

TODAYS
Animal News

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by Sherill Cobb

Illustration by Christi Bonds

Did you know that a rabbit can be trained to use a litter box? Did you know he can learn to do simple tricks? Yes, like a dog or cat, a young rabbit can learn many things, if you are willing to teach him. The main thing to remember in training a rabbit is to repeat the exercise you are teaching. By doing something again and again, your rabbit will quickly learn.

LITTER BOX

First, before you bring your young rabbit home, make a litter box for him. Take a shallow cardboard box and put newspapers in the bottom. Then place the box in a corner, perhaps in the laundry room. Wherever you put the box, be sure to leave it in the same place.

When you get your rabbit you will see how clean he is. His soft fur smells and feels so clean, because he bathes himself often with his tongue, like a cat. Since your rabbit is a clean animal, he will usually leave his droppings in the same place. At first, however, you can help him by taking him often to his litter box and leaving him there. When he has finished he will hop out and run about the house.

After a week or two he will be trained so well that he will go alone to his box. Of course, each day you will want to empty the soiled paper and put fresh paper in the box. Keep his food and water a few feet from his litter box. Each day he should have fresh rabbit pellets in a clean bowl, and next to it a bowl of fresh water. In a short time, your pet will learn that his litter box, food, and water are in a special place.

Remember: with litter box training, each day take him often to his box, and keep his special place clean.

SIMPLE TRICKS

After you have trained your rabbit to use his litter box, then train him to do simple tricks. For instance, you can get him to sit on his hind legs. Hold a treat food, such as fruit loop cereal, above his head, and he will sit up. Then give him one fruit loop, and gently rub his nose upward. At the same time, tell him that he is a good rabbit. Do not give him more than one or two treats at a time. Too many treats will upset his stomach.

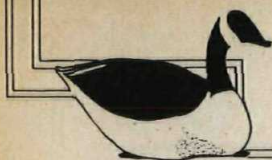
After he learns to sit up, you can teach him to toss a ball. You can use a

rubber ball or a small wire ball, with a bell on the inside. Place a small ball in front of him. At first he may only smell the ball, but keep placing it in front of him. When he does pick it up, he will toss it. Then give him a cracker jack or a fruit loop and pet him. Again, tell him you are proud of him. Soon he will be tossing the ball across the room.

After your rabbit learns to toss the ball, teach him to jump through a wire hoop. You can make a ring hoop out of a straightened coat-hanger. Place the hoop in front of your rabbit, talking to him. Then hold a treat, perhaps a dry shelled peanut, in the center of the hoop and pull it through. In a few moments he will jump through the hoop. Give him his treat, and get ready to hold up the loop again. He will like this trick. To show his joy, he may flick his ears and toss his head about.

Remember: with simple tricks, give one or two treats, pet him, and talk to him. Repeat this action many times.

With a little time and training, your pet will learn to do many tricks. And you will be the proud and happy owner of a well-trained rabbit.



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Dear Reader,

THE PERFECT PET . . .

What is the perfect pet? Millions of humans share their lives, their sorrows, their joys with some kind of pet. Dogs and cats, of course, top the popularity list. But snakes, birds, fish, turtles, goats, sheep, rabbits and many other forms of animal life can also be companions.

The need for sharing with something other than another human is being recognized in a flood of research studies. The results show that pet owners outlive non-pet owners, and enjoy more mental stability. Surveys point out that pet owners recover faster and live longer after a heart attack than do non-pet owners.

Even our laws are changing to include pet ownership as a basic right and need. Many older folks who have previously been denied the love and companionship of pets by landlords will now be able to insist on the legal rights to keep a pet. Many "rest homes" have found that maintaining a "mascot" dog or cat provides their residents with a "new lease on life."

In the pages of this special issue of **Today's Animal News** we hope to help you in the selection and care of your perfect pet.

Charles Robinson, D.V.M., Editor-in-Chief

Best regards,

Charles T. Robinson, D.V.M.
President & Publisher

*Animal Health Foundation
Today's Animal News
4331 Montgomery Dr.
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Today's Animal News

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Battle looms over pet foods...

Veterinarians are bracing for a spate of pointed questions from their clients concerning ingredients in pet food and the required contents printed on pet food cans and bags. It seems the Pet Food Institute, a trade group that represents 95 percent of the nation's dog and cat food manufacturers, is locked in a struggle with animal protection groups that want better labels with more detailed information as to the contents.

PFI has asked the Food and Drug Administration (FDA) to make new regulations that would allow "class and collective terms" in pet food ingredient labels. Dr. Michael Fox, scientific director of the Humane Society, says such permission would lead to "serious veterinary health and nutrition problems... it will deceive many pet food purchasers."

"Class and collective" names would "adequately identify the source and function" of ingredients, says PFI's Duane Ekedahl, executive director. Corn would include whole corn, cracked corn, ground corn, kibbled corn and flaked screened cracked corn. According to Ekedahl, class and collective terms would permit the use of alternative ingredients based on

their availability and price. Like "cereal grains" could refer to "corn, rice or wheat." He also said use of class and collective terms could save consumers \$200 million a year.

"While the labeling requested by PFI may be beneficial to the producer, it certainly will not be beneficial for the pets involved," claimed Carvel Tiekert, D.V.M., president of the American Veterinary Holistic Medical Association (AVHMA). "There is a certain euphemistic quality to the term 'cheese' for dried cheese rinds and 'plant fiber products' for corncobs and peanut hulls."

Added Dr. Fox, "such vagueness in labeling could cause serious problems for those pets who are allergic to certain food materials... since the pet owner would not know whether the harmful ingredient was present or not. And the labeling of 'animal by-products' that are actually of little or no nutritional value as 'protein' constitutes a practice that is not only misleading to the public, but can also be detrimental to animal health." From the manufacturer's standpoint, regulatory requirements increase product costs by forcing him to either continue to purchase ingredients re-

gardless of increasing acquisition costs, or to maintain alternate label stocks or revise labels to meet the availability of ingredients," said Ekedahl.

Currently, the FDA is reviewing all the materials from both sides, but they've given no date as to when they'll come up with a decision. ●

SPIDER LADDER

Squeamish about coping with the spider trapped in the sink or bath tub? His plight is obvious, but how do you rescue him from his predicament without touching the crawly critter? If you live in England you can buy the Spider Ladder, a 12-inch miniature rope ladder that can be tied to the faucet to allow the spider to climb to safety.

At a price of just under three dollars the item has become a popular department store seller, according to Pet business magazine. ●

CHECK YOUR LABEL

Does your label have the name of a veterinarian hospital on it? If so... That hospital has chosen you to receive a complimentary subscription to Today's Animal News!

NCCA COLUMN

Last month we received a letter from a reader describing an unfortunate situation. Her cat developed a sore on its back that, when treated with antibiotics, would get better then return. It seemingly would not heal. It was a tumor, and by the time it was biopsied it had already spread to other parts of the body and was beyond treatment.

Sores that do not heal are one of the cardinal signs of cancer. Do not take any non-healing wound for granted. Insist on removal or at least a biopsy so that you know what the lesion is. If it turns out to be something other than a tumor, so much the better! You will probably be relieved, your veterinarian will have a much better understanding of how to treat the problem (all veterinarians are not socialists) and everyone can expect a better outcome.

A biopsy is taking a part of a lesion for examination by a pathologist. Some can be done easily with a local anesthetic; others will require a general anesthesia and sometimes extensive surgery just to reach the tumor. When it comes to cancer, the first step is to know what you are dealing with. Knowing this, the second step is to determine what can be done and what are the possibilities.

Cancer is everyone's problem. Help treat our pets and help the fight against this disease. Support the NATIONAL COMPARATIVE CANCER ASSOCIATION.

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Animal hearing research

Sound waves enter the external ear canal and hit the eardrum, making it vibrate just like the head of a drum. These vibrations travel through the bones of the middle ear and eventually stimulate nerve endings in the Organ of Corti and the cochlear nerve. This nerve enters the brain and carries the impulses that are recognized as sounds.

There are several kinds of deafness in our pets: white dogs and white cats with blue eyes are often deaf because of a lack of a part of the nerve conduction system. These animals are deaf from birth. Infections that damage ear structures and the aging process are the most common causes of acquired deafness.

The determination of the causes of deafness is a process of elimination. Knowing the history of an injury or disease is very important. Injuries to the ear drum may cause a decrease in hearing ability and some antibiotics needed to treat infections can cause damage to the nerve tissues and deafness. Wax, foreign bodies, tumors and debris from infection may plug the ear canal and interfere with sound waves. A thorough cleansing may restore normal hearing. Knowing the breed can be very helpful because inherited deafness can occur not only in some purebred animals but occasionally in crossbreds as well. Old dog deafness can be related to a degeneration of the bones of the middle ear as well as loss of the sound nerve receptors. These dogs will occasionally accept a hearing aid that has been especially molded to fit their ear. Some hearing can be restored with the help of these aids in very tractable dogs. However, the condition is progressive and usually ends with complete deafness. Dogs born deaf can be trained using hand signals and vibrations produced by stamping on the floor.

Deafness is not a serious disability for dogs or cats. The biggest threat is from automobiles because our pets seem to use the sound of vehicles to warn them of danger. •

DEAFNESS IN PETS . . .



Charles Robinson, DVM.

Deafness or diminished hearing capacity often goes unnoticed in our domestic animals. This is partly because of our inattention, but mostly because our pets are not dependent on hearing to live useful lives. Loss of hearing in one ear is usually not recognized, although a very observant owner may suspect that the animal does not discern the source of noise as well as it should.

The changes of behavior associated with loss of hearing can be confusing. Generally, the first change will be evidence of fright

when startled. Then lack of attention and response to calling or commands will become obvious. Exaggerated barking and meowing is a frequent problem in acquired deafness. Perhaps they continue to make noise because they cannot hear themselves, but the true cause is not known. You would expect this type of barking to stop of its own accord as long as the animal is not rewarded by petting, feeding, or going outside every time it makes noise. A mild punishment, visual or physical, is usually sufficient to stop it and re-condition the dog not to bark.

The Animal Health Foundation

WHAT DOES THE ANIMAL HEALTH FOUNDATION DO?

By Harry Maiden

This is currently the most frequently asked question submitted to the Animal Health Foundation . . . and a question we are happy to answer. The numerous requests for this information is a reminder to those of us who work with the foundation on a day-to-day basis that we have failed to share this information with the thousands of new subscribers to our magazine Today's Animal News. Please accept our apology as we now attempt to correct this communication gap.

The Animal Health Foundation was founded in 1967 as a "charitable non-profit corporation" for the specific and primary purpose of charitable, scientific, literary and educational activities in the field of animal health and care.

What does this mean to animals and their owners?

As a reader of this magazine we hope you are aware of one of our educational efforts, and we appreciate your interest and support. You probably have not read the first issue of the magazine, published in 1970 (originally titled Animal Cavalcade) but you are now part of our growing family of animal loving friends living in every state, and 30 foreign countries who subscribe to the magazine. Last week three new African countries Somalia, Cameroon and Zambia, joined our family of readers.

We want the magazine to bring you interesting and helpful information to provide the kind of care you want to give your pets.

The Animal Health Foundation also actively participates in educational seminars on the importance of the human-animal bond which has recently created a dramatic surge of interest in both professional and public circles concerned with the practical applications of

human-animal relationships to fill a range of physical, psychological and social needs for a variety of people.

Special help for the elderly and disabled . . .

This introduces another important part of our work, to provide care for the sick and elderly pets of elderly citizens who are living entirely on social security, and those on Aid to the Totally Disabled. In this regard we are very fortunate in having marvelous support from members of the veterinary profession, who were truly convinced that the principal of a charitable foundation, dedicated to improving animal health, was worthy of their time and effort.

A group of sincere veterinarians formed the Animal Health Foundation in 1967, contributing a considerable amount of money, time, medical skills, and serving as Trustees for the Foundation. Numerous veterinarians continue to serve as trustees, with the addition of equally dedicated lay people.

The continued sponsorship of the veterinary profession enables us to provide necessary medical care for sick and injured pets of those elderly citizens living entirely on social security, and those on Aid to the Totally Disabled. At one time we also assisted pet owners who were on welfare, but found the demand for help was more than we could afford or handle.

Veterinarian support makes it possible

We rely on the excellent cooperation of veterinarians who accept referrals from the Foundation, and in many situations, either do not make any charge, or they greatly reduce fees on large bills, or ask a maximum fee of 30% off actual cost. This means that the veterinarian never charges for his or her services or profit.

All who are helped are asked to contribute as much as they can. For this project we rely on contributions (which are tax deductible) from animal lovers who wish to share in supporting this meaningful care in time of need. Some months we are able to assist more than others, but there are sad days when we can only help the most urgent cases.

The demand for a contributive dollar is a constant one, and creates great concern as to how much of that dollar is actually used for the purpose requested, and how much is used for overhead expenses. The Animal Health Foundation is fortunate in being able to maintain extremely low overhead costs, due to the kindness of the Southern California Veterinary Medical Association for providing our main office, and a veterinarian for the use of a day to day work office and large store room in his hospital, all without any cost to the Foundation.

Our good fortune continues with a dedicated staff of volunteers, one starting his 12th year, another completing her eighth year, and another volunteer on call as needed. Before deciding to send a helpful donation you may wonder if the Executive Director is perhaps a highly paid executive? You can be the judge. He is now starting his 17th year of enjoyable service in this position with a salary of \$4000 per year.

Look for more information about the Animal Health Foundation in the next issue of Today's Animal News.

If you wish to contact the Foundation directly please write or call:

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Good old Soap and Water

GRANDMA
KNEW BEST . . .

Is there anyone, anywhere not familiar with the grand old adage "cleanliness is next to Godliness"? Now for a fact, it's been proven that grandma was right again. Her rigid philosophy about a good bar of soap, lots of clean, fresh water and "don't forget the scrubbing," is very much alive and well today.

Since bacteria normally enjoy living on skin, any scratch presents a golden opportunity for invasion. Recent studies have proven that soap and water significantly reduces the number of bacteria present and consequently lessens the danger of an infection in an open sore.

Our pets' wounds also heal more often without infection if the skin is kept clean and their tongue is kept away. Animals tend to lick persistently at any open wound within reach and, contrary to popular belief that it keeps the sore clean, the actions of the tongue actually sweeps bacteria into it gathered from the surrounding skin and hair.

When your pet has a sore, clip the hair away from the wound, wash it thoroughly and often enough to keep it clean. Try, also, to prevent irritating licking. The wound should look clean and healthy and a little less angry everyday. If it does not appear to be healing normally, it should be examined by your veterinarian without delay. •

Prostate problems

PROSTATE PROBLEMS IN DOGS

During the warm summer months dogs and people enjoy the outdoors, its beauty and hazards. Dogs allowed to visit (unsupervised) others, especially boy dogs visiting girls, can get into all sorts of trouble. Everyone is aware of the dog-catcher picking up the injured and unwary and of the wounds from fights and machinery, but how about unseen things. Male dogs being stimulated by the attractive odors of females in heat get unexpected exercise and excitement that often results in muscle stiffness and pain. Some of this pain can be caused by a diseased prostate gland.

The prostate gland is a rather large gland situated behind the urinary bladder in the back of the abdomen. Its function is to contribute the fluid that makes up most of the dog's semen. When diseased it can shut off or reduce normal urine flow and, if it's very large, it can cause the dog to want to have a bowel movement even when it's not necessary. Attempts to urinate when prostatitis is present will often result in a very small stream of urine. Severe or acute infection will cause the dog to have a painful abdomen, fever, loss of appetite, constipation, be depressed and even have difficulty in walking.

The prostate is frequently affected by chronic infections and by enlargement caused by hormones and the aging process. Half of all male dogs and 85 percent of those over five years of age have enlarged prostates!

The condition is usually first detected by finding the enlarged gland during a rectal examination. Its size and shape and position help direct the veterinarian's further efforts. X-rays may be necessary and a thorough understanding of the urinary bladder, kidneys and large bowel is essential. Sometimes testing is extensive before the whole disease is understood.

Neutering (castration) is almost always necessary for treatment to be effective and may be the only treatment necessary. Complicating bladder infections, peritonitis, constipation, tumors of the testicle that are secreting offending hormones and many of the other problems inflicting older dogs must be considered and treated before the prostate problem will improve. •

THE VETERINARY FRONT . . .

March-April
Today's Animal News

Page 8

Charles Robinson, D.V.M.

TODAYS ANIMAL NEWS

From the veterinary front

Your Dog's Liver. . .

Have you ever thought about your pet's liver? Not many people do. Most don't even want to think about such things, but since it's the largest single gland in the body and its health is of vital importance some understanding is useful.

Liver disease can be a dramatic and rapidly fatal process or a mild condition that has practically no symptoms at all. This large organ lies in the abdomen against the diaphragm where is protected by the last ribs. It's so important that it has two sources of blood supply. Arteries and larger veins that come from the spleen, stomach and intestine. We cannot see it, usually cannot feel it, and are unaware of its presence except when it stops working properly.

The liver has many functions and activities that are not duplicated anywhere else in the body. It processes starches, fats proteins from digested food, breaks down toxins, eliminates wastes and useless substances, and stores food stuffs and vitamins. It helps control the circulation of blood, body temperatures and is involved in the immune defense system. It even makes the bile that is necessary for the digestion of fats in the intestine. A very important item, this liver!

It's not surprising that the symptoms of disease are varied and many. Loss of appetite and mental depression are the most common early signs and along with fever, vomiting, abdominal pain, and weakness. Others include thirst, swollen abdomen, weight loss and yellow eyes and membranes.

This large organ is very susceptible to damage by viruses, toxins from bacteria and chemicals that

are eaten. The virus that causes infectious canine hepatitis can cause sudden liver failure and death or a mild prolonged disease in dogs that are only partially immune. This is why yearly vaccination is so important. A damaged liver can recover and even grow larger by forming new cells to replace damaged ones! To be effective, however, the liver disease must be recognized early and treated vigorously so that the organ is not too badly scarred or misshapen.

The detection of liver problems is usually made in several stages. Physical examination and symptoms will usually alert the veterinarian that the liver will not be functioning properly. Blood samples for blood cell counts and chemistry will often point directly to the liver. Further examination may require X-rays, excretion tests to estimate the severity of the problem and often a biopsy must be taken for examination by a pathologist. Information of sequential biopsies has proven that many liver diseases can be treated effectively. These include chronic active hepatitis and steroid induced liver disease. It has been said that the pathologist's report is the most important information available in liver disease.

When your veterinarian diagnoses a liver ailment and begins treatment by adjusting the diet and changing medications given for other problems, and discusses complications such as kidney disease, a patient recovery is usually not rapid and often requires follow-up blood examinations and liver biopsies. ●

*By Charles Robinson, D.V.M.,
Editor*

Where an ounce of prevention saves lives

Most dogs love to go for a ride in the family car, and even some cats enjoy an occasional outing. But a parked car can turn into a pet killer when the temperature climbs.

Every summer many pets left in closed cars and suffer from heat stroke simply because their owners were careless or thoughtless, according to authorities of the American Animal Hospital Association.

Many pet owners fail to realize that the temperatures inside an auto can easily climb to 120 degrees (F) and may even hit a scorching 140 degrees in the Southwest.

It may be only a fairly comfortable 70 to 75 degrees outside, but the temperature inside a parked car may soar to more than 100 degrees in a parked car. When the heat is combined with high humidity and poor ventilation, the family car can turn into a fatal oven for the pet locked inside. Car temperatures are affected not only by the sun, but from heat generated from the pavement and streets, by catalytic converters and other parts of the exhaust system that create heat.

Dogs and cats don't perspire like people. When they get hot they salivate and pant to get rid of excess heat. But this can lead to hyperventilation and dehydration. Excessive heat also produces stress and muscle contractions which also build up body temperatures.

And, of course, pets with heart conditions are more susceptible to the heat stress, as are pets that are very young, obese or ill. Short nosed breeds, such as Boston terriers, Pekingese, and bulldogs are more likely to suffer from heat stroke because they have a harder time breathing and, therefore, cooling off. ●



FISH NEED TLC ALSO . . .

Photo and text by Gary brown . . .

HEALTH CARE FOR SALTWATER AQUARIUMS

Until a few years ago, saltwater aquariums were considered too exotic and too expensive for the average hobbyist. Recent developments in equipment, however, along with hybrid breeding that has produced hardier fish at lower retail prices has resulted in a rapid growth of this hobby.

Page 10

While a saltwater aquarium requires somewhat more attention and effort to establish, it is basically easy to maintain once it is functioning properly. The fact remains, however, that a saltwater aquarium is more expensive to stock than freshwater — making the prevention and cure of diseases important.

When new stock die in a saltwater aquarium, the owner has a tendency to rationalize that it was due

to "bad stock" or fish that were already in bad condition prior to purchase. While this may be true in some cases, the majority of losses can be attributed to maintenance or feeding problems that create "stress" for the fish and lower their natural resistances to diseases.

Perhaps one of the greatest misconceptions within this hobby concerning stress and diseases related to stress is the idea that a saltwater aquarium is a miniature section of

Continued on next page

the sea. This misguided belief has resulted in the loss of many marine fish and invertebrates.

To begin with, your saltwater aquarium is an artificial environment — no matter how meticulously it was established. If you have established your salinity at 1.020 to 1.025 density you have created what is generally considered the ideal salinity for your tank. The problem is, however, that while that particular salinity is ideal for your tank, it is considerably lower than oceanic salinity — which varies from region to region — and from which your fish and invertebrates are stocked. The reason for this, and the fact your hydrometer is probably banded at 1.020 to 1.025 density, is that it represents the ideal AVERAGE salinity for saltwater species.

Consider for a moment the environment from which your stock naturally comes and it becomes apparent why average standards must be established in a tank and why stocking a marine aquarium is more difficult than freshwater.

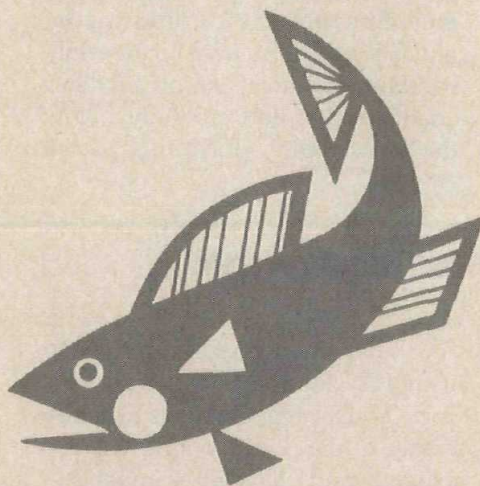
If you are a beginning marine aquarist, the odds are that your fish are basically reef fish. In the ocean, tidal action and the breaking of waves on solid objects and reefs create a high degree of aeration. For some fish this is good but others can move outward to where the level is more comfortable. In your tank, however, the fish must adapt to your equipment standards.

In the ocean, solar radiation provides continual ultraviolet lighting and fish have the depth in which to establish a healthy exposure. At best your tank can provide only full-spectrum or wide-spectrum — but artificial — lighting with a set depth.

Filter-feeding invertebrates exist in large populations in the ocean but in your tank they are basically decorative and do not provide any real function of ecological balance. Also, pH, ammonia, nitrite and nitrate levels are almost non-existent in the ocean while, in your tank, they are of critical importance and must be monitored constantly.

Given these facts, it is apparent that your tank is merely an artificial environment and even with the best of care you should expect losses in introducing new stock. Bearing in mind these handicaps, however, you can take certain steps to insure a minimum of loss due to stress and disease.

Experts generally agree that marine fish and invertebrates in tanks are not as disease prone as are freshwater species. A common misbelief, however, is that this is because of the salt content of the water. This may be due, in part, to the fact that salt has been used for centuries to preserve meat against disease. The salt content of seawater, however, is considerably lower than that of pickling brine which does slow decay producing microorganisms and there are a number of diseases that flourish in seawater.



Because saltwater fish do tend to be more disease resistant, the majority of problems arise not from the actual disease but from improper water maintenance, care and diet. These conditions create the stress which can in itself be fatal or can make the fish vulnerable to diseases it might otherwise resist.

A daily inspection of your tank can reveal the early signs of stress or disease. Such signs include white splotches, disoriented swimming, unusual eating habits or refusal of food, strange breathing, excessive hiding, and changes of color.

One of the most common causes of stress is overcrowding. It is a general rule that a newly established tank should have no more than one inch of fish per five gallons of water. After the tank becomes more established this can be increased to one inch of fish per 2½ gallons of water. For the purpose of example, damsels — which measure usually about an inch — could be introduced to a twenty gallon tank in the following numbers: four fish (inches) maximum to begin then gradually increased to eight fish (inches) maximum as the tank becomes established.

Another common cause of stress is the improper introduction of new stock to a tank. Coral fish are for the most part fiercely territorial and will often defend their "area" of the tank — often to the death — against newcomers. Upon introduction to a tank new fish become disoriented and this leads established fish to harass them producing stress that sometimes becomes fatal. Many pet store owners advise to let a new fish float in its bag in the tank for at least fifteen minutes before releasing it. The main reason for this is to let the new fish acclimate to the water temperature in the tank. This practice, however, does not really help in establishing the new fish in the tank.

Inexpensive perforated plastic boxes are available and many serious marine aquarists allow a new fish to spend up to three days in this protected environment while adjusting to the new tank. Another useful practice is to lightly feed while releasing a new fish into the tank so the established fish will be preoccupied eating while the newcomer adjusts.

Poisonous water caused by abnormally high levels of ammonia, nitrites or nitrates also leads to disease. Relatively inexpensive test kits are available with which regular monitoring can be done. Partial water changes can also correct many problems in this area.

Proper oxygen levels and aeration will also prevent many marine

HEALTH CARE FOR AQUARIUMS

diseases. By insuring that a pump is of proper size for the tank, the toxic amounts of ammonia and carbon dioxide in the water will be forced out through the air bubbles. Partial water changes — usually 25% of tank water once a month — will also help insure proper oxygen tension.

Despite the most meticulous care and maintenance, diseases may still appear. By far the most common is a disease in which white spots appear accompanied by scratching action by the fish against the bottom of the tank or against coral. Known as *Oodinium*, it is best treated by commercial copper solutions available at your aquarium store. Copper, however, is lethal to invertebrates so they should be removed along with coral and shells prior to treatment. By following instructions on the product, a cure usually requires ten days to two weeks.

In treating *Oodinium* and many other diseases, the instructions

should be checked carefully with regards to filtration since charcoal filters often remove the medication from the tank solution.

Fungal diseases appear as whitish tufty growths around the site of skin damage. When this occurs the charcoal filtration must be turned off and treatment involves swabbing with hydrogen peroxide or use of commercial solutions such as Myxazin or Furance. Treatment requires five to ten days.

Bacterial diseases also develop as whitened areas around body wounds but are accompanied by torn fins and cloudy eyes. If this occurs the fish should be removed to a separate tank of new seawater and treated with an anti-bacterial medicine such as chloromycetin. NEVER add antibiotics to an established aquarium. Turn off all charcoal filtration and carefully follow the instructions concerning partial

water changes and feeding during the treatment period, which takes three to ten days.

Another bacterial disease is known as pop-eye disease (*Exopthalmus*) and causes the eyes of the fish to become swollen until they stand out of the sockets. Treatment is the same as for other bacterial diseases but may require the tank be blacked out during treatment.

Oodinium, fungal and bacterial diseases are the most commonly found problems in marine aquariums. With these, or any other suspected diseases, a reputable marine aquarium shop owner is usually the best source of information and advice. In all treatment follow the instructions carefully and maintain the treatment for as long as recommended. These practices, along with responsible care and maintenance of your tank, should result in a healthy fish population. ●

Gary Brown

WHAT TO DO FOR HEARTWORM

TIPS ON CURBING CANINE HEARTWORM

Standard treatment for heartworm in dogs is preventive medicine, usually with a daily pill administered by the owner of the animal. It's a lot easier to prevent heartworm infestation than it is to try to cure it once it has been established.

A lot of dog owners seem to find it difficult to get into the rhythm of this daily pill routine. But the powerful drugs used to kill heartworms can also cause liver and kidney damage.

Dr. John M. Bowen at the University of Georgia Research Foundation is working under a grant from the Morris Animal Foundation to help heartworm victims, and he has a few words of wisdom for dog owners who're forced to use the powerful drugs to wipe out the parasites:

"The compounds kill the worms in short order and all this 'garbage' from the worm goes into the bloodstream of the dog. Bloodflow is restricted, and the owner must restrict exercise. A dog which gets loose during this time, and maybe chases a cat, can die."

Heartworm infected dogs become listless and short of breath after even mild exercise . . . those are the early warning signs. More dangerous signs occur as the infestation increases. Mosquitoes have been identified as the carriers of the infestation. All breeds are susceptible and most parts of the country now have problems with heartworm.

"Our own dog is a border collie-retriever mix, what you'd call just a family pet. She gets a daily pill," said Dr. Bowen. "They're all susceptible to heartworms." ●

OUR COVER

The cover story

This nostalgic painting goes back a few years to a time when advertising art was just that. Art. Some of America's most respected artists were engaged to help sell the products of the day. Even the old wooden crates that transported oranges and apples and other produce were decked out with paintings that have withstood the test of time.

If the ads of today are "hard sell", certainly those ads of the past had to be the ultimate "soft sell".

Our cover painting of a girl and her perfect pet was originally titled "To school well fed on Grape-Nuts." Simple. Effective. Appealing. We wonder how many "hard sell" ads of today will be treasured fifty or seventy-five years from now?

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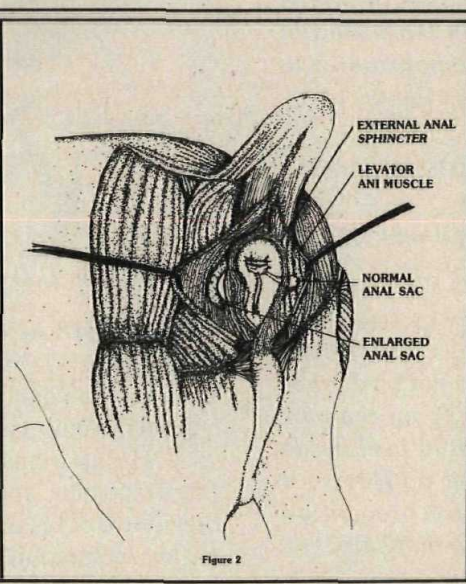
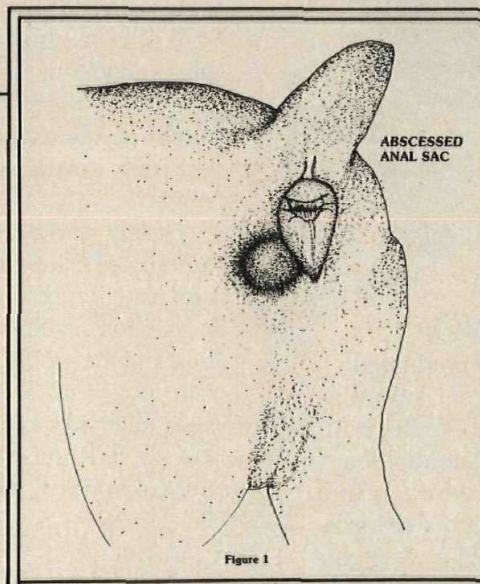
ANAL SAC PROBLEMS

Do you have a "Scooting" Dog?

by Ilka Woods

Illustration by J.J. Laughlan

This drawing shows an enlarged abscessing anal gland just to the left of the anus.



This drawing shows the location of the anal glands in relation to the muscles in the area. The gland on the left is enlarged while the one on the right is normal.

One of the most frequent ailments of the dog is impaction and inflammation of the anal sacs. Dogs and cats, as well as several other mammals have anal sacs which store secretions from surrounding glands. There are two of these sacs under the skin, one on each side of the rectum.

What the function of these sacs is remains uncertain. The material stored in the anal sacs has a strong unpleasant odor. Some people feel that this allows animals to mark their stool and territory with a distinctive scene. Often when strange dogs meet they will smell each other under the tail, as if checking each other's credentials.

Normally the anal sacs are emptied during defecation. Frightened dogs often emit a strong odor and this is because as they became tense, pressure was exerted on the anal sacs causing them to empty their contents. Skunks when frightened will express their anal sacs or scent glands.

The anal sac fluid from the skunk has a very sharp unpleasant odor that persists for a long time as anyone who has had the unfortunate experience of being sprayed can tell you.

In dogs, impaction of the anal sacs causes the dog to lick and chew around the anal area. Often the dog will scoot his hind end along the ground in hopes of emptying the anal sacs and getting relief from the pain that is associated with impacted anal sacs. The old wives' tale that a scooting dog is a sure sign of worms is false. More often the scooting is due to impacted anal sacs rather than worms.

Dr.

DIFFICULTY

Often the pet with inflamed, swollen anal sacs will have difficulty with bowel movements because of the pain connected with defecation and may even become constipated. In dogs with swollen infected anal sacs, the skin over the region is usually glistening red, thin and extremely painful. Relief, at times, can be provided by applying warm, moist packs to hasten the softening of the hard painful swelling.

Many times the sac ruptures discharging pus to the outside and leaving a small, draining open wound next to the rectum.

When detected early, your veterinarian can express the anal sacs and may infuse medication into the sac. If the sac is greatly swollen and infected, your veterinarian may have to open the sac surgically and drain it. Once the anal sac infection has been treated, the pain quickly subsides.

INFECTIONS

In certain dogs, infection may become chronic and recur every few months. In animals with repeated problems, surgical removal of the anal sac offers the only permanent cure.

Fortunately, anal sac disease is not nearly the problem in cats as it is in dogs.

BIRD CARE: PLANNING IS THE KEY TO SUCCESS

DIFFERENT PETS FOR DIFFERENT FOLKS...

The restrictions of living conditions may prohibit the ownership of some pets for some people. An apartment that does not allow dogs, a yard that is too small, an occupation that doesn't allow enough time to spend with more demanding pets. For many people in these situations the perfect pet may have to be a bird, a snake, a fish, or even a turtle. But no matter what kind of pet, you have a responsibility to provide adequate care for any pet.

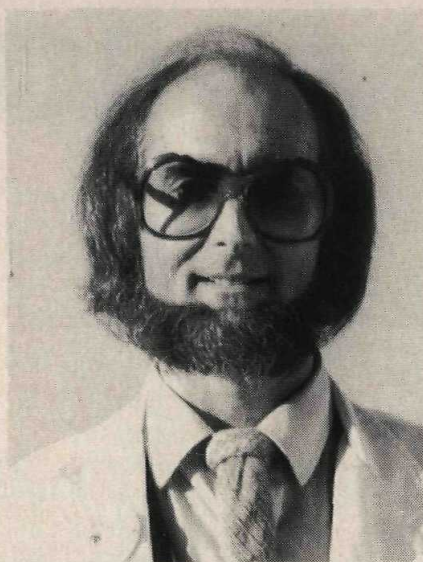
KEEPING YOUR BIRD HAPPY AND HEALTHY...

Prevention is better than cure!

By Chuck Galvin, D.V.M.

Owning a pet bird can be a real joy, but also a serious responsibility. Proper care of a pet bird takes thought and planning on the part of the bird owner. Your bird needs you! The following outline is a check list of disease prevention tips to help you plan that care.

1. Try to avoid buying sick birds in the first place. Buy from reputable dealers. Look at the bird carefully, comparing it with others of the same kind. Have a veterinarian who cares for birds perform a health check on your new bird.
2. Isolate a newly purchased bird from any birds you may already have, for at least 30 days, in a separate room, just in case the new bird is harboring a disease without showing signs until days or weeks later. Wash thoroughly after feeding, cleaning and handling your new bird before handling other birds.
3. Avoid the three biggest predisposing causes of disease:
 - a. poor nutrition
 - b. lack of cleanliness
 - c. exposure to other sick birds
4. Providing proper nutrition...
 - a. Provide a varied diet of (1) basic seed mix (2) treats and condition foods (3) a variety of human table foods (such as fruits, vegetables, greens, wheat bread, eggs, cheese, peanut butter, cereals, meat, etc.) (4)



Chuck Galvin, D.V.M.

ABOUT THE AUTHOR

Charles E. Galvin graduated from the University of California School of Veterinary Medicine in 1969. He has a small animal practice in Ignacio, and devotes about one fourth of his practice to birds. He has lectured in avian medicine at American Animal Hospital Association and California Veterinary Medical Association continuing education meetings. He has published articles on avian medicine, and is a member of the Northern California Avian Practitioners Association, The Association of Avian Veterinarians and the American Association of Avian Pathologists.

dry dog, cat, monkey foods. These can also be ground into a powder, using a household blender, and the powdered food can be mixed with equal amounts of bird seed.

b. Well-balanced pelleted bird foods may be fed.

c. I advise bird vitamins in the water as well as a bird vitamin and mineral product in the food.

d. Cuttlebone or mineral block are good sources of minerals as well as being helpful to keep the beak in shape.

e. Avoid heavily salted foods such as salted peanuts, potato chips and salted pretzels. Avoid alcohol, candy and "junk foods" (if it's not good for you then it's not good for your bird.)

f. Foods which spoil easily, such as avocado, cottage cheese, baby cereals, milk, cooked egg, etc., should not be left in the cage for more than a few hours.

g. Remove seed hulls daily; provide clean water containers and fresh cage papers; scrape the perches free of dirt and fecal matter. Provide fresh clean water at least twice daily plus any time it becomes dirty.

h. Thoroughly wash fruit, vegetables and greens fed to your bird.

i. Don't place water containers under perches where the water can become contaminated by droppings.

j. Only allow access to a small amount of grit daily. Overeating grit can lead to impactions.

k. Look at the food carefully for bad smells, molds and rodent feces. Monitor it closely. Insects in the seed such as moths are a nuisance, but not harmful. Placing the seed in the freezer will kill such insects in it.

1. Encourage birds to try new foods. It may be difficult to overcome bad eating habits, but persistence can pay off (not always). To encourage a bird to try new foods:

(a) Begin with sweetening the water, and then after it has developed a "sweet tooth", add other nutrients, such as juices, milk and infant milk replacement formulas.

(b) Introduce only small amounts of a new food.

(c) Try feeding warm foods, such as hot cereals, cheese, soups, etc.

(d) Place new foods below mirror or adjacent to a favorite toy.

(e) Try feeding outside of a cage.

(f) Try changing your bird from free choice feeding to three 15 minute feeding periods daily.

(g) Hand or spoon feed.

(h) Place a "finicky" bird on a perch at the table at family meal time. This is an excellent means of taming and offering new foods at the same time.

(i) Don't give up unless you have tried to expand the diet with table foods daily for at least six months.

(j) One popular bird diet involves the feeding of equal amounts of cooked rice, cooked pinto beans,

Bird Care . . .

Continued from Page 14

canned or fresh corn, and ground dog kibble. This is an excellent diet by itself. This mixture can be prepared ahead of time and placed in little plastic bags in the freezer. It can then be thawed by placing in hot water. Mixing this recipe in with the birds seeds a little at a time can encourage your bird to try it.

(k) Avoid burning your bird's mouth or croup by feeding foods that are too hot. Test the temperature with your finger first.

(l) Don't allow your bird to become fat. Obesity in birds can over a period of time lead to atherosclerosis, liver damage, kidney damage, heavy breathing, and foot problems. Results can be fatal in some cases. Therefore, avoid "pudgie budgies" and "round robins."

5. Provide a clean environment. A dirty cage can lead to a sick bird. In addition to cleaning of food and water dishes, scraping the perches, and providing fresh cage papers, at least once per week the bird should be removed and the entire cage, including toys, etc., should be scrubbed with hot soapy water, rinsed thoroughly and dried in the sun. Extra sets of food and water dishes and perches are helpful to have while one set is being cleaned.

6. Avoid hazards of the environment.

a. Keep away from toxic plants such as Poinsettia, Dieffenbachia, Philadendron, and ivy. Also avoid plants with sharp stickers, such as cactus.

b. Keep away from string . . . can become tangled or hang self or swallow it and become obstructed.

c. Avoid nesting hair . . . can wrap around toes and cause severe injury to toes or legs.

d. Avoid access to any sources of lead such as lead paint, drapery weights, solder, stained glass lead, fishing sinkers, bullets, and other sources.

e. Protect unclipped wings from transparent or open windows or mirrors.

f. Avoid open bowls and pans of hot water, bath tubs, toilet bowls, running hot water, fish tanks, etc. Pet birds do not swim and can drown.

g. Avoid fans, hot frying pans, toasters, electric cords near cage, and cigarette butts.

h. Before you close a door make sure the bird isn't standing on top of the door.

i. Be especially careful not to step on a bird you may not see who is walking on the floor. Always be aware of where your bird is if it is not in its cage.

j. Protect from cats and dogs . . . e.g. hang cages from a ceiling; introduce bird and dog carefully. Don't trust the dog or cat. A dog can playfully accidentally injure the bird.

k. Protect from noxious fumes, cigarette smoke, aerosol sprays, etc.

l. Never let a bird have free run of the house unless you are there to supervise. Clipped birds are less likely to get into trouble. Many unclipped birds have flown away. Be extra careful with unclipped birds. Keeping your birds wings clipped is strongly advised. Keep a close watch on the wings so that you will be aware when the trimming time is due again.

7. Provide proper, safe caging.

a. The cage should be large enough so that the bird's wings, when fully extended, do not touch the sides. The tail feathers should not touch the cage floor or sides when the bird turns.

b. The cage or perch should be positioned in a draft-free area.

c. Cover the cage at night with a material that the bird cannot get its nails caught in. This helps to insulate the bird from drafts and cooler night temperatures and provides uninterrupted darkness to help the bird sleep.

d. Kitchens are poor places to house birds because of gas fumes, smoke, and burnt Teflon (can be fatal to birds).

e. Avoid sharp objects, broken wires, wood splinters, metal shavings, etc.

f. Avoid cages with bars where the bird can get its head or legs caught. Avoid round cages where the bird can get legs or neck caught in narrowing bars as they converge to the top.

g. Make sure that when your bird is in its cage, the door is fastened securely to prevent escape.

h. The cage should be practical and easy to clean and the size of the door should be adequate for getting the bird in and out of.

8. Provide proper perches.

a. Clean perches of various sizes to exercise your bird's toes to prevent sores on feet. Use a non-poisonous wood i as eucalyptus, manzaneta, apple, pear, maple, willow, elm, ash and nut trees. Be sure to wash them off with hot soap and water, rinse and let dry in the sun prior to use, to wash off any insecticide or wild bird dropping. Also avoid narrow-angled side branches that could catch a toe. Avoid sharp points.

b. Avoid perch covers. A sandpaper perch cover does nothing for the bird. It does not wear the nails down and often irritates the feet. Also avoid gravel paper or placing grit on the bottom of the cage. It can irritate the feet and get contaminated by droppings.

9. Have overgrown beaks trimmed; nails also. Overgrown nails can get caught, causing injury and can cause toe deformities. Nail, beak and wing trims are best performed by experienced individuals. Do not attempt these procedures alone. After toenail trims, your bird may not cling onto things as easily and may tend to lose its grip until it gets used to its new nails. Until your bird gets used to its new toenails, keep it in an area where it can't hurt itself if it falls. After wing trims, be sure to place the bird on the floor and encourage it to try to fly, so that it soon realizes that it is unable to. Otherwise it might jump off from a height and hurt itself when it hits the ground. After wing trims always test the flight to make sure that the bird is adequately trimmed to prevent flight before taking it outside on your shoulder. Some birds can still fly following wing trims.

10. Avoid drafts and overheating. Never leave your bird in a parked car in the sun on a hot day. If the bird in its cage is placed in a window on a hot day, make sure that part of the cage is shaded to escape to.

Continued on Page 16

"Keeping your pet bird healthy and happy"

Continued from Page 15

11. Make sure that rodents and insect pests are controlled. I don't recommend the routine use of insecticides unless mites or lice or other insects are actually diagnosed.
12. Make sure that toys are safe and also kept clean.
13. Don't allow your bird to chew the carpet. It is unsanitary and the rug fibers can impact the crop.
14. Be careful placing birds together in the same cage. They don't always get along and can fight . . . one bird could kill another. One bird could dominate another, causing behavior problems. Also one bird could dominate the food, while the other bird starves. Separate unfriendly birds. And, don't allow one bird to walk on top of another bird's cage . . . bitten toes!
15. Have leg bands removed as soon as they are unnecessary. They can get caught and cause injury, irritation, and and act as a tourniquet. Record the band number for identification purposes.
16. Have a blood-stopping styptic powder on hand to control superficial hemorrhage.
17. Never apply anything oily or greasy to your bird's feathers. Oil matts the feathers and the bird loses its insulation and chills.
18. Leg chains are dangerous and should not be used.
19. Try to avoid contact with wild birds and other people's birds. They might be carrying disease which your bird could pick up.
20. Never lose your temper and hit or harm your bird. It is not uncommon for parrot-type birds to bite and it is easy to lose one's temper and strike back or throw the bird down in an attempt to stop the biting. Don't!
21. Give your bird a lot of direct attention. Talk to the bird; whistle to it; carry it around, sing to it, and make it an important family member and friend.
22. Safe, supervised activity outside the cage allows for mental and physical stimulation.

23. Provide a low-stress happy environment. A regular schedule of quiet and darkness is important. Your bird should get at least eight hours of sleep daily.

24. Learn as much as you can. Become familiar with your bird's normal pattern of behavior and activity so that you can detect any deviations from normal. More birds die from uninformed owners than any other reason.

25. If you suspect that your bird is sick, do not delay in making an appointment to see a veterinarian who is experienced in bird care.

A proper home, good diet, exercise and an annual checkup by a veterinarian who cares for birds will keep your pet bird healthy and happy. Prevention is better than cure! •

Paddlefish peril . . .



Take the paddlefish. Well, too many anglers are taking the paddlefish in the midwest. This remnant of prehistoric ages with its long paddle-like upper jaw has recently found its future in jeopardy after millions of years of survival in the Mississippi River system.

It seems paddlefish roe is selling at \$100 a pound, and apparently the roe ranks just about as high as imported Beluga with American gourmets. And the Beluga variety is sold at \$150 a pound, or more. Five states ban commercial fishing for paddlefish: Minnesota, Montana, South Dakota, Wisconsin and Nebraska. But North Dakota, Illinois, Oklahoma and other states in the vast Mississippi and Missouri system have no such bans.

Oklahoma's 1983 paddlefish catch is estimated at 1,275, compared with only 159 caught in 1980. Oklahoma wildlife officials are now pushing a law to ban commercial fishing for paddlefish. Perhaps, if a few other states follow this lead, the paddlefish may yet survive. •

Veterinarians ponder . . .

FUS . . .

In government circles, it's popular to sneer at the old saying "the problem will go away if you throw enough money at it." Nobody sneers when money is "thrown" at veterinary research, for it takes money to solve these problems.

For example, the Morris Animal Foundation is funding research at the University of Georgia Research Foundation, Inc. to find some answers to feline urological syndrome (FUS), a baffling set of conditions that continue to send many pet cats to an early death.

Dr. Delmar Finco will head up the research team. Cats will be fed certain diets at certain times and checked against a control group. Urine samples will be constantly taken and examined under a microscope in a focused program to come up with answers.

What's known so far is feline urine is a super-saturated solution filled with minerals, especially shortly after eating. Mineral crystals form spontaneously and can grow to completely block the urinary tract. What causes that? No one knows for sure since the urine contains both accelerators that trigger crystal formation, and solubizers which prevent it. Factors include minerals in the diet, efficiency of intestinal absorption, how the kidneys react to excrete minerals through the urinary tract, and the volume of urine.

Do minerals "leak" from the intestines to the kidneys? Is there a correlation between feeding time and crystal formation? Why does magnesium and ash content affect some cats and have no effect on others? Questions are many, answers are few. So far. •

Four knees on one animal ?

Most interesting news item culled from an animal business magazine tells us "of all the world's animals only the elephant has four knees." Stop and think about it. Can you name another four-kneed animal?

PRODUCT RESEARCH . . .

EVEN PERFECT PETS PROVIDE PROBLEMS . . .

For many folks the cat is the perfect pet. Usually not noisy or aggressive, they don't require the outdoor exercise of many other forms of pet life.

Perhaps the most demanding and difficult task in the keeping of felines is the care and maintenance of the kitty box. Until recently the same old tried and true methods have been used with no significant improvements.

The following product test by **Today's Animal News** could be of interest to feline owners.

THE CORN COB KITTY BOX

Some routine household tasks are, at best, drudgery. At the top of the list of tiresome tasks is emptying and cleaning the kitty box. And the constant refilling with a variety of clay absorbing products is not only expensive but presents the regular challenge of disposing of the used clay.

How would you like to never have to replace kitty litter again? Well, one manufacturer has introduced a product that is supposed to offer just that advantage.

The plastic kitty tray looks pretty much like the standard trays, except that it is really two trays. The top tray looks much like the tray you probably use now, and it sits on a second shallow tray. The big difference is that it doesn't use the common clay kitty sand. Instead, it employs ground up corn cobs.

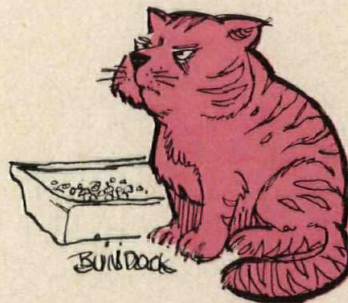
It works this way; the top tray is generously filled with these brown looking corn cob segments, and the bottom tray has a few sheets of newspaper. When the cat eliminates, the fecal matter stays on top but the urine passes right through the particles and through the top tray by way of a series of fine openings.

There is no release of the usual "deodorizing" chemicals that are present in almost all kitty litter products. As almost any cat owner can testify, sometimes these deodorizing chemicals can be almost as offensive as the odor they are supposed to mask. Since the corn cobs don't absorb moisture they don't absorb odors. The bottom tray fits snugly enough to trap any odors there.

Obviously, the contents of the bottom tray must be emptied from time to time. But, instead of the chore of emptying the whole kitty box and disposing of the soiled contents, the cat owner has only to dispose of little bits of newspaper. If it's winter and there is a roaring fire in the fireplace this is an obvious answer.

In this test of the product several findings were made:

Fecal matter still has to be removed from the tray and disposed of. But a handy gadget for this purpose is more effectively used than the old-fashioned "spoons" used for most trays. (But this device must be purchased separately, even though it really should be a regular part of the litter box.)



The size of the tray could be somewhat cumbersome to many households, since it is larger than most standard trays. But it seems to be able to accommodate several cats without a problem. (The manufacturer says a smaller size tray is in the works).

Even cats that have been conditioned to the traditional look, feel and smell of conventional kitty boxes come around to using the corn cob trays quite readily.

Because of the different texture of the corn cob bits there appears to be less scattering of debris from the kitty tray.

However, while the sales pitch for the new kitty comfort station suggests that you will never have to replace litter again, they also sell refills for the trays. And they also suggest that you may, at some point, choose to remove the litter material and wash it. This hardly sounds like a fun type of job.

But even replacing the litter three or four times a year is easier than performing this tedious task every few days.

Some veterinarians have found the trays to be an easy manner of collecting urine samples.

The price of the unit will vary from area to area, but somewhere around \$35 for the entire kit seems to be a reasonable price. Over a period time this cost could be defrayed by the savings from the constant cost of replacing more traditional and expensive kitty litter.

It may not be the perfect answer to this unending task, but it is at least a step in the right direction. ●

by Doug Bundock

Tiny horse

Perfect pets come in all sizes. A Percheron-Shire cross named "Firpon" claimed the record for the biggest horse when measured in at just over seven feet tall at the withers. And in contrast, the smallest horse was a breed called the Falabella that was produced by breeding Shetland ponies with miniature English thoroughbreds. The result was a horse that only stood around fifteen inches at the withers, about the size of one of our smaller breeds of dogs.

Tiny new mammal discovered . . .

A "new" mammal has been found and identified in Thailand and now holds the record for being the world's smallest. This little cave bat weighs less than 2 grams. It exists on flies and wasps, has been tagged with the name of "bumblebee bat" and may not hold the record for very long since its habitat is going fast and it is already on the endangered list.

MAYBE NOT THE PERFECT PET...

WILD ANIMAL PETS

How about a lion or tiger or a skunk ... or perhaps even a raccoon as a pet? Wouldn't that be fun? That would certainly impress your friends!

Many exotic animals are available through dealers (at some pretty exotic prices) but, even if raised in captivity, they are still wild animals and require a special knowledge in handling. Our dogs and cats and hooved pets are the result of selective breeding that has produced an animal that is compatible to man. Most wild animals, even after a generation or two of domestic life, still retain the instincts of the wild. They lack the built-in tolerance to a totally different lifestyle that has been bred into domestic animals.

It has taken hundreds of years of selective breeding for man to develop those domestic animals that fit easily into our way of life. They are predictable and conform to our social structure. Information about their care and management is readily available.

But, in contrast, wild animals are without the inherited and predictable behavior of more usual pets. Many can be dangerous and unpredictable. A wild animal that has appeared to be perfectly adjusted to domestic life may suddenly react to an unexpected situation with tragic results. For a few seconds or minutes the conditioning slips away as a wild animal responds in a natural manner with teeth and claws.

In those few seconds the human companion can be seriously (or even fatally) bitten or clawed or gored. Hundreds of such incidents are reported annually.

That baby deer that was so gentle and affectionate suddenly changes, and those horns and hooves now become deadly weapons. That darling raccoon reaches maturity and without warning suddenly inflicts painful bites that send the owner to the hospital.

The problem is that these attacks are not without warning. The owner, lacking the knowledge of wild animal behavior, just didn't recognize the warning signs.

Wild animals just don't make perfect pets for most people. Wild animals usually require special diets, often difficult to obtain, different inoculations, and special holding facilities. And, if they are to be cared for in your absence, finding a kennel with appropriate facilities and experience can be next-to-impossible.

There are also special requirements for licenses for exotics. These may be issued by Fish and Wildlife agencies or the U.S.D.A. Some local communities have additional laws regarding the keeping of wild animals. To qualify for a special permit from a Fish and Game type regulatory agency, the owners must meet special requirements for a holding facility for the wild pet.

For most wild animals this requires an elaborate compound constructed of several inches of concrete, extra heavy chain link, and piped in running water. Needless to say, it can be a very expensive project.

When taken into a domestic environment wild animals can be surprisingly frail when exposed to a variety of ills not common to their natural living areas.

Providing health care for exotics can often be a specialized field and finding a veterinarian with expertise can be a challenge.

This is the time of year when many wild animal babies get out into the world for the first time. Young deer, birds and squirrels are the most frequently spotted spring babies. If you spot a baby wild animal and are completely convinced that it is really in distress, do it a favor. Don't attempt to take it home to raise yourself. Do contact any of the wild life rescue agencies. If you need help in finding one you can either contact your local humane society or your veterinarian.

Wild animals just aren't for everyone. ●



A young porcupine visits with Animal News staffer Doug Bundock. A fascinating and charming creature ... but hardly the perfect pet for most people.

Photo by Callea

Doug Bundock

ASH IN CAT FOOD

There's a lot of "scare talk" about ash in cat food and its effect on feline urological syndrome (FUS) and urinary tract problems. But before you shop around looking for a "low in ash" cat food, be warned that this is a necessary part of a complete and balanced feline diet.

Ash contains all the essential minerals such as calcium, phosphorus, salt, iron and several others. A diet very low in ash may be below the cat's required level of certain minerals and could cause a nutritional deficiency and result in health problems.

Ash is the non-combustible residue left after a sample of food is burned at 600 degrees centigrade for two hours and is found in practically all animal foods. Ash levels are slightly lower in dry and semi-moist foods as compare to canned foods.

For additional information, send a large, self-addressed stamped envelope to Ralston Purina Co., Box 522, St. Louis, Missouri 63188 and ask for their "Ash in Pet Foods . . . What Is It?" leaflet. Tell them you want further details on this article in *Today's Animal News*. •

NEW HORSE WORMER

There's a new kind of horse wormer on the market, perfected at the University of Illinois Veterinary Medical Teaching Hospital. Its key ingredient is something called ivermectin.

According to Dr. Joseph DiPietro, it's an injectable solution which paralyzes large and small strongyles, ascarids, pinworms, stomach worms, bots, *Onchocerca microfilariae*, summer sores and some migrating stages of strongyles.

"Tapeworms are about the only thing this wormer doesn't get," said DiPietro. It's a non-reversible paralysis that hits the parasite's nerve function, and is injected into the horse's muscles. Accidental intravenous injection can cause the horse to go into shock, so veterinarian-handled injections are strongly recommended.

He also recommends standard procedures to limit parasite infestations, such as clean stalls, cleaning up of manure in stalls and no spreading of manure in pastures. •

the world of pets . Page 19

BONE DISEASE IN DOGS

A University of Florida College of Veterinary Medicine professor has won "Best Paper of the Year" award for a published article about a severe bone disease in dogs. Dr. J. Carroll Woodward's research into hypertrophic osteodystrophy demonstrated that the disease is not associated with a vitamin C deficiency and is not a form of canine scurvy. Four Weimaraner puppies with the disease were studied and, as a result, the disease was labeled an infectious one and not merely a metabolic disorder. Microscopic analysis of bone lesions proved they were different from the typical scurvy lesions.

Woodward's research did not pinpoint the exact cause of the disease, but it did rule out the vitamin deficiency and thereby prevented a futile course of treatment for afflicted dogs. •

ZEBRA'S SURROGATE MOTHER . . .

If all goes well, about May 1 a quarter horse in the Louisville (Kentucky) Zoo will give birth to a most unusual foal: a zebra!

It's another surrogate mother story in the animal world. "We're praying a lot," said zoo veterinarian Dr. Bill Foster. The biggest fear was tissue rejection, but after 60 days the embryo has "taken hold" and will "go all the way now."

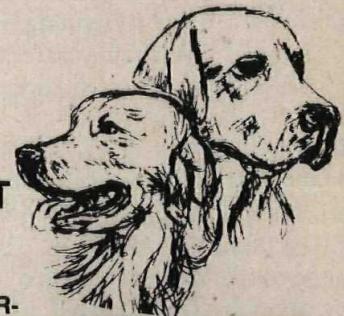
The embryo transplant is from a Grant's zebra, not on the endangered species list. But the closely related Grevy's and Chapman's zebras are on the list.

If the experiment is successful, it will be the first time it has been carried out successfully in a horse. •

FIRST DOG SHOW

The first properly recorded dog show was held 1859 in Newcastle, England. It was a two-day affair.

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What could be more tragic than discovering that your best friend and family companion has become crippled by hip dysplasia. Unfortunately, it is an all too frequent occurrence. What is this crippling affliction . . . how did it happen . . . what can you do about it? The following discussion of the problem by Dr. Joe P. Morgan, D.V.M., should be of interest to all dog owners.

CANINE HIP DYSPLASIA

By Joe P. Morgan, D.V.M., Vet. med. dr. Stockholm.

Hip dysplasia is literally abnormal development of the hip. The word is formed from the Greek "dys", meaning abnormal, and the Greek "plassein", to form. Thus dysplasia is an abnormal development. Hip dysplasia is a developmental, multifactorial genetically influenced condition characterized by ill-fitting hip joints and development of secondary joint disease or osteoarthritis. Hip dysplasia in slightly different forms affects many species of animals, including man.

The year 1983 marked the fiftieth year since we first became aware of the existence of canine hip dysplasia (CHD) (Schnelle, 1933). In past decades, impressive amounts of money, time, and effort have been expended by veterinary practitioners, researchers, nutritionists, and breeders in an effort to define the genetic, anatomic, physiologic, pathologic, and biochemical aspects of hip dysplasia in the dog. It behooves all of us, who are interested in and love dogs, to pause and reflect on what has been learned in these five decades and determine our course of action today as we continue to attempt to control this disease.

All that was known about hip dysplasia in the early years was that it constituted faulty growth and development of the tissues of the hip joint and that it was thought to be similar to a disease found in children that led to painful osteoarthritis of the hips in at middle age and beyond.

UNDERSTANDING DYSPLASIA



By Joe Morgan, D.V.M.

We have learned many of the factors that influence the manner in which CHD appears. The early work on muscle mass and exercise regimen was of great importance in recognizing the significance of environment as well as heredity. It was discovered that we could influence the development of hip dysplasia and this presented additional problems for it was now possible to "hide" dysplasia or at least influence the degree of presentation. Certainly the statement by Dr. Schnelle in 1973 is still correct one decade later: "we do not understand all the complex causes of CHD."

With experience, it became apparent that there was an "acute" phase in which the puppy, during

rapid skeletal growth, could show such severe clinical signs of pain that it would have difficulty in rising and would tend to drop to the floor rather than lower itself slowly. Later in life, the clinical signs became chronic and both owner and dog attempted to learn to live with this sometimes painful and sometimes not painful condition. The term "warming out" became a familiar one that was used to describe the attitude of the adult dog toward the relief of pain after exercise.

Radiographically, the deformity of the coxofemoral hip joint was characterized by a shallow acetabulum (hip socket), deformity of the femoral head, coxofemoral luxation (dislocation of the hip), and remod-

eling changes best described as osteophyte formation bone lipping and femoral neck thickening. These radiographic changes were characteristic of secondary joint disease or osteoarthritis. Radiographic change presented in different patterns, with one or more changes being prominent (figure 1). The radiographic changes and clinical signs in an individual dog were not necessarily correlated; in fact, they frequently seemed to be at variance. This was noted as early as 1959 (Snively, 1959).

Examination of the hip joints at necropsy showed a pattern of change characterized by a shallow acetabulum with osteophyte formation along the acetabular margin, remodeling of the femoral head with osteophyte formation; remodeling of the femoral neck; marked thickening of the joint capsules; degree in dogs which showed no lameness or gait abnormality visible to the casual observer. In fact, Dr. Schnelle came to feel that: "every young dog with CHD has a good chance of leading a normal or near-normal life if nothing is done for the hips except to let time lapse until maturity is complete." (1973).

Also, we begin to learn of "radiographically" normal matings that produce offspring with hip dysplasia. Now, it was necessary to re-evaluate our thoughts concerning the desirability of euthanizing every dysplastic puppy as well as re-evaluate our thoughts concerning selection of breeding stock.

Treatment of hip dysplasia was directed both toward attempts to prevent the development of the painful joint disease in the puppy as well as being directed toward the use of techniques of management designed to minimize the clinical signs of the disease and to delay its progression in the older dog. These methods ranged from correct use of exercise to elaborate surgical procedures.

Recommendations concerning surgical procedures that might prevent or at least limit the development of hip dysplasia began to appear. Dr. Schnelle's remarks in 1973 expressed his early opinion of these

CHD

Continued from Page 20

procedures: "(I) would not under any circumstances allow pectineal muscle or tendon surgery to be performed upon an immature canine member of my family or patients under my control."

We learned that hip dysplasia was not a disease limited only to large and giant breeds of dogs. Nor was it limited to those breeds where man's influence on breeding had been primarily directed toward the appearance of the animal rather than its functional use. Canine hip dysplasia was described in the relatively small Beagle dog that was frequently used in research projects. It was also described in Australian Shepherd Dogs which were not an AKC recognized breed and were only a few generations from the working dogs in Australia and were still used in this country primarily as obedience and performance dogs.

Progeny evaluation was considered when it became apparent that simple selection of sire and dam was unsatisfactory in eliminating hip dysplasia. Because of the nature of dog breeding in this country, it was difficult to establish data on the character of the progeny. Evaluation of litter mates provided additional information on the genotype character of dogs of interest but again was not used to the degree required. It would seem that the next few years should see the development of "banks of information" that would assist greatly in the eradication of or at least better control of hip dysplasia. These computer banks would be based on progeny and litter evaluations.

Over 15 years ago, great interest was aroused concerning the value of palpation as a "new" technique or method of diagnosing CHD in a younger dog. While some of the early reports did not have solid data to

support them, the concept of palpation still caught on. If not of value in the youngest puppies, it might at least be of value in assisting in the evaluation of the hips in older dogs. The value of the "fulcrum" technique for radiographic diagnosis became recognized as a combination of physical manipulation of the hip joints plus the radiography to record any degree of joint instability.

Unfortunately, during the past 50 years, interest in hip dysplasia has waned with a somewhat predictable pattern. A new article promising "better" diagnostic results brought forth renewed interest. There were those who were strong advocates of programs of control and elimination of all dysplastic breeding stock who now have modified their thoughts. Others, unfortunately, still feel that obtaining an OFA number is all that is necessary to "solve" the problem of CHD.

Canine hip dysplasia is probably here to stay for the near future unless we quickly discover much more about genetic alteration. It certainly must not be "swept under the rug." Breeders should select for propagation only those individuals who are entirely sound of body and mind when judged at maturity upon all aspects of their form, movement, temperament, and any qualities or characteristics that make them desirable companions for man. The presence of a disabling lameness centered on both hip joints and now recognized as CHD affects this soundness and is one indication along with possibly many others that the animal should not be used for future propagation. Since the disease is an inherited one, the mode of transmission is important to consider when breeding stock is considered.

To the owner of a companion dog, hip dysplasia today is an acutely and later chronically painful hip joint causing lameness that is persistent and unrelenting. It is a condition that may require medical treatment and often the consideration of more radical surgical treatment. Eventually, it may require

Continued on page 22

CHD

Continued from page 21

consideration of the alternative of euthanizing the dog. To the owner of a working dog, it is a problem of how to select that dog that most likely will have functional hips. It is the problem of what to do with a valuable dog with extensive time and money commitment that is now not able to perform assigned tasks as well as before and ultimately may not be able to work at all. To the dog breeder, it is a constantly "harped upon" problem causing necessary radiographs that are expensive and do not solve the problem. It is long-planned breedings that fail to produce puppies with normal hips. It is disturbed buyers demanding to return dysplastic puppies that were "guaranteed" to have normal hips. To the veterinarian, it is lameness that responds poorly to medical treatment. It is having to advise a shocked owner of the unexpected detection of hip dysplasia radiographically. It is having to talk to owners and breeders about the "best thing to do considering the circumstances." And it is having to euthanize a dog that may be a young puppy with unrecognized potential or maybe an older dog with a career in the ring or field cut short.

Thus, understanding the etiology, diagnosis, clinical significance, and treatment of hip dysplasia requires careful consideration of the many facets of this very important disease of the musculoskeletal system of the dog.

This monolith is directed primarily to those who rely upon structurally and mentally sound animals for police, protection, search and rescue, hunting, herding, and as recreational companions. Those who train dogs have an obvious interest in detecting the condition early in the life of the dog. Breeders must understand the inheritance of the condition so that selection to eliminate the disease can proceed. Veterinarians need to know the pattern



An English springer spaniel named "Trapper" is the perfect pet for 10-year-old Heather Schaefer of Kentwood, Mich. And why not? Trapper was the winner of "Great American Dog" contest sponsored by Purina Dog Chow. Trapper defeated 26,000 other contestants to earn \$25,000 in cash, a one-year supply of dog food and a trip to New York with his mistress. The second annual Great American Dog contest will kick off in April.

of presentation of the clinical signs and which therapeutic techniques are most successful.

This monograph is dedicated to the principle that the correct use of radiography, palpation, and progeny and litter evaluation in the detection of CHD can help in lowering its incidence in the population.

Dr. Morgan is currently Professor in the Department of Radiological Sciences, School of Veterinary Medicine, University of California, Davis. He has had a long interest in the problem of CHD and has studied the disease and written extensively from the standpoint of radiographic diagnosis, palpation, pathophysiology, and genetics. This interest began with his graduate studies under Professor Sten-Erik Olsson in Stockholm, Sweden who pioneered much of the basic work in evaluation of causative mechanisms in CHD. He has been an evaluator of radiographs for the Orthopedic Foundation of America (OFA) for the past 14 years. The manuscript is an introduction of a soon to be published monograph on CHD. The monograph will be available through Venture Press, Box 222, Davis California 95617.

POPULAR NAMES?

If you named your dog Pepper, Brandy, Lady, Bear, Rocky, Sam or Samantha, Misty, Sheba, Bandit or Smokey . . . well, maybe you didn't show much originality but you included your dog in the Top Ten canine names for the last year.

What about cat names? Okay, what about Sam or Samantha, Kitty, Tiger, Boots, Princess, Patches, Muffin or Muffy, Smokey, Fluffy and Tom. Those were the Top Ten feline names.

The survey that came up with these names isn't exactly the Roper survey, or all that scientific. In fact, it's pretty well localized as to area: The Anderson Animal Shelter in South Elgin, Illinois. They noted names of some 7,000 pets brought to the shelter for veterinarian treatment or adoption.

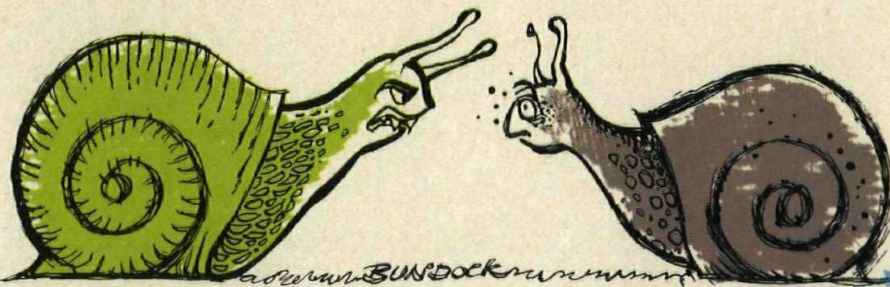
More than half the dogs or cats surveyed had human names, a lot of them last names like Monroe, Dillon, Murphy and McTavish. Also growing in popularity are initials, like BJ, HR, AC or DC.

Nobody at the shelter had any idea why Sam or Samantha (or Smokey) were popular names for dogs and cats.

THE SEARCH FOR THE PERFECT PET



A horse can make the perfect pet , but horses require care, plenty of room and exercise. This pair of Clydesdales are kept in top condition by grooms at the Anheuser-Busch brewery stable in St. Louis.



THE GREAT SNAIL BATTLE . . .

Spring! Time for planting. And time for the return of those garden pests. And gardeners who are also pet owners are again faced with the same old problem: how do you control those demons of the garden without introducing dangerous poisons into your environment? For your consideration here is a . . .

biological alternative to poison bait for snail control

By Mike Rose and Richard Glassberg

Pesticide use in the home environs has become commonplace following the development of chlorinated hydrocarbon and organophosphorus poisons during World War II. A recent article in the *Bulletin of the Entomological Society of America* states that about 89 percent of persons in small cities use pesticides. Unfortunately, many pesticides are dangerous to "non-pest" organisms such as people, pets and other animals.

Many pest species are developing resistance to commonly used pesticides; thus, more severe pests are being created. This results in a greater annual pesticide load

because more pesticides are used in attempts to control resistant pests. Most persons are not aware of the magnitude of pesticide use. For example, 113,586,954.91 pounds of pesticides were reported used in agriculture in California alone in 1981. This massive amount of pesticide does not include homeowner use, non-agricultural use or non-reported use.

Aside from long-term health hazards inveighed by continued use of poisonous chemicals, many of which are accumulated in the global environment, the home use of some pesticides can cause immediate tragic consequences to pets. One of the most immediate threats to pet health in Southern California is metaldehyde poisoning of dogs, and to a lesser degree cats, that eat poison baits used to kill the brown garden snail. Safeguards may be taken but snail bait poisoning of family pets is a chronic problem. (See **Today's Animal News**, Spring 1983, page 10).

Brown garden snail activity becomes very noticeable during moist Spring and Fall conditions in Southern California. During these active periods home gardeners apply snail

baits and many pets are subsequently poisoned. *The Daily Sun-Post*, an Orange County newspaper, reported on March 25, 1983 that one veterinary clinic in Mission Viejo treated 15 cases of metaldehyde poisonings in dogs in two weeks. Other veterinary clinics in Orange County reported treating as many as 10 metadethide poisoning cases a weekend during Spring of 1983.

Metaldehyde poisoning symptoms initially include hypersalivation, tremors and nervousness which are followed by convulsions and seizures. Untreated pets face death due to respiratory failure.

Home gardeners have thus been faced with a two-fold problem; controlling the brown garden snail to protect the landscape while currently protecting family pets from painful, expensive and traumatic poisoning.

Dr. Theodore Fisher, a Specialist in Biological Control at the University of California, has been studying non-chemical, biological control of the garden snail for many years. There have been many successful biological control projects conducted by

KILLER SNAILS . . .

researchers at the Division of Biological Control at U.C. Riverside, particularly against the pests of citrus trees. The brown garden snail became a pest in citrus groves and in ornamental plantings.

Dr. Fisher has recently concluded that there is a biological agent to control brown garden snails — **another snail!**

This is the predatory decollate snail, *Rumina decollata*. In articles in *California Agriculture* and the *Sunkist Pest Control Circular*, Fisher has shown that brown garden snail populations are much smaller where the predatory decollate snail has been established than in nearby or adjacent areas without the predator.

The main principle of biological control is one of checks and balances. In nature populations of most organisms are regulated by various natural enemies. As in the case of the brown garden snail, pests are oftentimes created when organisms invade new territory where natural enemies to regulate population growth do not exist or are not effective.

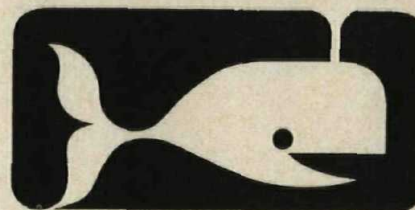
The brown garden snail, which is almost completely herbivorous, was originally imported to California from Europe and thence became a severe pest because of relatively unlimited food sources combine with favorable climatic conditions and the lack of effective natural enemies. The predatory decollate snail, which evolved in North Africa and is also found in the Mediterranean area, now lives in some areas of California and can thus be used as a natural enemy against brown garden snails.

The decollate snail feeds primarily on the eggs and young of the brown snail and in doing so reduces the existing brown snail population and regulates future population growth. Decollate snails do feed on vegetation, but generally only previously damaged foliage or damaged fruit are eaten. Germinating seedlings may be eaten and should be protected. The most appropriate areas for home use of the predatory decollate snail are established landscapes. The decollate snail prefers shaded habitats with moist organic soils where the predator reproduces by laying circular, white eggs. It is this same specialized habitat that brown garden snails also reproduce, providing the eggs and young snails the decollate snail feeds upon. Charles Darwin and other scientists

have referred to this generally unseen but constant and dynamic conflict as the struggle for existence.

Given time, the decollate snail can greatly reduce brown garden snail populations. Although some brown snails will remain in the landscape when decollate snails are used for snail control, this is also true when poisonous baits are used. Biological control is a long-term, non-hazardous and non-polluting means of pest control. By working with nature, accepting the presence of relatively low numbers of pest species and understanding that biological control is a system of checks and balances, we can help lessen the inherent dangers of pesticide use and ultimately help provide a quality environment for all the living things that must share our diminishing space. •

A whale of a deal . . .



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THE PERFECT PET . . .

Page 26

IS THE PET SHOP PET THE PERFECT PET?

How much is that doggy in the window" was a syrupy little ditty that was popular a few years ago and still comes back to haunt us occasionally around Christmas-time. But, actually, it is a good question.

That cute little doggy in the window may be more expensive than you think, and in more ways than you might think.

First of all, where did that puppy come from? What sort of planning produced it? What kind of rearing did it have to prepare itself for a successful life as your family companion?

The vast majority of puppies in pet shops come from mass producers of dogs. These "puppy farms" exist to sell their wares to pet shops. The puppies are ordered, sight unseen, in lots, by mail, by pet shop owners. The majority of the producers are located in states like Kansas, Missouri, and Nebraska, where the state laws are more lenient for this type of breeding operation.

The puppy producers (often called puppy mills) usually offer a variety of breeds and maintain hundreds of dogs and puppies at a time. They are produced for the market and advertised as such in pet shop trade journals. Their operations have many similarities to those producing cattle, pigs, or chickens for the market.

It has been well established by many years of research that the temperament and personality of dogs is influenced strongly by the formative experiences and socialization that takes place (or doesn't) as a puppy. How well the dog relates to humans as an adult often relates directly to how well the puppy was reared and socialized during the critical first weeks of life. Experiences as a puppy become a yardstick to measure future experiences as an adult dog.

The question, then, is how much personal time, evaluation and affection can be lavished on a puppy that comes from a factory type of production.

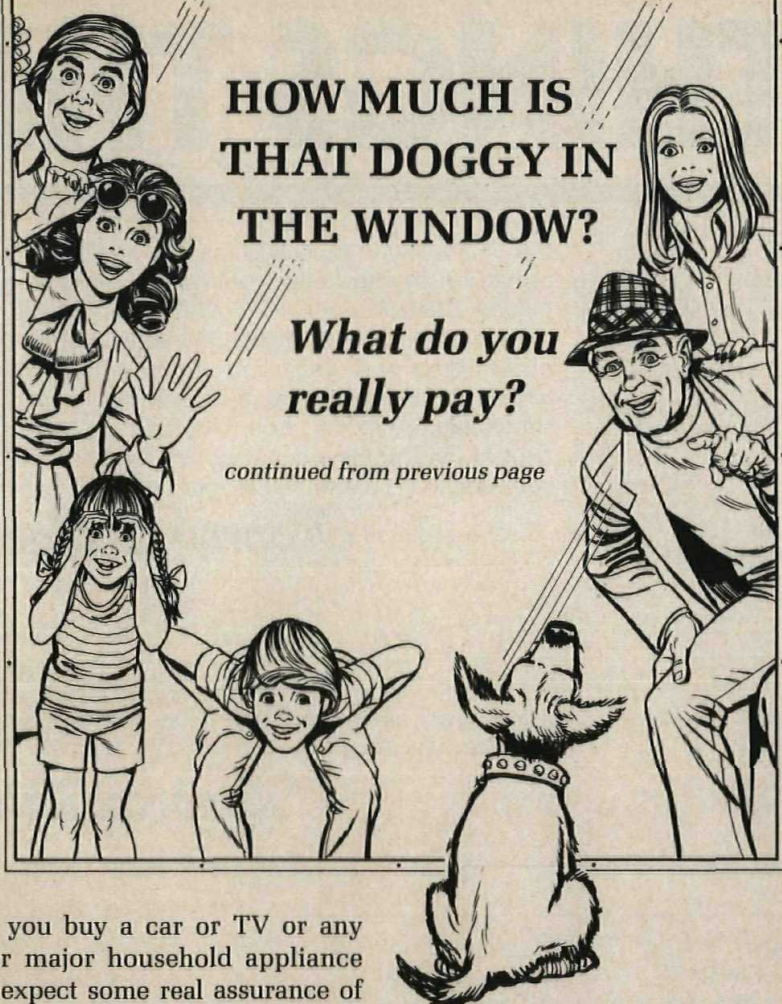
Researchers spent several years doing a study of canine behavior in a program at Bar Harbor, Maine, a few years ago. Many breeds of puppies were studied under varying conditions. Some received no real social contact with humans. And others enjoyed varying amounts of human relationships. The results were obvious. Socialized puppies grew to be adults that related well and worked well with humans. The puppies deprived of this social contact had serious problems for the rest of their lives.

The results provided dramatic proof of the manner in which improved canine-human relationships were developed by puppy socialization.

The findings of this study were used by Guide Dogs For The Blind to almost double their success ratio of raising puppies to serve the critical needs for the blind.

This time-consuming socialization of puppies is simply a luxury that most cannot afford.

continued on next page



If you buy a car or TV or any other major household appliance you expect some real assurance of performance for your investment. If it fails you know where to get satisfaction. If you buy a puppy from a pet shop and have a problem, what do you do? Drive to Kansas? If you insist, the pet shop may give you a partial refund of your puppy purchase price . . . if you are lucky. But the heartbreak and disappointment cannot be compensated for with a refund of a few dollars.

OTHER CHOICES

There can be a number of advantages in buying a dog from a reputable "private" breeder. You can probably meet one, or even both, parents of the puppy that you are considering. Interviewing the parents may give you a preview of what your puppy may grow up to be.

Don't be "put off" by the fact that these breeders are producing "show dogs." It's a plus for you, even though you are buying a pet. Breeding show dogs is far from a perfect science. In an attempt to produce a top show dog the typical

breeder produces many dogs that will be sold as pets. These pets may not measure up to the demanding standards that can only be detected by an expert, but they can certainly measure up to your standards for a pet and companion.

In the hope that every litter of puppies harbors a potential great show dog every dedicated breeder devotes vast amounts of time and money and attention on these young hopefuls while waiting for the puppies to reach an age that will allow that evaluation of show potential. During this time the pet puppies have also enjoyed all these advantages.

In fact, you will probably buy your puppy for less than it cost the breeder to produce and raise it to a suitable age to sell. Surprisingly, that price may be equal to or less than the price you might pay for a puppy in a pet shop!

So, why would a breeder invest so much time, money and energy just to sell puppies at a financial

loss? Well, the breeder is, in a sense, a gambler . . . always looking for the rare, exceptional show specimen that will justify the losses.

If lucky, the breeder may produce that very special dog worth thousands of dollars and recoup the past losses. But, whether or not this happens, you are the winner. You get a puppy that has enjoyed all the advantages of a potential show dog great . . . and you pay for a pet.

And, afterwards, the dedicated breeder will be there to help and offer experienced advice in the further rearing of your puppy and, even beyond, when the puppy becomes an adult.

Obviously, all pet shops are not the same just as all private breeders are not the same. All pet shop puppies don't come from a Kansas puppy mill, and all private breeders don't adhere to the best standards.

But, since buying a dog is a major decision and investment, caution should be a watchword. The average family dog will outlast the car, house and TV set. Buy your pet in haste and you may have to repent in leisure. ●

Douglas Bundock

BEARS VERSUS BACKPACKERS

Backpackers and packtrain devotees who take to the rugged wilderness every summer always have a running battle with bears who have developed a fondness for human food. This summer a new kind of food storage container is being tested in several California national parks: Yosemite, Sequoia and Kings Canyon, and Denali National Park in Alaska.

Several were filled with aromatic, irresistible sardines, tightly closed and tossed into the bear dens at San Francisco zoo. The black bears attacked them with gusto, pawed them, chewed away on the outside, jumped up and down on them and hurled them against the walls. No dice. They gave up after an hour of determined effort.

According to park ranger Michael Coffey, the ready and easy (up to now) availability of tasty food from backpacks has always been a problem. Property damage and injuries to campers have cost thousands of dollars.

THE THINGS THEY

Anyone who has ever sent the family away for a holiday and lived alone with the dog and the refrigerator understands why old virgins soliloquize to their cats and canaries.

A mature dog is excellent for conversation. If you chat with him a while, gradually building up the argument and the intonation, he relishes it so that he will roll around the floor, lie on his back kicking, and groan with joyous worship. Very few wives or husbands are so affected.

Christopher Morley

Let us not say to ourselves that we need the dog as a protection for our house. We do need him — but not only as a watchdog. I have often stood in need of my dog's company, and I have derived from the mere fact of his existence, a great sense of inward security. In the almost film-like flitting-by of modern life, a man needs something to tell him, from time to time, that he is still himself, and nothing can give him this assurance in so comforting a manner as the four feet trotting behind.

— Konrad L. Lorenz

Ignorant people think it's the noise which fighting cats make that is so aggravating, but it ain't so; it's the sickening grammar they use.

— Mark Twain

If a dog will not come to you after he has looked you in the face, you ought to go home and examine your conscience.

— Woodrow Wilson

Dogs live with man as courtiers round a monarch, steeped in the flattery of his notice and enriched with sinecures. To push their favour in this world of pickings and caresses is, perhaps, the business of their lives; and their joys may lie outside.

— Robert Louis Stevenson

If women could watch the slow progress of a Persian cat into a crowded drawing room — the delicate tread, the tail held at exactly the right angle, the sudden pause, the glance over the left shoulder, and then the final exquisite nonchalance of the attitude in which it curls itself by the fire — they would receive a perfect lesson in poise. If they could enter restaurants like that they would break even the headwaiter's heart.

— Beverley Nichols

Let dogs delight to bark and bite,
For God hath made them so.

— Izaak Walton

To his dog, every man is Napoleon: hence the popularity of dogs.

— Aldous Huxley

The man recovered of the bite,
The dog it was that died.

— Oliver Goldsmith

When a dog occasionally wants to hang out the "Do Not Disturb" sign, as all of us do now and then, he is regarded as a traitor to his species.

— Ramona E. Albert

I have shared the greater part of my life with cats, but I have never at any time chosen one myself; the decision has always rested with the cat.

— Penelope Turing

By associating with the cat one only risks becoming richer.

Colette

The song of canaries
Never varies,
And when they're moulting,
They're pretty revolting.

Ogden Nash

The trouble with a kitten is
That
Eventually it becomes a
Cat.

— Ogden Nash

SAY ABOUT PETS

Every household should contain a cat, not only for decorative and domestic value, but because the cat in quiescence is medicinal to irritable, tense men and women.

In spite of all the physicians and hospitals and books that endeavour to induce them to relax, few human beings understand the art of repose. Now when a cat decides to rest, he not only lies down; he pours his body out on the floor like water. It is reposeful merely to watch him. The average man looks up from the morning newspaper and roars at the world's follies. Then he happens to see the family cat, who seems to put to him every day the Emersonian question — "So hot, my little Sir?"

William Lyon Phelps

The great pleasure of a dog is that you may make a fool of yourself with him, and not only will he not scold you but he will make a fool of himself, too.

Samuel Butler

Of all God's creatures there is only one that cannot be made the slave of the lash. That one is the cat. If man could be crossed with the cat it would improve man, but it would deteriorate the cat.

Mark Twain

Living with a cat is like being married to a career woman who can take domesticity or leave it alone. Nobody owns a cat.

Margaret Cooper Say

Those who wish to pet and baby wild animals, "love" them. But those who respect their natures and wish to let them live normal lives, love them more.

Edwin Way Teale

The great tie that binds us to dogs is not their fidelity or their charm or anything else but the fact that they are not critical of us.

Sydney Harris

I don't like cats. A cat is a poker-faced creature and I, for one, don't take poker-faced animals or people at their face value. It is too easy to act deep and mysterious. I question the so-called wisdom of cats; I think they are bluffing.

I like dogs because they spill their beans. A dog is no compote of cagey inhibitions. A cat makes no mistakes, but a dog starts to make mistakes the minute you enter the door. He wags without thinking it over.

Don Herold

A real dog, beloved and therefore pampered by his mistress, is a lamentable spectacle. He suffers from fatty degeneration of his moral being.

Agnes Repplier

I think one reason we admire cats, those of us who do, is their proficiency in one-upmanship. They always seem to come out on top, no matter what they are doing — or pretend they do. Rarely do you see a cat discomfited. They have no conscience, and they never regret. Maybe we secretly envy them.

Barbara Webster

When a dog bites a man that is not news, but when a man bites a dog that is news.

Charles Anderson Dana

We have discovered that the best way to get medicine into the family dog is to talk to him on a variety of dull subjects, then drop a pill down his throat when he yawns.

Franklin Jones

Cruel, but composed and bland,
Dumb, inscrutable and grand,
So Tiberius might have sat,
Had Tiberius been a cat.

Matthew Arnold

THE THINGS THEY SAY ABOUT PETS

Continued from page 7

If dogs could talk, they wouldn't make such good friends

John Titus

A dog looks up to a man, a cat looks down.

Noel Armstrong

I might have been a goldfish in a glass bowl for all the privacy I got.

Saki

A dog's best friend is his illiteracy.

Ogden Nash

I beg you beware of giving your heart to a dog to tear.

Rudyard Kipling

Never stare at a dog; he thinks it's a challenge.

David Wilkins

There is no faith which has never yet been broken, except that of a truly faithful dog.

Konrad L. Lorenz

Dogs have more love than integrity. They've been true to us, but they haven't been true to themselves.

Clarence Day

The dog was created specially for children. He is the god of frolic.

Henry Ward Beecher

The idea of calm exists in a sitting cat.

Jules Renard

Cats seem to go on the principle that it never does any harm to ask for what you want.

Joseph Wood Krutch

I love cats because I love my home; and little by little they become the living soul of it.

Jean Cocteau

Animals are such agreeable friends — they ask no questions, they pass no criticisms.

George Eliot

Our dogs will love and admire the meanest of us, and feed our colossal vanity with their uncritical homage.

Agnes Repplier

When I play with my cat, who knows whether she is not amusing herself with me more than I with her.

Michel De Montaigne

A dog will never forget the crumb thou gavest him, though thou mayst afterwards throw a hundred stones at his head.

Sa'di (1258)

If 'twere not for my cat and dog, I think I could not live.

Ebenezer Eliot

The cat will mew and the dog will have his day.

William Shakespeare

Cats like silence, order and quietness and no place is so proper for them as the study of a man of letters.

Theophile Gautier

Cat: A soft, indestructible automaton provided by nature to be kicked when things go wrong in the domestic circle.

Ambrose Bierce

When a dog runs at you, whistle for him.

Henry David Thoreau

Give me a cat of character, and we will mature together.

Joseph Wood Krutch

When a cat is alone she never purrs.

Dr. Samuel Johnson

Cats, like men, are flatterers.

Walter Savage Landon

Every dog has his day.

George Borrow

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