## THE PAINFUL REALITY OF PLANT TOXICITY

By Elizabeth Barrett RVT, CCRP

ancy Sodel of Kaliber Dobermans was frequently spotted about the small island town of Boca Grande, Florida with her Doberman, CH Kaliber's Unforgettable CD at her side. Whether at the hardware store or coffee shop with his service dog training vest on, Cole was the epitome of a well-behaved and beloved pet. Shown occasionally, he already had two majors towards his AKC Grand Championship and was a champion producer. A humorous dog, he brought cheer whether at home with family or to the elderly on his therapy dog visits.

Following renovations of their Boca Grande home in 2012, the Sodels had their property professionally landscaped and maintained. Prior to the design and installation, Nancy sat down with the landscape architect. She explained to him that the house, the yard, was "all about the dogs." The plantings had to withstand the dogs playing, but also be safe. The final plans for the job were run by several different architects within the landscape company—none raised any alarms about the plants being installed.

Though Cole was finally maturing into a well-mannered adult, he had been a busy adolescent who put Nancy through trials earlier in life. His antics resulted in two obstruction surgeries in a six month period for an ingested toy and sock respectively. That is one of the reasons that when over the last year and a half he would go through spells of occasional vomiting and refusing to eat it was written off to some ingested foreign matter passing through, or as one vet suggested, a sensitive digestive system. Sometimes it was bad enough to have to take him to the veterinarian for fluids and medications to settle his stomach, but he always

bounced back. Now and again he would sometime get into a particular planting area and chew on what appeared to be some sort of seed pod. But knowing that the landscaper would not have put any toxic plants in the yard, neither Nancy nor the vets ever considered that the plant was the cause.

That continued until this January when Cole became ill once again. This time pieces of the seed pods from the plants he chewed on were in his vomit. As the Sodels drove Cole to the emergency care clinic in Sarasota, Nancy texted the landscape architect describing the plant to ask its name and to see if was possible that the plant was poisonous. He replied back that the plant was a Sago Palm and that no, it was perfectly safe. Ten minutes later he called back in a panic. Just to be thorough, he had done an internet search and found out that Sago Palms were highly toxic—the entire plant, but especially the seed pods.

Armed with the name of the plant, the veterinary team at Sarasota Veterinary Emergency and Specialty Center was able to consult with the Animal Poison Control Center based at the University of Illinois College of Veterinary Medicine. With the aid of the APCC's database of more than one million animal cases involving pesticide, drug, plant, metal and other toxic exposures, Cole's critical care veterinarian team led by Lesleigh Redavid DVM, DACVECC was able to start immediate treatment. Cole spent the next six days in the Intensive Care Unit being treated for severe liver failure. Despite around-the-clock treatment including multiple plasma transfusions, it was decided to humanely euthanize him when, as his body began to turn against itself, he began hemorrhaging.

Cole had just turned three years old two days before.



Young Cole laying in front of a Sago Palm.

In the South, Sago Palms (also commonly sold under the names of Coontie Palm, Cardboard Palm, Cycad or Zamia) grow throughout Florida, most of Louisiana and in the southern reaches of Georgia, Alabama and Mississippi. In the West their growing area includes much of Texas, Arizona and California. Outside of the U.S. they are found in the New World tropics, Southern Africa, South and East Asia, Australia and the South Pacific. In Australia, loss of cattle afflicted with the "zamia staggers" led to government cycad-eradication campaigns. This family of palm plants are not only found in outdoor landscapes, but as ornamental houseplants as well. While most toxic plants warn potential predators away with a foul odor or bitter taste, the Sago Palm is a wolf in sheep's clothing. Because Sagos do not have these typical distractors, animals do not instinctively know not to eat or chew on the plants or the seed pods.

Sagos contain multiple toxins, with the most potent being Cycasin. Even with aggressive treatment, the survival rate for Cycasin toxicity in animals is only about 50%. In humans, Cycasis not only causes liver failure, but is a neurotoxin as well. The Sodels have very young grandchildren that visit them at their home. As we all know, toddlers will pick up and mouth anything—they were lucky that their grandchildren never found one of the seed pods.

Cole's death was a tragic loss of a young dog that did much to dispel stereo-typical myths about the Breed. Ultimately, our dogs trust us to protect them, so understandably the Sodels were despondent and ridden with guilt. They felt that they had let Cole down when they left his safety in the hands of others.

The owner of the landscaping company has stepped up to the plate—owning the company's part in this tragedy and intent on making amends. The company has replaced all of the Sago Palms and Cardboard Palms in the Sodel's yard with dog/child safe plants, and have agreed to pay Cole's veterinary bill. They are also making sizable donations to the local animal shelter and to the charitable pet foundation, Frankie's Friends. Most importantly to every current and future client, is that everyone in the company, from architects to laborers is being trained in recognizing the region's toxic plants.

As a result of Cole's death, Nancy is spear-heading the drive for a Boca Grande community educational program. In addition to learning how to identify toxic plants in and around the home, the program will include how to identify the symptoms of toxicity and first aid that owners can give to a pet until they arrive at a veterinary hospital.

Some lessons in life are learned the hard way—sometimes devastatingly hard. Making the most out of those lessons, and even turning one's loss into something positive, is the mission that Nancy is on. More than anything else she does not want Cole's death to be meaningless. His ultimate and "unforgettable" legacy should be a catalyst for owners to do their research to identify toxic plants both inside and outside of their homes so that no one else suffers the undue loss of a healthy dog to such an agonizing and preventable fate.

## EXAMPLES OF TOXIC PALMS













Left (top to bottom): Ornamental Cardboard, Ornamental Sago, Cardboard Palm, Male Sago specimen.





Right (top to bottom): Cycad, Coontie Palm, Sago Seed pods, King Sago Palm at UC Berkeley campus.