



Summer heat sparks concerns

KSVDL toxicologist points to hazards from blue-green algae

By Gabriella Doebele

A toxicologist with the Kansas State Veterinary Diagnostic Laboratory said recent weather conditions form the recipe for the development of blue-green algae.

Also known as cyanobacteria, blue-green algae may bloom in fresh water where environmental conditions make it possible for these organisms to grow and replicate rapidly. Conditions typically associated with blue-green algae development include warm weather, lots of sunlight and the presence of nutrients in the water, which often are the result of agricultural runoff.

Dr. Steve Ensley, a clinical veterinary toxicologist, said health problems can arise when animals and people come into contact with the various toxins produced by cyanobacteria. The most prominent problem involves a toxin called microcystin, which affects the gastrointestinal tract and liver.

When animals are exposed to this toxin, they may experience

vomiting or diarrhea, Dr. Ensley said. If the cyanobacteria exposure is severe, it can be lethal and cause liver failure in animals. Although gastrointestinal problems and liver failure also are possible in humans after blue-green algae exposure, Dr. Ensley said irritant effects are more common. Humans often experience skin rashes, sneezing, coughing, irritated eyes, running noses and conjunctivitis after blue-green algae exposure.

“If there is a bloom in a body of water that animals are drinking out of, then we need to move them away from it as fast as we can,” Dr. Ensley said. “Fence off that water source if at all possible.”

If livestock and/or pet owners are worried that their animals



Blue-green algae looks like blue or green paint was spilled on the surface of nonmoving water.

could potentially be exposed to blue-green algae, then they should regularly check for signs of its development, Dr. Ensley said.

“There is some confusion between the blue-green algae blooms and other vegetation on water,” Dr. Ensley said. “If a blue-green algae bloom occurs, then it looks like blue or green paint was spilled on the surface of nonmoving water.”

With warm weather and rainy days on the rise, the risk of blue-green algae blooms may not slow down soon.

Recent grad receives Merck innovation award

By Gabriella Doebele



Dr. Akaterina Davros with the CVM's Dr. Peggy Schmidt

Dr. Akaterina “Kat” Davros, a May 2018 graduate from the College of Veterinary Medicine, is among the 28 recipients of the 2018 Merck Animal Health Veterinary Student Innovation Award.

The award recognizes graduating seniors at each veterinary school accredited through the American Veterinary Medical Association in the U.S. and Canada. Students chosen must be in good academic standing and have demonstrated innovation, entrepreneurship and creative forward-thinking in the development of a project or product that inspires others within the veterinary profession.

Dr. Davros received the honor for her help with creating programs to improve mental and physical health of veterinary students, staff and faculty.

“I scheduled weekly free yoga classes, created an appreciation board in the Veterinary Health Center and other programs to break down the mental health stigmas in our profession,” Dr. Davros said

Dr. Davros is currently an emergency medicine intern at the Fort Collins Veterinary and Emergency Rehab Hospital in Fort Collins, Colorado. However, she would like to see her days as a Wildcat continue at some point in the future.

“I would love to one day come back to the K-State College of Veterinary Medicine and teach other students,” she said.

Additional concerns for animals during excess heat conditions

By Gabriella Doebele

With excessive heat warnings his summer, Dr. Tom Schwartz, director of the Veterinary Health Center, says pet owners need to take precautions.

Dr. Schwartz said the best thing is to keep all animals inside in cool places. But if the animals can't be brought inside, they must be given shade and plenty of water. Misting fans, sprayers and just a hose can help keep cattle, horses and pets cool.

In excessive heat conditions, Dr. Schwartz said that horses can lose more than 7 gallons of fluid as sweat.

“It is important to note that if the sum of humidity and temperature exceeds 130 degrees, horses and other animals can be at risk for heat stroke,” Dr. Schwartz. “This risky combination of heat and

humidity often occurs earlier in the day than most expect because of high humidity in the morning. For example, the heat plus humidity index was well over 150 at 8 a.m. Thursday, June 28. Black cattle, such as Angus, are at a higher risk for heat stroke as are animals with heavy coats, such as sheep and llamas. Make sure that they have access to shade and to water in their pastures.”

Dr. Schwartz also said that no pet should be kept in a car for any length of time without the air conditioner on. He said the best thing is to leave pets at home and that they should only go outside when the temperature lowers. For horses, the combination of heat and humidity can be a problem even early in the day.



“Do not walk your pets once the day heats up,” Dr. Schwartz said. “Walk only early in the morning or late in the evening when temperatures drop and try to avoid pavement that can burn a pet's pads. Dogs such as English bulldogs and pugs, who have trouble breathing, should not be outside for any length of time as they can easily overheat.”

Some pets may enjoy boats and being around the water, but this activity should be avoided as well, Dr. Schwartz said.

Workshop unites CVM and twinning project partners from Tanzania



SUA faculty members tour a bovine facility during the visit to K-State.

By Gabriella Doebele

Since its inception in 2016, the goal of the OIE Veterinary Education Twinning Project has been to establish a link between the CVM and the Sokoine University of Agriculture (SUA) College of Veterinary Medicine and Biomedical Sciences in Tanzania. This link was strengthened with the project's fourth workshop, during which seven faculty from SUA visited K-State.

One objective of the OIE Twinning Project workshop is to foster networking opportunities for education, research, and professional development. During this fourth workshop of the project, the main topics discussed were curriculum mapping, continuing education, research

collaborative opportunities and the student exchange program.

Curriculum mapping exercises were continued to provide further insight on how both universities are addressing the standards of the OIE Recommended Model Core Veterinary Curriculum.

Participating faculty also discussed plans to implement a continuing education (CE) five-day course will be given to Tanzanian veterinarians at SUA in June 2019. Four K-State faculty will participate during the CE course in Tanzania. The SUA workshop participants attended K-State's annual conference to see an example of continuing education offered for veterinarians in the U.S.

Researchers at K-State and SUA also met to identify innovative solutions to combat global health challenges.

U.S.-China Joint DVM Program celebrates annual homecoming



By Gabriella Doebele

Another year, another graduate! On June 5, the CVM hosted its annual homecoming for the U.S.-China Joint DVM Program. The lone 2018 graduate, Dr. Aolei Chen, earned her DVM at the University of Minnesota in May.

The U.S.-China Joint DVM Program provides for the selection of four Chinese students each year to study for a veterinary degree in the United States. Students must complete one year in the pre-veterinary program at K-State, after which they can enroll in the four-year veterinary programs at K-State or one of its partnering schools in the U.S.

The homecoming event included reports from 21 of the students who just finished their pre-veterinary year at K-State and/or are currently working on their Doctor of Veterinary Medicine at K-State, the University of Minnesota, Iowa State University or the University of California, Davis.

Dr. Chen knows graduating is just the tip of the iceberg. She looks forward to making a lasting impact in her home country.

"Veterinary school is just the starting point of our career; lifelong learning is the key," Dr. Chen said.

See more in Lifelines online!

CVM researcher examines invasive squirrel species at Jerusalem Zoo

By Gabriella Doebele

Dr. David Eshar, assistant professor in companion exotic pets, wildlife and zoo animal medicine, is currently collaborating with the Tisch Family Zoological Gardens in Jerusalem, Israel, examining the northern palm squirrel (*Funambulus pennantii*).

The five-striped palm squirrel is native to India, but can become a feral invasive species through illegal pet trade. In this research project, Dr. Eshar is testing an injectable anesthesia protocol for these squirrels supported by a Department of Clinical Sciences research grant.



Dr. David Eshar and second-year student Ariella Barry perform a physical exam on a palm squirrel.

CVM News Ticker



Two of a Kind: The CVM recently welcomed Marilyn and Taylor Reiter, the daughter and granddaughter of Dr. Robert Kind, class of 1957, memorialized via the Kind Touch statue. Taylor, from Arizona, hopes to study veterinary medicine.



Congrats to **AshLee Lattner**, doctoral student in veterinary biomedical studies at Kansas State University, was selected as a 2018 Seaboard American Royal scholar. Lattner is one of 12 scholars selected from across the country. This scholarship program is designed to provide opportunities for outstanding college students to advocate for leadership, the food and fiber industry, and the American Royal.



Three K-Staters (circled): **Drs. Katie Reif, Tippawan Anantatat and Chandra Kondithimmanahalli**, attend the ASR conference in Milwaukee, Wisconsin, thanks to travel awards administered by K-State Global Campus.

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