

Penn State Extension Looking for Farm Partners for the Penn State Parasite Research Project”

Equine gastrointestinal parasites, and their increasing resistance to available dewormers, are a major concern in the equine industry. Taking a whole-farm approach to managing parasites can decrease the frequency of deworming, eliminate the use of products that are no longer effective on your farm, help you learn which horses have natural resistance and which ones are “shedders”, and help decrease the development of resistance to dewormers. Routinely deworming with the same products, or simply rotating dewormers, is not the best method and can contribute to the development of parasites that are resistant to the products that we use. Since no new products are on the immediate horizon, if resistance continues to progress at the present rate, the equine industry may face a major crisis.

Interest in the latest information and studies on parasite control is very high. A grant from the Northeast Sustainable Agriculture and Education program is enabling the PSU Equine Extension team to travel across the state educating horse owners about strategic deworming and non-drug based parasite control methods.

Dr. Martin Nielsen, DVM, PhD, DACVM, DEVCP, a world renowned parasitologist with the Gluck Institute in Kentucky is serving as a consultant for the project. In a September article on the race against parasite resistance, Dr. Nielsen commented on the Penn State project. He stated that “the initiative and energy (of the project) will change a lot of things in the state for the better, It could be a fabulous model for other states. Why not Kentucky? Why not every state?”

Farm owners interested in participating in the project must first attend the “Managing Parasite Resistance Using a Whole Farm Approach” course. The same day-long program will be offered in State College at the Samuel E. Hayes Livestock Evaluation Center on March 18, 2017. The course runs from 10:00 AM- 4:00 PM at each site. Cost is \$45 per person and includes lectures, lunch and materials. Advance registration is required at least one week prior to each class. For registration materials, contact Donna Foulk at dlf5@psu.edu or Heather Stofanak haf10@psu.edu or call 610-746-1970. The course is open to all interested horse owners, barn managers, equine industry personnel, veterinarians and vet technicians.

A key speaker will be Ed Jdrzejewski, DVM and Penn State Equine Farm Manager who will describe the major gastrointestinal parasites in horses. Dr. Jdrzejewski has used targeted deworming practices on the Penn State University Quarter Horse herd since 2009. “We have been doing fecal samples on every horse every month since February 2009. After a couple years of monitoring fecal samples, all of the concepts mentioned by proponents of targeted deworming were clearly obvious in our herd. We had significant resistance to the Benzimidazoles such as Panacur and Safeguard and developing resistance to Pyrantel. Using strategic based deworming practices, we were also able to decrease our use of dewormer by 79% while maintaining the quality of our parasite control.”

Donna Foulk, Equine Natural Resources Educator with Penn State Extension, will demonstrate how resistance develops and will discuss parasites and the environment, covering issues such as the effects of temperature and moisture on parasite levels, whether to harrow or not, and pasture and manure management practices to reduce parasite exposure.

In the afternoon Heather Stofanak and other members of the equine team will discuss the research project, will present information gleaned from the farms enrolled in 2015 & 2016, and will help farm owners learn to prepare samples and conduct fecal egg counts.

During all of the presentations, the team will emphasize the importance of working with the owners' veterinarian to build a customized plan for each person's individual farm.

Those attending the course will have an option to be involved as an "Equine Team Parasite Research Partner". The Penn State equine team is seeking farms to enroll as farm partners. The participants will meet at predetermined site equipped with microscopes and the other supplies needed to conduct fecal egg counts. Whole herd fecal egg counts will be conducted by the farm partners three times a year. The data will allow the farm owners to determine which horses on the farm are high shedders and which ones are low shedders of small strongyle eggs. Horses that are identified as high shedders will be dewormed using predetermined de-wormer and will be rechecked after two weeks to determine the efficacy of the product on the farm. This year-long involvement will increase horse owners' and farm managers' ability to make educated decisions concerning parasite control on their own farm.

A major goal of this project has been to empower farm owners to make changes to their deworming program by increasing their level of confidence in strategic deworming practices. 2015 & 2016 proved to be a very exciting years for the project with 79 farm partners from 28 PA counties enrolling 697 horses in the project. By the end of the summer, 100% of project partners identified the high shedders on their farm, increased their confidence in strategic deworming practices, and started to conduct fecal egg counts on new horses on the farm. Ninety-five percent were able to determine products effectiveness on their farm, felt empowered to make good management decisions, and reduced their fear of parasites. Eighty-one percent reduced their use of de-wormer.

Come and learn more about equine gastrointestinal parasites and join in on this very exciting and cutting-edge programming. This is an exciting learning opportunity to help yourself, your farm, your environment and your horses. You may also be able to be part of a research project aiding horse owners and reducing the proliferation rate of resistant parasites. To receive a brochure about the project, Contact Donna Foulk - Equine Extension Educator (dlf5@psu.edu) or Heather Stofanak -, Equine Team Program Assistant (haf10@psu.edu) or call 610-746-1970. To learn more about the Penn State Equine Team programs visit the website at: <http://extension.psu.edu/animals/equine>. To be added to the list serve regarding future equine extension offerings, contact your local Penn State Extension Office. Penn State is an equal opportunity university.

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