

Keeping Your Geriatric Cat Healthy

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October 13, 2008. Cats, like their human counterparts, are prone to the aches, pains, and health issues that seem to come hand in hand with advancing age. Unfortunately, as the average lifespan of our cats increases so does the chance that owners will see age-related issues arise in their senior cats.



As your cat begins to age your veterinarian will likely start to recommend doing some tests to make sure your cat's internal organs are functioning as they should. Cats have evolved to hide signs that they are feeling under the weather and these tests can let your veterinarian know that something is wrong with your cat long before your cat displays outward signs of illness.

"I recommend that owners have yearly blood work done on their pets if the animal is healthy, and increase that frequency if any clinical signs present themselves or if abnormalities are seen in the blood work," says Dr. Julie Byron, a small animal internist at the University of Illinois Veterinary Teaching Hospital in Urbana.

According to Dr. Byron, geriatric cat owners should also increase their awareness of how their cat is acting and feeling. It is important to be able to recognize what is normal for your cat so that when there is a change you can recognize it. She explains that a trip to the veterinarian is warranted if your cat is displaying any of the following signs or symptoms:

- Increased or decreased water intake and urination
- Weight loss
- Decreased appetite
- Vomiting or diarrhea
- Failure to groom
- Appearance of a growth or mass
- Any changes in activity level or normal daily habits

Two of the most important tools that a veterinarian uses to start narrowing down the list of possible problems are an accurate history from the owner and a thorough physical exam. Bringing your pet in to the veterinarian is only the first step; it is important to share with your veterinarian any changes and symptoms your cat is displaying.

There are certain conditions that are more common in our elderly cats including renal (kidney) disease, gastrointestinal diseases, arthritis, hyperthyroidism, and neoplasia. With these conditions come certain signs and symptoms that, when seen by the owner or veterinarian, can lead to a quick diagnosis of the problem.

Renal disease is a common issue with senior cats. Subtle changes in your cat's kidney function can be picked up on the recommended yearly blood work before any outward symptoms have presented themselves. Since kidney problems often cause symptoms like increased water consumption and increased urination, if blood work is not done or if the problem develops rapidly before it can be caught on a routine blood panel, owners may notice they need to fill the water bowl more frequently or that the litter box needs to be emptied more often.

"Owners should understand that while kidney disease is usually a degenerative disease it is not necessarily a death sentence for the pet," advises Dr. Byron. "There are medications and treatments on the market that can greatly increase the cat's quality of life and delay the progression of the disease."

An overactive thyroid gland, or hyperthyroidism, is another common problem in the aging cat population. If your cat has an overactive thyroid you may notice that your cat is losing weight, even though the animal's appetite may have increased dramatically, or that your cat's sleep-wake cycle has changed. Hyperthyroidism in cats is both easy to diagnose and treat. Unfortunately, if the disease is left untreated or undiagnosed it can lead to cardiac disease, gastrointestinal problems, high blood pressure, blindness, and even death.

The one disease that every cat owner dreads hearing about is neoplasia. Unfortunately, it is a common problem in geriatric cats and is also one that can be incredibly difficult for your veterinarian to diagnose. According to Dr. Byron it is the ability of cancer to mimic other diseases and include multiple organ systems that makes it so difficult to pinpoint on a diagnostic work-up. In order to diagnose neoplasia your veterinarian may ask for extensive diagnostic testing, which is necessary in order to rule out and narrow down the list of possible differentials your pet's symptoms and signs may point to.

While the necessary diagnostic tests can be expensive, if you are interested in pursuing further treatment for your pet these tests are essential. Your animal's prognosis and treatment strategy will vary greatly based on the results of these tests and whether a final diagnosis can be made.

Another common disease in aging pets is arthritis. According to Dr. Byron arthritis in cats is under diagnosed due to their ability to hide any signs of pain or discomfort. Signs of arthritis in cats can manifest in a variety of ways including decreases in activity level or ability/desire to jump, limping, weakness, and decrease in appetite. If you notice any of these signs do not medicate your pet with human over-the-counter drugs as these can be very hard for your cat to metabolize and actually may damage their internal organs. There are newer veterinary medications that can be used safely in cats as a long term arthritis treatment that your veterinarian can prescribe.

"Above all, owners need to understand that age itself is not a disease," explains Dr. Julie Byron "It just means that your pet has an increased likelihood of experiencing certain problems and illnesses. As veterinarians we work to combat these problems and ensure that your pet has the best quality of life possible."

For more information on issues that geriatric cats may encounter contact your local veterinarian.

<http://vetmed.illinois.edu/petcolumns/index.cfm?function=showarticle&id=590>

Cementless Prostheses Successful In Dogs

Potential Use in Human Joint Replacement

03 Nov 2008 Only six months after undergoing a unique and innovative surgery at Michigan State University, Jake - part dog and now part machine - spends his time working out on an underwater treadmill, traversing obstacle courses and prancing around pain free.

Jake, an 11-year-old yellow Labrador retriever, was the first dog in the Midwest and only the 11th in the world to undergo surgery for a new, cementless elbow prosthesis last April. The procedure, done at MSU's Veterinary Teaching Hospital by veterinary orthopedic surgeon Loic Dejardin, has left Jake pain free from elbow arthritis. Without the surgery, Jake would have dealt with severe pain for the rest of his life.

Dejardin has helped MSU's hospital become one of the first four institutions in the country to offer this elbow prosthesis, which has potential applications for human joint replacements as well. "Jake's case has been an absolute success," said Dejardin, who has performed three more elbow prosthetic surgeries and is preparing for another this week. "The work we are doing here is transforming veterinary care."

Jake was referred to MSU by veterinarian Sarah Shull of Grand Rapids' Family Friends Veterinary Hospital and Pet Care Center, where he now undergoes intensive physical rehabilitation under the guidance of Kim Selbee. Dan and Sue Falk of Grand Rapids are Jake's owners.

"We were told originally there was nothing that could be done for the pain Jake was in," Sue Falk said. "But after talking with Dr. Dejardin, we were so impressed and wanted to try the surgery. It is so exciting to be part of such amazing work. "Jake is running around just like he did when he was younger."

The technology for the prosthetic elbow came to MSU through the work of Randy Acker, a veterinarian from Idaho, and Greg Van Der Meulen, an engineer now working with BioMedtrix, a New Jersey company and leader in joint replacement design.

Cementless prostheses have many potential advantages over the currently used cemented model, including reduced risk of infection and reduced rate of implant wear, both of which are regarded as leading causes of post-surgery morbidity and implant failure. The surgery also is performed as a minimally invasive procedure, which drastically cuts the risk of catastrophic complications, fractures and dislocations.

"Clinical results have been very positive, and we believe there is potential for this system to mimic total hip replacement in aspects of operating time, post-op function and patient recovery," Dejardin said.

Van Der Meulen said the design of the implant virtually guarantees proper alignment of the joint surfaces, as opposed to other designs which leave greater room for surgical error.

"With this surgical technique and instrumentation, we are able to prepare the bones of the elbow simultaneously, practically guaranteeing alignment," he said. "Depending on the joint, this could have potential for use in human joint replacement as well."

Article URL: <http://www.medicalnewstoday.com/articles/127835.php>

New Web Site Devoted To Canine Heart Disease – A Leading Cause of Death in Dogs

23 Oct 2008 Heart disease is a principle cause of death in dogs, affecting more than 10 percent of all dogs and more than 60 percent of aged dogs. A new Web site devoted to this issue - <http://www.yourdogsheart.com> - is designed to educate pet owners about how to protect and care for their dogs' hearts.

"A dog's heart is just like yours, and dogs suffer from heart disease almost as often as people do," said Steve Peterson, DVM, senior manager at Boehringer Ingelheim Vetmedica, Inc., a leading global manufacturer of veterinary medicines. "Early detection is so important, and there are signs to watch for. We developed the new Web site as a resource that people can use to learn how to keep their dog's heart healthy and become better informed about a major canine health concern that is often overlooked."

At <http://www.yourdogsheart.com>, visitors will find a wealth of useful information, including:

- The incidence of heart disease in dogs, which increases as they age;
- How veterinarians detect and diagnose heart problems;
- What a heart murmur sounds like;
- The risk factors and symptoms of heart disease;
- Which dog breeds are more prone to developing heart disease;
- A description of congestive heart failure; and
- Dog heart health tips

The most important steps that dog owners can take to keep their pets healthy and heart disease-free are maintaining a dog's proper body weight, regularly exercising the dog and taking the animal to a veterinarian at least once a year for a checkup. Heart disease in dogs can be managed. Knowing what to look for and catching it early are keys to prolonging and improving the quality of a dog's life.

To learn more, go to <http://www.yourdogsheart.com>. Visitors also can submit and read heartwarming stories about families who have triumphed in their dog's battle against heart disease.

Article URL: <http://www.medicalnewstoday.com/articles/126563.php>

Statement from United Egg Producers On Prop 2 Results

We are disappointed to see the preliminary results from the California Prop 2 election, which appear to indicate the Prop. 2 was passed by California voters by a margin of approximately 60%-40%.

From the beginning, we knew we were fighting an uphill battle. Animal rights groups succeeded in convincing voters in California into thinking Prop. 2 was about animal cruelty by using images of pets in their ads, when in fact Prop. 2 simply was a means to try to end animal farming in that state.

U.S. egg farmers and our industry are proud of the fight we waged. While still disappointing, we would

rather fight and lose when we are in the "right" than to simply turn tail and run. We are thankful for the support we received from Governor Schwarzenegger, the California Republican Party, California Grocers Association, California Chamber of Commerce, National Latino Congreso, Congress of California Seniors, California State Conference of the NAACP, and hundreds of other politically-powerful groups and individuals. We received the endorsement of more than 30 of the largest and most influential newspapers in the state, including the Los Angeles Times, San Francisco Chronicle, Sacramento Bee and others.

We ran an aggressive, sophisticated political campaign. But sometimes even the best candidates lose. In the coming days, we will be analyzing the results of the election and our campaign and developing lessons that we can all learn from in the future.

Because the wording of Proposition 2 is so vague, the state of California will have to determine how this new law will actually be implemented and enforced when it comes into effect six years from now. Proponents of Prop. 2 have said publically during the campaign that it was not their "intent" to ban cage free production. Will they be true to their word when it comes time for the state to implement Prop 2?

Will other states be targeted for initiatives similar to Prop. 2? Probably. But just because voters in one state like California pass Prop 2. doesn't mean that the other 49 states should follow suit.

Pet Owner's Guide to Cancer

The latest online video from Cornell Partners in Animal Health developed in conjunction with the Cornell Feline Health Center can be found here: <http://partnersah.vet.cornell.edu/fhc/Pet-Owner-Guide-Cancer>
The video is divided in sections covering an explanation of cancer, why cancer cells form, how they metastasize, why pets get cancer, how to watch at home for signs of cancer. The video demonstrates how to do pet examinations for swollen lymph nodes and feel for bumps or small tumors.

Excellent and informative for all pet owners the video also includes behind the scenes look at diagnostics and treatment.

California Law Strengthens Protections for Researchers

California lawmakers have strengthened protections for academic researchers who have lately come under increasing attacks by animal rights extremists. Passage of the Researcher Protection Act follows a rash of violence, threats, and harassment targeting University of California scientists and their families.

Governor Arnold Schwarzenegger signed the measure into law Sept. 28. The legislation is intended to enhance law enforcement's ability to protect academic researchers and their families from acts of violence and intimidation by anti-animal research extremists. The law took effect immediately.

Assemblyman Gene Mullin introduced the Researcher Protection Act (AB 2296) in February at the behest of the University of California. It received strong bipartisan support and passed the Assembly and the Senate in August by unanimous votes.

"Increasingly, the potential for innovative thought and new medical therapies is jeopardized by threats aimed at researchers and their families," Mullin said. "The signing of AB 2296 sends a message that California recognizes its researchers and their families need to be protected from threats of violence."

On Aug. 2, two University of California-Santa Cruz scientists were targeted in firebomb attacks. Both targets do health-related research using animals. Earlier, the home of a UC-Los Angeles researcher was vandalized by animal rights extremists who left a note threatening to burn the house. A burning effigy was also left on the doorstep of another researcher's home.

AB 2296 makes it a misdemeanor offense to publish information describing or depicting academic researchers, their immediate families, or their locations with the intent that another person use the information to commit a crime involving violence or a threat of violence. In addition, AB 2296 makes entry onto the residential property of an academic researcher for the purpose of "chilling," preventing the exercise of, or interfering with the researcher's ability to perform their academic work a misdemeanor.

"This law will provide law enforcement with some of the tools necessary to help protect academic researchers so they can continue to perform ground-breaking research without the threat of violence," said Mark G. Yudof, University of California president.

JAVMA. November 1, 2008 <http://www.avma.org/onlnews/javma/nov08/081101q.asp>

Prosthetic Eye Gives Horse a Shot at Show Career

LAWTON, Okla. (AP) - A miniature horse has been given a second chance for a career as a show horse - thanks to a prosthetic eye. The 65-pound horse, named KBuck, was born June 1 at Lil Chums Miniature Horse Farm in Lawton and lost its eye a few days after birth. Owner Kelsey Chumbley, 12, said she suspects the young horse was the victim of a swift kick from its mother.

"We thought he was going to end up being a backyard pet" instead of a show horse, Kelsey said. "When we found out he had a second chance I was really excited for him."

Veterinarian Jeff Hammond of Marlow tried in June to save the young horse's eye. When it became evident the surgery didn't work, Hammond suggested the cosmetic alternative. KBuck's prosthetic eye was handcrafted by designers at La Fuente Ocular Prosthetics in Oklahoma City.

The eye was fashioned with a mold of KBuck's hollow eye socket and constructed with hard acrylic plastic, said Brandon La Fuente. It was hand-painted to look exactly like the horse's real eye, complete with deep blue features and tiny red veins.

KBuck's eye cost about \$3,000, but his worth will far exceed the investment if his show career takes off. Kelsey Chumbley said there are no rules against showing a horse with a prosthetic eye, and it's unlikely judges will be able to tell it's fake.

Hammond said adjusting to a prosthetic eye shouldn't be a hardship for the horse because he was so young when he lost it.

"Having one eye hasn't affected him a bit - he's a spitfire," Hammond said. <http://www.newsok.com>

The Center for Animal Law Studies

The Center for Animal Law Studies is a first-of-its-kind partnership between the national non-profit Animal Legal Defense Fund and Portland, Oregon's Northwestern School of Law of Lewis & Clark College. ALDF's long history at Lewis & Clark makes the partnership a natural collaboration.

The partnership between ALDF and Lewis and Clark is committed to developing a world-class, groundbreaking animal law program. As an academic and practical forum for the burgeoning field of animal law, the Center for Animal Law Studies will develop and provide essential programs and services for law students under the guidance of experienced animal law professors. Some of the projects already in the works at the Center for Animal Law Studies include: a Litigation Clinic, a Legislative Alliance, a Legal Scholarship Project, and a Job Center for students interested in career options in animal law. The Animal Legal Defense Fund is very excited to be partnering with Lewis and Clark to advance the study and practice of animal law. *Animal Legal Defense Fund (ALDF) website.*

CVM Laboratory Animal Resources Unit

5 Questions for . . .Rick Fish

Dr. Richard Fish is an associate professor of Laboratory Animal Medicine and the Director of the CVM Laboratory Animal Resources (LAR) unit. Dr. Fish is a Diplomate of the American College of Laboratory Animal Medicine and currently serves on its Board of Directors. He has been active in several laboratory animal medicine and science organizations, and recently concluded nine years service on the Board of Directors and Executive Committee of the North Carolina Association for Biomedical Research. Dr. Fish discusses the important work of the LAR and how it supports critical research conducted at the CVM.

What role does the Laboratory Animal Resources unit, or LAR, have within the CVM?

LAR is an administratively centralized service unit with husbandry, veterinary care, and oversight responsibilities for CVM research and teaching animals. LAR manages facilities in 13 buildings on the CVM campus (approximately 65,000 gross square feet of space) and has a staff of approximately 30, including three veterinarians with academic appointments in the Department of Clinical Sciences. LAR cares for an average census of roughly 5,000 animals, representing more than 20 species.

The mission of LAR is to provide CVM researchers with "optimal animal resources at the least practical cost." Animal resources means routine housing and husbandry for research and teaching animals, but also animal facilities and equipment; research/teaching animal veterinary care; technical assistance with experimental procedures, handling, and animal transport; instruction in animal handling techniques; animal ordering; assistance with Institutional Animal Care and Use Committee (IACUC) procedures; and consultation on any aspect of laboratory animal medicine or animal model development. LAR has a web site that provides information on policies and procedures for using research and teaching animals at the CVM. <http://www.cvm.ncsu.edu/lar/>

With the varied responsibilities assigned to LAR, can you describe the background or preparation necessary for a LAR staff member.

LAR staff members have a variety of backgrounds, but preferred qualifications for lab animal technicians include a college degree and prior experience in animal care. In both our hiring and new employee training, we emphasize an appreciation for the importance of animals in research, as well as the critical customer service role of the laboratory animal technician in promoting animal welfare and minimizing unwanted experimental variation. New staff training includes preparation for certification by the American Association for Laboratory Animal Science (AALAS), which is now a requirement for all new LAR technicians and supervisors.

There are, of course, strict regulations involving the use of animals. What agencies oversee the LAR activity and how does this oversight function?

Research and teaching animal use is governed primarily by two federal regulations: the Animal Welfare Act and the Health Research Extension Act and corresponding Public Health Service Policy on Humane Care and Use of Laboratory Animals. Each of these emphasizes the pivotal role of an Institutional Animal Care and Use Committee appointed by the university's Chief Executive Officer. The NC State committee is charged with oversight of the university's use of animals in research and teaching, and has a number of federally mandated functions, including review and approval of animal use protocols, inspection of animal housing facilities, and addressing animal welfare concerns. In addition to this institutional self-regulation, we are subject, under the Animal Welfare Act, to unannounced inspections by veterinary medical officers of the U.S. Department of Agriculture. The CVM also participates in a voluntary accreditation program offered by the Association for the Assessment and Accreditation of Laboratory Animal Care—International, and has been continuously accredited since 1987.

What is the process for adopting those animals that assist the CVM in its teaching and/or research mission?

CVM research and teaching animals that have completed their use may, if healthy, be assigned to another project or offered for sale. (The State of North Carolina considers these animals to be surplus property; therefore, adoption is technically considered a negotiated sale, and the price is expected to reflect fair market value.) LAR manages this program, and the process begins by transferring the animals to LAR when their use is completed. There are sometimes strong feelings about the appropriate method of disposition, reflecting legitimate concerns for reducing the overall numbers of animals used in our programs (by appropriate re-use) compared with placing animals in good homes. We encourage the principal investigator on any research project to share with us their thoughts on animal disposition before the project begins.

Are there special challenges your team faces in managing the LAR on a daily basis?

LAR faces challenges that are similar in many ways to any operation that cares for animals. These include finding and training personnel who are sensitive to the needs of the animals, the need to provide routine care every day, and assuring appropriate care in emergency situations, such as adverse weather and outages of power, water, or heating/cooling. Our first concern in an emergency is animal welfare, but there is also the special challenge of trying to maintain consistency in environmental conditions for an array of species and experimental needs. The care and use of research/teaching animals is highly regulated, and there is a societal expectation that research facilities are effectively self-regulating. This adds an oversight role to what both IACUC and LAR staff do, and sometimes creates conflict with our customer service goals. Another special challenge that faces research staff as well as LAR employees is the threat of animal rights extremism. We've been fortunate at NC State to have had minimal intrusion, but there is an increasingly well-funded and vocal minority who feel that intimidation and even violence are justified to stop the use of animals in research and teaching.

Posted October 29, 2008

<http://webapps.cvm.ncsu.edu/news/view.cfm?id=1265>

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