

COWS HAVE NO IDEA HOW MUCH HUMANS THINK ABOUT THEM. EVERYTHING THAT AFFECTS THE HEALTH AND PRODUCTIVITY OF AMERICAN DAIRY AND BEEF COWS — THEIR LIVING SPACE, THEIR FEED, THEIR RANGE OF MOVEMENT, THEIR INTESTINAL TRACTS - HAS BEEN EXTENSIVELY STUDIED. **ONE PLACE WHERE SUCH SERIOUS THOUGHT ABOUT BOVINES HAPPENS** IS THE WKU UNIVERSITY FARM, WHICH IS OVERSEEN BY THE DEPARTMENT OF AGRICULTURE. FORMER AGRICULTURE **DEPARTMENT HEAD, DR. JENKS BRITT,** IS A LONG-TIME VETERINARY SCIENCE RESEARCHER. BRITT HAS BEEN THINKING ABOUT COWS FOR MOST OF HIS LIFE. AS A BOY GROWING UP ON A DAIRY FARM NEAR BOWLING GREEN, HE PARTICIPATED FULLY IN THE RAISING, TENDING, AND MILKING OF HIS FAMILY'S HERD.

On 400 acres supporting over 100 dairy cows, Britt got to see every stage in the life cycle of cows, both healthy and sick. "We had a mechanical milking operation," he says. "I also did 4-H projects involving dairy cows." He participated in Future Farmers of America as well, but ended his involvement with both groups when he finished high school.

One aspect of cow management that particularly struck him during his youth, says Britt, was the role of the veterinarian. "I got to watch him treat sick animals, deliver calves, give vaccinations," he says. "I decided at age ten or eleven what I wanted to do." When it was time for him to enter college, he stuck to his plan and double-majored in agriculture and biology. After graduating from WKU in 1966, he headed to Auburn University in Alabama for a graduate

degree in veterinary medicine, which he completed in four years.

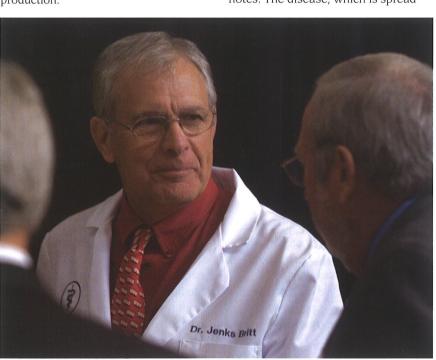
For the next twenty-three years, Britt practiced veterinary medicine in Russellville, Kentucky, specializing in animal health management and reproductive technologies such as embryo transfer.

But in 1993, he decided to quit private practice and move into academia. At the University of Wisconsin - Madison, he took the position of clinical assistant professor in the College of Veterinary Medicine, and five years later joined the WKU Department of Agriculture. "I started doing research as part of the tenure process," he says, "and I've been doing it ever since."

At the university farm, Britt oversees three distinct types of projects involving bovines: applied research, applied field trials, and in-depth disease research. Only the smaller projects can be done using the university's herd of 150 beef cows and 40 dairy cows. "If it takes 30 or fewer animals to do a trial, we can do it at Western," he says. "If we need 400 animals, then we do the project using private, family-owned herds." Some of the funding for new research comes from feed and pharmaceutical companies, who contact the researchers to set up trials.

The university farm sits on 783 acres just south of the Natcher Parkway, and is run by the Department of Agriculture. The farm currently has four staff members and about thirty students who work there raising crops (corn, wheat, alfalfa, pasture, and soybeans) and tending the livestock (in addition to bovines, there are horses, pigs, and goats). All of these animals are potential subjects of research studies and trials, but are also used for teaching within the department. WKU graduate students usually participate in the disease studies.

One focus of Britt's research has been on bovine nutrition. "I've done quite a bit of research looking at specific additives such as yeast culture in bovine feed," he says, "to see what effect it would have on health and milk production."





"I'd like to think our work with bovines has led to real improvement in the health and profitability of herds."

His research on bovine diseases, says Britt, focuses on two in particular: Johne's disease and bovine viral diarrhea (BVD), both gastrointestinal illnesses. The former malady, which was identified in cows more than one hundred years ago, resembles Crohn's disease in humans. The organism that causes Johne's disease is in the same family as tuberculosis and leprosy. Like those two sicknesses, Johne's is slow to develop. "A calf could have exposure and infection at two months old, but not show any sign of illness until seven or eight years of age," Britt notes. The disease, which is spread

through fecal contamination, is not curable yet. "A lot more research needs to be done," Britt says.

In addition to overseeing an extensive array of research projects and trials, Britt also teaches courses in the science of agriculture, livestock management, and animal pathology, among others. And when he is not supervising trials and teaching, he is writing (he has authored or co-authored 227 articles), giving presentations (he has given 222 in the U.S. and abroad), and participating in professional organizations (the American Dairy Science Association and the American Association of Bovine Practitioners, among many others). He is also on the editorial board of the Journal of the American Veterinary Medical Association.

Some of the numerous awards Britt has earned in his long career include Veterinarian of the Year (1993, Kentucky Medical Association), Practitioner of the Year (1992, American Association of Bovine Practitioners) and Alumni of the Year (1992, WKU). Starting in January 2011, he will shift from full-time teaching to part-time, and continue to oversee research projects at the farm. "I'd like to think our work with bovines has led to real improvement in the health and profitability of herds," he says.

So even in partial retirement, Britt will go on thinking about cows, just as he has done all his life.