

Train the Trainer Small Ruminant Parasite Interventions: Providing Methods and Materials for Producer Driven Parasite Control

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Introduction

Various climactic and biological factors are promoting the spread of deadly parasites throughout domestic small ruminant populations. Long a problem in southern states, where warm winters allow parasite populations to flourish and there is a history of goat production, we are seeing more issues with parasites in the Northeast due to an increase in production¹ and warming winters². One of the most effective approaches to combatting parasites is a combination of progressive strategies driven by producer education. Many producers are not aware of the best practices to decrease parasite loads and reduce resistance to deworming medications.

This project worked to educate New York State producers in the best management practices to prevent and treat their animals for deadly parasites, slow the incidence of parasite resistance within domestic flocks, and provide producers with access to the supplies to complete the analyses in the future. The intervention used a “train the trainer” framework to instruct local CCE educators on current best practices to enable them to train local producers.

Objectives

1. Efficiently train local educators and producers in best practices for parasite management and treatment.
2. Provide materials so that producers can conduct their own parasite counts at their local extension office.
3. Combat dewormer resistance in northeast small ruminant populations.
4. Collect data on parasite numbers and loads to improve treatment of parasites and production of small ruminants throughout the Northeast.



Detzel with student
Photo Credit: Jason Detzel1.

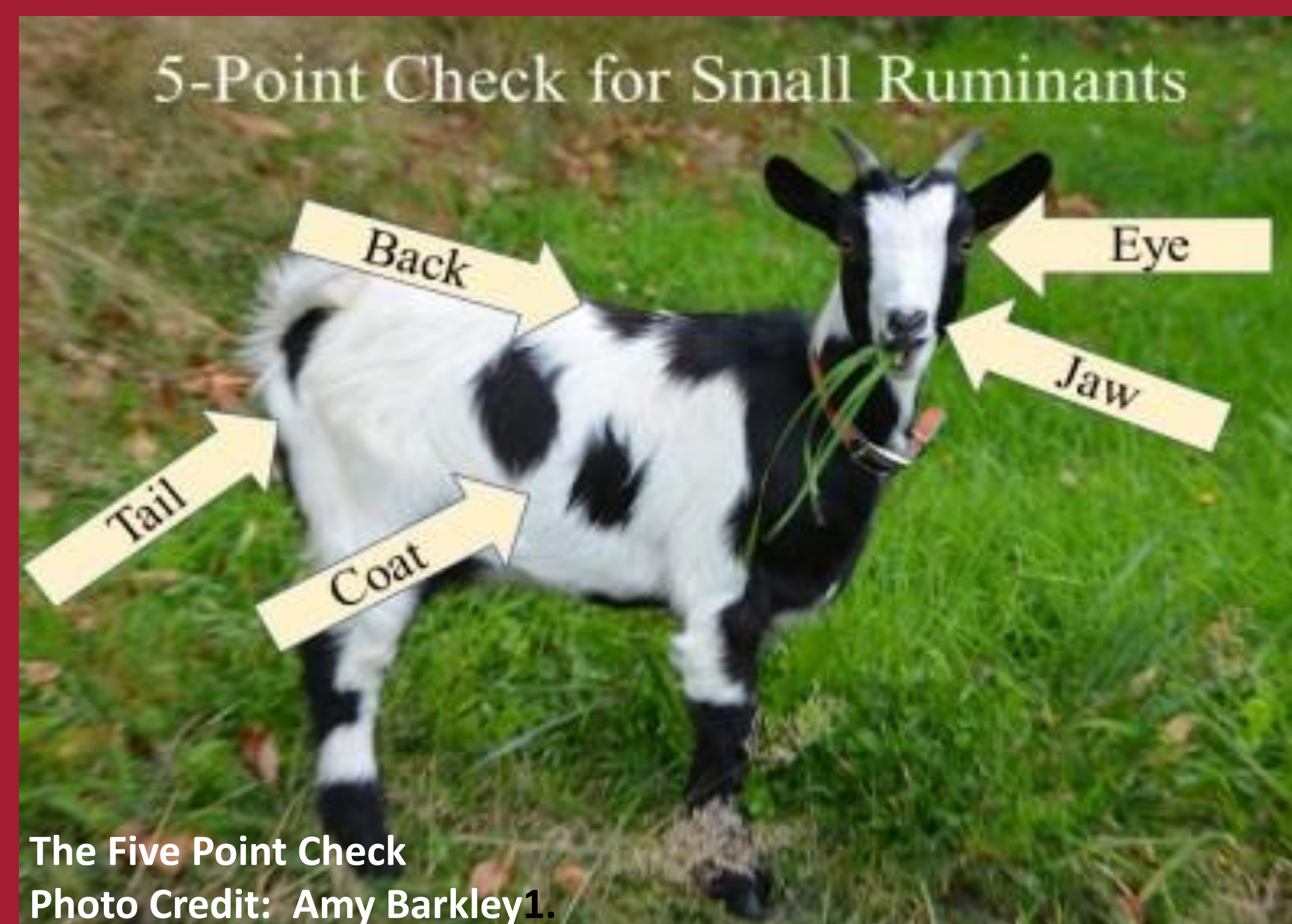
Methods and Materials

There are two phases to this project. In phase one, Jason Detzel hosted a small ruminant parasite control course for pre-selected CCE educators in a local county extension office in New York State. Through a power point presentation and live demonstrations, the two-hour course reviewed the basics of the five-point body check, the basics of FAMACHA³, a selective deworming procedure for small ruminants, and a demonstration of the lab procedures for counting parasitic eggs in fecal samples. The course also reviewed current best practices and treatment options for internal parasites.

Once the course had been completed in each of the 7 County hubs, Detzel provided each hub with a complete fecal lab kit that consisted of all the materials they need to host their own lab on site. Each hub is required to host at least one fecal lab day per month during the parasite season (May-October). This lab time is available to any farm that has completed the training. Each hub is required to send out email notices to the participants detailing the times that the lab will be open so producers can use the lab to complete their counts and make informed decisions regarding their parasite loads and possible interventions.

Results

The project was altered due to the effects of the pandemic. Instead of Detzel providing live instruction to the trainers at their home office, the teaching and demonstrations were done online. There was a spending freeze on the project and we were not able to send out the lab materials to each of the Counties until March 2021. Despite these issues, Detzel was able to provide the “train the trainer” webinars to all 7 of the participating Counties and all of the Counties were able so successfully host their producer training events in 2020. At this time, we have been able to instruct 46 separate farms in best practices for small ruminant parasite control.



The Five Point Check
Photo Credit: Amy Barkley1.



Subjects in the field
Photo Credit: Detzel

Impacts

Although the project has been delayed, the project is still working as intended. After the initial training, each County educator was able to successfully offer the course in the fall of 2020. We expect to have all of the fecal lab supplies to each County by end of March 2021. Detzel has been encouraging the participating Counties to host the course again in the spring of 2021, prior to the opening of each lab at the start of the growing season.

- 7 Small Ruminant Parasite Control Courses across New York State
- 7 Complete Small Ruminant Fecal Count laboratories in each of the selected Counties
- 7 Completed Courses for 47 farms and access to the labs during the growing season
- Materials and methods to host the course again in the spring of 2021

This project is not over. Each County now has the methods and materials to host this course and to open their lab as they see fit. The program can be adjusted as new research and interventions are identified.

Location of Labs in New York

Albany County
Broome County
Chenango County
Clinton County
Orange County
Ulster County
St. Lawrence County



Contact

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References

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