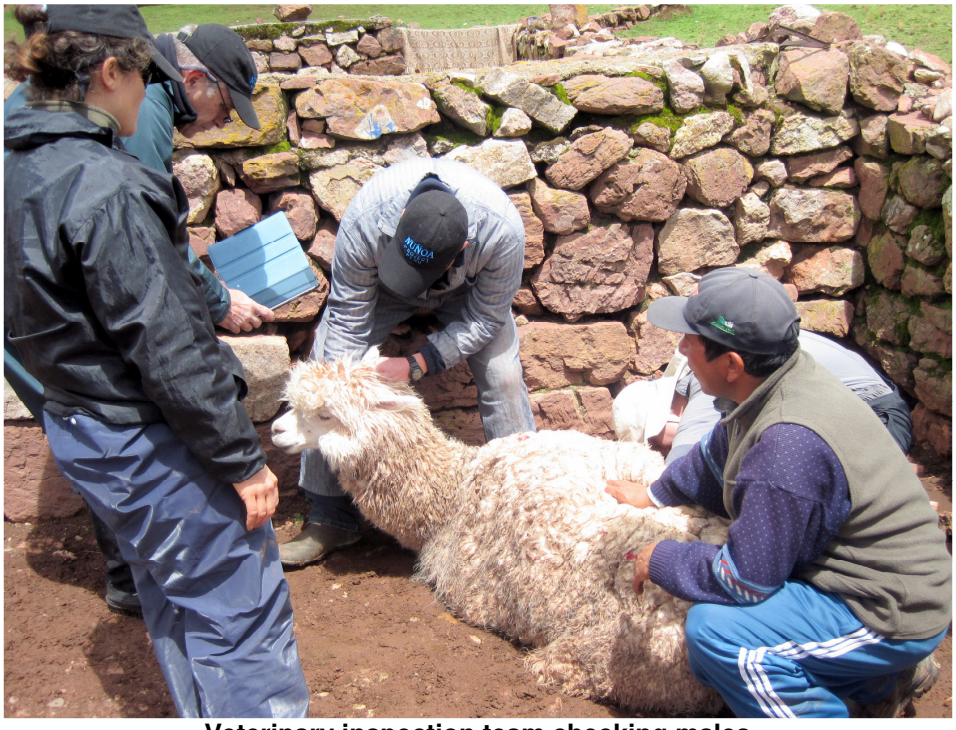
Nunoa Project Alpaca Breeding Improvement Program- January 2012

Selection of the Males

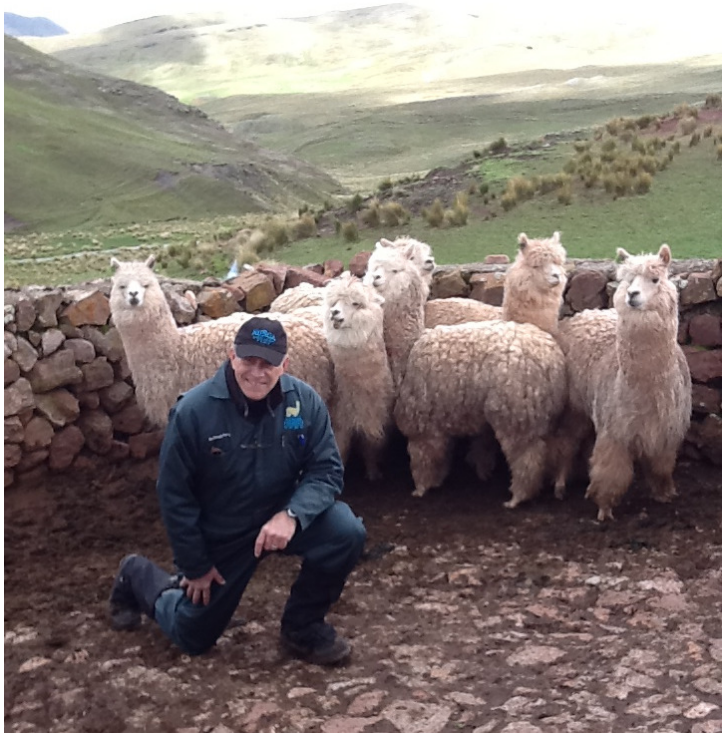
Donations from a US alpaca breeder (Cloud Hollow Farm, www.chf1752.com, Bob and Erin Weintraub, Waldoboro, Maine) and a camelid veterinarian (C. Norman Evans, DVM, Lama Wellness Service, Madisonville, Kentucky, 270-821-7993) allowed us to purchase the first 6 males for the program. They come from Mamaniri Farm in Nunoa, one of the premier alpaca farms in the area. The males are being used now in three different communities in Nunoa which were selected by the mayor. These communities are Diego Tampara, Salcaccancha, and Orcorarapampa. The 6 machos were selected in January 2012 by Nunoa Project veterinary team members Stephen Purdy, DVM and Gisela Marcoppido, MV, PhD. Animals were selected on the basis of fiber and conformation. All were proven breeders. As part of an ongoing training and research program with visiting veterinarians and students we performed full evaluations on all of the offered males, and semen evaluations on some of the selected animals.

Male Group at Mamaniri Farm

An example of the superior fleece in the Nunoa Project breeding males



Veterinary inspection team checking males

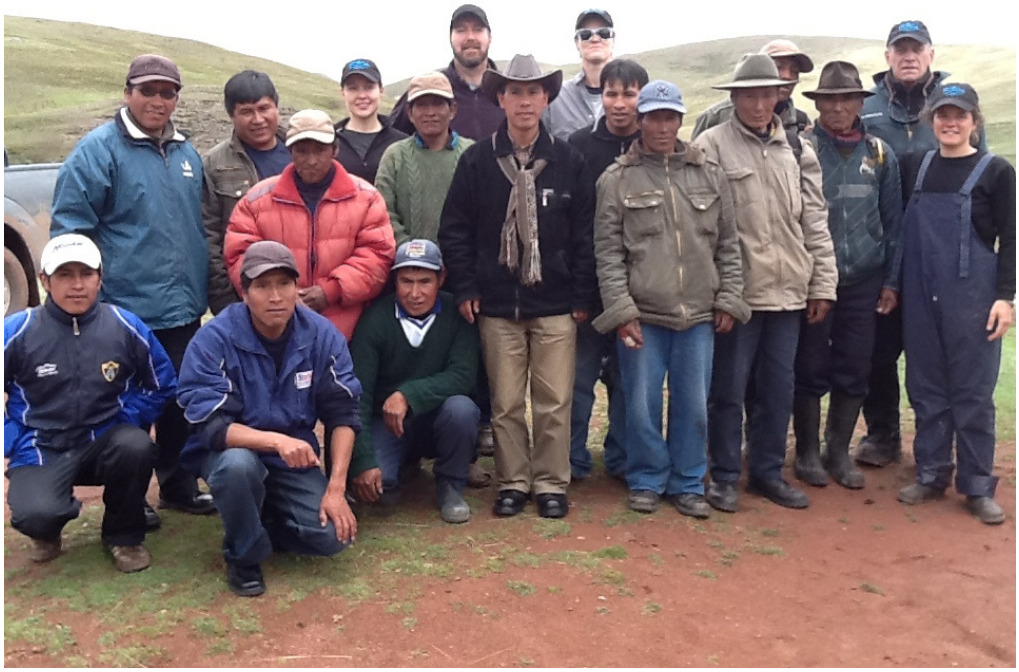


Dr. Purdy with final 6 selected males

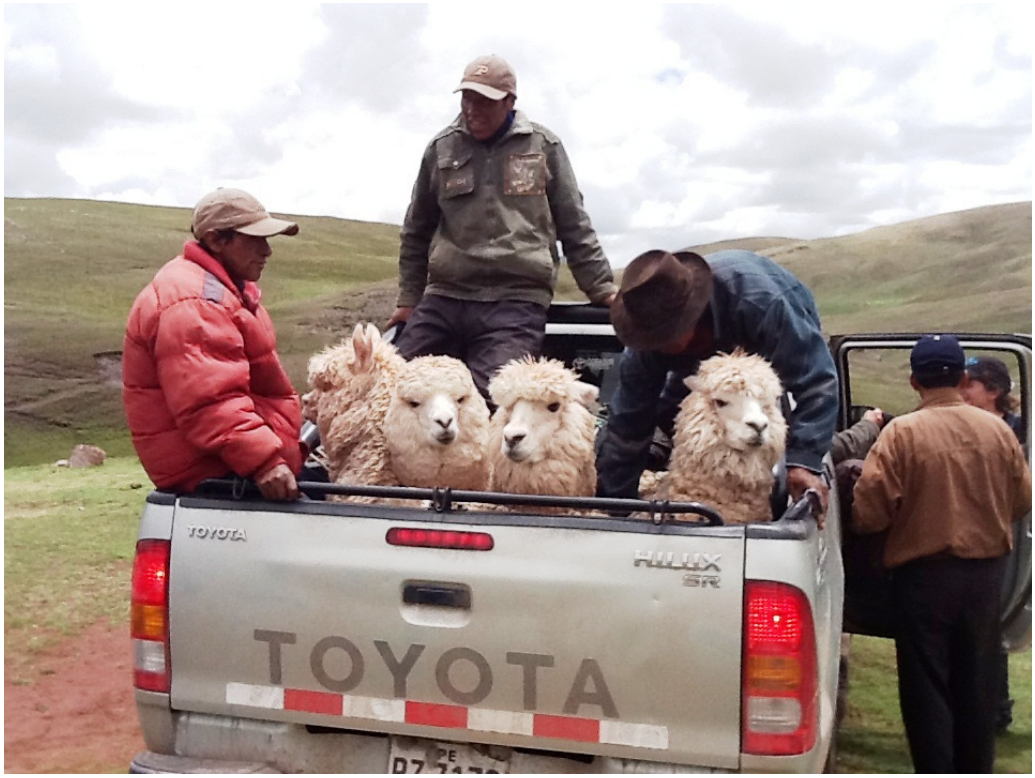
Presentation Ceremony

Two days later we took part in a presentation ceremony at Mamaniri Farm with the mayor and other town officials. Representatives from the three communities were present and received their alpacas for transfer to their community farms. Each community will use the two males for two years. The males will be rotated to the next community for two years and then the rotation starts again. A contract was signed to that effect between the municipality, the communities, and Nunoa Project.

Nunoa mayor and Diego Tampara community president with Drs. Purdy and Marcoppido



Municipality and community leaders with Nunoa Project veterinary team



4 of the 6 Nunoa Project males wait for the trip to their new herds

Diego Tampara

This community has approximately 110 members with 20 families. They have approximately 600 alpacas and breed 300 females per year. Families own their own animals and there is also a community alpaca herd. We assisted the community in selecting the community herd females to be turned out with the two new Nunoa Project males. The group we chose from consisted of approximately 50 females with some crias. They have been pastured continuously with two males. The community members checked all animals for pregnancy by abdominal palpation, and those that were not in advanced pregnancy were separated out and examined. All animals were checked for age and body condition. One was rejected because of extremely poor body condition and a purulent vaginal discharge. The 25 females selected were identified with new ear tags. The two new males will be housed continuously with the selected female group for 90 days. When we return in August 2012 the females will be checked for pregnancy by ultrasound. Some females will of course have been bred by the two males with which they had been turned out. The idea is to use the offspring of the Nunoa Project males for an elite breeding herd to improve the genetics/production of the community herd over time. This will require ongoing evaluation by community and Nunoa Project members.

Diego Tampara community members select females to be bred to the two new Nunoa Project males

Nunoa Project male at work

Salcaccancha

This community has approximately 130 members in 23 families. They have approximately 400 alpacas and breed 260 females per year with 10 males. They selected 30 females to breed with the two new Nunoa Project males which are kept in a separate location. They will manage them by exposing 5 females to the two males daily and allowing breedings to take place if females are receptive. They have ear tags on the females and will keep records of the breedings. When we return in August 2012 the females will be checked for pregnancy by ultrasound. The idea here again is to use the offspring of the Nunoa Project males for an elite breeding herd to improve the genetics/production of the community herd over time. This will again require ongoing evaluation by community and Nunoa Project members.

Breeding female group at Salcaccancha

Orcororapampa

This community has approximately 100 members and 1800 alpacas, 800 of which are exposed to 8 males per year. They are a disadvantage with respect to the other two communities because they do not have fencing to separate breeding males from the rest of the herd. They pasture them in a separate location and turn them all together during the breeding season. The animals do not have ear tags and no breeding records are kept because the community members do not know how to read or write. The municipality has agreed to provide ear tags to the herd and also to help them establish a record keeping system so that they can cull non productive females and thus help to improve production. The two Nunoa Project males will be added to the rest of the breeding male group. This method of breeding will not result in improvement to the breeding herd as rapidly as establishing a limited breeding group as in the other two communities. The addition of the new genetics to the community herd will help improve wool production and birthing rates however. We plan to devote a considerable amount of effort to assist this community with the support of the municipality.

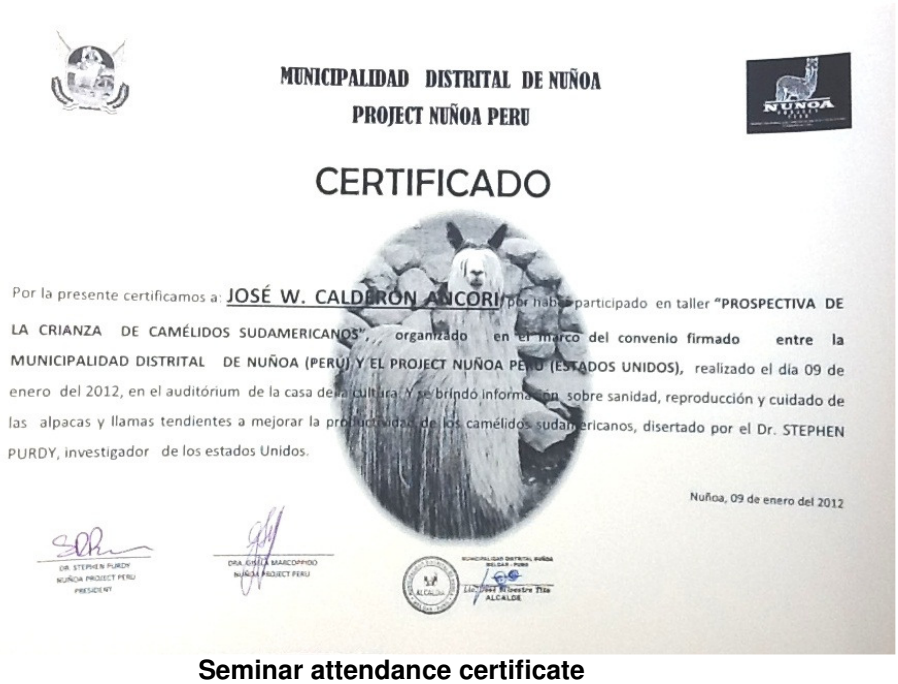
Nunoa females and crias grazing

Future Plans

We noted in all three communities that many of the breeding females had poor quality wool and were small in stature. This was also true of most of the breeding males they were using. This is a common problem in many communities in the area, along with not enough males servicing the females and the resulting low birthing rate. The price of wool is very low which prevents communities from purchasing outside animals for breeding stock.

Dr. Marcoppido conducted a seminar in the Nunoa Cultural Center building which was attended by 60 farmers from the district. We intend to offer more seminars in conjunction with the wishes of the municipality. The next one will be held in August 2012. We will concentrate on presenting results of breeding and parasite testing trials we have performed in Nunoa over the last two years. We will also emphasize the importance of production record keeping and culling poor producing animals as way to improve wool production and birthing rates. These two improvements will result in more wool and more meat animals, thus increasing income for the communities. We feel that this is critical to improve the standard of living for the Nunoa alpaca farmers which will result in better food and medical care. The municipality is wholly supportive of this effort and has been very helpful with all of the Nunoa Project programs. We look forward to continuing this breeding improvement program and also to expanding it to other communities over time. Funding is our limiting factor at this time.

Dr. Marcoppido answering questions at the first Nunoa Project seminar in Nunoa.



MUNICIPALIDAD DISTRITAL DE NUÑOA
PROJECT NUÑOA PERU

CERTIFICADO

Por la presente certificamos a: JOSÉ W. CALDERÓN ANCORI por haber participado en taller "PROSPECTIVA DE LA CRIANZA DE CAMÉLIDOS SUDAMERICANOS", organizado en el marco del convenio firmado entre la MUNICIPALIDAD DISTRITAL DE NUÑOA (PERÚ) Y EL PROJECT NUÑOA PERU (ESTADOS UNIDOS), realizado el día 09 de enero del 2012, en el auditórium de la casa de la cultura. Y se brindó información sobre sanidad, reproducción y cuidado de las alpacas y llamas tendientes a mejorar la productividad de los camélidos sudamericanos, disertado por el Dr. STEPHEN PURDY, investigador de los estados Unidos.

Nuñoa, 09 de enero del 2012

DR. STEPHEN PURDY
NUÑOA PROJECT PERU
PRESIDENT

DRA. GISELA MARCOPPIDO
NUÑOA PROJECT PERU

ALCALDE

Seminar attendance certificate