

Avian Health

Statewide, based at VDL, Ft Collins

Courteney Walker
DVM, Class of 2023

Dr. Ragan Adams, Veterinary Extension Specialist
Heather Reider, VDL, Avian Health Team Lead
Dr. Kristy Pabilonia, Director of Clinical Diagnostics
Veterinary Health System, CSU
Dr. Raye Walck, Director, Western Slope VDL, CSU

PROJECT INTRODUCTION

I worked with the Colorado State University Avian Health Team as a Certified Field Technician implementing the National Poultry Improvement Program (NPIP). Through this work I learned about a variety of avian species and types of poultry operations that are not emphasized in our standard veterinary curriculum.

We also attended a tabletop exercise on Highly Pathogenic Avian Influenza hosted by the Colorado State Veterinarian and were introduced to the state and federal regulatory response to this foreign animal disease.

During the fair season we did health checks on poultry before they entered the local county fairs. I got to interact with people of all different ages and backgrounds including 4-H and FFA exhibitors. I was pleased to give back to programs that helped shape me into who I am today.

INTERNSHIP GOALS

- Advance knowledge in avian health and diagnostics
- Understand the role of poultry production in Colorado
- Improve poultry handling techniques
- Understand the importance of biosecurity
- Understand how to implement and improve upon biosecurity plans for a variety of poultry operations
- Learn about the National Poultry Improvement Plan

HOW DOES THIS APPLY TO YOUR EDUCATION

I will use this experience as a mixed animal veterinary doctor. In this role it is important to be familiar with animal handling and medical knowledge for a variety of species. DVM's have the responsibility to be agriculturally literate and aware of concerns and relevant topics in production animal medicine.

I became more versed in sample handling and diagnostic testing of both live and deceased animals. I also got to work on my communication and client education skills. Both are very important aspects of veterinary medicine.

WHAT YOU DID

- Performed National Poultry Improvement Plan Testing for new and currently existing flocks of *Salmonella pullorum* and *Salmonella typhoid*
- National Poultry Improvement Plan Biosecurity Audits for large and small animal producers
- Avian Influenza Surveillance Sample Collection
- Followed Standard Operating Procedures for biosecurity, sample obtaining, performing diagnostic tests.
- Learned about different diagnostic procedures performed at two CSU Diagnostic labs
- Learned about proper sample handling, packaging, and paperwork
- Maintained strict biosecurity measures
- Properly cleaned and sanitized vehicles and gear before and after each flock to minimize spread of disease between flocks and diagnostic lab
- Participated in poultry necropsies
- Attended High Pathogenic Avian Influenza Tabletop Exercise led by the State Veterinarian's Office and took notes on the exercise and the intricate and deliberate procedures that would take place during an HP Avian Influenza outbreak.
- Performed vet health checks at county fairs
- Practiced communication skills with people of various backgrounds
- Participated in public education about avian health and husbandry
- Visited:
 - a large commercial feather facility and learned about the intricacies
 - a commercial hatching facility
 - Large commercial organic layer/grower flocks
 - a commercial wild game flock

Pictures From the Field



WHAT YOU LEARNED

Working with the Colorado State University Avian Health Team taught me about a variety of avian species and avian operations and their goals.. We visited a variety of different producers who had different interests and goals for their flocks around the state of Colorado. We saw an organic, free-range laying flock, cage free flocks, wild-game flocks, flocks that only had water-fowl, and smaller producers with unique and beautiful birds. Each had different housing types, production goals for the flock, and biosecurity protocols. At the Western Slope VDL, we did avian necropsies with Dr Raye Walck.

Attending the High Pathogenic Avian Influenza Tabletop Exercise held by the Colorado State Veterinarians Office, I got to learn more about the importance of surveilling for Avian Influenza in the state of Colorado. Learning about all the intricate steps and communication that takes place once there is suspicion of a highly pathogenic disease. The scenario covered the steps from the moment that an increase in deaths in poultry houses are reported all the way through depopulation of the confirmed flock to proper disposal of carcasses.

The tabletop exercise and working with the Avian Health Team helped me better understand biosecurity and measures that can be taken in order to protect a premise and the animals on it. Things like having designated shoes for just bird areas and not wearing them anywhere else, including to feed stores are small things to prevent spreading disease.

NEXT STEPS

My project entitled, "Dead Bird – Now What? is an educational, 2-page fact sheet for bird owners who have had a death in their flock. This is a common question for veterinarians and Extension agents. The fact sheet reviews the importance of necropsy (animal autopsy) to identify the cause of death, the proper handling of the deceased bird prior to submission, and subsequent steps to control further spread in the flock. Basic but impactful biosecurity steps to protect flocks from infectious diseases are also reviewed.

This summer internship has given me a solid foundation in bird handling, avian disease, biosecurity and poultry production which will be helpful in my veterinary profession.