## Nunoa Project- Making a Difference for 14 years in the Peruvian Altiplano and US

Stephen R. Purdy, DVM
President Nunoa Project Peru
Director North American Camelid and Donkey Studies Programs
nunoavet@gmail.com 413-658-7718
www.nunoaproject.org



Nunoa Project is a US nonprofit which conducts educational and service programs in the US and the Peruvian Andes. Nunoa Project veterinary teams have been working with camelid (alpaca and llama) farmers in Peru since July of 2006.

Initial trips concentrated on meeting farmers, getting used to how alpacas and llamas are managed in Peru, and learning as much as we could. We identified how we could possibly help improve the income of farm families, and how we could coordinate with farmers and local officials. We focus on elevating production in the alpaca herds through improvements in reproduction management and fiber production from alpacas. We have placed multiple teams in the Andes for longer term study and coordination with farmers, in addition to conducting our twice annual two-week work trips. Our team members and leaders have come from many countries including the US, Peru, Argentina, New Zealand, the UK, Australia, Canada, and Germany. All of us share a common goal of practical education and helping others to attain a better life. We have a Peruvian veterinarian who maintains contact with Andean farmers in between work trips. Nunoa farmers are anxious for us to return and we have many new farmers with interest in our assistance.



Nunoa Project veterinary team members prepare to evaluate a camelid herd in Nunoa District.

The high altitude work at 13,000 to 15,000 feet is difficult and uncomfortable by our normal standards. It is very challenging on a daily basis, but the rewards are also high. Small management changes and interactions with the farm families can make a large difference in their lives. Team members have a strong sense of service to others and a clear perspective of how fortunate we are. Team leaders have developed from early training with the Project as young veterinarians and students. Team members are comprised of students, veterinarians, and others who want to help. New members start out inexperienced on each trip, but within a few days the teams are working like a well-oiled machine. It is an exercise in international problem solving, teamwork, and flexibility. The work exposes team members to the challenges and rewards of working in international agriculture. The work changes

our people and motivates them to make a positive difference in the lives of others. Schedules are changed on a daily basis, often with no warning. It is the way life is in the Peruvian altiplano. Team members commonly deal with altitude sickness and gastrointestinal upsets during their work. The showers are cold or non-existent, the food is very basic, sleeping is interrupted due to the altitude, and it is very cold every night in the high Andes. The roads are rough, but a least we have trucks to move between farms unlike most of the farmers with whom we work. The farmers are often wary of outsiders at first, but they soon recognize that the team comes to work hard and to exchange knowledge. The Peruvians are after all multigenerational camelid farmers. We come to learn from them also. The farmers and their children are friendly and very inquisitive. They want to see ultrasound images of pregnancies and watch closely as we work with their animals. They are curious to look into microscopes at whatever we are examining. The children are the future scientists and veterinarians of the altiplano.



Alpaca herd waiting for evaluation by team members at 14,000 ft. altitude.

The work we do includes evaluation of breeding herds including body condition scoring as a measure of herd nutritional status, gastrointestinal and skin parasite surveys, evaluation of breeding males, measuring pregnancy rate with portable ultrasound equipment to evaluate reproductive efficiency, and evaluations of breeding females and offspring. We speak to farmers about the problems they see in their herds to try to identify practical solutions. The farmers' primary cash product is alpaca fiber for which they are paid a low price by weight regardless of quality. Our goals include achieving more fiber production from each herd, and the birth and survival of more offspring each year. We conduct training seminars and clinics which are well attended, with demonstrations and education on practical, hands on techniques. We also started a knitting cooperative in Nunoa to get local products to consumers.

The *most recent trip to Nunoa District* in the Department of Puno in the southern Peruvian Andes was in January of this year. We interacted with a local government veterinarian and multiple farmers with whom we have established relationships. They and we are assisting other farmers in the area. We evaluated hundreds of alpacas and worked with new farmers. All plus more are interested in continuing the work with us in the future. Unfortunately, the June 2020 and January 2021 work trips were cancelled due to travel and health restrictions relative to the COVID 19 virus pandemic. Our next scheduled trip in for June 2021.

Nunoa Project's educational programs in the US, the North American Camelid and Donkey Studies Programs, dovetail with the Peruvian work, with about half of our team leaders and workers having been trained in Massachusetts. These are the future animal scientists and international agriculture specialists. Preprofessional students from the program have attended a wide range of veterinary schools in the US and Europe. Many other national and international veterinary students and veterinarians have also been trained by us. Our work here in the US focuses on teaching students practical problem solving through hands on instruction. We use our Massachusetts teaching herd of alpacas, llamas, and donkeys to illustrate principles of observation, animal management, animal reproduction, problem solving, and teamwork. We develop evaluation and examination techniques which work both in the US and internationally. During each academic semester in western Massachusetts we work with undergraduate preveterinary students in the Alpaca and Donkey Reproduction and Camelid Management courses we provide. The total number of NACSP students admitted to veterinary school or other graduate school programs over the last 12 years is approximately 90. We also offer a 6 day intensive Camelid Practice Course for veterinary students and veterinarians in June of each year, including in 2020. The future is bright for large animal veterinary medicine and international agriculture based on these excellent young people with whom we work.



Left: Veterinarians and NP Peruvian volunteers Nicole Rapa and Maggie Sorbi (far right) who were trained in the NACSP work with students evaluating breedings at our teaching farm in Western Massachusetts.

Right: Tufts University veterinary student Vanessa Sylvia (also a Peruvian volunteer and NACSP trained) evaluates a semen sample collected at our Massachusetts teaching farm.

We rely on private financial support from people like you to continue our important work. We invite all interested parties to contact Dr. Purdy for more information and to find out how they can help us to make a positive difference in the lives of hard-working young people and Peruvian farm families.

Steve Purdy is a 1981 graduate of the NY State Veterinary College at Cornell University. He has worked as a farm animal veterinarian in Virginia, Massachusetts, New Hampshire, and Vermont. He is an adjunct professor in the Veterinary and Animal Science department at the University of Massachusetts at Amherst after having spent 7 years as a full time, teaching award winning, faculty member. He continues his teaching and service work with young students and veterinarians in the US and Peru through the Nunoa Project.