

## **Advanced Training in Food Animal Practice—Enhanced Education in Rural Practice, Food Safety and Public Health**

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Currently, there is a nationwide shortage of large animal veterinarians. In 2019, the U.S. Department of Agriculture designated 190 regions throughout 44 states as having shortages in large animal veterinarians. Currently, only 3-4% of veterinary graduates will pursue a career in food animal medicine, further contributing to the decline in food animal veterinarians. This shortage is even more evident in rural, underserved communities, where there is a severe shortage of veterinarians who provide services to food animals. For example, the Navajo Nation, the largest land area held by a native American tribe in the United States has only one veterinarian. The issue is multi-factorial, but lack of awareness of training opportunities, and lack of recruitment strategies are some of the factors that contribute to the decline in large animal medicine interest. Regardless of cause, the shortage of food animal veterinarians poses welfare concerns as well as safety concerns for the United States food supply and public health.

In this Teaching Innovation presentation, we share a novel program that aims to enhance the existing infrastructure of veterinary food animal programs by establishing an exclusive educational opportunity for veterinary students. We aim to develop a competitive externship in food animal practice that involves veterinary students nationwide and youths from Navajo Nation. This program's objective will be to expose food animal-focused or mixed practice veterinary students and Native American youths to rural food animal practice experience and provide them with the entry-level competency and practical skills needed to be successful in food animal medicine. Not only is this program aimed at increasing interest and retention in livestock practices within rural communities, but also to encourage Native American youths to consider a career in veterinary medicine.

To aid in developing a larger externship opportunity, we implemented a pilot rotation in October of 2022. We had two food animal clinicians, one mixed practice intern, one veterinary assistant, and three senior Midwestern University veterinary students on the clinical rotations. We had two veterinary trucks and a mobile cattle chute. We worked with the founder and president of Animal Rez-Q, a non-profit corporation that focuses on animal welfare and care on reservations, to coordinate with communal farmers and small-scale ranchers in the Navajo Nation who wanted to participate in the program. Services provided ranged from ewe breeding soundness examination, cow pregnancy diagnosis, vaccination, deworming, dehorning, and castrations. We had one high school student with us for four days and one elementary student for one day. We treated 231 cattle, 130 sheep, and 29 goats. More ranchers have reached out and registered their interest in participating in the program in the future and we had excellent feedback from the participating senior veterinary students, highlighting the potential of a broader externship program going forward.

Due to the proximity of MWU to the Navajo Nation and both community and student interests, there is a clear opportunity to work with tribal and underserved communities in Arizona to help remedy the national shortage of rural, large animal veterinarians by providing a unique training opportunity for future veterinarians.