

Katie Weber

DVM Candidate Class of 2019

University of Wisconsin-Madison

AQUAVET Experience

Before veterinary school, I was a fisheries technician first for the Wyoming Game and Fish and secondly for the Illinois Natural History Survey. I have always appreciated aquatics, specifically for freshwater fish. Until this past year, I had no idea aquatic medicine could even be a career! But after speaking with classmates and veterinarians about this option, I completely switched my career path from food animal to aquatics. The next step was finding experiences to further my knowledge and clinical skills to become a better fish veterinarian.

Because of this AAFV scholarship, I could afford attending the annual AQUAVET class, which is the premium source of aquatic medical information ranging from invertebrates to marine mammals. This month-long course in Bristol, Rhode Island provided contacts with the best fisheries veterinarians in the nation and access to their expertise in the field. Considered the "Parade of Stars," various veterinarians lectured to our class from 8am to approximately 9pm almost every day. Among the wide range of topics, we learned about oyster hatcheries, fish surgery, diseases, pathogens, anesthesia and euthanasia, reptile and amphibian medicine, aquatic bird diagnostics and medical management, and marine mammal conservation medicine. The comprehensive amount of information provided me with a massive advantage, and I firmly believe there is no other comparable experience regarding aquatic medicine today. We also gained extensive insight into the programs and career opportunities available in fish medicine, and the expansion of those programs thanks to the current veterinarians.

Throughout the course, we were also offered various wet labs. The coordinators provided specimens for necropsies and expert veterinarians led the labs and gave insight on pathogens, disease processes and how those diseases manifest in their respective tissues. Necropsies were performed on oysters, clams, horseshoe crabs, squid, saltwater fish, sea turtles, birds, and marine mammals. We were taught clinical skills such as gill clips, skin scrapes, using tissue swabs for bacterial cultures, histopathology, and harvesting blood samples for hematology. We were also taught how using endoscopy, radiology and ultrasound provided ancillary diagnostics. Further, students participated in a water quality lab, which is the most important form of diagnostics an aquatic veterinarian can utilize. One of the highlight experiences was performing fish surgery on striped bass. Each surgery group conducted a splenectomy on their fish, as well as a spay or neuter. We anesthetized the fish with MS-222 and practiced our surgical techniques under the supervision of skilled veterinarians. It was a fantastic, all-encompassing representation of the surgery process.

Another aspect of the course involved behind-the-scenes tours of aquariums in the New England area. The veterinarians at these aquariums shared information on how they manage the health of their aquatic wildlife, including coral, which is a vital aspect of sustaining certain fish populations. A major topic at these aquariums involved behavioral training of the marine mammals to ensure the veterinarians could perform proper physical exams. The animals were trained to position themselves for ultrasound exams, blood draws, and to receive eye drops in the case of the seals and sea lions. This strategy ensures adequate medical care and reduces stress on the animals during exams. Biosecurity

was another important topic as it relates to acquisition of new species and subsequent quarantine. Included in this is an adequate biofiltration system and frequent water quality monitoring of the different tank environments. It was a rare experience to be able to interact with these aquarium veterinarians and to observe how these educational facilities are managed today.

Thank you for this wonderful, unforgettable opportunity. I would not have been able to do this on my own, and I feel truly honored to have attended AQUAVET. I learned more than I could have hoped for, and I feel significantly more prepared and excited to pursue a career in aquatic medicine. I hope to contribute to the AQUAVET curriculum someday and help future fish veterinary students gain a better understanding of this field and the opportunities available to them.



