President's Message, December 2013

North American Camelid Studies Program End of Year Summary 2013

Our ongoing teaching program included two courses for undergraduate students in both the spring and fall semesters in Amherst MA at our classroom and farm locations. Both are in action again in 2014.

Camelid Management is an introduction to alpacas and llamas in the US and internationally through interactive lectures and hands on laboratory sessions. Hands on animal care of the teaching herd includes feeding, cleaning and watering of the animals during the semester. Topics covered include camelid historical perspective, international agriculture, housing, behavior, handling, herd health, basic reproduction, semen collection and evaluation, and gastrointestinal parasite identification and control.

Alpaca and Donkey Reproduction Research is an interactive course designed to introduce the student to all aspects of reproduction research in alpacas and donkeys. Lectures and hands on laboratory sessions include work with both alpacas and donkeys. Topics covered include reproductive behavior, male and female anatomy and reproductive physiology, ultrasound examination of the male and female reproductive tract, semen collection and evaluation, and infertility evaluation. A review of the latest reproduction research findings for both alpacas and donkeys is included. The international importance of both species is emphasized.

Students and Dr. Purdy worked at both the North American Alpaca Show in West Springfield MA and the Green Mountain Alpaca Fall Spectacular in Essex Junction VT in 2013. We also received good exposure for the Nunoa Project and Dr. Purdy presented our work at the MAPACA Show in Harrisburg PA and the Northeast Alpaca Show in Syracuse NY. All of these events resulted in financial support for our programs. A trip to California in November established contact with alpaca breeders there and a substantial donation for our work. We hope these events will be an ongoing and expanding source of financial support.

We also provided learning opportunities for veterinary students, veterinarians, and owners in Amherst MA at our classroom and farm locations. Two Camelid Practice Courses were held in June providing a combination of interactive lectures and hands on work with alpacas using the program's teaching and research herd. Both are in action again in 2014. Visits to work on local farms were included. Topics covered included Camelids 101 (historical perspective, behavior and handling, housing, common procedures), Male and Female Reproductive Anatomy and Physiology; Reproductive System Ultrasound of Males and Females and Pregnancy Diagnosis; Male and Female Infertility; Semen Collection and Evaluation; Herd Health Management (vaccines, disease prevention); Practical Nutrition; Dermatology; Dentistry; Castration of the Alpaca; Considerations for Pregnancy; Birthing; Neonatology; Antibody Transfer in Neonates; Lactation and Cria Growth; Gastrointestinal Parasite Control; Meningeal Worm Disease Prevention; and Animal Agriculture in the Southern Peruvian Highlands.

Ongoing Research Studies involving undergraduate and post graduate prevet students include Alpaca Reproductive Cycle and Pregnancy Ultrasound and Alpaca

President's Message, December 2013

Semen Evaluation and Relationship to Establishment of Pregnancy. Data is collected and analyzed from our herd and working alpaca farms in the northeast.

Nunoa Project-CONOPA 2013 Work with Farmers in Peru

Our Collaborative Alpaca Breeding Improvement Program is conducted annually in Nunoa District in the southern Peruvian highlands. During January through April (breeding and birthing season in the Andes) 14 Nunoa Project males are loaned to farmers to breed to their select females (approximately 300) to improve wool, meat, and cria production. The offspring of those breedings become the future reproduction animals in their herds. US and Peruvian students stay in Nunoa during this period to work directly with farmers. We are working on implementation of record keeping to monitor male and female production in order to make sound breeding management decisions. Breeding animals are tagged and evaluated. Other studies conducted in 2013 and commencing again in January 2014 include: Semen Collection and Evaluation, Cria Birth Weight and Growth Rate, Cria Birth Rate and Cause of Neonatal Mortality, Fecal Examinations for Gastrointestinal Parasites, and Alpaca Breeding Behavior.

In July we return to Nunoa to work with local animal health officials and farmers and perform ultrasound pregnancy examinations of all project females to evaluate success of the Nunoa Project males, the farmers' females, and herd management programs. In 2013 pregnancy rates were increased from the previous estimated 30-50% to 70-90% in the project herds. Seminars and workshops are held twice yearly for Nunoa farmers and agricultural workers to improve production of crias, wool, and meat. In January 2014 we are providing a semen collection and evaluation manual and workshop to municipality workers and interested farmers. Again two students from the US who were trained this fall in MA will be working in Nunoa for January through April. A Peruvian veterinary student who worked with us in January 2013 is returning to Nunoa for an extended work period along with a new veterinary student from Peru. Each visit to Nunoa also includes volunteer work by preveterinary and veterinary students from North America. It is a life altering experience for those who get to see firsthand the difficulties of working in rural agriculture in Peru.

Steve Purdy, DVM President, Nunoa Project