Pennsylvania State University is the largest in the Commonwealth, and among the top ten in size nationwide. And that’s not even counting the animals.

The University’s 40,000 head of students is amplified by some 1,000 cattle and sheep, nearly 100 American Quarter Horses and ponies, and dozens of breeding sows. There are aquaria brimming with native Pennsylvania fish and African cyclids. Thousands of chickens and turkeys. Wildlife including raptors, turtles, snakes, and a herd of white-tailed deer. And countless lab animals.

Overseeing them all is Jacob R. Werner, V’00, Penn State’s attending veterinarian for agricultural animals and wildlife. Werner is one of four veterinarians holding this vast menagerie of production and bioscience animals together.

A land-grant university established in 1855 for agricultural use and engineering, Penn State relies heavily on its animals for teaching purposes. “Agriculture is the number-one industry in Pennsylvania,” Werner explains, “so it’s important for students to learn animal husbandry and proper animal care.”

As a head veterinarian at Penn State, Werner divides his time between paperwork and fieldwork. On any given day, he might work up diarrhea in swine, diagnose foot problems in deer, do pregnancy checks on cows, or insert catheters in lab animals.

But Werner spends most of his time on regulatory issues, ensuring that procedures and husbandry protocols comply with regulations like the federal Animal Welfare Act and Public Health Service Policy on Humane Care and Use of Laboratory Animals, and with guidelines issued by organizations like the American Veterinary Medical Association (AVMA) and the Association for Assessment and Accreditation of Laboratory Animal Care International (AAALAC).

As a member of Penn State’s Institutional Animal Care and Use Committee (IACUC), Werner also reviews experimental protocols that involve the use of laboratory animals and helps enforce the University’s strict biosecurity measures.

While he admits to a dislike of “just busy paperwork issues,” he enjoys compliance work because it improves the care and well-being of the animals concerned. “If it’s an issue that can better animal welfare,” he says, “then we need to deal with it.”

For the poultry-processing plant on campus, Werner helped draw up a new euthanasia protocol incorporating electrical stunning prior to exsanguination. This added step, he says, has made the procedure more humane and in closer synchrony with AVMA guidelines. He’s also working with the dairy farm to incorporate the use of local anesthesia into calf dehorning.

No stranger to agriculture—or Penn State—Werner grew up in a rural town in northwestern Pennsylvania. There, he spent time helping out at his uncle’s dairy farm. And he paid close attention to the veterinarians treating his own horses, eventually working for one of them while a high school student and later while majoring in bioscience at Penn State.

Although he veered in the direction of large-animal medicine, Werner tried to maintain an open mind by choosing a mixed-animal concentration in veterinary school. Following a large-animal medicine and field-service internship at the Virginia-Maryland Regional College of Veterinary Medicine, he went to work for a mixed-animal practice.

When he arrived at Penn State last June, Werner, 28, soon reaped the benefits of his strong clinical background, which, he says, helped him better understand the complex animal-use guidelines as well as the practical production matters. And it’s helped him face down some of the inherent challenges of compliance work.

“The hard part about regulatory issues is getting people like producers and basic scientists to understand why they are so important,” he says.

Werner, who serves as his veterinary school class agent, says his Penn experience helped him converse on the many different levels that his job demands. “I’m working with investigators, students, regulators…. You need to be a good communicator in my job—understanding different processes, putting concepts together, and then explaining them. Penn always challenged me to do these things.”