



Ohio State University Uncovers Poinsettia Fact, Fiction

December 25, 2012. Did your Christmas gifts include a poinsettia? Go ahead and enjoy poinsettias this winter and forget about the myth of them being poisonous according to Patrick Byers, a horticulture specialist with University of Missouri Extension.

"While poinsettias are not good for you and have a horribly bitter taste, the poinsettia is not poisonous to humans or pets," said Byers. "Most pets or children, if they ever tried a leaf, would spit it out and go no further."

If a new puppy got overzealous and ate most of the leaves on a plant, it would probably get a stomach ache and throw it all back up, according to Byers, but the plant is not deadly.

Research conducted by Ohio State University found ingesting large amounts of any part of the plant to be non-toxic. The American Medical Handbook of Poisonous and Injurious Plants states that ingestion of the poinsettia plant may produce vomiting but no toxic effects.

A little care

A poinsettia will keep best in an area with ample sunlight and limited air temperature fluctuations. It is also important to keep poinsettias away from heater vents. "Poinsettias will decline quickly when the roots are too wet. Only water when the soil surface is dry, and don't let the pots stand in water," said Byers.

It is possible to keep a poinsettia through the spring and summer so it will bloom again next fall but it is a challenge, according to Byers.

A little history

The Christmas poinsettia is the most popular potted plant in America. It is named in honor of Joel Roberts Poinsett (1779-1851), who was the first United States ambassador to Mexico. "He failed in his assignment to secure the purchase of Texas, but he did bring home colorful plants that Franciscan priests in the town of Taxco used in nativity processions," said Byers.

The red "petals" are actually bracts - the true flowers are found in the center of the bracts.

Source: University of Missouri Extension

The Breakfast Effect

Dr. Holly Miller investigated whether a dog's consumption of a morning meal would affect search accuracy on a working memory task following the exertion of self-control. By Claudia Bensimoun

Posted December 3, 2012 United States Dog Agility Association, Inc.

For centuries, dog handlers have employed the exceptional scenting abilities of dogs to make the world a better place. Searching out explosives, detecting pests, and alerting children with peanut allergies are just some of the ways humans have put canines to work. Many people find it easy to accept that nutritional factors can influence brain function in dogs. Now there is solid evidence that breakfast plays an important role in the search performance of trained canines.

Studies at the University of Kentucky suggest that eating a morning meal increases search accuracy in dogs. Dr. Holly Miller and colleague Charlotte Bender tested the search performance of trained domestic dogs after either consuming breakfast or fasting. Earlier studies demonstrating results that children do better in cognitive exercises when they have eaten breakfast, led Dr. Miller to wonder whether breakfast would also improve dogs' performances.

This study concentrated on a dog's accuracy on finding hidden food and investigated the effect of a dog consuming breakfast beforehand. The dogs were shown a treat that was then hidden in one of six containers. The results were eye-opening.

You may think that the dogs that were fasting would have retrieved the food first, since they would be more likely to be the hungriest. However, dogs that had already eaten breakfast 30 minutes before the search displayed greater search accuracy. The study found that dogs that searched 30 minutes after a meal were more accurate than those canines that searched when hungry.

An earlier study by Dr. Miller indicated that the exertion of self-control depletes dogs' energy levels as well as their ability to perform certain tasks. To ensure that all the canines tested had somewhat depleted energy levels before the search test began, the dogs had to show self-control for ten minutes by completing a sit/stay exercise. Researchers considered these results supportive of the theory that children do better in cognitive exercises when they have eaten breakfast. But is the same true for their wild relatives, the closely related wolves, coyotes and jackals? "When wolves, coyotes, and jackals eat a diet that is rich with carbohydrates like such as in commercial dog food, their brains are more dependent on glucose and more affected by fluctuations in glucose levels. But with a diet of hunted meat, where the carbohydrate level is low but fat content is high, the brain switches to its secondary fuel source of ketone bodies instead of the preferential glucose," Dr. Miller explains in an interview with BBC Nature.

Three water-soluble compounds, known as Ketone bodies, are produced as by-products when fatty acids are broken down for energy in the liver. Two of these ketone bodies are used as an energy source in the heart and brain. The third is excreted from the body. In the brain, ketone bodies are an important source of energy during fasting.

A dog's brain gets a portion of its energy from ketone bodies when glucose is less available as in times of fasting, strenuous exercise, or while consuming a low carbohydrate diet. What happens when there is low blood glucose is that most of the other tissues have additional energy sources beside ketone bodies such as fatty acids,

but the brain does not. When a dog's diet has been changed to lower blood glucose for a period of three days, the brain gets 25% of its energy from ketone bodies. Then, after the fourth day, this will increase to 70%. Nonetheless, during the initial stages, the brain does not burn ketones because they are an important substrate for lipid synthesis in the brain. "If these animals are consuming a natural diet that is not scavenged from the dump, they are probably in a state of ketosis where energy for neural processes does not fluctuate much. This means that one small meal may not have a big effect on problem-solving and may make wolves and coyotes less impulsive and more cautious. When hungry they become less able to control their behavior and this might be why, when hungry, they are so much more dangerous and unpredictable," says Dr. Miller via BBC Nature. The key finding to this interesting study is that dogs searched more accurately thirty minutes after a meal than those dogs that had not eaten. The study has been published in the journal Behavioral Processes.

[Editor's note: While the study officially dealt with canine search work, there may be a similar link to doing agility as well. If you normally don't feed your dog breakfast before training and competing, consider trying it (leaving time so that your dog doesn't work hard on a full stomach, of course) and see if it improves his performance.]

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Hemingway Cats Should be Federally Regulated

An appeals court opinion, issued Dec. 7, comes nine years after a dispute kicked off between the agency and the museum over whether the museum needs to follow federal regulations on exhibiting animals.

The U.S. Department of Agriculture can move forward with regulating the popular six-toed cats at Ernest Hemingway Home & Museum in Key West, an appeals court said.

The opinion, issued Dec. 7 by the U.S. Court of Appeals for the 11th Circuit, comes nine years after a dispute kicked off between the agency and the museum over whether the museum needs to follow federal regulations on exhibiting animals, according to the [New York Times](#).

A spokesman for the Agriculture Department told the Times the agency is following the law, meaning it wants to ensure proper daily care. The agency tracks things such as toxic peeling paint or rodent infestation. For now, the museum is unaffected by the ruling. That is because it reached a settlement with the Agriculture Department four years ago that gave the museum an exhibitors' license as long as it extended the height of the fence, added special bowls designed to drown bugs and upgraded its cat shelters, the Times reported. Ernest Hemingway's house has 45 celebrated six-toed cats, and tour guides say the cats descend from Snowball, a white cat given as a gift to the Hemingways.

Source: NBC6 South Florida

Treatment for Insecticide Toxicosis in Cats

Posted: 17 Dec 2012 05:30 AM PST

Haworth MD and Smart L. Use of intravenous lipid therapy in three cases of feline permethrin toxicosis. *J Vet Emerg Crit Care*. 2012; 22: 697-702.

Permethrin is a synthetic pyrethroid insecticide and acaricide commonly used for flea and tick control in dogs. Permethrin toxicosis in cats usually occurs when owners inadvertently apply over-the-counter spot-on flea insecticides intended for dogs to their cats or when cats are exposed secondarily to the product used on dogs that share the same environment. Permethrin exerts its toxic effect on ectoparasite and host by modulating sodium ion channels, causing them to remain open longer, resulting in repetitive excitable cell discharge. While this leads to paralysis and death of the parasite, toxicosis in the host manifests primarily as central nervous system effects including tremors, hyperesthesia, ataxia, mydriasis, pyrexia, seizures, and possibly death. Cats are highly susceptible to permethrin toxicity possibly due to their innate deficiency in glucoronyl transferase and slower hepatic detoxification of the compound. No antidote exists for permethrin toxicosis, therefore treatment is aimed at decontamination and control of neurological symptoms while allowing time for the toxin to be metabolized and excreted. Clinical signs typically last from 1 to 3 days. Mortality rates vary from 5-45%. Lengthy hospitalization times and cost often contribute to an owner's decision for euthanasia.

Intravenous lipid emulsion (IVLE) has shown promise as an emerging adjuvant treatment for certain lipophilic toxicants such as ivermectin, local anesthetics, and permethrin. Although the exact mechanism of action of IVLE is unknown, it has been postulated that the lipid creates a "sink" for fat-soluble drugs, decreasing their tissue availability. This report describes treatment of 3 cats with permethrin toxicosis with IVLE administration in addition to standard treatment. All 3 cats appeared to show accelerated resolution of clinical signs following lipid administration. The authors suggest that lipid administration may also reduce hospitalization time and cost, and possibly prevent the decision to euthanize. A prospective, controlled clinical trial to confirm these findings is warranted. In circumstances where euthanasia, or death is imminent, the use of IVLE is justified. [GO]

See also: Bruckner M and Schwedes CS. Successful treatment of permethrin toxicosis in two cats with an intravenous lipid administration. *Tierarztl Prax Ausg K Kleintiere Heimtiere*. 2012; 40: 129-34.

Malik R, Ward MP, Seavers A, et al. Permethrin spot-on intoxication of cats: Literature review and survey of veterinary practitioners in Australia. *J Feline Med Surg*. 2010; 12: 5-14.

Source: Winn Feline Foundation

USDA Issues Final Rule for Animal Disease Traceability

WASHINGTON, December 20, 2012—The U.S. Department of Agriculture (USDA) announced a final rule establishing general regulations for improving the traceability of U.S. livestock moving interstate.

"With the final rule announced today, the United States now has a flexible, effective animal disease traceability system for livestock moving interstate, without undue burdens for ranchers and U.S. livestock businesses," said Agriculture Secretary Tom Vilsack. "The final rule meets the diverse needs of the countryside where states and tribes can develop systems for tracking animals that work best for them and their producers, while addressing any gaps in our overall disease response efforts. Over the past several years, USDA has listened carefully to America's farmers and ranchers, working collaboratively to establish a system of tools and safeguards that will help us target when and where animal diseases occur, and help us respond quickly."

Under the final rule, unless specifically exempted, livestock moved interstate would have to be officially identified and accompanied by an interstate certificate of veterinary inspection or other documentation, such as owner-shipper statements or brand certificates.

After considering the public comments received, the final rule has several differences from the proposed rule issued in August 2011. These include:

- Accepting the use of brands, tattoos and brand registration as official identification when accepted by the shipping and receiving States or Tribes
- Permanently maintaining the use of backtags as an alternative to official eartags for cattle and bison moved directly to slaughter
- Accepting movement documentation other than an Interstate Certificate of Veterinary Inspection (ICVI) for all ages and classes of cattle when accepted by the shipping and receiving States or Tribes
- Clarifying that all livestock moved interstate to a custom slaughter facility are exempt from the regulations
- Exempting chicks moved interstate from a hatchery from the official identification requirements

Beef cattle under 18 months of age, unless they are moved interstate for shows, exhibitions, rodeos, or recreational events, are exempt from the official identification requirement in this rule. These specific traceability requirements for this group will be addressed in separate rulemaking, allowing APHIS to work closely with industry to ensure the effective implementation of the identification requirements.

For more specific details about the regulation and how it will affect producers, visit www.aphis.usda.gov/traceability.

Animal disease traceability, or knowing where diseased and at-risk animals are, where they've been, and when, is very important to ensure a rapid response when animal disease events take place. An efficient and accurate animal disease traceability system helps reduce the number of animals involved in an investigation, reduces the time needed to respond, and decreases the cost to producers and the government.

Ohio's Exotic Animal Law Upheld

COLUMBUS, Ohio (AP) — A federal judge upheld Ohio's new restrictions on exotic animals on Thursday after several owners sued the state over the law, which was enacted after a man released dozens of his wild creatures including lions and tigers last year and then committed suicide.

U.S. District Court Judge George Smith in Columbus sided with the state, saying the court recognizes some businesses may be negatively affected and some owners may not be able to keep their beloved animals but the owners failed to prove constitutional rights were violated.

The court said the case came down to the public interest and protecting the public from potential dangers of exotic animals.

"While the named Plaintiffs may be responsible dangerous wild animal owners, there are some that are not," the ruling said.

Dogs Seized from Hoarder

December 18, 2012. Responding to a tip, forty-four small breed dogs were seized by Iredell County Animal Services and Control from a home in Statesville. It's law in Statesville that you cannot have more than five animals within city limits. According to Director Chris Royal, the owner had gone through a personal tragedy and used hoarding as an outlet. She will not be charged.

Animal Services will focus on the dogs. "We don't want to euthanize any dogs, and we're asking for the public help," said Royal. Most of the dogs are in good condition and ready for adoption.

Source: WSOC

Myth Busters

MYTH: The Crisis of Pet Overpopulation

Three to four million dogs and cats in shelters are euthanized because there are not enough homes for them. Too many companion animals competing for too few good homes is the most obvious consequence of uncontrolled breeding. (Source: HSUS website)

FACT

As far back as 2001, in *State of the Animals* HSUS stated: "There was, however, general consensus among most animal related organizations that the term pet overpopulation was not only difficult to define, but that it was also probably no longer an accurate catchphrase to describe the reasons for animals leaving their original homes, especially for dogs."

Uncontrolled breeding is no longer the primary reason dogs and cats end up in shelters, and has been replaced with a pet retention problem. A 2009 study in the Journal of the American Veterinary Association reported that the vast majority - at least 80 percent - of pet cats in U.S. households are neutered, with middle-to higher-income households reporting rates of over 90 percent.

The most recent surveys by the National Council on Pet Population Study & Policy (NCPSP) identified the top reasons for relinquishment common to both dogs and cats are: moving, landlord issues, cost of pet maintenance, inadequate facilities, no time, and personal problems.

According to NCPSP it is quite clear that many pet owners lack the knowledge to solve problems with their pets. Animals, which otherwise might remain happily in their home are relinquished to shelters across the country. *Exploring the Surplus Cat and Dog Problem. Highlights of Five Research Publications Regarding Relinquishment of Pets*

However, HSUS and other animal rights groups choose to ignore facts for the purpose of framing an overpopulation issue for their advantage in the public eye in order to raise sympathy dollars or convince legislators that anti-breeding legislation is required. Against their carefully crafted emotional campaigns, facts and truth needed to counter the propaganda can often become lost in the discussion. ■

North Carolina Responsible Animal Owners Alliance, Inc. (NCRAOA) is a statewide organization of animal owners and professionals dedicated to animal welfare, responsible animal ownership, and maintaining the rights of responsible citizens to breed and own animals. NCRAOA, a 501(c)3 organization, provides education and information to the public and supports reasonable and humane animal welfare laws. Permission granted to copy and distribute NCRAOA News and Views in its entirety as is.

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