy Father from myself."

"Sister Agnes tried every angle she could to see the Pope. Eventually, they gave her an audience with a great many other people, but nothing came of her visit. Do I pray for the Pope or the Archbishop? I'm afraid I don't pray very often for either of them now. My animals need my prayers more than they do. Nothing we've ever done either at the Priory or the shelter has been done with the help of the church. The church wants your money but it doesn't give you money. I have given the church thousands of dollars. They've never given me a cent. I've fought all my life - I've had to fight - and I've won most of the battles. But not all of them. One day an old Indian lady read my palm and said 'Sister, if you had lived in the Middle Ages you would have been burned at the stake. But before you die, you will go through something which corresponds to that.' Wasn't that funny?"

Although the shelter at Mill Bay takes in dogs and cats in a never-



Mother Cecilia with Twinkle, the dancing goat, when her animal shelter was first located at Metchosin, a suburb of Victoria, B.C.

ending stream (there are currently more than 400 abandonèd domestic animals in addition to horses and goats), Mother Cecilia maintains a strict policy of adoption for dogs and many would-be purchasers are often sent on their way without a new pet because Mother Cecilia feels they do not live up to her standards of pet ownership.

She recalls her refusal one time to sell a boxer to the Queen's representative in British Columbia, former Lieutenant-Governor George Pearkes, until she had personally met him before approving the sale. While she makes no distinction as to wealth or station in life, she does insist that no dog leaves the shelter until it is guaranteed a stable and permanent home.

Now that she is past her mid-80's and with her health becoming more delicate with each passing year, this stubborn, dedicated nun continues to care for, with the able assistance of one remaining nun, Iowa-born Sister Mary Julia, the creatures she feels are forgotten and betrayed. Her work, she says, is in God's hands.

"Any animal or bird in trouble is welcome at the shelter. If we can't find good homes for them, and they are hard to find nowadays, they can live with us permanently. They are not put to sleep. I believe the Good Shepherd Animal Shelter is the only one of its kind in the world where animals can be cared for during their natural life. They are God's children as we are. They were created by God as we were. They have souls; their own kind of souls as we have. They do not die any more than we die. They survive death as we survive death."

Supported by animal lovers throughout the world, the shelter's existence in the future is now assured through the formation some years ago of a non-profit foundation with three directors who make the final decisions concerning its operation.

For more than 50 years, the Maverick Nun of Mill Bay has done more than her share for the sick and oppressed of the world, both human and animal.

In the best sense of the word, Mother Cecilia has been for the past 88 years a strong right hand of the Creator, caring for those on this earth who pass in a brief moment of mortality.

Of her own life, she says: "I think that everybody has some kind of fear of death. My only fear is that I don't want to give up my work, for it is so needed. I was sure a long time ago that while my work was needed I wasn't going to die. But death itself doesn't worry me. It's only stepping from one phase of life to another. I know I can't live forever. Not in this life, anyhow. Somebody must take over. I want you to feel that animals are God's children; that we all have a responsibility. God will bless you for it. A great work is being done at the Good Shepherd Animal Shelter; perhaps, in its way, greater than anywhere else in the world."

Defiant in the face of overwhelming authority, alone in the sight of God, Mother Cecilia has trodden a difficult path, supported by a stubborn faith in the goodness of Creation. It has been a long journey since the day Ethel Cecilia Dodd, at the turn of the century, had a vision that would culminate in the dedication of her life to the service of humanity.

DENTAL PROBLEM/IN A

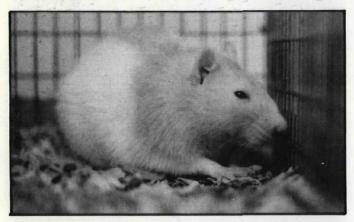
PART V DENTAL RESEARCH

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

Photos by Author

Dental research involving animals has relieved a great deal of man's suffering from dental disease and we owe a debt of gratitude to animals. Knowledge gained has been directly applicable to improvements in human dental care as well as improving veterinary dental care of animals.

Why do dental research? Basically because we know so little about so many dental problems. Dr. Julius H. Comore Jr., a professor at the Cardiovascular Research



1. Laboratory animals have dental disease and tooth aches just as their relatives in the wild do. Being small doesn't protect you from tooth problems. Rampant tooth decay can be induced in the common golden hamster by feeding a diet high in carbohydrates (sugars) and low in fats.

Institute, University of California, San Francisco, discussed in SCIENCE this May why he was in research. "Research meant that the teacher did not have to say 'I don't know' year after year. Research meant that a physician did not have to say, year after year, 'I can't cure you' to the vast majority of his patients."

DENTAL WORK LESS PAINFUL

In the last 20 years the advances in controlling pain have been spectacular. Through research we have a much better understanding of pain and how it can be controlled. Most of the anesthetics, tranquilizers and other drugs used daily by veterinarians were not on the market 20 years ago. Before a new drug is released for human use, it has undergone extensive testing in animals. Thanks to animals your visit to the dentist is now less painful than ever before. Some dentists are even using agents which block out memory of the dental work. Patients don't lose consciousness, and they are still able to respond during the procedure. The newer anesthetics have also made it possible to improve greatly the dental care zoo animals receive today.

PLASTIC SEALANTS STOP DECAY

After many years of experimental work with various animals special substances called sealants were developed which can be applied by the dentist to the chewing surfaces of the teeth to seal off vulnerable pits and fissures where decay is known to start. It has been known for years that the chewing surfaces of both the deciduous (baby) and permanent teeth are the areas where destructive tooth decay appears first and advances rapidly. Look in your mouth or your child's mouth and you can see most of the dental work has involved the chewing or occlusal surfaces of the teeth.

It was not until the early 1960s that plastic sealants were introduced and after their introduction Japanese and American researchers have been hard at work perfecting the materials and techniques. Sealants are materials which bond to the enamel surfaces of the tooth and prevent bacterial decay from occurring. Maximum



2. Use a mirror and look at your teeth and you will see that most of your fillings involve the chewing or occlusal surfaces of your teeth. Plastic sealants can help stop decay here as the material penetrates deep into the fissures of the tooth.

reduction in dental caries or cavities is achieved on permanent teeth when the sealant is applied shortly after tooth eruption. The procedure has proven safe in clinical trials and benefits include the preservation of sound tooth structure and the elimination of restorations (fillings, inlays, crowns, etc.) which themselves have limited life expectancies. The application of a sealant is a relatively innocuous procedure which would be acceptable to most children, making their first visit to the

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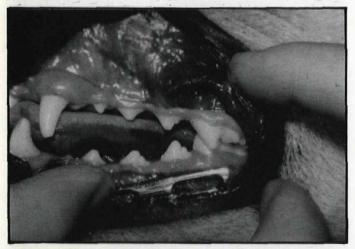


dentist a pleasant one. The first mass application of plastic sealants by a public health department as a preventive dental health measure involved 350,000 children in Mexico. Some dentists feel that the development of the new sealants may be a milestone in preventive dentistry.

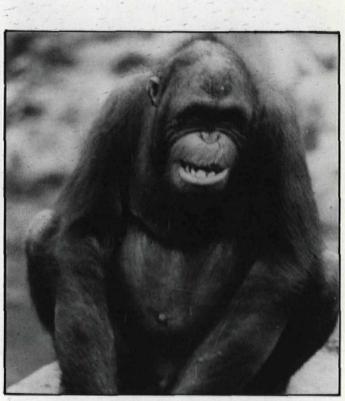
In a five-year study conducted in Kentucky on the longevity of fissure sealants, Dr. Walter A. Doyle and Dr. June A. Brose reported in March-April JOURNAL OF DENTISTRY FOR CHILDREN that the use of fissure sealant is an effective preventive procedure for permanent teeth. They also reported that oral hygiene and refined sugar intake is not a significant factor in the retention of sealants on the chewing surfaces of teeth.

TOOTH BANK IN FUTURE?

According to Dr. George R. Riviere at the UCLA Dental School, "The best replacement for a missing tooth is another viable functional tooth." Replants (teeth that have been knocked out by accident and are replaced in the same socket) are performed by veterinarians in private practice with some success. In humans, replants are most successful in children when the tooth has been out of the mouth less than 30 minutes. Unfortunately in most instances when a tooth is knocked out of the mouth it is also smashed at the same



3. Research is being done on dental implants in dogs at the University of California. A dental research project at the Veterinary Medical School in Davis by Dr. Ira Gourley, a veterinarian, involves the use of metal implants in the jaws of dogs for the support of fixed or removable prostheses which could be used as aids in restorative dentistry in companion animals and humans.



4. An orangutan smiling and showing his teeth. Tooth structure and development in apes and monkeys is similar to that in man and much of the final stages of human dental research involves primates.

time. Past dental research has shown that when teeth are exchanged between unrelated individuals, the teeth are almost always rejected by the body's immune system. Transplanting teeth from one location to another in the same individual has been more successful. A dentist might be able to replace a missing molar tooth with a partially developing wisdom tooth from the same person.

In a dental research project at UCLA involving inbred laboratory mice, Dr. Riviere found surprisingly that in closely related individual mice, tooth transplants survive indefinitely whereas skin grafts are rejected. This raises the hope that given adequate methods of matching recipients with prospective donors, the transplantation of teeth may one day be considered an alternative to conventional prosthetic dentistry. Instead of getting false artificial teeth, we may one day go to a tooth bank and get new natural teeth to replace our broken or worn out teeth. Research is now being done with monkeys, as well as inbred mice in hopes of developing the technique further.

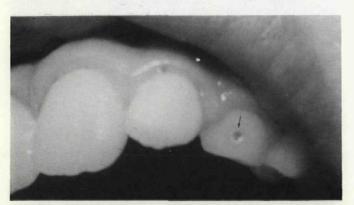
DENTAL PROBLEMS IN ANIMALS



5. Vaccination has been used successfully in rats to prevent dental caries. By studying tooth decay in animals man has been able to gain a broader perspective of the problem and scientists have concluded that it could be viewed as an infectious disease.



6. Tooth implants offer an alternative to prosthetic dentistry. Much of the work in this area remains to be done but some studies indicate that there is a potential.



7. Dental carie (arrow) in an 8 year old boy. Tooth decay in people is mainly a disease of childhood and adolescence. In the primary or baby teeth the greatest period of caries development is between 4 and 8 years of age. 22 Today's Animal Health

VACCINE AGAINST TOOTH DECAY

Dental caries or tooth decay is a problem all too familiar to people. Fortunately in animals dental decay is of minor importance compared to the overwhelming problem in man. It is estimated that 95% of people are affected by dental caries at some time in their lives.

The exact cause of tooth decay is not fully understood. However, dental research in animals has revealed that two essential components must exist to produce the disease.

- 1. A diet high in fermentable carbohydrates (sugars), the most important one being sucrose.
- Specific bacteria that can ferment the sugar into an acid that will dissolve the enamel on the tooth.

Studies done over 20 years ago with germ-free rats at the University of Chicago demonstrated that a diet high in sugar did not produce tooth decay, unless the rats were infected with specific bacteria that could ferment the sugar.

After several studies with animals, it was shown that tooth decay should be considered an infectious disease. Viewing tooth decay as an infectious disease has allowed dental researchers to think in terms of developing a vaccine and preventing the problem altogether for future generations. Vaccination has already been used to prevent dental caries in rodents and primates.

At Guy's Hospital in London Dr. Thomas Lehner has developed a vaccine against tooth decay in rhesus monkeys. Dr. Lehner chose to work with rhesus monkeys because their teeth are similar to human teeth — in shape, number and eruption of deciduous (baby) and permanent teeth. Dr. Lehner reports the monkeys are maintained on a human type of diet which contains about 15% sucrose. The vaccine made from the bacteria Streptococcus mutans is given in the limb under the skin and a booster vaccination is given six months later if necessary. Work is still being done to improve the safety of the vaccine.

Dr. Lehner, who is a professor of oral immunology, raises the possibility of preventing tooth decay in children by vaccination in a report this year in NEW SCIENTIST. Immunity could be increased by booster vaccinations throughout life, making an adult population that is immune to tooth decay.

dialogue

Continued from page 4

establish baseline values for reproductive hormones for the cat. This research has provided very interesting results, and we are now contemplating expanding this research program to zero in on methods of population control. We have the nucleus of an interested staff, excellent facilities, and a disease free colony of cats which would provide an excellent source of animals for the proposed study. The inevitable problem of lack of research funds, however, is currently hindering the establishment of an all out campaign to conquer the population problem.

I look forward to receiving any information and your thoughts relative to our proposed studies.

F. W. Scott, D.V.M., Ph.D., Associate Prof. **Cornell Feline Research Laboratory** New York State Veterinary College Cornell University, Ithaca, N.Y.

Our research funds are at present all committed. Should readers like to donate money to this worthwhile project, they can send tax deductible donations to the Animal Health Foundation and request they be used to support Dr. Scott's research.

- Editor

I want to take this opportunity to thank "Today's Animal Health" for helping me save the life of a kitten.

About six weeks ago my daughter brought a kitten home from school which had been found by the body of its dead mother. The kitten was only about three weeks old itself, and was almost dead. She was dehydrated, emaciated, had lost her hair, and her stomach was bloated from malnutrition. Everyone told her to leave the kitten to die because there was nothing to be done for it, but she refused to abandon it (her proper upbringing, of course), and brought it home for care.

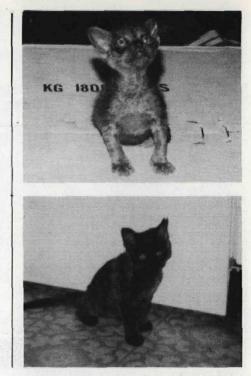
That very afternoon my issue of your May/June (ed.) magazine arrived with the article on how to take care of abandoned kittens. I followed your directions to the letter, and am happy to report that our baby girl is about nine weeks old and is healthy and happy living with her adopted brothers and sisters, four other cats and two dogs.

The enclosed are the "before" and "after". The "before picture was taken after we had treated her for about four days and she was looking pretty good, so you can imagine the sorry condition she had been in earlier.

My veterinarian knows how distressed I have been recently after losing four of my precious cats to the dreaded leukemia, so I am thankful to have had the opportunity of saving this adorable kitten whom we have named Charo.

Again, thank you for your help and continue your good work!

Mrs. Bernice Lehman La Habra, California



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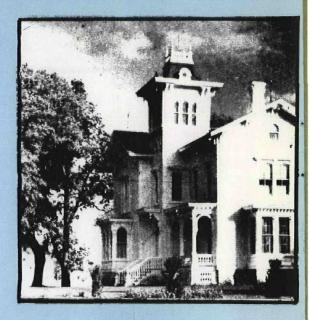
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VETERIARY MULEUM

Reprinted Courtesy of Modern Veterinary Practice





(Above) "Cutting" the horse from the official buggy, in lieu of the traditional ribbon-cutting ceremony, at museum dedication. Left to right: Dr. Fred J. Born, co-chairman WVMA historical committee; Dr. Donald A. Price, AVMA executive vice president, Dr. William E. Burmeister, WVMA president-elect; Mrs. W.E. Burmeister. (Below) Dr. Born welcoming visitors at museum entrance.



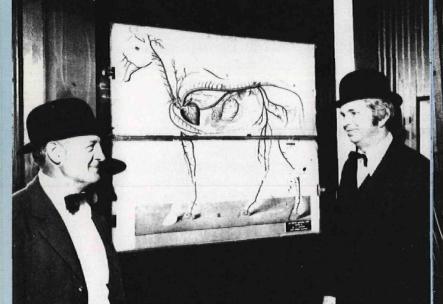
A uthentic glimpses of veterinary practice as it was at the turn of the century have, in recent times, existed almost solely in the minds of the hardy few whose memories go back that far. But now the opportunity is open to all, in the form of a faithfully restored veterinary office at the Galloway House and Village, Fond du Lac, Wisconsin.

Through the joint efforts of the Wisconsin VMA and the Fond du Lac Historical Society a 14×27 -foot 1900-vintage building typical of those used for various purposes then and later was moved to the site. Two such structures are still in service as veterinary offices in Wisconsin, but with considerable interior modernization. In addition to the collections of veterinary artifacts of the colleges and in private hands there are several other permanent museum exhibits in various parts of the country, but none is housed in a structure which is itself a museum piece.

On exhibit are many valuable and some priceless relics of the past, including more than 500 veterinary texts and farriery manuals dating from 1860. There are nearly 800 instruments, the oldest of which is a bleeding fleam made in England about 1830. Also, leather medical and surgical cases containing drugs and instruments used at the time, a complete equine dental kit, docking shears, and an 1880-vintage anatomical chart constructed in layers from the skin to the interior of the viscera.

Easily accessible via US Route 41 from Milwaukee, the museum is truly a national resource for the history of veterinary medicine. Aside from numerous contributions by Wisconsin veterinarians, donations of material from New York, California and Canada emphasize the broadbased support such projects deserve. Planning for the project was begun in 1970 by the WVMA historical committee, members of which include Drs. Fred J. Born of Fond du Lac, Q. C. Metzig of Oshkosh, Burke A. Robinette of Coleman, and Burr W. Nussdorfer of Sparta.

The project is on-going, and further details can be obtained from Dr. Born at 961 S. Main St., Fond du Lac, WI 54935.



Equine anatomical chart used in veterinary science classes and client instruction during the late 19th and early 20th centuries.



Drs. Burmeister and Born in library corner of Veterinary Office at Galloway House and Village, Fond du Lac, Wisconsin.

Drs. Burmeister and Born examining exhibit of veterinary instruments, some dating to the early and mid-19th century. (Photos courtesy of The Brady Company and Wisconsin VMA)



MEN-WOMEN! TRAIN AT HOME IN SPARE TIME FOR A CAREER AS A VETERINARY ASSISTANT



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worth reading

Arco Publishing Company, Inc. of 219 Park Avenue South, New York, N.Y. has sent us four excellent paperbacks. Their titles are self-explanatory, and the contents are informational and accurate. We would recommend them as references and guidebooks for pet owners.

Behavior and Training of Dogs and Puppies By: Louis L. Vine, D.V.M.

Breeding, Whelping, and Natal **Care of Dogs** By: Louis L. Vine, D.V.M.

Your, Dog, His Health and Happiness By: Louis L. Vine, D.V.M.

Stable Management Explained By: Carol Green

Treatment of Exotic Marine Fish Diceace

By: Edward Kingsford, M.D. New York: Arco Publishing Company

n indispensable manual for the An indispensation in the sector fish. This is not just the ordinary hackwritten opus. It is scientific, technical in spots, well-organized. The author is a pathologist and has given us a reference book based upon his own original research and experimentation. Illustrated with color plates.

Mutch About Horses By: Ronnie Mutch New York: Arco Publishing Company, Inc. 1978: \$7.95

book of cartoons for the dedi-A cated horseman. These cartoons are choice and hilarious, but are to be appreciated by the rider who is "into" his sport.



Physical Therapy for Animals

By: Ann H. Downer, B.A., M.A., L.P.T.

Springfield, Ill.,; Charles P. Thomas, Publisher

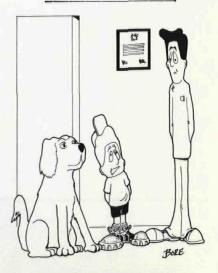
1978: \$10.50

comprehensive, well-organized book in a field largely neglected - physical therapy for animals. The introductory section details guidelines for the establishment of a physical therapy department and then general considerations for all treatments. The remainder of the book is broken down into various techniques of physical therapy with explicit instructions, indications and contra-indications for use. Will be of great use to the . veterinarian assistant, the veterinarian, and possibly trainers and breeders who can utilize these techniques.

Common Sense Book of Complete Cat Care

By: Louis L. Vine, D.V.M. New York; William Morrow & Co., Inc. 1978: \$8.95 (paperback)

ust what the title says - a common U sense approach to caring for your cat. Covers the life cycle, behavior, nutrition, diseases, emergencies, and has a great appendix of symptoms and probable causes. Good book to have around if you are a cat owner.



I THINK HE'S GOT A HEARING PROBLEM HE DOESN'T LISTEN

FROM MY CHILDHOOD IN JERU/ALEM

by Dr. Ari Shoshan-Rehovot

The author, Dr. A. Shoshan, is a pioneer of the veterinary profession in Israel. Being at his start a teacher and a Hebrew scholar, he was furnished with the tools to gather from ancient Hebrew sources relevant material concerning the Jewish attitude to animals in general. He has authored several books on the place of animals in Jewish literature.

n my early days my parents and my mother's parents lived in the Old City, near Via Dolorosa, adjacent to what was once Solomon's Temple, now the Mosque of Omar. My grandfather came to Jerusalem a century ago, after emigrating with his family from Russia due to the pogroms recurring in the Ukraine where his family lived for generations. He opened a big store in the Moslem quarter in a busy market center, selling local and foreign flour, bran and grains for animal fodder. In the large spacious shop, my grandfather kept a local cat, and as far as I remember she was always accompanied by kittens. She was not like the usual cats we knew which were semiwild, stealthily penetrating partly opened doors or windows, and seizing whatever was at hand and speedily escaping before being punished. My grandfather's cat was different, she behaved well and even when she occasionally left the place and strolled around Arab neighbouring shops she was welcomed, and passers-by knew her address.

Once a year, at the approach of the feast of Passover, my grandfather on religious purposes had to close his shop for eight days. He brought the cat and her offspring to spend the holidays with the entire family who would give them great care, and the cat and her small ones would in return restore to us interest and joy. I should like to add, that we children of the Old City living in close court-yards, had no facilities to keep a pet dog or a fancy bird, therefore we, all the grandsons of the four daughters and one son, were extremely happy with this opportunity which was repeated for several years. It gave us a feeling of satisfaction to have an animal friend even for a short time.

A good many years have passed since my parents left the Old City and settled down in a newly built quarter out of the ancient walls of the Eternal City. I reached the age when my father enrolled me in a Yeshivah for advanced Talmudic studies. It meant a full day of studies with a short midday lunch-break. The four years I spent within the walls of the Yeshivah were years of famine, pests and hardships caused by World War I, in which Turkey, under whose rule we were, was a partner to Germany. At luncheon my father sat at a table where R'Aaron the monitor sat. R'Aaron was an elderly man, who spent many years in the States. He was friendly and good natured, especially to children for whom he always kept a sweet for a surprise. R'Aaron, though it was at a time of war and people were starving and bread was in great shortage, did not enjoy his last bites and left a portion of his ration. After he completed his prayers at the end of the meal, he crumbled the bread and went out to the spacious verandah to offer it to the assembled birds hovering over him with chirps as a signal of thanks. What amazed the fellow students was the scene with the sparrows hopping around their benefactor. To me it was not a novelty. It reminded me of my grandfather and his pet cat.

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PETNAPPING

An "Ignored" Crime, Anything But Pretty

Courtesy Newsmaking International Inc.

If you think kidnapping is confined to Italian premiers, South American corporate executives and the heirs of Arab oil magnates, then you may be barking up the wrong tree. Move over and make way for petnapping, which, together with being a fast growing crime, is one of the most unusual ones in the nation.

But before you get too excited, keep in mind that the American business person, long known for creative genius, also seems to be leading the way in coming up with solutions to combat the stealing of pets, including the founding of Pet Switchboard, located just east of Sacramento, California.

The pet-snatching problem is anything but small. In California alone, some estimates put the total business in the millions of dollars with other states close behind.

On the West Coast, a \$10,000 reward was offered for the return of what many would simply consider another "missing mutt" — a German Shepherd mix. Elsewhere another owner recently posted a \$5,000 reward for his non-pedigreed St. Bernard.

"Rewards" commonly advertised for the return of lost dogs in newspapers like the New York Times and Chicago Tribune average \$50 to \$500, but it is no longer unusual to see offers of \$1,000 or even \$2,000 for a prized pet. And these rewards are being offered by the dozens in almost every newspaper in the state every day of the year.

"The problem of lost and stolen dogs is one that is growing all the time," says Fay Brisk, a nationally known animal welfare activist, "and it's difficult to see an end in sight."

Bob Pettet agrees; he is marketing manager of Pet Switchboard, the first national pet emergency "800" phone communications service, located in Cambridge Park, California. "The number of kidnapped and lost animals has increased dramatically in the past ten years. All animals registered with Pet Switchboard are issued a collar tag," explains Pettet. "Anyone finding an animal wearing a PS tag is asked on the tag to call (800) 824-5120 or, in California, (800) 852-7711. The lost animal's owner can periodically check with the service until animal and owner are re-united."

Why has pet-thievery become an increasing problem?

To understand the answer you have to look at the pet industry as a whole, how people feel about their pets, how easy it is to steal an animal and current law enforcement policies regarding kidnapped animals.

First of all, there are more pets available — and in demand — than ever before. Though no one knows exactly how many pets there are in the country, estimates range from one for every five persons (48 million) to one for every ten (24 million). Americans spend a whopping \$400 million a year just to feed and care for their animal friends.

Then there is the changing fashion in which Americans live. With the great urban sprawl replacing 28 Today's Animal Health the old neighborhood, a family pet is not as easily recognized in the local community. This means that a lost animal has less chance of being spotted and returned to his owner.

"I would guess that 50% of the nation's pets are allowed to run free, usually with no identification whatsoever," reports John Keane, who calls himself "Sherlock Bones" and operates as a "tracer of lost pets."

Though some dogs are stolen from yards, houses or even cars ("I know of one case where a dog was removed from a car after the kidnapper smashed open the side window," said Keane), the majority, experts agree, are pulled right off the street. And "pulled" is perhaps too harsh a word to use. Many dogs are so friendly they simply wander up to the waiting dognapper, thinking he wants to pet them or give them something to nibble.

Little wonder, then, that petnapping has become so large an industry that there are now as many different kinds of thieves as the breeds they take.

Some petnappers hold their animals hostage, then try to extort the owners for as large a ransom as possible. Says Pettet: "You're talking about a great deal of money with some of the more valuable show animals."

Other criminals will steal virtually any dog they see roaming the street. Their next step is to scan local newspapers for rewards being offered. One such petnapping ring has operated in Northern California for years; it usually employs teenage boys to catch the dogs, then pays them a cut of the total take. Tells a source who wishes to remain anonymous: "Any kind of dog is fair game to these people. The whole year is one big open season."

Still other persons only seek certain kinds of dogs.

For example, just before the hunting season many dogs disappear. Explains Pettet: "Some hunters aren't too particular about what dogs they buy, just so they can pick up a scent." Certain dognappers specialize in supplying hunters with stolen bloodhounds at discount rates.

The same is true for guard dogs. Though no special season applies, some rings specialize in obtaining dogs for security companies at prices far cheaper than the \$15 to \$20 fee charged by most pounds. The vast majority of all security firms shy away from this practice, but there are, as in any industry, the unscrupulous few who cannot resist what seems like a good offer. These rings often nab German Shepherds and Dobermans.

There are even kidnappers whose only aim is to supply fighting dogs. Since dog fighting is illegal, the rings aren't too particular about what breeds they bring in; almost any dog on the street will do — after a little training.

Other petnappers are called upon by local pet shops to supply animals at below-market prices. Again, the majority of pet stores do not engage in this practice, but there are some which seem lured by the burden of inflation.

And finally, there are the "crazies". Some people swipe pets simply because they want a better breed, because they like the particular animal (perhaps they have seen it wandering in their neighborhood), or because they feel it is being mistreated. Recalls Keane: "I know of one guy who stole a dog simply because his dog had been stolen."

For whatever reasons, there is plenty of demand for stolen pets, despite laws on the books that make it a misdemeanor in most communities to carry out the crime.

Animal activists complain that current statutes aren't worth the paper they are written on.

"It is not a federal crime, the local police just can't be bothered, and the pounds don't have the personnel or funds to really tackle the problem" shrugs Brisk.

Said Keane: "You get more cooperation from the police if someone steals your watch than if they take your pet. I keep thinking of the example of someone who robs \$500 from a 7-11 store. If they catch him, he could go to jail for years. But what happens to somebody who kidnaps your dog and gets \$500 for it? Nothing. The police usually won't even come out to investigate."

While breed and pedigree sometimes are factors in determining reward offers, high rewards are sometimes offered to kidnappers for no other reason than the agony involved with losing a pet.

All of this gets back to how people feel about their pets.

"An animal really can become an important member of a family," explains Pet Switchboard's Pettet, "so when it is lost or kidnapped it can be a very emotional experience. Owners go though a lot of grief."

In most cases, kidnappers trying to arrange a ransom for the animal get in contact with his owner by phone, then set up a meeting place where the animal is handed over for a price. The criminals usually try to get full payment in most cases.

What if the owner can't afford the fee being demanded?

Again, the answer often depends on various factors. The kidnapper may still try to make a buck by selling the pet to a store, or, perhaps, another supply ring. He may simply release the animal back on the street, probably far from home, making him easy prey for other unscrupulous persons. Or, in rare cases, he may even kill the pet and dispose of his body.

Only an estimated 10-20% of the dogs lost or stolen will ever find their way back to their owners.

Fortunately, however, there is hope to solving what seems, given these discouraging facts, like an unconquerable problem. And much of the impetus for stopping petnapping is coming from Californians.

Pet Switchboard, for example, anticipates more than a quarter million animals to be registered within the next year for its emergency communications service. For a one-time registration fee, each animal is issued a collar tag stating that when the animal is found the owner can be contacted through the no-charge number from anywhere in the country.

The company can act as an authorized agent in any emergency when the animal's owner is unavailable. Explains Pettet: "All authorization is specifically detailed in a comprehensive registration form. At the time of registration we have each owner spell out how that particular animal should be treated in various emergency situations. It is from this information that we give any authorization."

In addition to re-uniting lost animal and owner or authorizing emergency treatment, Pet Switchboard can act as an impartial liaison when ransom or reward demands are involved. One question asked on the registration form is: "Will you pay a reward for the return of your pet, and, if so, how much?" Another asks the registree whether PS can inform the person who has the pet of that reward or ransom.

Pettet also suggests that owners tattoo the PS number on the inner thigh of a hind leg in case the tag is lost or removed. The tattooing procedure is approved by the American Kennel Club. Tattooing, according to experts, does not jeopardize the animal's show quality.

Another well-known service has all its registered animals tattooed with the owner's Social Security number for easy identification. Still another uses a tattoo to identify animals registered with its service.

A serious problem with dognappers in Virginia sparked the formation of a group to counteract the problem. Called Action 81, the organization is the brainchild of Mary Warner. After her own German Shepherd was stolen, Mrs. Warner started keeping track of suspected dognappings and organized the Virginia area to be more aware of people and animals in the neighborhood. Though dognappings have sharply decreased, she too has become part of the chorus of voices recommending that owners tattoo their pets. "In our area, it is generally purebreds that are taken," reports Warner, "but in the cities and suburbs they'll take just about anything. No dog is safe on the street."

According to some animal groups, 97% of all tattooed dogs are eventually found or returned to their owners. Keane believes the figure is much lower, but also endorses the tattooing idea. How can dognappings eventually be stopped? Answers Keane: "By concerned citizens getting together and demanding that more statistics and interest be shed on the problem."

Says Pettet: "The primary concern of all of us is to protect the animal."

Pettet should know.

The idea for Pet Switchboard developed from the personal frustration of locating a lost family pet as much as from the overall animal problem.

"I had a St. Bernard that was picked up just a few doors down from our house and taken to the pound, right before the weekend when the pound was normally closed," he recalls. "By the time we picked up the animal, his waiting time had almost expired and he was scheduled to be put to sleep shortly. I decided then and there that a more efficient way of dealing with lost or stolen pets was definitely needed."

Adds the marketing executive: "I was one of the lucky ones because I got my dog back. So many other animal owners are not that lucky."

Now, for those who happen to find themselves victims of a lost animal or petnapping, there is growing hope especially in California — that owner and animal will be reunited. No permanent answer to the lost or stolen problem may yet be available but at least there are services to deal with the hard reality of what up to now has been a hopeless situation.

HEARING AND EAR PROBLEMS OF DOGS AND CATS

Continued from page 7

If you are going to use over-the-counter (nonprescription) drugs, know something about the drug, how it is used, the contraindications and the active ingredient. If you need more information, write the drug company, ask a pharmacist or a veterinarian. Some drug literature (references) are available but technical. These are listed at the end of this section. A drug information sheet is included to aid you in this task.

DRUG INFORMATION SHEET

Use:

Name of the drug _____

Manufacturer's name

Manufacturer's address____

Local source of the drug _____

Dosage form _____ Container size ____

Dose instructions ____

Chemical ingredients:

Contraindications:

Expiration date, other directions (shake well, keep tightly closed, etc.):

Length of time used:

Results:

DRUG STANDARDS

Standards for purity and strength are set by law. Sources for drug information are:

- 1. (U.S.P.) **United States Pharmacopoeia.** Published by the American Medical Association. Contains the official drug listing.
- 2. (N.F.) **The National Formulary.** Published by the American Pharmaceutical Association. Describes drugs not used in the United States.
- (PDR) Physician's Desk Reference. Published by Medical Economics. A drug cross reference and identification guide.
- 4. (N.N.D.) **New and Nonofficial Drugs.** Published by the American Medical Association. New Drug Listing.
- 5. (VDR) Veterinarian's Desk Reference. Published by Medical Economics.
- Current Veterinary Therapy IV. American Veterinary Publications.
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WRITING A PRESCRIPTION

A properly written prescription should include:

- 1. A proper blank with the practitioner's name, address, telephone number, date and narcotics registration number.
- 2. The name and address of the patient.
- 3. Name and amount of ingredients (subscription).
- 4. Directions to the pharmacist (if needed).
- Label directions (signature "Sig" or "S" be specific).
- 6. Refill information.
- 7. Prescriber's signature.

PRESCRIPTIONS (WHY?)

- 1. Catch mistakes in script (toxic doses, compatibility).
- Reduce stock needed by physician, veterinarian, or dentist.
- 3. Rapid turnover and greater selection.
- 4. All directions are written on label.

PRESCRIPTION FORM

Written by a practitioner to a pharmacist. It is abbreviated in form to save time.

Rx = R = Latin recipe "take thou of"x = 4 = represents a prayer to Jupiter

Prescription 2 parts:

- 1. Ingredients and amounts
- 2. Directions

Registry number = narcotic registration

Abbreviations:

Pil.	= pilula = pill
cap.	= capsula = capsule
Pulv.	= pulvis = powder
Aq.	= aqua = water
q.s.	= quantum sufficiat = as much as may be
Sig.	= signa = write on label
a.c.	= ante cibum = before meals
p.c.	= post cibum = after meals
Stat.	= statim = immediately
q.h.	= quaque hora = every hour
q. 2h	= quaque 2 hora = every 2 or 3 hours
O.D.	= omni die = daily
b.i.d.	= bis in die = 2 times daily
t.i.d.	= ter in die = 3 times daily
q.i.d.	= quarter in die $=$ 4 times daily
p.r.n.	= pro re nata = as occasion requires
s.o.s.	= si opus sit. $=$ when required
SS	= semis = half
gtt.	= gutta = drop
m	= mix
о.	= octarius = a pint
Omn.	hor = omni hora = every hour
Omn.	man = omni mana = every morning

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