

TODAYS *Animal* News

WINTER ISSUE

INSIDE THIS ISSUE:

Surviving winter

How cats purr

Dog shows suffer

Choosing a cat food

Pet food fact and fallacy

\$1.50

The Official voice of the Animal Health Foundation

YOUR PET'S ANNUAL PHYSICAL

Cardiovascular System

A stethoscope will be used to evaluate the heart. Any abnormal sounds or beats may result in the need for additional tests. Common among these additional tests are radiographs or x-rays and electrocardiograms (ECG).

Radiographs or x-rays are helpful and important diagnostic tools. As a matter of record, the American Animal Hospital Association not only requires that a Hospital Member have a separate facility for radiology, but that they produce high quality x-ray films or radiographs. The quality is checked by a routine on-site evaluation by field representatives who also gather a sample of radiographs for review by a special AAHA board.

Anal Area

"Sleigh rides" or scooting generally indicate an anal sac problem. Fortunately, the problem is usually quickly treated by a veterinarian, who will provide the corrective therapy or recommend a treatment program.

Both dogs and cats have sacs on each side of the anal opening which may become enlarged or infected. The veterinarian will also note and evaluate any tumors which are common to this area.

Reproductive System

The reproductive system will be examined for any abnormalities. Today many pets are being spayed and neutered for reasons other than birth control. For example, neutering of male dogs and cats reduces the incidence of prostate disease and some types of cancer. Neutering may also help eliminate or modify some behavioral problems.

Spaying or an ovariectomy eliminates the possibility of pyometra, a serious uterine infection. Ovariectomies also virtually eliminate the incidence of breast cancer if completed before the first "heat" period.

Common Laboratory Procedures

Laboratory tests are sometimes necessary to determine or confirm certain health threats. Common laboratory procedures performed for pets today are checks for worms or internal parasites, skin parasites, bacteria, fungi and mange mites. A multiple screening test of a single sample of the blood or urine may also be advised for certain pets.

Internal Parasites

There are five common internal parasites which can infest dogs and cats, and each produces distinctive-looking eggs. For example, by examining a specially prepared stool sample under a microscope, the eggs will identify the specific parasite which is infesting the pet. The common parasites include: hookworms, whipworms, roundworms and coccidia. Tapeworms are

also common in both cats and dogs. Tapeworms pass their eggs in individual tapeworm segments which are usually easy to detect. The segments cling to the stool or to the hairs in the anal area of the dog and cat. They look like flat grains of wheat or rice. Fleas, mice and rabbits are common intermediate hosts for the tapeworm of the dog and cat.

Heartworms are a growing menace to dogs. Heartworms are now common in warm humid climates and are spreading to many areas of the United States. Your local veterinarian can tell you about the degree of severity for your area. In some heavily infested areas veterinarians routinely recommend and prescribe medication to prevent heartworms. If heartworm is prevalent, it is advisable to have your dog tested annually.

A heartworm test consists of taking a small blood sample which is carefully prepared for study. The heartworm's living larvae, called microfilariae, are usually found by microscopic examination of the blood sample.

This adult parasite does not "live" in the blood but makes its home in the heart, as its name indicates.

Blood Studies/Urine Analysis

A single sample of blood can also be used for a multiple screening process. Blood cell counts, blood chemistries and enzyme determinations can be made from the single blood sample. AAHA Member Hospitals and clinics have facilities for the routine analysis of blood samples or have fast access to special analytical laboratories as part of their membership requirement.

The type of analysis for your pet's blood can parallel the tests performed with human blood. The detail or complexity of the analysis will depend upon the amount of information required to make a diagnosis or to recommend an appropriate treatment procedure. A urine analysis can help spot bladder problems, diabetes, liver and kidney disease and other abnormalities.

The Older Animal

Dogs and cats in the 12 to 15 year age bracket are now common. In fact, more animals in the 15 to 20 year age group are being seen today.

Older animals are now enjoying better health due to advance in nutrition, medical and surgical care. Leash laws are also reducing severe accident and accidental deaths.

Geriatric or "over seven years of age" cats and dogs may require more frequent screening and laboratory tests. Early detection can help to spot or detect diseases such as diabetes, heart and renal dysfunction, prostate and other diseases. Both geriatric pets and humans can benefit from a planned program of health care. The sooner a program of preventive medicine is started, the better--for either man or beast.

But for either man or beast, the advice of the physician or veterinarian must be followed and medication must be administered as recommended. With the proper medication and medical treatment, both man and animals can live more comfortable and longer lives. Today animals can enjoy much of the same high caliber of medical services that are available to their human masters.

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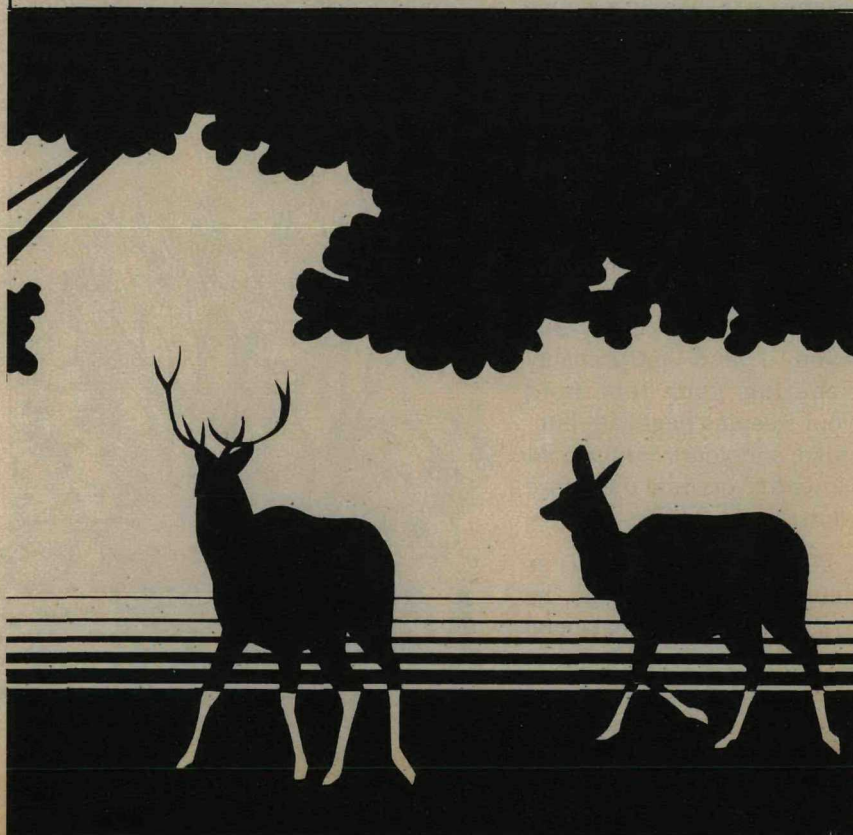
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CONTENTS

INSIDE THIS ISSUE:

Metamorphosis of Timmy . . .	5
Update on bloat . . .	8
How cats purr . . .	13
Dog shows suffer . . .	15
Surviving winter . . .	16
Feline behavior . . .	17
Training your dog . . .	18
Pet food fact and fallacy . . .	26
Finicky Fido . . .	27
Choosing a cat food . . .	28
Classified ads . . .	30



SNOW FUN'S NO FUN . . .

If your pet gets in trouble . . .

Surprisingly enough, one of the problems that often occurs during the frigid winter is overheating. Not out on the snow or on the trail but in the car while everyone is busy doing other things. It may be chilly outside, but the automobile still acts as a solar oven, collecting heat and storing it inside while the poor dog gets hotter and hotter.

If you think cross country skiing or snowshoeing is taxing, imagine *how tiring it can be for your dog*. Every step is more work for him, since he doesn't have the special footgear that you are wearing. And he travels much further than you do as he makes investigative sidetrips, exploring all sorts of objects and smells. With this in mind, the thoughtful owner doesn't start his pet off on overly long trips.

Ice or even hard, icy snow will lacerate tender canine feet and wear off the pads, leaving them sore and bloody. Check with your pet shop for boots for your dog until his feet become more toughened. If these protective rubber boots are not available you can improvise with small plastic "baggies" from the supermarket.

Be sure that your dog is in the proper physical condition to make the hike. You won't enjoy having to carry him back if he becomes too exhausted to continue.

Planning to do some overnight camping with Rover? Well, remember that it is just as cold out there as it is for you . . . and that probably means sharing your tent (and maybe your sleeping bag) with him. For his sake, and yours, you should include towels to dry him off before settling down for the night.

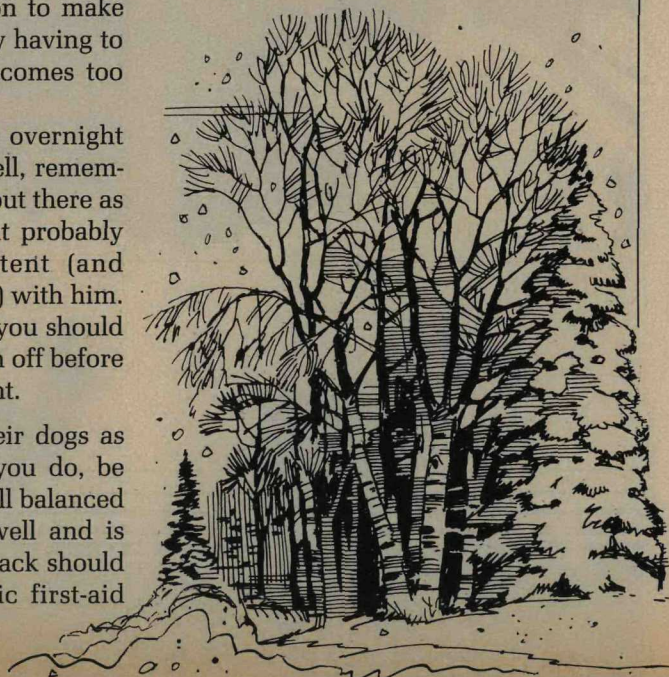
Some hikers enlist their dogs as "pack animals", but if you do, be sure that supplies are well balanced and that the pack fits well and is properly adjusted. The pack should also contain a few basic first-aid supplies.

Frost bite can be a painful problem for your pet, especially on the ears, toes, and tip of the tail. But if it does happen you probably shouldn't try to treat it yourself, but see your veterinarian at the first opportunity.

One of the wonderful qualities of snow is that it can convert even the ugliest terrain into a beautiful white winter scene. It can also conceal a lot of dangers to your pet. Forgotten fish hooks, sharp tin cans, broken glass, traps, snares, barbed wire all lurk unseen in the snow.

"Water, water, everywhere . . . but not a drop to drink" can be very true in snow country. Dogs often find ice and snow a novelty to eat, but the snow can contain a variety of impurities and chemicals to make the dog ill. Ice can be fascinating to the inexperienced dog but can also be a death trap, if the dog crashes through thin ice into freezing water.

Snow games can be fun for you and your dog . . . if you plan ahead. The additional cold and exercise can be stressful. A visit to your veterinarian for a checkup, update on vaccinations, and some advice can be a worthwhile step in planning a healthy, happy snow holiday!



In the news . . .

DISTEMPER THEORY DISPROVED

Recent research at the National Institutes of Health (NIH) have disproved a tenuous theory that there was a link between canine distemper and multiple sclerosis (MS) in humans. A research project four years ago said families with puppies had a higher incidence of MS.

But now this has been disproved by the discovery that measles antibodies are very similar to canine distemper antibodies. Blood tests of MS patients confirmed a higher level of measles antibodies than normal. Antibodies against canine distemper bear a "serological similarity" to measles, said Dr. David L. Madden of the NIH.

Another factor that tends to disprove the four-year-old theory is that people living in the heavily populated northeastern United States have a higher rate of MS incidence than dwellers in the southwestern states. Yet there is a higher percentage of dogs per capita in the rural areas than in urban areas.

Madden cautioned on this latter finding, saying the factors "are so variable it is difficult to assess their individual importance."

VETERINARY GROWTH

In 1956 there were 18,120 veterinarians listed in the American Veterinary Medical Association (AVMA) directory. In 1981 that number jumped to more than 35,500 on the AVMA roster. Three out of four are in private practice, about 26,000; the rest are with companies, the military or allied health fields or research laboratories. About 12,000 vets today are listed as strictly small animal practitioners, the rest with horses and livestock.

ALGAE-LADEN BEARS

Scientists were puzzled at first when three white polar bears at the San Diego Zoo turned green. A check-up revealed that algae growing in the bears' pool had found a safe home inside the bears' hollow hairs, explains the National Wildlife Federation.

The Metamorphosis of Timmy

Why I named him Timmy I don't know. It certainly didn't fit. He was no ordinary cat. While other kittens were still cuddling close to mama, Timmy with newly opened eyes, was swatting at flies and trying to pounce on bugs. Curious about soap bubbles he fell into the mop bucket. Then he let me know emphatically that he would not be towelled. He could take care of himself. Or could he? Not much bigger than the quail he saw outside, Timmy banged his head against the windowpane trying to get to it. Disdaining sympathy he wobbled into the closet. Before I thought it safe to let him out, he deserted the litter box for the flower pots and I had to change my mind.

Oh sure he was cute, jumping at falling leaves, plunging into windswept grass, racing after butterflies. Still, putting up with his independent antics became increasingly hard to do.

Late one stormy night after a particularly trying day, I sank gratefully into a hot tub. Through the cat door came a very muddy Timmy, with a big squealing gopher in his mouth. Sans towel or robe, I dashed from the tub to the living room. The gopher had gotten free. Timmy chased it round and round the rug getting it more muddy with every step.

One pounce! Crack! Its neck was broken and it died. I grabbed a handful of paper towels, picked it up, and braving the storm, threw it into the field as far as I could. I was through with Timmy! All the while I worked at getting the mud out I told him what a despicable beast he was. I really told him off. This, I scolded, was his last night on Earth.

The next morning Timmy was nowhere around. I missed him all that day and the next.

On the third day at 3:10 a.m. I awoke sensing a presence in the room. Hearing nothing, I cautiously reached for the light. There on the floor beside my bed was Timmy. He had been in a fight and somehow had crawled in and now was unconscious.

Placing him under the covers I turned the electric blanket to high. The thought of losing him was unbearable.

I coaxed and petted. "Come on, Boy, you've got to live. You've made it this far. You can do it."

After what seemed all night (3:35 by the clock) Timmy opened his eyes.

Seven hours later the veterinarian looked him over. "he's been cornered and severely frightened. Dogs fight to the death. Cats die of shock. Since Timmy has survived this far, he'll be his old self in a few days.

The vet's prediction wasn't quite true. Timmy recovered, yes. But he was never his "old self" again. He began curling up next to my pillow at night. He cuddled in my lap whenever I sat down, or followed me about when I didn't. If I went out, he waited for me beside the driveway. When company came he disappeared. I'd find him on top of boxes in the storeroom or on blankets in the closet. His fur became sleek. Months went by without trips to the vet. Timmy had turned into an adorable pet.

Alma Upson

After the Falklands war...

AFTERMATH OF WAR THREATENS WILDLIFE

Fighting on the Falklands has ended for British and Argentine soldiers, but may have only begun for the island's wildlife.

Little known is that the Falklands are home to a dazzling array of ducks, plovers, oystercatchers, gulls, geese, the Falklands thrush and the long-tailed meadowlark, and five species of penguins, including rockhoppers and kings.

The fabled albatross nests there, clinging to high cliffs along with macaronis and king cormorants.

Even less known is the full range of effects the war had on the island's creatures, although, the experts say, there inevitably will be considerable damage to the fragile land from high explosives, military vehicles, foxholes and trenches, as well as crashed aircraft.

But the biggest threat to the Falklands wildlife, according to International Wildlife magazine, is yet to come.

The fate of island's wildlife depends on the long-term policies adopted by whichever government ultimately takes over the stewardship of the island's natural resources.

The islands were discovered in 1592 and intermittently occupied by French, British and Spanish settlers since the 1760s. It was not until the early nineteenth century, however, that increasing numbers of seafarers arrived. They originally came to hunt whales, but over the years, they also killed large numbers of fur seals, sea lions and elephant seals for their pelts and oil. Penguins, too, were slaughtered by the millions for oil, and their eggs were taken to supply the ships with fresh food.

Fortunately, in recent years, local sentiment in favor of the islands' remarkable wildlife has increased. A number of small islands has been set aside as wildlife preserves, and last year, the Falklands Island Trust was established by a group of dedicated islanders to promote a better understanding of the islands' wildlife, and a more realistic attitude toward its preservation. The effects of the war on the islands' wildlife have yet to be determined, but war is seldom beneficial to wildlife, says International Wildlife. Prince Philip of England, husband of Queen Elizabeth, perhaps said it best: "Human conflict, whatever form it takes — terrorism, civil war, aggression, or international warfare — is the biggest, directly destructive influence on nature and the natural environment."

Today's Animal News
Winter Issue

PARROT FEVER IS FOR THE BIRDS ... (and humans, too!)

You may know it as "parrot fever", veterinarians know it as psittacosis, but health authorities know it as a rapidly growing health problem in both birds and humans.

"But, doctor," argued the patient, "I don't even own a parrot. Or even a canary, for that matter. So how could I have parrot fever?"

No one knows how many birds and people become ill with psittacosis each year. But the number of reported cases of humans tripled in the four years of 1975-1978, increased again in 1979 and jumped again in 1980. And most health authorities agree that many human cases go unreported or unrecognized. Many people simply refuse to believe it.

But the figures show that increased cases in infected birds has a direct counterpart in the number of reported human cases.

With so many government agencies at work to combat the disease, why is it continuing to prosper?

The reasons are many and complex. Bird smugglers caught all the blame in the beginning. Strong laws and enforcement has slowed down this illegal traffic considerably. And psittacosis continues to spread.

Strict quarantine regulations were adopted by the U.S. Department of Agriculture to require all commercially imported birds to meet a 30-day quarantine in a USDA approved quarantine facility. And the disease continued to spread.

The birds won't cooperate!

New regulations were adopted for the quarantine program in 1979. But psittacosis-infected birds are still being released from quarantine stations today! The regulations look great on paper, but the birds just won't cooperate.

Birds are kept for 30 days and, while in quarantine, are supposed to be fed a special diet including drugs that will eliminate the disease before the release of the birds. But many of the birds don't accept the new diet or are upset and stressed by the drastic change in environment. Every day that a bird fails to eat shortens the treatment time. If the bird does not eat the medicated diet for a week, the treatment time is reduced to only three weeks. And some of the larger birds, like parrots, require a longer treatment time. 45 days has been suggested by many experts as a more realistic treatment time. In the meantime, infected birds are being released to eventually go to new owners who believe the bird has passed all health tests with flying colors.

In humans the symptoms can be confused with a variety of other ills, and psittacosis (called ornithosis in people) often goes undetected.

Although the infected humans may only suffer some mild flu-like discomfort, the disease can manifest itself in more serious symptoms. It can appear as a pneumonic disease with chills and fever and severe headaches. Heart problems can occur. Some cases result in death!

Humans can become infected by inhaling airborne matter from the feces of a diseased bird. Dried feces can continue to contaminate for many months. Even after an infected bird has been removed, the area in which it was kept can still be a source of future infection.

What to do?

Be careful! Almost all of the birds from the quarantine stations go to bird wholesalers, then to pet shops, and, finally to the buyer. Sick birds are often the first to go to a pet

home because they are easier to handle and appear to be easier to train. If a bird appears to be unusually calm and quiet, think twice about buying it.

Avoid bargain birds

Beware of bargains. Buy from a reputable seller. Avoid any bird you suspect may have been smuggled.

Remember that the so-called "parrot fever" is not limited to parrots. Macaws, cockatoos, budgies, canaries, finches, and even pigeons are candidates for the disease.

Generally, the longer the bird has been out of quarantine the better are its chances of not being infected. Incubation is about one to four weeks (although the rare case can appear many months later).

Have your newly purchased bird checked out by your veterinarian. Some symptoms to watch for are listlessness, depression, diarrhea, ruffled feathers, loss of appetite and a lack of coordination. If your bird displays some or all of these symptoms, it should get qualified help as soon as possible.

If you have a sick bird, or have been in an area in which a sick bird was kept, and feel unwell yourself, notify your doctor.

Until 1979 it was difficult to have psittacosis diagnosed. Laboratories had the means to do it, but were reluctant because of the danger of human infection to lab technicians.

A new handling method has been developed, making it much easier for your veterinarian to obtain a positive diagnosis. An improved knowledge of diagnosis and treatment finally offers some hope for the future control of psittacosis. But, in the meantime, be careful. Owning a pet bird can be a rewarding experience, but a little caution can go a long way in avoiding problems later on.

Parrot fever is *not* just for the birds.

THERE'S A KNACK TO

Pet pill popping

HOW TO GET THAT PILL DOWN HIS THROAT . . .

From an article by Robert L. Stear, D.V.M., Manager of Veterinary Services, Norden Laboratories.

Few pets take medication willingly. Most pet owners use either trickery or physical force to send liquids and tablets down a pet's throat. Sometimes it can be a frustrating procedure for the pet owner.

One popular ruse involves concealing medication within the pet's favorite food. Tablets and capsules are easily hidden in small balls of hamburger, cooked liver, or cheese. The distinctive odor of liver can help mask the chemical smell that accompanies most medications.

If you find your pet greedily eats the meat or cheese, but leaves the medicine on the floor, it's time for more trickery or physical action.

It won't take some pets long to become suspicious of your "loaded" treats and sift out the contents to avoid the medication. You may be able to overcome this by giving your pet two or three unadulterated treats in rapid order and then slip in the loaded one. Follow this with another unmedicated treat rapidly and some pets will bolt down the treats without doing a "spot check."

But if all else fails you are stuck with getting down to the basics of "pilling." The technique of "pilling" a cat or dog depends on proper placement of the tablet or capsule far back on the tongue so that the pet automatically swallows.

The method has four basic steps: positioning your pet, opening its mouth, placing the medicine on the back of the tongue, and encouraging the pet to swallow.



To start, place the pet on your left side on a smooth, slippery surface: a table top for a small pet, or a bare floor for a larger animal. This gives your pet the least opportunity to pull away. If you are medicating the animal by yourself, hold it firmly under the left arm, with the head facing forward. Otherwise, have a friend hold the pet steady.

Place your left hand over the animal's eyes: fingers on one side, thumb on the other. Gently tilt the head backward, squeezing the corners of the mouth slightly. The pet should open its mouth.

Holding the medicine between the thumb and forefinger of your right hand, place the dose on the pet's tongue, as far back into the throat as possible, and then close the jaws. Hold them closed with the left hand, and begin to gently stroke the throat with the first fingers of your right hand, to encourage swallowing.

You should be able to see the throat ripple slightly as the pet swallows. Until you acquire the knack of placing the tablet far enough back on the tongue, you'll need to watch your pet for a few minutes to guarantee that the medicine isn't ejected on the floor.

If you must give your cat or dog a bad-tasting liquid, don't try to pour it down the pet's throat. The fluid may enter the lungs and cause pneumonia . . . or it may be splattered all over you and the floor!

The facial skin of a dog is loose enough so that you can retract the skin at the corner of the mouth to make a small pocket. Pour the liquid from a spoon into the pocket, tip the muzzle up, and hold the dog's mouth closed. The pet will swallow shortly. A cat can also be dosed in this fashion, although the cheek pocket is smaller, and the liquid may need to be given in several increments, with time for swallowing in between.

Stay calm. Don't lose your temper. You know that this all is in the best interest of your pet's health, but your pet doesn't know this. Being angry will only make the next medicating session more difficult. As soon as the pet swallows the medicine reward it with a treat and lots of praise and, perhaps, the next medicating process will go even more smoothly!

HANDLING NEWBORN KITTENS

In a controlled experiment, newborn kittens were handled by humans for ten minutes a day every day from the day after they were born until one month of age. A similar clutch of kittens was untouched for the same period.

The kittens who were handled developed more rapidly. Their eyes were opened a day earlier, and they left the nest and explored about three days before the untouched kittens, and were generally more active. They also developed the characteristic coloring (both sets of kittens were Siamese) earlier.

All the kittens were normal at the end of one month, but the handled ones were slightly advanced in development than the ones isolated from humans.



An update on

BLOAT

Bloat appears to be occurring more frequently than ever and it is just as life threatening as it ever was.

It has been estimated that 30,000 cases a year occur in the United States alone. Better understanding of the disease has led to improved treatment and a lower death rate but at a higher cost. The economic losses exceed \$5,000,000 a year. That's a lot of money and a lot of pain and suffering to be caused by a disease that is not yet completely understood.

Evidence, mostly circumstantial, points to many individual factors working together to produce the bloat/torsion complex. Properly called acute gastric dilation, the term "bloat" most graphically describes the illness and the symptoms.

Included in the list of suspected causes are hormones, diet, exercise, excitement associated with feeding time, size of meals, type of food, size and age of dog, physical condition, previous injuries, neurological disorders, and more. Despite much intensive research, no single factor has yet been incriminated as the cause. However, investigations have resulted in improved treatment and the development of surgical procedures to help prevent recurrence.

The deadly cycle . . .

Large deep chested dogs are at highest risk, but many small breeds, notably dachshunds, are included. Show dogs and kennel dogs seem to comprise a large portion of clinical cases, but that may be because of closer observation by better informed observers.

The condition, regardless of what triggers it, probably begins with a failure of effective stomach emptying and a failure of the normal belching mechanism. The ensuing discomfort leads to swallowing of air, causing the stomach to inflate like a balloon. The inflated stomach shuts off the stomach exit and the deadly cycle begins. The esophageal entrance into the stomach is closed to belching and vomiting but not to the entrance of air pushed in by the muscular esophagus during swallowing. Gas in the stomach has been shown by analysis to resemble swallowed air more than gas produced by fermentation of food.

The stretched muscular wall with its decreased blood supply is unable to move food, gas and fluid out and the stomach's great size displaces the rest of the abdominal organs, interfering with their blood supply. Decreased blood supply leads to tissue damage and shock. Life threatening shock is followed

by the accumulation of toxic substances in the blood, serious heart problems, bleeding, severe pain and death.

Important symptoms . . .

The inflating stomach may twist and produce gastric torsion, always fatal without surgical intervention.

Dogs developing bloat show

characteristic signs associated with pain beginning with restlessness, pacing, getting up and down, trying to find a comfortable position, ineffective belching or retching occurs with slimy mucus being spit up. Progressive depression with swelling of the abdomen and difficulty in breathing follows.

Without immediate medical attention these dogs die within a few hours. The longer the delay, the higher the mortality!

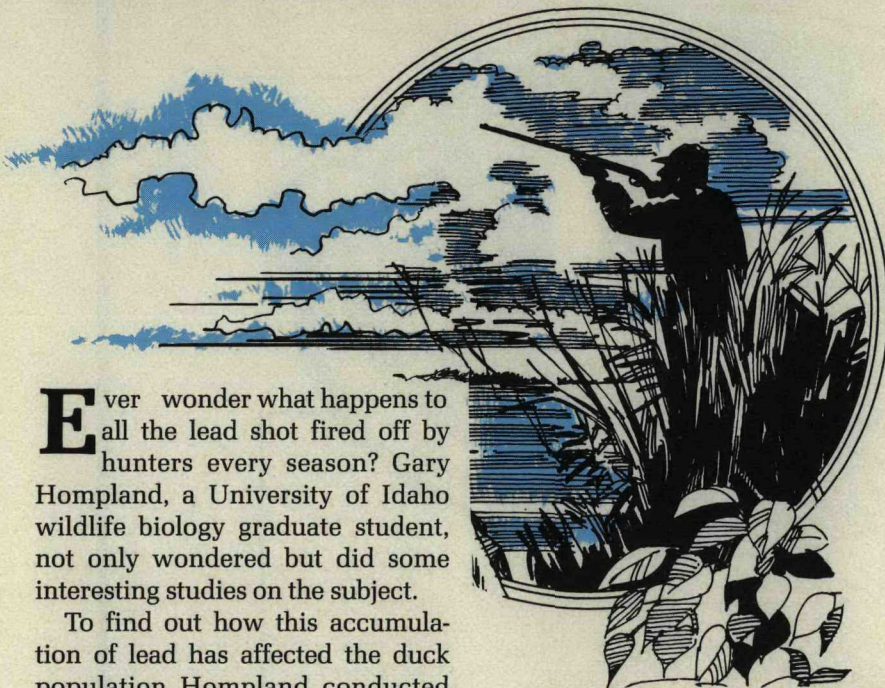
Treatment is directed toward decompression by a stomach tube or surgery and a variety of fluids and injections for shock. In spite of intensive therapy, about one third of these dogs will die, either immediately or within a few days of complications.

Time is critical . . .

Dogs that have bloated once will often bloat again, and several surgical procedures have been developed to decrease or prevent recurrence. None have been consistently useful, but a simple technique of attaching a portion of the stomach to a rib to keep the stomach from twisting over holds more promise than most.

Bloat is a devastating condition causing severe pain and many deaths and every dog owner should be aware of its early symptoms. Immediate veterinary attention offers the only hope for successful treatment. *Don't wait to see what is going to happen!* Continued →

PUMPING THE SKY WITH LEAD



THE CAT'S WHISKERS . . . AND MAYBE DOG'S

Ever wonder what happens to all the lead shot fired off by hunters every season? Gary Hompland, a University of Idaho wildlife biology graduate student, not only wondered but did some interesting studies on the subject.

To find out how this accumulation of lead has affected the duck population Hompland conducted an extensive study on the land, water and ducks in an area of the Snake River about 100 miles east of Boise, Idaho.

To get an idea of the amount of shot deposited in the marsh during the 1978-1979 season thousands of hunters were surveyed. Based on an average number of rounds fired, they pumped several tons of lead in the form of shot in that area.

That is, Hompland added, several tons in one season.

Samples of dikes, marsh bottoms, and shorelines were taken, revealing a significant number of lead pellets per square meter in the dikes and shorelines. And even more in the marsh beds.

Update on bloat

Currently, control involves feeding several small meals a day and not allowing excitement or physical activity to be associated with feeding time. Foods that produce belching or gas should be avoided. Limit water consumption at feeding time. Improving general physical condition through regular exercise may also help.

Be aware and if you suspect bloat don't delay getting help!

By C.T. Robinson, DVM.

Ducks ingest large amounts of gravel and grit so they can digest food in their gizzards. While eating grit the ducks have also eaten up the shot that has accumulated. Lead shotgun pellets are very soft. Grit in the gizzard breaks down the pellets just like any seed or grain. The digested pellets get into the bloodstream and spread everywhere from there. Hundreds of ducks were analyzed, and many of the birds showed high amounts of lead. The studies showed a major portion of the ducks in the area were affected by lead poisoning. That problem, along with high cripple losses due to inaccurate marksmanship, led the Idaho Fish and Game Department to close the area to hunting in 1979.

"The amount of ducks killed by lead poisoning in one season adds up to more ducks than are killed in several years of hunting," Hompland said. "This is like foresters cutting this year's tree harvest and plowing under a few years' supply of seedlings at the same time."



Funny. A lot of people talk about cats' whiskers and acknowledge their importance to the feline's well-being and means of keeping in touch with objects. But very few people have much to say about the dog's whiskers. In fact, most breeds have them trimmed off altogether to "enhance" their appearance in the show ring.

Now along comes Dr. Thomas McGill of Williams College in Massachusetts writing in the *International Journal for the study of Animal Problems*. McGill contends "we humans can be terribly ignorant" regarding the sensory capacities of animals. In fact, McGill says scientific research has only "scratched the surface" of exploring the full range of animal sensory processes.

Getting back to dog whiskers. McGill did a lot of research on carnivorous whiskers, especially vibrissae, as they are called in scientific circles. Some of his conclusions: Vibrissae are much more innervated than body hair, i.e., they have a lot more nerve tissue . . . vibrissae in dogs are served by the largest of 12 pair of cranial nerves . . . and the dog's upper jaw, where the whiskers emerge, is one of the more important sensory areas of the whole animal.

McGill recommends that the American Kennel Club and dog breeding organizations in other countries "recognize the potential importance of vibrissae as sense organs and instruct judges to excuse for the ring animals whose vibrissae have been trimmed or at least make it optional for show dogs, and no dogs with these organs intact should be penalized.

That, at least, makes it easy for the AKC, since it is already optional to cut the whiskers of a dog being shown and dogs with untrimmed whiskers are not penalized."

"BUT THEY NEVER WARNED ME"

By Wayne Thomas, Announcer - Project Manager,
KHJ-TV (Channel 9), Los Angeles, California

Animals, especially unusual ones, have provided me with some of my best interviews . . . entertaining, educating and amusing. I'd always wanted to have my own dog but thought it best to wait until I bought a home. When that day came in 1964, I was barely in the door before I was looking in the dog books trying to pick the right one for me. I checked out all the middle sized ones . . . Cairns to Dinmounts, Yorkies to Scotties but none seemed just right. Then one day a small Benji type of dog peeked through the gate at the house next door. It was love at first sight. When the owners left for work each day, I would spirit her over the fence to have breakfast with me. I finally proposed to them that I'd pay anything if they'd sell her. They had two large dogs and little Happy was left in the yard alone most of the time. She had been found wandering the streets when she was about six months old. Alas, they were in no mood to sell.

Can I ever forget that Sunday night dinner when the phone rang and the neighbors asked if I still wanted to buy Happy . . . they needed money. I told my guests dinner would have to stop while I went next door to buy a dog. She was already packed and came home to finish dinner with us. What a treat after all those breakfasts. I soon changed her name to Heidi (with her permission of course) and we became inseparable friends. Often she would appear on TV with me and became the Channel 9 mascot. I forgave her for getting more fan mail than I did. When she was five, I bred her and thereafter I left her home to stay with the one pup I kept. I've always been a great animal lover, and I asked Doc Young and the veterinarian I was going to a multitude of questions about raising a dog properly. I must have done everything right, because for 13 years she was the perfect dog in all ways and in perfect health.

Then strictly by chance, I was trimming Heidi and her daughter Ginger one day and decided to shave their bellies. There it was . . . a growth on Heidi's chest about an inch wide and situated between two nipples on her left side. A sick, worried feeling dashed through me. The next day, I sped her to my veterinarian.

He examined the lump and asked if I had had her spayed. I said "no, she is always in my yard or house and I knew I could keep her away from the local male gang." Furthermore, I didn't want her to get fat. "Old wives tales" he said, "they only get fat because you feed them too much. They need less to eat after being neutered." And then he said something that I'll never forget . . . "furthermore, by having a bitch of any breed spayed, you greatly diminish the chances of breast cancer and female trouble." I couldn't believe it. I thought I had learned everything one should know about dogs. Somewhere along the way, I had never read or been told that spaying a female is very important to her health in later years. The doctor said the tumor might not be malignant but it should be removed. I was afraid . . . Heidi acted like a dog of 4, but she was over 13 and had a slight heart murmur. Could she stand it? I procrastinated . . . worried . . . tossed and turned. I decided to take a vacation and do it when I returned.

Fate came my way. My uncle, who was to take care of my home and dogs while I was gone, took matters into his own hands. He felt I would never have the courage to have her operated on. He took her to his doctor. She was spayed and the tumor removed. Three days later a lab report showed it to be malignant. I am holding positive thoughts. Even though it was done later than it should have been, I pray that the spaying will prevent any further cancers from appearing in her body.

Since this heart-stopping episode in my life, I have not found *one* other dog owner who knew that spaying a female greatly cuts down the chances of breast cancer and other female trouble . . .

I beg all the veterinarians who read this article to URGE owners of female dogs to have them spayed . . . the sooner the better. The best time is before their first heat. If they wish to breed them, fine . . . but as soon as it is over, then have the operation. It is not trying to push unnecessary services. It is educating a public that NEEDS to fully understand the importance of spaying a bitch.

I hope and pray that I did not find out too late. Heidi has been one of the greatest joys of my life.

NEWBORN PUPPIES NEED
LOTS OF WARMTH . . .

"Baby, it's cold out there!" If you have newborn puppies in the winter it is especially important to remember that they need lots of warmth. That's why they are usually so close to the warm body of their mother, or else tightly curled up with their littermates. Quite often, additional heat has to be supplied by humans if all the pups are to survive.

Rapid respiratory and heart beat rates are always found in newborn pups. Another physiological fact is that their body temperatures are about 94 to 97 degrees for the first two weeks of life, compared to a normal adult's temperature of about 101.5 degrees. What's more, they have no shivering reflex (it's the body's attempt to stay warm in cold surroundings) for the first six days of life. The pup's body temperature can drop to dangerous low levels in a cold room, and will drop slowly even in a room held at 70 degrees. Too cold conditions will bring on hypothermia which causes greatly reduced metabolism and eventual death . . .

The temperature of the whelping box or the area where the box full of puppies is kept must be around 85 to 90 degrees for the first week of the puppy's life. Since it's not very practical to heat an entire room to this elevated temperature, it's advisable to provide a source of heat over the whelping box, such as lights or small heating units. The lights or heater can be raised to lower the heat. Keep a thermometer on the floor of the box to check the temperature, and leave an area of the box outside of the heat source to provide a "cool spot" for both mother and pups when needed.

From the second to fourth week of life, the pup's body temperature begins to rise to 97 and 99 degrees, and close to normal adult temperatures soon after that. By three weeks or so, the puppies are able to walk and stimulate their own body heat. Temperatures in the whelping box can be reduced by about five degrees per week until it's about 70 degrees. By this time the puppies are becoming more independent. ●

Treating terrible Tom

By Judson Snyder

If you have an unaltered male cat and live in a neighborhood where there are other unaltered toms, you're going to be kept pretty busy treating macho Tom for bite abscesses.

You probably won't notice these combat wounds until there's a full-blown infection building up under the skin. The cause of it all is a puncture wound from a tooth or a claw that pierces the skin. The skin heals rapidly, but the bacteria are left to their devices in underlying tissues. In a short time, you'll be able to feel a lump or soft swelling under the skin. If your tom isn't quite a "lap cat" and you don't have much opportunity to explore his anatomy for wounds, the first sign of infection will be when it "pops" and drenches the adjacent skin and hair with foul-smelling liquid and pus.

Don't panic. It's a Godawful smelly mess, but wash it out with warm water, pat it dry with facial tissues, and clean out the wound with a cotton swab. If the wound is in an area where he can't lick it, sprinkle some antibiotic powder on it. Don't try to bandage or cover the wound. It looks like a gaping expanse of naked tissue and you'll probably think the cat is highly vulnerable to infection. To some degree, you're right, but if Tom can lick the wound he'll do a pretty good job of keeping it clean. Owners can help out now and then with tender cleaning when it becomes too dirty.

The wound will continue to drain for a day or two. That's O.K., for in the meantime healing forces are at work and it won't be long until the tissue layers begin to close up.

The last layer to close, of course, is the skin. And Tom will have a bald spot in plain view until the hair grows back again.

The bald spot should remind you to check the cat's body every now and then for suspicious swellings. Once you've recognized the typical size and feel of an abscess you could lance it yourself with a sterile needle, but you will probably want to seek the help of a veterinarian. That lump could be a hematoma, or blood filled bruise, and the cat could bleed to death in some extreme cases. If you are not sure what it is you probably want to make a hasty trip to the animal clinic.

Altering macho Tom will end the bothersome chore of cleaning and healing abscesses. Although it is not a completely perfect cure, the frequency of feline skirmishes will drop pretty close to zero in a few weeks after the minor altering operation.

Female cats can also acquire bite abscesses, although it's not very common. A suspicious swelling in a female should be checked by a veterinarian to make sure it's not a tumor.

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PURR - FECT Communication

Feline Behavior

The purring of cats has long been one of the most interesting and controversial sounds in the animal kingdom. This phenomenon, not really understood until recently, has become almost folklore.

ORIGIN OF THE PURR

Several theories for the origin of the purr have been offered. At first, the larynx was considered the source. However, results of early experiments virtually dispelled this theory. When (via a tracheostomy) air was allowed to bypass the larynx in some cats, they could still purr.

Next, the sound was attributed to vascular sources. Researchers observed that cats most often purred while being petted and that they also tended to arch the back during this time. The theory went something like this: the arching of the back bent the aorta, the blood edied at the sharp bend, resulting in turbulence that was heard as a purr. Investigators went so far as to induce local anesthesia at the site of an abdominal incision so they could manually palpate the aorta for fremitus.

Another group of investigators used the same arguments to explain how the caudal vena cava served as the source of the purr. However, neither group explained how purring occurred when a cat was lying down or why it had a biphasic component. They also overlooked an earlier report in which the infundibular region of the brain was credited with control behavior.

Not until recently has the mechanism for purring been found. Results of electromyographic studies of intrinsic laryngeal muscles revealed regular stereotyped patterns associated with purring. As certain of these muscles contract, the glottis closes partially, causing a buildup of pressure caudal to or within the glottis. The turbulence of the air passing through the narrowed opening produces the purr. This explanation holds for both inspiratory and expiratory purrs and for purring that occurs when the cat is in positions other than the arched-back.



MEANING OF THE PURR

Not all purring is associated with an audible sound, but it does indicate a state of arousal. Cats often purr in the presence of their kittens or people. Despite the fact that we can never truly know why cats purr, it is interesting to speculate on the reasons, based on circumstances at the time the cat purrs. Paul Leyhausen, noted authority on feline behavior, has said the purr is somewhat comparable to our smile. Indeed, the behavior occurs most commonly when cats seem to be happy, content or relaxed. Special variations of the purr have been described for receipt of favors, such as food, for confused mental states, and for use by feline aristocrats such as "Morris."

The most unusual occasion for purring is one often seen by veterinarians. A chronically debilitated cat may purr during the late stages of illness. This phenomenon may be similar to the feeling of euphoria described by terminally ill people.

CONCLUSION

The feline purr originates at the source of most vocalizations, the larynx. It probably communicates a feeling of contentment. It is interesting that it has taken scientists so long to prove the source and to conclude that the behavior probably means what most of always thought it meant.

By Bonnie V. Beaver, BS, DVM, MS

Department of Veterinary Anatomy, College of Veterinary Medicine,
Texas A & M University

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GOODBYE, DUGONG . . .

The legendary mermaid is on its way to extinction. The romantic sea sirens have been reported by lonely sailors for hundreds of years, but now it appears that their days are numbered.

Actually, what Christopher Columbus and other seamen saw and accepted as mermaids were strange creatures that are still with us in steadily decreasing numbers. The slow-moving, shy manatee (or sea cow) was often spotted by homesick and imaginative sailors as it perched on a small piece of land or rock. The strange sound made by the manatee came across the water as a beckoning song to the sailors. If approached by man the bashful manatee would slowly slip away into the sea and disappear before a real identification could be made.

Today, the last of these unusual mammals are found mostly in Florida waterways. The manatee may be the most peaceful creature left on earth. It has no aggression to any living thing, even in the defense of its young. It is unusual in the ability to thrive in either salt or fresh water. Its only enemy today is man.

Once hunted almost into extinction, laws now protect the manatee from hunters . . . but not from boats. The trusting manatee, serenely feeding on water hyacinths and grasses, is too slow to avoid the

propellers of speeding boats. Boating collisions with manatees are so frequent that almost every manatee bears propeller scars. The pattern of scars are even used as a method of identifying them.

Florida has recently adopted the manatee as the official state mammal and established boat speed laws at some refuges. But the "mermaids" of the past are still being killed off at a rate faster than they can reproduce.

Ironically, the manatees are credited with keeping the winding waterways clear of choking vegetation, which makes those waterways traversable by boat.

At one time the manatee was caught for the tears that would course down its face when captured. The tears were believed to be a love potion. Today the manatee has even more reason to cry.

MOTHER CECELIA MARY ADDRESS

For those readers requesting an update of the address of Mother Cecelia Mary and her shelter, we are happy to give you the most recent change of address:

Good Shepherd Shelter, c/o J.B. Kelly Associates, 900 Fulton Avenue, Suite 102, Sacramento, CA 95825.

Unfortunately, many older folks on fixed incomes even find it hard to relate to the \$100 veterinarian bill for the care of a pet.

If you don't have it, and don't know where you are going to get it, even a hundred dollars is an impossible dream.

It's hard to appreciate spending millions of dollars for space exploration or to develop a new agricultural program for some country that you have never heard of. It's really hard when you can't scrape up the few dollars needed to help your pet that may be your only friend and companion in this world.

That's where the Animal Health Foundation would like to help. For only a few dollars they can provide essential veterinarian care for the pets of the elderly who have no other sources of income. These dollars sometimes make the difference between losing or keeping the only companionship of some of our needy, older citizens.

Living alone is tough. Living on a fixed low income is tough. But, the love, affection and companionship of a pet can make each day rich and rewarding.

Would you like to help? Donations to the Animal Health Foundation go a long way, because concerned veterinarians also help with donations of their time and service. We're concerned with helping make life worthwhile for these pet-owning senior citizens. Millions of tax dollars have already gone to lavish space programs. We are only asking for a few down-to-earth dollars to life here. Your contribution, small or large, can make the difference between a lonely solitary existence or a life warmed by the loving companionship of a pet.

Contributions of any amount will help. Send to: The Animal Health Foundation, care of Today's Animal News, 2002 Fourth St., Santa Rosa, Calif., 95404. Your gift could make the difference!

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TAN 1



Recession, gas prices hit dog shows

Will the "gas crunch" put the crunch on dog shows? Many show giving groups are seriously concerned about this possibility.

Dog shows have been enjoying a quiet boom for about 15 years, with most clubs planning for an automatic jump of about 10 percent each year. But the boom may be over. With exhibitors looking hard at inflated prices of gas, the picture is changing. Entries at many shows have been slumping for the past couple of years. And the problem was compounded when the American Kennel Club approved about 30 new shows a couple of years ago. This translates into more shows to choose from and fewer exhibitors who are willing to travel long distances to compete.

A new look for shows

The pinch is being felt most strongly by single shows located far from the metropolitan areas. In some extreme case some of these shows have been discontinued. Circuits (where several shows link together by short drives) are suffering less. And "clusters", where several shows all share the same site, with no driving between shows, have become popular. Three, four, five or more shows from different cities join together to hold their shows on one location. The name of the show is changed every day, but the site remains the same and the

exhibitor gets several shows without the extra travel costs. Cluster shows may be the new look for the future.

Goodbye to the gas hogs

The weekend hobbyist, who makes up the bulk of the entries, has become more cautious. Traveling costs and the quality of the judging panel get a hard look before entries are sent off. Until a couple of years ago almost any showgrounds would be packed with hundreds of huge motorhomes and trailers. More small vans and station wagons are steadily replacing the giant gas hogs.

"People seem to be watching their money more closely," explained a staff member handling entries for the Westminster Kennel Club. The number of entries accepted for Westminster is limited and eager exhibitors in the past rushed to get their entries in prior to the closing. These days entries dribble in at a slower rate as dog owners weigh the pros and cons of rising costs.

But the energy crunch has been a boon to some professional handlers.

The handler takes a whole load of dogs to a show or circuit of shows, and his fees are now considerably less than the cost of a single hobbyist to travel to a show. And this means more exhibitors are giving up the first-hand participation of

showing their own dogs to save money.

And the inflationary spiral doesn't stop there. Most judges charge a flat fee based on travel expenses. Soaring fuel prices triggered a general hike in air travel costs. This increase is passed on directly to the dog show, and then passed on to the exhibitor in the form of higher entry fees.

A new look at an old sport

All of this means a new look at one of America's favorite week-end sports. Skyrocketing travel expenses, inflated entry costs, smaller shows with few chances for major wins all point to some big changes in dog shows in the year 1983.

How does this affect you? Well, since most serious breeders show dogs, these increased costs eventually trickle down to the final costs of breeding stock. And from there the bottom line is that you will probably be forced to pay may more for the next puppy you buy.



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TODAYS ANIMAL NEWS

SURVIVING

That winter cough

WE ALL DO IT . . . BUT WHAT DOES IT MEAN?

Winter weather means coughing, sneezing and wheezing for most of us humans. We accept this as part of the normal course of winter, and, accordingly pet owners often explain away a cough that plagues a pet in the same way. But, since pets don't get the common cold or human flu, owners may overlook symptoms of a more serious nature in their pets.

WHAT IS A COUGH?

The cough is one of the body's most wonderful mechanical functions. It's a sudden expulsion of air from the lungs. It's supposed to blow out whatever irritation that is causing that "tickle" in the throat, windpipe or lungs. Usually a few good coughs and the job is done, the foreign matter is expelled and all systems return to normal.

But, sometimes, a cough is just irritating, has no useful purpose, and may cause a problem in itself. Or it may be a signal of another health problem.

The body is the first and still the most sophisticated computer. The base of this computer is a complicated message center that we call the brain. Coughing is triggered by a reflex that starts with a stimulation that begins in the windpipe or lungs and alerts the coughing receptor in the medulla of the brain. This sends a message to the body, commanding it to inhale deeply, compress the air in the lungs, and exhale all at once in an explosive cough. The cough is noisy because the vocal cords need to be cleaned off, too, so they are in the stream of air expelled.

AN EFFECTIVE SOLUTION . . . SOMETIMES

The cough is usually an effective method of solving a simple problem. It rids the body of a temporary

irritant. But what if the cough persists? Sometimes a cough begets more coughing, starting a vicious cycle that may continue for long, painful periods. Severe bouts of coughing usually end in retching and vomiting, which often stops that particular cycle. But, if the pet continues to cough without resolving the problem, consideration should be given to other causes of the cough. Some causes of coughing are:

Chemical or physical irritations such as ammonia, chlorine fumes, or smoke.

Larger particles such as grass seeds or pollens.

Viruses: in dogs, distemper. In cats, calici virus, herpes virus.

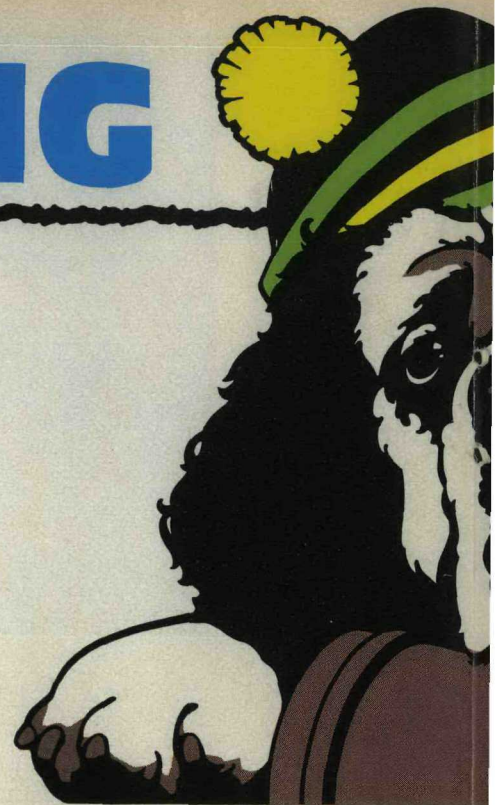
Bacteria: in dogs, kennel cough.

Other causes can be heart or lung disease, tumors, or collapse of the windpipe. Or a cough may signal a parasite, such as roundworms.

There are two basic types of coughs. One is simple and effective and clears out temporary irritants. The other is ineffective and persists and can indicate infection, tumors, heart conditions, allergic reactions, worm infestations, or a bone or other foreign object that the body is unable to dislodge.

DRUG STORE REMEDIES . . .

A host of over-the-counter drug store remedies are available for the human-type winter sniffles and coughs. But these are not necessarily appropriate for your pet. If the cough is temporary and seems to solve the immediate problem, don't worry about it. If it persists it is time to see a veterinarian and find out why. Treatment could include antibiotics for an infection, worming for parasites, surgery for the removal of a foreign object, or treatment for a heart condition. But whatever the treatment, you won't



find it in the cold and cough section of your drug store.

Remember that your pet's cough can either be a wonderfully simple system of solving a temporary problem or a warning light to alert you of a more serious problem. ●

PNEUMONIA IN TURTLES

Turtles and tortoises are not the kind of pets who communicate to their owners that they are sick, but if you suspect your pet tortoise is "off your feed", you can tell if it's pneumonia, which is not an uncommon disease among hardshells.

A slight runny nose might be the only obvious symptom, but you can listen to its breathing for more definite proof. So, how do you listen to a turtle breathe? Well, pick up the turtle and hold it so that its head is looking right in your ear. Take a rear leg and push it in and out repeatedly. This will cause it to exhale heavily, and you'll either hear a clear rush of air or a gurgling or rumbling sound. If it's a noisy exhalation, take it to the veterinarian for the proper antibiotics, and follow directions.

WINTER.....



The open (cat) door policy

CAT DOORS PROVIDE FREEDOM...

Winter creates some special problems for owners of comfort loving cats. These felines are loathe to spend to spend much time outside when the weather is wet or chilly.

Many cat owners are the type who allow their pets freedom indoors and out, especially if they live in a semi-rural area where safety and auto traffic is not a hazard. There's an increasingly large population of cats in this country who fall somewhere between the total indoor cat who adapts to a litter pan and windows to view the outside world, and the farm cat who spends its life outdoors and in the barns, never seeing the inside of its owner's residence.

The cats who straddle the best of both worlds in their lifestyle: allowed inside the home and freedom to go in and out whenever they choose, usually have the owners at their beck and call when it becomes necessary to open or close a door.

There's something compulsive about a cat that sits patiently by a door waiting for a human to come along and open it. Very few cat owners can ignore this silent plea. If ignored, the cat will either voice its request or reach up and scratch at the door. Or both.

Getting back in is even a tougher job for the cat, for he's unseen and must perform some vocal or physical trick to draw attention. Quite often, these pleas to get in take place at awkward hours late at night or by dawn's early light.

One solution is to make a cat entrance. Cut a hole in a back or side door, or create one in unseen corner, like a closet that is against the outside wall. The door, or flap, will be hinged at the top to keep the weather out, of course.

The next problem is teaching the cat it can get in and out its private entrance without human assistance. Unlike dogs, cats will not simply barge through the door. They must be taught. The way to do this is to prop the flap open for a few days and let the cat stroll in and out at will. Gradually lower the flap so that it has to squeeze its way through. In a few days you can completely lower the flap and the cat will easily push its way in or out.

Naturally, other cats in the neighborhood will see your pet gaining easy access to the house (and that delicious food and milk inside) and follow suit. To avoid taking on the entire neighborhood free-loading feline population, a method only your cat knows will have to be set up.

We go back again to the training process. The flap will not swing inside when the cat is outside... it will have to be pulled out as the cat squirms its way underneath. This is easily taught, but it's a good idea not to have other people's cats standing around in a circle watching the training process.

Some day, perhaps, cat (or even flea) collars will be fitted with tiny electronic senders which will trigger a mechanism on the door flap, just the way automatic garage door openers work. Then only your cat will be able to gain access to your house. But until the electronic age reaches our felines, we'll have to improvise in more traditional ways.



Fake snake trick

Winter is the time when we look forward to spring and gardens. But this year, with a little clever planning, you may be able to beat those feathered marauders to the harvest of of your strawberries, blueberries and cherries.

There's an easy answer to the problem of thieving birds, according to the National Wildlife Federation, and it doesn't require the use of poisons. It consists of fake snakes purchased at novelty stores or just fashioned from scraps of black rubber hoses.

Birds are deathly afraid of snakes and so they "recognize the snake shape and stay away," according to NWF. One family with a lakeside home found that a pair of feisty geese were terrorizing their children and pets. After they cut a black rubber hose into four-foot lengths and placed them around the property "the geese disappeared over the lake, never to be seen in that yard again."

One imaginative pilot has solved the problem of birds and planes. He drapes a make-believe rattlesnake over the air intakes of his engines to keep the birds out.

TEACHING YOUR DOG NOT TO COME . . . IS EASY!



By Doug Bundock

Here's a sure-fire, well-tested method of teaching your dog not to come to you.

First, yell and scream at it a lot. This teaches him not to listen to you. Do it often enough and he'll learn to ignore any command you give.

Next, chase him. This demonstrates your physical inferiority and helps him to understand the simple principal that he can outrun you. Now he knows that whenever he wants to avoid anything he doesn't like he can just run away.

And, very important, use a variety of commands when calling him so that he never learns any single command.

And, of course, be sure that when the errant dog finally does return home he gets some good harsh punishment. This can be reestablished by lots of nagging about what a bad dog he was. You can keep this up for hours after his return. Keep telling him how bad he was and he'll learn not to come home at all!

Sound silly? If it does, there is still hope for you to train your dog properly. But the negative approach described above really does happen every day to thousands of dogs. And, whether they realize it or not, those owners are actually teaching their dogs not to come.

So, let's turn all this around and do just the opposite.

Start teaching the "come" on a leash or a long line of some sort, so that you can enforce what you teach. The dog should also wear a chain or "choke" collar when training. Use one simple command like "come" or "here" every time to avoid confusion.

Remember, your dog will only actually learn and understand a very few words in his lifetime, so try not to confuse him by changing words.

Now, when he is a little distance from you call his name, to get his attention, and to make him understand that you are talking only to him. Follow that with your command, "Rover COME!"

Don't shout. He isn't hard of hearing. In fact, he can hear a lot better than you can!

He'll probably just stand or sit there and look at you, because he really has no way of knowing what that word means yet. It would be no different if you were trying to learn a foreign language.

So you will have to show him what this strange new word means. You can do this by repeating the command and reeling him into you. When he finally gets there make him sit right in front of you. This is where the important part comes in: once you have brought him in to you, lavish him with praise! Tell

him what a wonderful, clever dog he was to respond to your command to come. It will give him the incentive to want to obey the command next time.

Now repeat the whole process again . . . and again . . . and again. Dogs learn best by "rote" training, which means repetition. After several minutes of this he should start doing at least some of it by himself.

When he does, that is the time to conclude your training session. Tell him "okay", which means his formal training period is through for now, and reward him with more praise and a play period. He will look forward to pleasing you in future training periods to win his reward of play and love.

After repeating this for a few days you can assume that Rover understands the word. So, now if he just looks at you without any response you can start some re-enforcement. Keeping your leash slack and loose, give him the command to come. If he ignores the command give him a jolting jerk with the leash and bring him in to you. But praise him when he gets there as though he had done it all himself.

Rover now has a simple choice: come when called and be praised, or refuse and be corrected for his failure. The choice should be obvious.

Continued on page 19

CAT SALAD GARDEN

With the onset of winter, most house cats will be spending much less time outside, which can be bad news for your house plants. In the wild, cats eat vegetation as well as meat. And many domestic cats will satisfy an instinctive desire for "greens" by nibbling at grasses and plants.

To prevent your cat from indulging that craving by munching on your house plants, try growing a cat salad garden. Most cats prefer grasses to other forms of vegetables, so plant a handful of grass seed in a low, flat pot in a spot that is accessible to kitty. It takes only about a week before the tender shoots reach an edible size.

Even better, and often easier to buy in small amounts, is a mixture of wild bird seed. It will provide more variety for your cat, and make a more interesting planting for you. And the bonus for kitty is that most of these mixtures contain some catnip!

It's easy to teach your dog

Continued from Page 18

From this foundation you can start extending the distance and the length of your training line. Let him wander around and pretend not to be paying any attention to him. Wait until something attracts his attention away from you, and then tell him quietly, but firmly, to come. If he fails to respond immediately follow up with the corrective jerk on the leash. It won't take him long to learn that you can enforce your command from any distance.

Have patience and be consistent. It will also help to build some positive associations with the command. Use it when you feed him, before you take him for a walk or play with him, or before taking him for a ride in the car. Let him think that coming to you is wonderful, and failing to come is awful.

With a little time and thought and firmness you could be one of the fortunate few who own a dog that always comes when called!

WORTH READING

TETON WILDLIFE: Observations by a naturalist, By Paul A. Johnsgard

This book is the result of two summers spent by the author in the Jackson Hole area of Colorado's Grand Teton National Park. The author's observations are concentrated on a small collection of individual waterfowl, mammals and other vertebrates. Through patient viewing of antelope, coyote, Sandhill Cranes, Trumpeter swans, and Callipe hummingbirds, the author was able to observe the family life, mating habits, migrational patterns and other aspects of their interrelated lives. Appendices include a checklist of vertebrates living in Grand Teton, and instructions on when and where to see some of the more interesting species. Wildlife enthusiasts should enjoy these simple, vivid descriptions of animal activity in the Tetons.

Moderately illustrated with black-and-white photos and drawings; 128 pages, paperback \$7.95, hardbound \$17.50., Colorado Associated University Press, University of Colorado, 1424 15th Street, Boulder, Colorado, 80309.

DEER RANGE: Improvement and Management, By William Dasmann

For thousands of years, the deer has managed to survive by adapting to the slow climatic, vegetative and other changes in the environment. But in the last few centuries, as deer ranges were quickly introduced to such factors as automobiles, alterations in food sources and plant cover and competition with domestic stock for forage, the deer's age-old system of evolution are accommodation no longer sufficed. This book explains how man has and can act to provide enough habitable land to maintain a sufficient deer population. A short but very informative overview of the methods used as well as the problems that are encountered in deer range management.

Illustrated with black and white photos; 168 pages, hardbound \$13.95, McFarland and Company, Inc., Publishers, Box 611, Jefferson, NC, 28640

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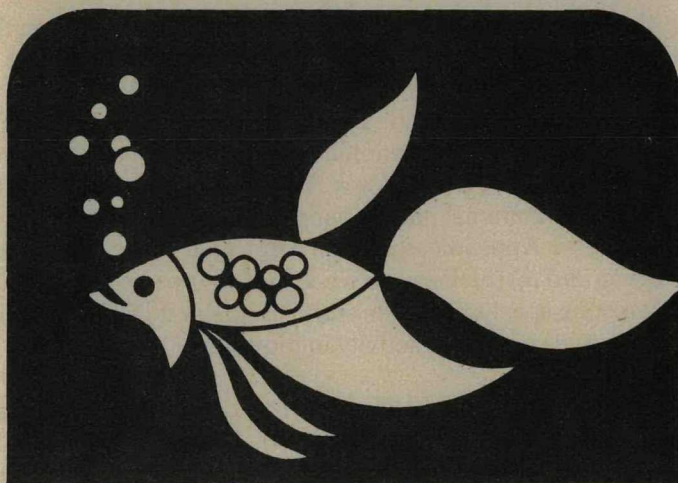
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AQUARIUM HINTS . . .

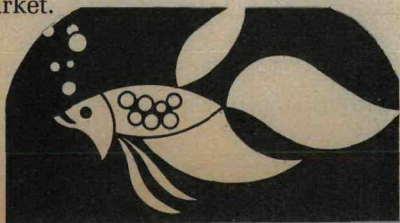


TROPICAL FISH IMPORTS

Tropical fish dealers who have been relying on the easy geographical access of fish from South America are not finding it so easy these days. There are two reasons: For one, a lot of importers have discovered they can make more money by growing marijuana for export. This is especially true in Colombia, where drug traffic in marijuana and even more dangerous drugs is a thriving business.

But of greater impact is the world economic condition. The dollar is not as strong on the international market as the franc and the German mark. This means European tropical fish importers are easily outbidding the Americans when it comes to bargaining for prize collections of rare tropicals. Large discus fish are in relatively short supply and more expensive than they have been in the past because of the shrinking dollar. Importers have to pay more for them to beat out European competition which means higher prices at the dealers.

So far, the supply of exotic tropicals from Southeast Asia waters and koi fishes from Japan have not been affected by the monetary market.



Lights... Action!

You come into a darkened room in your apartment or home and the first thing you do is turn on the aquarium light. Right? Wrong.

What you've done is caused shock and instant panic with nervous fish crashing into tank sides and zipping about the tank in wild zig-zags. It's as if you were sitting in a dark room and suddenly someone popped a flash camera in your face.

Instead, turn on the room lights first and then the tank light. Give your fish a chance to get accustomed to other lights in the room before switching on their light.

Another tip. Don't rap with your knuckles or fingernails on the side of the tank to "wake a sleeping" fish. This can cause sound waves to reverberate throughout the tank. Tests have shown this can cause bladder damage to sensitive tropical fish.

And another tip. Surely every hobbyist knows that overfeeding fish can lead to problems such as food spoilage and consequent water fouling. Just as a reminder, however, feed sparingly once or twice a day and watch to make sure every morsel is consumed. It shouldn't take any longer than five minutes for a group of healthy fish to devour every crumb. If it takes longer, cut down on the amount.

TANK TIPS

HEALTH OF AQUARIUM FISH DEPENDS ON THE ENVIRONMENT

SCHAUMBURG, ILL. — Glass tanks, dechlorinated water at 75 degrees, placed in a location away from extreme temperatures provide the best environment for fish in home aquariums, reports Dr. Louis Leibovitz of Cornell University in **Journal of American Veterinary Medical Association**.

The best tanks are made of glass with a wide surface area at the top.

The wider the top, the greater the rate of exchange of oxygen and gaseous wastes between the air and water, reports Dr. Leibovitz.

To clean tanks, best results can be achieved by using plain water or plain salt water with a 5% commercial chlorine bleach solution as the disinfectant.

"Most public water supplies are tested for toxic substances and have been widely used in aquariums," states the author.

Tap water should be dechlorinated by allowing it to stand in a covered container for several weeks. This "conditioning" also allows time for the removal of sediment and disease-causing agents and wastes.

Most fish are adaptable to slight temperature variations and 75 degrees is good for a community tank with a variety of species. Dr. Leibovitz stresses, however, that abnormal temperature shifts alter a fish's defense mechanisms and favor disease.

Aquariums should be placed in an area that is easily serviced, has adequate electrical outlets, and is away from drafts and extremes of heat and cold. Dr. Leibovitz also recommends fluorescent lights at the top of the aquarium. "Illumination from the sides or bottom of the tank is unnatural and provides an additional stress as well as increasing the temperature of the aquarium," says Dr. Leibovitz.

Gravel and sand in the tank act as biological and physical filters in the operational aquarium.

Cloned Fish

The first successful cloning experiment using tropical fish has been accomplished at the University of Oregon's Institute of Molecular Biology, reports *Pet Business* magazine.

Dr. George Steisinger and a team of researchers used a batch of eggs from a common Zebra fish to do the job. The Zebra fish was used because the female can deliver a batch of healthy eggs in a few days, thereby cutting short the experiment's time.

Normal fish have two half-sets of chromozones, one-half from the male and one-half from the female. The U of Oregon researchers eliminated the genetic contribution of the male by ultra violet irradiation. Then they doubled the female's genetic material by submitting pregnant Zebras to underwater pressures of 8,000 pounds per square inch. They also discovered they can double the material by heating eggs to 106 degrees.

Naturally, the resultant fry were all females as the male chromozones had been destroyed. Steisinger says they can produce all male fry by eliminating the female's contribution.

In theory, male cloned Zebras could be mated with female cloned Zebras to create clone-bred duplicates.

This bit of scientific research within the confines of a tropical fish tank has implications in other aquatic areas. For example, creating more fish for food or insuring the survival of endangered sport fishes, not to mention its impact on the tropical fish hobby.

SUPER DIVER

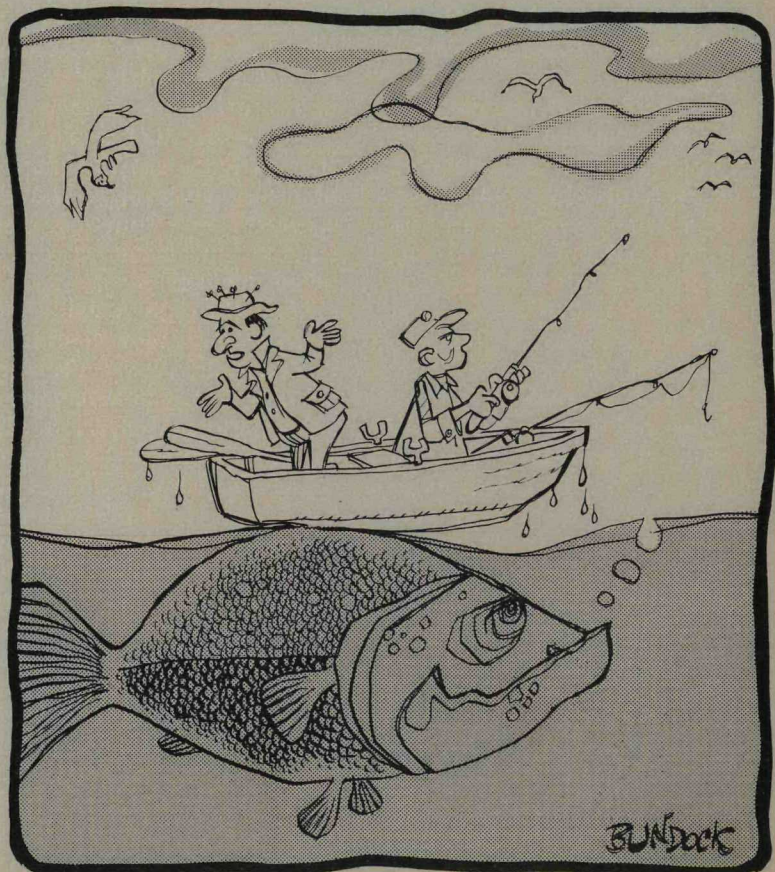
The Emeror penguin has been clocked at staying underwater for 18 minutes. And this large penguin is also a deep diver; a vertical plunge of 885 feet has been recorded. Notes *Ranger Rick* magazine, "That's almost twice as deep as the record for a human diver with scuba gear!"



BANDING OF A DOWNY WOODPECKER

This picture of a Downy Woodpecker being banded helped to earn Mike Remington, 17, of Longmont, Colorado, a \$1,000 scholarship in a national photography contest funded by Eastman Kodak Company.

Remington, who is legally deaf, discovered that photography was his best tool for communicating his love of animals and now plans to make a career of photography. "Part of my success," says Remington, "is due to my reliance on pictures to tell me things I cannot hear."



"WELL, THERE GOES THE OLD FISHING TRIP! WE SEEM TO HAVE RUN AGROUND!"

UNDERSTANDING OF THE D♥OG

Part I

There are two basic ideas that must be understood to appreciate how the heart and blood vessels work. The first is knowing the parts of the blood system which is called "anatomy". The second is knowing how each part works which is called "physiology". So we are going to discuss the anatomy and physiology of the heart, blood vessels and lungs.

I want you to refer to line drawings in figure 1 through 4 as we go along to understand where these parts are located in the dog. Figure 1 is looking at the dog from the side, and figure 2 is with the dog laying on his back; this is the same as looking at a human's chest. Figure 3 represents a close-up diagram of the four chambers of the heart, the valves between the chambers and the large arteries and large veins. Figure 4 is a diagram of how the blood circulation of the body works.

Begin with figure 4, the diagram of the body's circulation. This is the plumbing of the body; a system of pipes that are large when leaving the heart that get smaller and smaller as they reach the distant parts of the body until they reach the smallest of vessels (the capillaries). Here oxygen and nourishment exchange into the individual cells. The blood then passes into the small veins which collect blood into larger and larger veins to return to the heart.

The heart is the pump that moves the blood through these vessels, pumping it around and around the body. There are two major parts of the heart. The chambers on the right side (right atrium and right ventricle) pump blood through the lungs where oxygen is taken in by the red blood cells and carbon dioxide is given off into the lung cells. The blood is then pumped to the left side of the heart where the chambers on the left side pump blood (now oxygenated to its maximum and ready for use by the

body cells) to the body.

The arteries contain blood that is being pumped away from the heart to the body cells and the veins collect the blood from the cells and return it to the heart. When the blood returns to the heart (the right side) it is pumped to the lungs for oxygen exchange (through lung arteries) and returns by the lung veins to the left side of the heart to be pumped through the arteries to the body once again.

In figures 1 and 2 the heart is located in the chest within the rib cage. The lungs are also located in the chest. The heart, the two lungs (left and right) and the main arteries and veins are the organs in the chest. The organs of the dog and other animals are very similar to man in their location in the body and the way they function. Animals walk on all four legs (limbs) while man walks on his rear limbs, standing erect.

The heart of the dog has four chambers, the same as man. Refer to figure 3. The upper chamber that collects blood from the main veins (anterior and posterior vena cava) is called the right atrium. The blood is passed through a valve (tricuspid valve) into the right ventricle where it is collected. It is then pumped through the pulmonary valve into the pulmonary artery and to the lungs where oxygenation of the red blood cells takes place in the capillaries of the lungs. The blood returns to the heart through the pulmonary veins and enters the upper left chamber of the heart called the left atrium. The blood moves from the left atrium through a valve (mitral valve) to the left ventricle. Blood collected in the left ventricle is pumped through the aortic valve into the main artery of the body called the aorta.

The aorta divides into seven major arteries. The ones going to the head are called the carotid arteries; the ones going to the front legs are

called the brachial arteries; the ones going to the rear legs are called the iliac arteries; the one going to the intestines and organs in the abdomen is called the celiac artery; the one going to the kidneys is called the renal artery.

There are major veins returning blood from these major areas: from the head comes the jugular veins; from the front legs the brachial veins; from the rear legs the femoral veins; from the abdomen the splenic vein; from the kidneys the renal vein. These seven major veins collect into two very large veins before entering the right side of the heart. Blood from the head, neck, and front legs collect into the main front vein (anterior vena cava); blood from the abdomen, rear legs and kidneys collect into the main rear vein (posterior vena cava).

For an animal to be normal and in good health, it is necessary for all of these anatomical parts to be in normal condition and carrying on their functions without difficulty. If any organ begins to fail, it will eventually, as the condition progresses, begin to show symptoms that you will see in your dog. For example, failure of one of the valves in the heart so that it leaks blood backward into a chamber that the blood just came from will cause a drop in body blood pressure. When this becomes advanced it can cause blood to pool or back up into the lungs causing fluid to accumulate (edema) in the lungs. This produces coughing and difficult breathing, weakness and lethargy (laziness) from poor oxygen supply to the body cells. The veterinarian may first anticipate this when he hears the heart murmur from the leaking valve, long before the symptoms begin to appear.

THE HEART

*How the heart
and blood vessels work*

by Marvin W. Frace, DVM

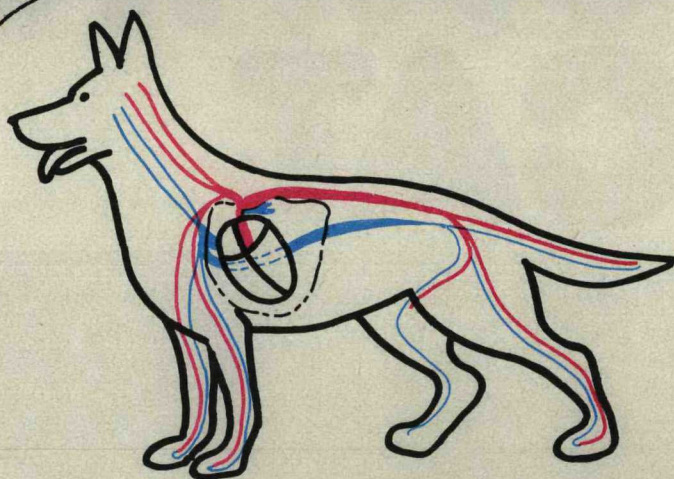


Figure 1

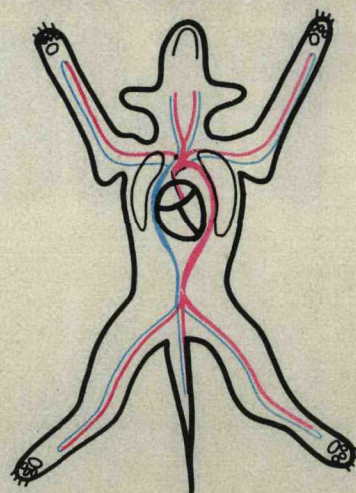


Figure 2

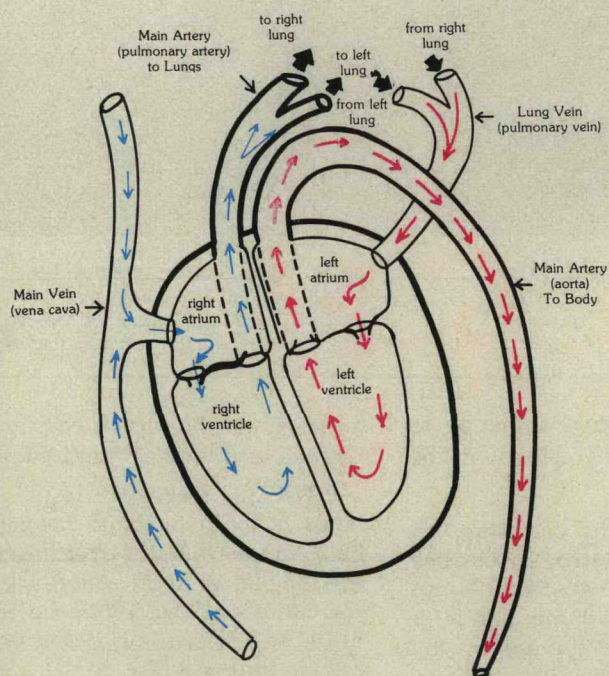


Figure 3

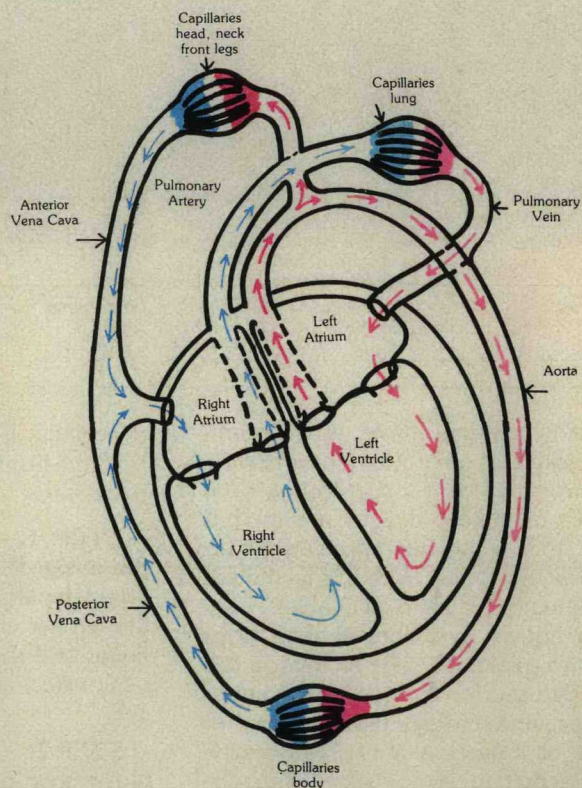


Figure 4

A SIMPLIFIED RESTRAINING
TECHNIQUE FOR

MEDICATING THE CAT

(photos courtesy Norden News)



1

Using Dr. Hilton's restraint technique for medicating a cat, the animal is positioned on the table facing you.



2

The left ear, grasped firmly between thumb and forefinger of the left hand allows maximum control of the cat and leaves right hand free for administering the medication.

Many readers have written and asked for an article demonstrating an easy method for medicating cats. Dr. Finus Hilton, a veterinarian, has used this technique successfully for over twenty years. With this technique you should be able to give tablets, capsules, liquids, eye drops or nose drops with no assistance. The technique can also be used for applying medicine to the face and for force feeding cats. For the 1 or 2 percent of cats with which this technique is not successful, Dr. Hilton recommends making a bib from a turkish towel, tying it around the cat's neck and then proceeding as

described. If you have someone to hold the front legs for you this won't be necessary.

STEP 1: With the cat sitting on the table facing toward you, place your left palm on the cat's head. Grasp the left ear with your thumb and forefinger, and the skin at the base of the neck with the remaining fingers (Figs. 1-2).

STEP 2: Rotate the cat's head until his nose points toward the ceiling. (Do not raise the head; rotate it to the right.) In this position, about 90 percent of the cats will relax their chewing

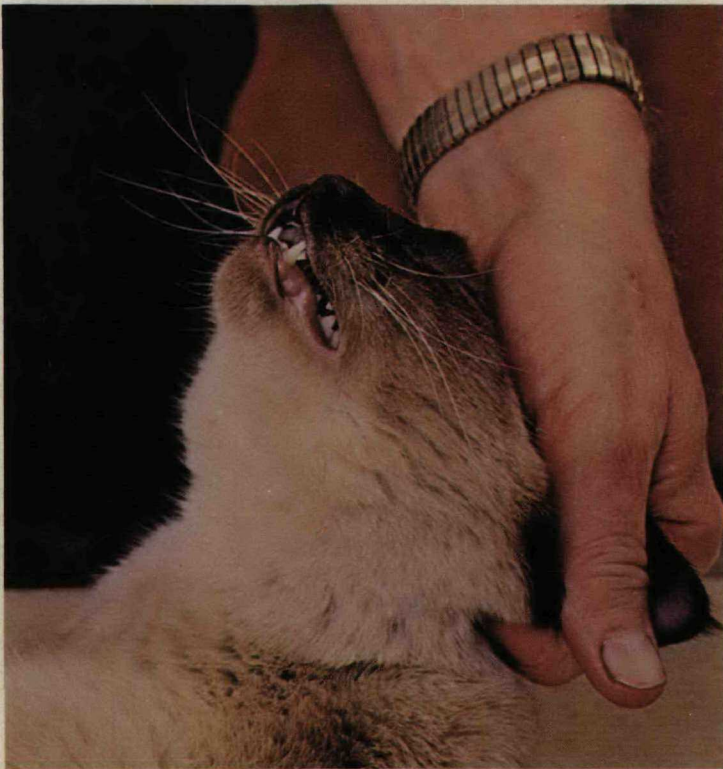
muscles and the mouth can be easily opened with the free hand (Figs. 3-4).

STEP 3: Place the capsule, tablet, bolus of food, or liquid medicine far back into the mouth, over the base of the tongue. A reflex action will cause the cat to swallow. When he licks his nose, he has swallowed and you can release his head (Fig. 5).

You can use this same method to apply medicine to the face or administer eye drops or nose drops (Fig. 6). When putting drops in the eye, try to keep the eye level so that the drops will remain in place.

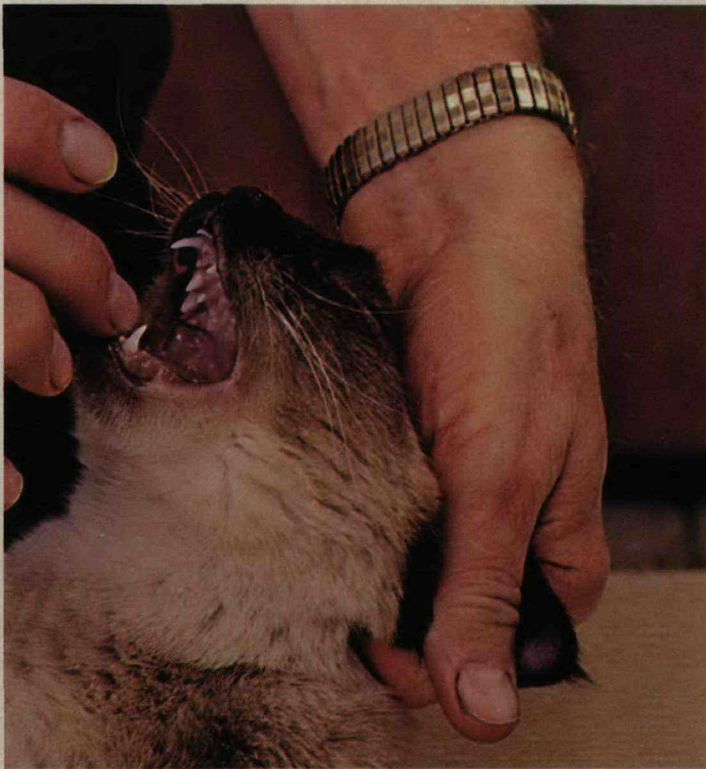
3

The cat's head has been rotated until the nose points to the ceiling.



4

As the chewing muscles relax, the right hand is used to pry open the mouth.



5

The capsule is placed far enough back on the tongue that reflex action will cause the cat to swallow.



6

Using the same restraint technique, you can administer eye drops or nose drops.

PET FOOD FACT

Pet Foods . . .

WHAT YOU SEE MAY NOT BE WHAT YOU GET

What is the most expensive part of your dog's diet? Even in these days of frugal shoppers and tight money we'll bet you don't know!

The most expensive part of your pet's daily food ration may be water.

To prove our point, let's take some sample figures and round them off for the sake of simplicity. Take an average can of better dog food. Turn it around and read the contents. On the average it contains better than 75% moisture (and that's water) — and then you get down to crude fiber, ash, etc. — and finally down to the actual meat and vegetables that looked so inviting on the front of the can. In a 14 ounce can that means that 10 1/2 ounces is just water. If that can cost you about 40 cents that makes the moisture worth about three cents per ounce.

If you project that figure, it means that you are paying about \$3.84 per gallon for water! If you thought you were paying 40 cents for a can packed with choice steak and vegetables, you may have been very mistaken.

Reading the fine print . . .

Reading the fine print on pet food packages gives some basis for comparison . . . but doesn't tell the whole story. A basis for comparison . . . but doesn't tell the whole story. An analysis can be interpreted many ways, and the manufacturer is going to be sure to present his product in the best possible light.

To demonstrate how misleading an analysis can be, Today's Animal News has, in the past, printed breakdowns of a couple of items that appeared to provide a very well balanced diet. The two items used for this demonstration were a pound of grass cuttings and an old leather shoe.



By comparison, if you check the breakdown on a bag of dry dog food you will find that kibble or meal contains less than 10 percent moisture, and a pound of dry dog food will cost you less than half the price of canned dog food.

Prices going up . . .

Dog food prices are high and going to get higher, no matter what kind of food you use. But, in comparison, Americans are still better off than most of the rest of the world. In England pet owners are feeding more canned pet foods than ever before. A survey of 5,000 households revealed canned foods to be the single most important item in the diet of a cat or dog. In fact, 78% of dog and 90% cat owners fed them to their pets.

Within recent years the price of canned pet foods rose more than 85% in the United Kingdom. Prepared pet foods represent four percent of all grocery sales in the U.K. But, staggering as the increases appear, they were less than the price hikes of human foods.

And many dog foods are still a better buy, nutritionally, than some foods designed for human consumption. And this may explain the sales of canned pet foods for human consumption in some poverty-stricken countries. If you have doubts about the food you are serving your dog consult your veterinarian for his advice.

Canine cookie recipe

ADDITIVE-FREE DOG TREATS

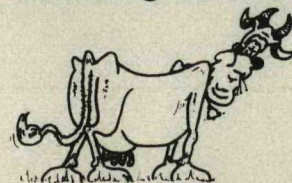
Health food devotees who want a dog treat, without the commercial additives, will be interested in this recipe that appeared in DVM magazine and credited to a New York veterinarian.

Take 2 1/2 cups of whole wheat flour, mix with 1/2 cup dry milk fortified with vitamins A and D, one beaten egg, six tablespoons of wheat germ oil, garlic "to taste" and one teaspoon of salt (leave out the salt if your dog is on a salt-free diet).

Mix all these ingredients until blended and then add gradually 1 1/2 cups of cold water until a proper consistency for cookies is reached. Roll out the dough with a rolling pin, cut into 12 or 18 or whatever size cookies best suit your dog, and bake on a cookie sheet 30 - 35 minutes at 350 degrees. Refrigerate until use, or if you want to make a really big batch they can be frozen until needed.

You can add to this basic recipe to create special taste treats. For instance, a puree of liver will give the cookies a flavor that few dogs can resist. It may not appeal to you, but lots of garlic is usually a winner with dogs. With a little experimenting you should soon find a formula that will turn on the taste buds of your dog.

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Finicky Fido

PICKY EATERS ARE MADE — NOT BORN

It's an old but true axiom that dogs are not problem eaters, it's their owners who are problem feeders!

One example pointed out in Purina Kennel News is the puppy brought into a new home, suddenly pulled away from his littermates. Naturally, nervous, lonely, and probably a bit apprehensive in the new surroundings.

This often leads to a reluctance to eat at first. So, the equally nervous owner will tempt the new arrival with table scraps and specially cooked food. This is one way to very quickly create a canine problem eater. The owner would be far better off to offer a nutritionally balanced dog food and give the puppy a reasonable amount of time to eat. If it doesn't finish the meal, take it away and let the puppy go hungry until the next meal. It will soon discover that you eat or go without. It's a lot easier to start the puppy out on correct eating habits than it is to try to teach it new and better habits once it matures.



It's usually the owner's fault . . .

There are quite a few reasons why dogs seem to "go off their feed" once in a while. For example, puppies shed their baby teeth between 15 and 22 weeks, and this is a time period when the mouth can be tender and sore. Don't spoil the puppy with special treats during this time . . . you'll wind up with a problem eater later.

Warm summer months mean the dog will cut back his intake about 25 percent, so smaller portions are in order. If the dog seems to be eating less no matter what the weather, it could simply be a matter of over-feeding.

Many male dogs will eat less when there is a female in season in the neighborhood. But normal eating habits return if the bitch is moved out of smelling range or the heat period ends.

Show dogs, hunting dogs and field trial competitors often seem to lose weight and get "persnickety" about their food. Constant travel, the excitement of competition and strange surroundings all play a part. But eating patterns will return to normal once the dog is back in familiar kennel or home. This is no time to force feed or provide special snacks.

Nyet on bread

It may not seem like a big deal for you to slip Fido a slice of toast at breakfast, but if you lived in Russia it could win you a winter vacation in Siberia. It all started when Russian farmers discovered that bread was cheaper than more conventional feeds for their stock.

Russia has suffered from grain shortages for several years and subsidizes bread. When the government discovered that bread was being used as a substitute for fodder a law was passed to penalize anyone feeding bread to any animal, including the family pet, with a penalty of three years in jail. Go to jail, directly to jail, and do not collect any rubles.



Catering to Kitty...

CHOOSING THE PERFECT CAT FOOD...

Wow! Chicken, tuna, beef, cheese, shrimp, turkey, milk, liver, kidney, horsemeat!

The shelves are crammed with different flavors, colors and brands. The last count — 71 separate items on one shelf. All this for our kitties! Their cup runneth over. Why so many? Which are best? How come they are all high in animal protein? Soft ... hard ... canned ... dry! Too many choices? Not really!

Cats are carnivores and their basic nutrient needs are pretty similar to other meat eaters — except that they have some very special requirements. Requirements that are not met by dog foods or table scraps.

We all know that cats have their own ideas on everything, including what they eat. Here's a clue as to why there are so many kinds of foods. 71 different food items surely illustrates that felines are finicky eaters. Biologists call them "occasional feeders." Some like to pick and nibble all day long while others like to eat one or two times a day (and tell you about it all the while).

Large cats, like lions, may feed every few days and be quite content. All cats can be trained to eat at specific times to correspond to our schedules. Fortunately they are creatures of habit.

Kittens and nursing queens (female cats) need more food containing a higher percentage of protein than adults. They must eat more frequently (cats will usually

not stuff themselves) in order to get enough calories. Felines have special requirements, too. They must have the protein taurine (an amino acid) present in their food to prevent blindness, to aid in the digestion of fats, and to prevent heart and muscle problems. Vitamin A and niacin have to be supplied in the food because cats cannot synthesize them. Good cat foods supply all of these as well as other essentials. All meat diets are bad and may lead to iodine and calcium deficiencies while all plant and milk diets are severely deficient and will lead to starvation.

How much? Here's a guide:

AGE	FOOD WEIGHT	IN OUNCES
5 weeks	1 pound	2½ — 3½
10 weeks	2 pounds	4½ — 5½
20 weeks	4-5 pounds	6
36 weeks	7 pounds	7
Adult	10 pounds	8½

Remember that your cat is an individual and will have its own feeding habits and needs.

Kittens require solid food by four weeks of age. Their mother's milk is not adequate then. They should be weaned by seven weeks of age.

Which food to select? Your cat will tell you — they have their own ideas. Their desires are influenced by the odor and taste as well as the consistency of the food. Some like it hot

Some like it cold

Some in the pot

Some dry, but never 9 days old.

The appearance of their food is not of much concern to the cat but it is to us. The adult cat's tastes are often determined by the foods it received as a youngster, however, as all cat owners know, their tastes may change at any time. Most cat foods contain quite a bit of fat and may seem oily. These fats are necessary and help make the food taste better.

Feline eating habits, including their table manners, are greatly affected by their surroundings. They are sensitive to light levels, often preferring to eat in subdued light. Loud and unaccustomed noises generally interrupt feeding and some cats will eat only from bowls of a certain size and shape.

All this is very interesting, but how do you choose a cat food?

Here's a guide:

1. Determine what type of food and flavors your cat likes. Always buy the smallest quantity when trying a new food. There is less waste that way.
2. Choose the highest price range you can afford. You are most likely to get the best quality. Look to see if the label says nutritional complete.
3. Check the label to see if the brand has all the vitamins and things the other brands have (not food sources such as beef, etc.). That way you will be more likely to meet all the nutritional requirements.
4. Do you like the food? Do you like the way it looks and smells, does it seem wholesome? These influence your decision since you must be satisfied, too.
5. Does the food cause any upset? Some cats will vomit certain foods, develop allergies, or have other problems.
6. When you have determined what your feline friend wants to eat, check with your veterinarian to be sure it is right and meets all his needs.

Well nourished animals, especially kittens, have the best chance to develop and maintain strong healthy bodies.



in the NEWS

NARC AGENTS RAID PIT DOG OPERATION

A "Tac" squad of eight narcotic agents swooped down on a Springfield, Illinois residence and shut down a drug and dog fighting operation. The agents, following up on a tip, found drugs and gambling records on the first floor and a complete "sophisticated" dog fighting setup in the basement.

Nine dogs, identified as Staffordshire terriers, were found chained in the basement training and fighting area. Records showed that fights were regularly held every weekend, according to an account released by the Canine Chronicle. The dogs made their "do or die" performances in a pit that was about 15 by 20 feet, with side walls high enough to prevent the dogs from escaping. Included in the equipment was a treadmill to keep the dogs in fighting trim.

RACCOONS, DOGS, AND GARBAGE CANS

Tired of putting up with raccoons and loose dogs foraging through your garbage cans? These middle-of-the-night forays can be vexing to say the least. Human Society officials suggest a method of making the area unattractive that is both safe and humane. Just sprinkle liberal amounts of either naphtha flakes or moth balls all around the area. Hopefully, the marauders will take one whiff and head for a more attractive garbage can elsewhere!

Coming in the next issue...

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SEEING EYE SIMBA

A remarkable true story about a cocker spaniel and a German shepherd in England came to light recently. It seems Esme Bidlake of Kent had this spaniel named Minky and a shepherd named Simba. The 7-year-old spaniel went blind and 3-year-old Simba took personal charge of his sightless friend.

By gently grabbing Minky's ear, Simba guides her down the stairs and then opens doors with front paws to gain access to other rooms. Simba guides the spaniel this way to the feeding bowls and sits beside her while she eats.

When the dogs are out for a walk, Simba will hold on to Minky's ear when they approach a street crossing, wait for traffic to clear, and then guide her across.

The incredible part of all of this is that Simba has never been trained to be a guide dog. He does it by instinct, sensing somehow that Minky is helplessly blind.

"As soon as Minky went blind, Simba seemed to sense it, and without any training from me, started guiding the little spaniel about the house," said Bidlake. "I have never seen one dog care so much for another," she added. "Simba hates to let Minky out of his sight, even for a few minutes."

CROCODILE QUIZ

How do you anesthetize a crocodile? (The first one that says "verrry carefully" get his or her knuckles rapped.) Well, veterinarians at a British zoo had this croc that needed heart surgery (heart surgery on a crocodile?) and weren't sure the normal animal anesthetics would work on the cold-blooded reptile. So they packed him in ice for several hours until he was thoroughly chilled and nearly stiff. Then they accomplished the necessary surgery. The croc was then put in a warm water "recovery room" for eventual recovery.

Still the same

A coelacanth, a fish that was thought to be extinct for 60 million years, was caught off the coast of South Africa in 1939. A comparison of fossils showed that it had not changed at all during that time, according to the National Wildlife Federation.

Our cover

She will never win a prize at a dog show and she has no fancy pedigree. In fact, her lineage is so completely mixed that one cannot even identify her as any cross of any purebreds. She is an all-American mix. Even her name, "Taffy", is common.

But Taffy, and others like her, have filled the hearts and homes of millions of humans with their intelligence and devotion.

With the hybrid strength of many mixed breeds, Taffy is still going strong at 16 years of age. She has outlived most of her purebred contemporaries.

Her gift of love and companionship will be remembered and treasured long after the trophies and ribbons of the show dogs have tarnished and faded. She is truly "man's best friend."

Cover photo by Doug Bundock

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Magnesium	.20	.10
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Ash	8.10	5.90
Magnesium	.16	.11

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