

Emergency Care: An Extraordinary Case

The night before Thanksgiving, Jack Benenati of Manteca didn't know where to turn when a fire burned the enclosure of his sulcata and leopard tortoises. More than a dozen pets were severely burned.

Benenati called several veterinarians. Few were open. None specialized in tortoises. Finally, an acquaintance told Benenati to try UC Davis, where third-year resident Ashley Zehnder responded in the Companion Avian and Exotic Pet Service. The service regularly handles emergencies involving birds, reptiles and other exotics.

Senior Veterinarian Marilyn Koski recalls, "When the tortoises were admitted, their burns were so severe that it was difficult to clearly identify their normal anatomy. Up to 40 clinicians, including myself and Dr. Zehnder, students and others from different services—even the Large Animal Treatment Crew—helped to provide the best possible care for these patients."

"The Boss," "Baby Huey" and the others, weighing from 15 to more than 150 pounds, received aggressive supportive care: fluids, morphine, antibiotics, wound care and gavage (tube) feeding, says Koski. "Because they were so sick, our first priority was to provide analgesia. We performed only noninvasive testing."

Some animals had to be euthanized or died at home, but the rest remained responsive. "They have such personality and strength that it drew us to do everything we could," Koski says. "The stoicism and apparent will to survive exhibited by these animals was stunning."

The reptiles' situation provided staff and students with new insights into treating these unusual creatures, Koski says. "Over the course of the months we cared for the tortoises, we obtained blood samples for hematology and clinical chemistry analysis, placed esophageal feeding tubes to allow nutritional support, and refined our wound care to adjust to the needs of each animal.



Photo: Don Preisler

From left, third-year resident Ashley Zehnder, Senior Veterinarian Marilyn Koski and Registered Veterinary Technician Jacquelyn Ashby treat an African sulcata tortoise.

"The Ophthalmology Service provided diagnostic and treatment services to correct the eye damage suffered by some of the tortoises. The Radiology Service performed a CT study on the largest tortoise early on, and then a second CT over two months later. This diagnostic imaging afforded us a better understanding of the degree of damage caused by the fire, and the subsequent CT study revealed the long-term effects of fire injuries and the healing abilities of this species."

Ultimately, five of the 12 burned tortoises survived, including two of the most severely affected animals seen at the hospital. In the Companion Avian and Exotic Pet Service, veterinarians are consulting with surgical and medical companies to devise a protective material to enclose the exposed bone on the damaged shells of the survivors.

In reporting the case, the *Modesto Bee* underscored its impact: "Koski said treating the reptiles was an invaluable learning experience for her students. 'It's a sad story, but because of [Benenati's] fast work and courageous

effort, these animals were alleviated pain and they were given a chance,' she said. 'It also allowed us to learn so much to help future reptiles and future patients. [Mr. Benenati] is really to be applauded for all he's done for reptiles.'"

Benenati spoke highly of students, staff and faculty involved in his case. He also describes a renewed faith in veterinarians. "I have a new vet," he notes. "Her name is Marilyn Koski."

A non-medical complication of the case was the treatment cost of more than \$5,000. The teaching hospital and client sometimes face tough choices as the hospital cannot absorb all costs, but hospital personnel work with clients on an individual basis. Some help comes from special funds. For example, the Adam Fund, established by a reptile enthusiast, helps to cover some costs of treating sick reptiles whose owners can't fully afford treatment. To make a donation to keep this and other funds available for extraordinary cases, contact the development office at (530) 752-7024 or online at www.vetmed.ucdavis.edu/development/.