NAVAJO SHEEP PROJECT N·E·W·S·L·E·T·T·E·R

Department of Animal, Dairy & Veterinary Science Utah State University Logan, Utah 84322-4850



Fall 1995

NEW HOME FOR NSP?

There has been increasing concern at the North Logan site of the NSP because of the growing number of large new homes being constructed on the hillsides surrounding our barns and pastures. More than a year ago an appraisal team appeared in our office and the flag went up that USU was assessing the value of the property for possible future sale. Anticipating the worst, we began to search for alternatives to relocate the flock. USU administrators have indicated a willingness to help find a new location and we're exploring options in replacing the facilities that have been constructed with generous donations from our many supporters through the years.

This issue has been discussed at meetings with our NSP Board of Trustees during the past year. The Board has recommended on different occasions that the flock should be relocated to the four-corners region to be nearer to the Navajo and Hispanic cultures that treasure the Navajo-Churro sheep. We have always been hindered by the distance between Logan and the people we serve and the costs of travel.

Beginning with a chance encounter at the Phoenix airport with David B. Haight, an apostle of the Church of Jesus Christ of Latter-day Saints (Mormon), we have had several meetings with the Church's Humanitarian Services Division. The Church has now offered the use of two former welfare farm properties to house the flock and provide the annual feed resources needed to sustain the sheep. There is also the potential for selling surplus hay production that could help to meet our general operational costs.

The property in La Plata, NM is a 330 acre irrigated hay farm located 15 miles NW of Farmington, NM. It includes a large hay storage barn, some old animal sheds and corrals, and an abandoned adobe home. The other property is a 1723 acre ranch in Blanding, UT that has been used for grazing cattle, plus 100 acres with a hay barn used for winter feeding close to the College of Eastern Utah (CEU) San Juan Campus. This property could be used for summer grazing, not only for the NSP flock, but also for some of the Navajo family flocks involved with the USDA/SARE program. In addition there is the potential for developing an undergraduate program in animal science at CEU in

cooperation with USU. This would include Native American students in the region.

We have perused the two lease agreements and discussed these with NSP Trustees. No final decision has been reached pending further consultation with USU administrators.

WE LOSE SOME AND WE WIN SOME

A major reorganization took place on November 1 when we lost two outstanding employees, Flock Manager Lyle Coombs and Administrative Assistant Marla Brindley. Both USU animal science graduates have been involved with the NSP for several years. Lyle has accepted a position with Circle Four Swine Farms in southern Utah and Marla is following a longstanding dream to work with draft horses and harness/leather repair near Durango, CO; then she hopes to get accepted into the School of Veterinary Medicine at CSU in Fall 1996.

Three bright and enthusiastic freshman animal science majors have recently joined our staff as part-time employees. Ami Burleson from Breen, CO and Shanelle Boyd from Salt Lake City will take over Marla's responsibilities, and Kerby Barker from his family ranch near Evanston, WY will care for the animals and outside facilities. A senior student from Chico, CA, Lisa Nation Nelson, a USU American Studies major, will serve a year long internship to gain experience in public relations and grant writing in preparation for a career in development. In addition, a senior Business Information Systems major, Nancy Chiappini Moyle from Blackfoot, ID spent the summer organizing files and developing more efficient office systems for Dr. McNeal's packed schedule; she will expand her responsibilities to provide occasional assistance at the NSP office.

LLAMAS INVADE NAVAJO NATION FLOCKS

After the loss of many Navajo-Churro lambs to hungry coyotes on the Reservation, we approached Dr. Marty Field, a veterinarian in Carmel Valley, CA to locate benevolent individuals that would donate llamas from their farms to place with Navajo families. Penny and Don Keller from Monterey, CA delivered 5 llamas to Logan: Stormy Weather and Raindancer from the Monterey Fairgrounds Animal Farm Education Program, Moondance from Vicki

Wilkinson and Sun Cloud and White Wolf from the actress Kim Novak and her husband, Dr. Robert Mallow, DVM. Marla Brindley made a trip to Yerington, NV to pick up two llamas, Overlands Domingo and Raspberry's Ezekiel (Zeke) donated by Karen Wines and Jerri Lyn Bowers.

...AND THEY WILL COME HOME....

Hesperus Peak near Durango, CO is one of the four sacred peaks which encompass traditional Navajo land. This northern most peak is known as Dibe'ni'tsaa (pronounced dibentsa) which means "Big Sheep". Before the Navajo Reservation boundaries were imposed in 1868, many Navajo shepherds brought their flocks into the mountains of southwestern Colorado for summer grazing. During recent years we have dreamed of bringing our flock to this region for summer grazing and perhaps for a permanent home.

We met with Dr. Charles Laughlin at Colorado State University and arranged for the summer usage of pastures at the San Juan Basin Research Center (SJBRC) near Hesperus, CO. With the assistance of Dr. Dave Schafer, station superintendent, three large pastures already utilized by a portion of the resident cattle herd, were temporarily fenced for grazing by sheep and goats. In recent years, these pastures became overgrown with oakbrush. The sheep and goats would serve as a natural biological control rather than chemical, fire or mechanical treatment to reduce the amount of oakbrush, open up the ground cover to permit better rainfall penetration, permit a more evenly spaced distribution of manure, and allow Ponderosa pine seedlings to take root.

Three Navajo families affiliated with the USDA/SARE Grant commingled their flocks with the NSP sheep. Lena and Raymond Benally from Jeddito AZ moved to the SJBRC for the summer with their sheep and goats to shepherd the flocks. Because the station staff was shorthanded, Marla Brindley expanded her SARE duties and also spent the summer there to help out. One goal of the grazing study was to allow the reservation homesite grazing areas to rest and allow the vegetation to grow and to provide more feed for winter.

We were cautioned that there were lions and coyotes and bears in the area, so we placed two llamas with the flock. Domingo and Moondance didn't like each other so they stayed with the sheep instead of hanging out with each other. During the annual SJBRC Field Day in July, which is open to the public, the llamas demonstrated their worth when a strange dog appeared and both llamas quickly moved toward the intruder. When the grazing study ended there were no predator losses.

QUARANTINE DISASTER

Not long after the sheep were grazing at the SJBRC the southwestern US was hit by the outbreak of Vesicular Stomatitis Virus (VSV), a disease that affected all livestock.

A quarantine was imposed for most of the region and restricted any livestock travel or sales. None of our sheep had the disease, but when the feed ran out in the SJBRC pastures, the flock had to be confined to pens and fed hay until mid-September.

An additional outcome was the negative impact on our sheep sales normally conducted at this time of year. The NSP flock returned to Logan for another 30 day quarantine imposed by USU veterinarians and, after being held in temporary quarantine, it was time for fall shearing.

SPRING NEWSLETTER POSTPONED

With a hectic schedule already underway in anticipation of the summer activities, in April we were alarmed by having Dr. McNeal suddenly come down with Polymyalgia rheumatic (PMR) and Temporal Arteritis. His initial symptoms included chest pains that led the emergency room and the ICU unit staff to treat him for a heart attack (which it wasn't), and then severe head and neck pain that brought assumptions of spinal meningitis (which it wasn't). When our doctor returned from out of town he pinpointed the cause, and because blindness could result, the only treatment was regular doses of prednisone and NSAIDs for the next two years. Ulcers unfortunately resulted from this, so he has been doing a delicate juggling of medication so he can keep working.

TRUSTEES & STAFF COMINGS AND GOINGS

When we met in Park City, UT in March, we added another board member to replace Kathy Mincer, who needed to pursue personal educational plans. Her position was filled by Stephen Williams, vice president of corporate affairs at Children's Miracle Network in Salt Lake City. He adds expertise in development work, and brings Navajo language skills from his service in 1980-83 as a missionary for the LDS Church on the Navajo Reservation.

NSP Name Change

The Board felt that the NSP should be more completely identified in its name and logo. It is often stated to us that "the NSP is more than just saving sheep---it is helping people become self-sufficient within their life way." In the course of much discussion the Board decided to add the sub-title phrase "serving people, preserving cultures" as part of the logo/word mark.

Video Being Developed

We decided that a professional quality short video presentation about the NSP programs would be a great asset in providing information to individuals, groups and foundations to solicit support. Trustee Larry Warren, environmental reporter for the local CBS affiliate, has prepared a few television reports about the NSP and offered to share some of his expertise in creating the video. Board members John Ernst and Vern Vivion agreed to help finance the video project, and Larry volunteered his time and travel expenses to match their donations. He recruited a local

cameraman to travel to the Navajo Reservation to visit several families and film them with the sheep. A discussion about the NSP with Dr. McNeal will also be included.

Navajo Flavored Open House

Robert Simonsen graciously offered to host an open house during August at his new home in Midway, UT to introduce guests to the NSP programs and activities. Board members invited friends and invitations were sent out by Board member Ceanne Mitchell, with other invitations and RSVP's handled by USU Animal Science student Heather McBride from Magna, UT. Arrangements were made to have members of Dine be iina prepare traditional Navajo food and entertainment. Mary Lee Begay from Hubbell's Trading Post was invited to demonstrate her skills in weaving.

Traveling Board Meeting

A university van brought some members of the Board of Trustees to the annual fall board meeting held on November 4, in Durango, CO. Board members Joe Benally and Sharon Begay were spared the long trip to Logan this time. The board meeting was held in conjunction with the semi-annual SARE cooperators meeting with the university outreach staff from USU and CSU.

We took a "field trip" to visit NSP Advisory Board member Tom Bolack's B Square Ranch and Museum in nearby Farmington, NM. We were all impressed with his vast collection of mounted animals, fish and birds from all over the world. Of particular interest was the mount of the five-horned silver grey Navajo-Churro ram purchased from the NSP; it is the only animal amongst a vast collection of Navajo art and weavings in Governor Bolack's private study. We then traveled 15 miles NW to La Plata, NM, to visit the site of the anticipated new location for the NSP.

APPEALING MEDIA COVERAGE

As part of a series about land grant colleges, the May 1995 High Country News, a well respected periodical from Paonia, CO, published an excellent article in April about the NSP and our SARE work on the reservation. It was initially submitted by Emily Chewning, but was gradually embellished by the newspaper staff.

When the **Grateful Dead** came to Salt Lake City for a three day concert during the spring, reporters came to Logan to do a segment for **KSL TV** about the donation we received from the rock group to provide sheep to the Big Mountain Weavers.

The Farmington Daily News and the <u>Durango Herald</u> each did a front page story about the grazing study at the SJBRC and our use of llamas to protect against predators. The Navajo Sheep Producers Summit at Farmington in late September was also well reported.

The Salt Lake Tribune did a nice story on the society page about the gathering at Robert Simonsen's Open House to

benefit the NSP. It acknowledged the great help provided by Bob's children.

Sharon Salisbury O'Toole did a wonderful story *Gifts From the Holy People* in the Summer 1994 issue of <u>Range Magazine</u>. This publication is widely circulated and she is to be congratulated for such a thorough story. She is also in the process of writing a children's book about Churro Sheep.

<u>The Daily News-Sun</u> from Sun City did a great story on the Churro sheep and its impact on the Navajos and Hispanics in the Southwest. This was following the Wool Festival at the Heard Museum in early November.

UPROARIOUS SUMMER TIMETABLE

Our involvement with the <u>USDA/SARE</u> project on the Navajo Reservation has caught the interest of federal administrators. We were invited to attend a Western Regional meeting at Snowbird UT. We asked Sharon Begay to join us there prior to Memorial Day to make a presentation about the outreach work with the families in the various communities. Dr. McNeal gave a slide presentation and Sharon talked about the impact on her extended family. As a result, the ensuing discussions at the SARE meetings explored the possibilities of extending the funding for additional years to projects that still had many things to accomplish, such as ours.

The summer grazing study at SJBRC received a big boost from the efforts of Kirk Olsen of Spanish Fork, UT. He arranged for the donation of a sturdy old sheep camp wagon from Joseph Jackson of Provo, UT. Kirk hauled it to Hesperus where it was placed in the sheep pastures for the shepherd's family to stay in while they kept watch over the flock.

Medicine woman Mary Begay, Sharon's mother, offered a blessing ceremony for the flock and all those people that were associated with their care. At the end of the summer grazing study Dr. McNeal had the rare opportunity to study as an "apprentice medicine man" under Mary's tutelage and started the process of learning the uses of many plants; more sessions will be held in months to come. They called him "Doc Yazzie" or "little doctor".

We had two special young people from New York with us for that week: Jessica Ernst, daughter of John and Margot Ernst, chairman of our national advisory council, and Alexander Mantel, son of Emily Chewning who wrote the marvelous article about the NSP that was in last summer's edition of Arts and Antiques. Ian and Ilene McNeal enjoyed entertaining them during the trip.

Dr. McNeal served as a judge in June for the Estes Park Wool Market and judged classes of wool and fleeces, and then served as judge for the show sponsored by the National Colored Wool Growers Association. He also gave a workshop about the "Biology of Wool".

A few weeks later Dr. McNeal was asked to make a presentation to the American Sheep Industry Association (ASI) summer meetings in Englewood, CO. This was the first time the ASI leaders included a segment about the work of Navajo Sheep Producers and the Navajo Sheep Project and it was well received. Sharon Begay also came to Colorado to share about the importance of sheep to the Navajo culture and families. A sandpainting was presented to ASI President Pierce Miller.

In September the other university experts on the SARE team joined us in visits to each of the four Navajo cooperator families. We were joined by Cynthia Vagnetti and her friend Debra Schuman from Washington, DC. Cynthia was selected by the national SARE council to document outstanding SARE projects on video to use for informational purposes.

Several USU students joined us for the fall outreach visits to help with the sheep work; these included Terrill Thayne, who is a graduate student in ag systems technology and education working with Steve and Kitt Farrell-Poe to model systems to reduce winter feed costs for Navajo livestock, as well as Heather McBride, Michelle Naylor, Robb Briggs and Keith Bond, whose father is a USU faculty member.

NAVAJO SHEEP PRODUCERS SUMMIT

For the last several months the sheep industry and wool warehouse operations on the Navajo nation have been in a crisis situation. The tribal government has tried to cut off funding for the wool marketing program, with underlying speculation about turning the wool facility into a gambling casino. Fortunately the Navajo people voted down gambling, but policy makers within tribal economic development agencies continue to press for the implementation of casinos.

Rozita Jake, Director of the Wool Warehouse, is very concerned about the families, especially the elderly sheep flock owners, who rely on wool for weaving and income. She met with Dr. McNeal during the spring to discuss possible solutions. It was decided to convene a summit meeting to let the growers have a voice in the future of their industry. Notification was sent to each chapter to invite families to attend the conference held at the San Juan College in Farmington, NM.

Navajo folk singer Sharon Burch was invited to present a concert at the Farmington Civic Center to lead off the weekend summit events. Sharon reminisced about her grandparents and their devotion to their sheep and their traditional way of life. She was joined on stage by Hillbilly West, a local bluegrass singing group. The meetings

featured a medicine man ceremony, an update on the successes of the Hispanic cooperative Ganados del Valle/Tierra Wools in Los Ojos, NM by Gumercindo Salazar, remarks from Rozita Jake and Dr. McNeal about the current status of the Navajo wool industry and the world wide wool market, a talk by Sharon Begay about the efforts of Dine be Iina, and a special presentation by ASI President Pierce Miller from Texas. Pierce Miller extended a welcome to the Navajo sheep producers to form their own organization to align with the various state sheep associations to strengthen the industry as a whole.

Participants then divided into breakout groups speaking in both English and Navajo, with facilitators Victoria Garcia and Nan Nash from Western Networks in Santa Fe. The two groups identified common problems and needs and set priorities on which problems needed to be immediately addressed if their sheep industry was to survive. A task force was elected and plans were outlined to form The Navajo Nation Sheep and Goat Producers Association. The group was encouraged to participate in the upcoming American Sheep Industry annual convention which will be held in Albuquerque in mid-January. The November issue of the ASI magazine, the National Lamb and Wool Grower, featured a three page article and photographs about the outcome of the summit.

If the sheep raising tradition is to continue on the Navajo Reservation, it will be necessary for the producers to have a united voice to get the attention of the tribal government and policy makers. Economic development centered on sheep and wool will have to push for value-added marketing options that will keep the raw materials, wool and lamb, on or near the reservation where Navajos can be employed in the production of yarns, fabrics, pelts, meat commodities in addition to the traditional weaving arts. The sheep producers organization could take over the operation of the Wool Warehouse in Shiprock as a privately owned enterprise separate from the tribal government.

W.K. KELLOGG GRANT

In 1994 we applied for a grant from the prestigious W.K. Kellogg Foundation to explore the possibilities of a Sustainable Agricultural Center for the Four Corners region. We had often speculated about the possible use of the old historic U.S. Cavalry Post, Fort Lewis, which now serves as Colorado State University's San Juan Basin Research Center (SJBRC). The federal government presented this property to Colorado for use as an Indian School, which later evolved into a junior college and then became Fort Lewis College which eventually relocated to Durango, 15 miles east.

In the summer of 1993 we met with Dr. Chuck Laughlin at CSU to learn more about SJBRC and the possibility of its use as a center for agricultural outreach education to serve the diverse cultures of the four corners region. This led to a

meeting in December 1993 of representatives from the four land grant universities. The group determined that we needed to involve the diverse cultures of the Four Corners region to assess the sustainable agricultural education needs of the area. Dr. Laughlin felt that this issue would appeal to the Kellogg program officers and suggested that a grant could be provided to convene a retreat to enable those concerned with agricultural and natural resource issues to assess the needs.

The grant was submitted by NSP board member Joe Benally and Joe Muniz, Director of Natural Resources for the Jicarilla Apache Tribe. The funding for two retreats finally came during the spring and we worked with Fort Lewis faculty members Dr. John Greathouse and Dr. Phil Schuler, and Dave Eppich, Assistant to the President to prepare a list of participants, select a location and send out invitations for the last week-end in October.

More than 60 people attended and after several presentations that addressed various special needs of the area residents, a team of facilitators from Western Networks led four breakout groups to identify priorities that need to be addressed. The over-riding problem is that the four state land grant universities that provide agricultural and natural resource education are located about as far as possible from the four corners region. Added to this is the economic and family restrictions that prevent relocation to opposite ends of the states, especially by non-traditional older, married or single parent students. The next retreat in March will bring the same participants together to develop a model to resolve the problems in a cooperative agreement among the four universities and regional colleges, Fort Lewis, San Juan College, College of Eastern Utah and Navajo Community College.

CHURROS IN DOWNTOWN PHOENIX

In January 1990, we met with NSP Board member Kathy Mincer and her dear friend Mary Dieterich to conceive a plan that would celebrate contemporary weavers and Navajo-Churro sheep at Phoenix's Heard Museum, where Mary was an avid guild member. We knew it would take a while to organize, but it was delayed longer with impending plans for a major construction project at the Heard.

However, early this year it was a go and the program was scheduled for November 11-12. Dr. McNeal was asked to make a presentation about the NSP and we had an informational display set up in the auditorium area. The Begay family of Jedito brought several of their sheep to have on exhibit on the grounds outside. There were also other breeds of sheep on display which are used primarily for hand spinning and weaving wool.

TRUSTEE SPOTLIGHT

Nancy Bush found her way to traditional hand knitting via a degree in Art History from the University of Utah and post graduate studies in color design and weaving at the Rudolf Schaeffer School in San Francisco and Saterglantan Handcraft School in Insjon, Sweden. She works as a freelance designer and consultant to several varn companies and has been a Contributing Editor to Knitter's Magazine. Her articles have appeared in Vogue Knitting and Threads. She has instructed knitting classes at the University of Utah since 1981, has taught at Stitches Knitter's Fair, Coupeville Art Center's Needleworks and other workshops around the country. She is the owner of The Wooly West, a retail and mail-order yarn business in Salt Lake City, UT. As a knitter, her focus has been on traditional knitting techniques and ethnic uses of pattern and detail. The last several years have been devoted to research on the history of hand knit socks and stockings and their techniques of construction. The results were published in her book Folk Socks from Interweave Press in the autumn of 1994.

Nancy has an interest in the unique characteristics of Navajo-Churro wool. She developed a knitting pattern and kit for making rugged outdoor socks from our yarn, and is eager to have pre-spun Navajo-Churro yarn available for this kit again when it becomes available. She was involved in a knitting workshop at NSP's Sheep and Wool on a Small Scale Conference and is eager to share her skills with Navajo people in designing and developing unique ski sweaters for upscale ski resort shops.

FOUNDATION GRANTS

During a trip to Farmington last year we visited the **Williams Field Services** facilities and were impressed with the extent of their involvement in that area. Their regional office is located in Salt Lake City and also oversees operations in Evanston, WY. The Williams Companies have helped make possible the Nature Conservancy's Tallgrass Prairie Preserve in northeastern OK. They have now provided support to the NSP with \$5,000 per year for the next three years. We look forward to having their support for more efforts in the future in the Farmington area.

The Anschutz Family Foundation has again given their support to the NSP with a grant to help with the summer grazing study in Hesperus, CO. We are grateful for their interest in assisting our efforts with the Navajo people.

El Paso Natural Gas Foundation is an ongoing supporter and we are grateful to its president Lesley Gosling who has taken such a personal interest in our efforts through the years. Their annual \$20,000 grant goes a long way to keep the NSP operating.

The Richard and Susan B. Ernst Foundation which is chaired by John Ernst, has made it possible for Dr. McNeal

to continue his work as Director of the NSP. In 1989 we were faced with the choice of shutting down the NSP or having Dr. McNeal get his salary cut back by one fourth. The Ernst Foundation stepped forward to restore the salary and benefit loss. In a very real way John has allowed the NSP to continue and as an employer he is a great man to work for.

A PLEA TO OUR SUPPORTERS

We are always humbled by the belief that others have in what we are striving to accomplish. Large and small grants make possible the outreach activities on the reservation, and we never cease to be amazed at the gratitude for our efforts by the many families we have served. And at the root of all our work is the peaceful flock of Navajo-Churro sheep that started all this nearly 20 years ago. They raise their lambs and grow their beautiful fleeces totally oblivious to the stir they have caused. They trust in us that they will be fed and the pastures will be green and they will be protected from the many predators they have encountered through the years. Unfortunately their daily feed and care is not a glamorous cause to many foundations.

Operational needs such as student hourly pay, utility bills, vehicle fuel and maintenance, office supplies, and facility repair must be paid in part from income received from sheep and wool sales. The rest of the expenses are taken care of by the donations of the wonderful individuals and guilds and organizations that have caught the vision of what we're doing. We are currently developing a plan to provide Navajo families, who are being carefully selected, with sheep from our flock through donations to the NSP. We want to share the joy we receive from Navajo families with others far from the reservation life. If you are interested in being involved in this particular project please let us know.

In the meantime we always must buy feed and pay our bills. It never ends. Please know how we appreciate your regular contributions. Every penny makes a difference. This newsletter is our way of reporting our stewardship to those who have provided financial support. Your annual donation keeps you on our mailing list. In addition, the regular donations that keep the newsletter coming to each of you also make it possible for Navajo families to get our news and the information on sheep and wool management to help them with their flocks. *Thank you for your help!!!*

YES! WE'LL SELL SHEEP, WOOL, ETC.!!!

Despite the quarantine, our flock was never sick and we have many sheep of various ages for sale. We're currently preparing a sales list and welcome any requests for information. We recently sent out a wool sales list, and there are still some fleeces for sale if you are interested. A few pelts with long silky white wool and some black and multicolored long wool are available, and more will be ready in a few months. A couple of recently submitted grant

applications request funding for spinning a large backlog of white wool into warp yarn for weavers. If all goes well, we will have this available for sale next year. Long and short sleeved NSP logo tee shirts in white, burgundy and grey are always for sale.

We also are marketing some wonderful silver Navajo made rings, bracelets, and earrings with the NSP logo and also the Dine be iina four horned ram with accompanying Navajo decorative designs. Some of these pieces of jewelry are available now and special orders can be placed with Sharon Begay's family. She can be contacted at P.O. Box 1183, Ganado, AZ 86505 or call (520) 755-3266.

A TRIP TO "THE RES" FOR EVERYONE!!

Plans are already underway for a combination of two of our most delightful events. After sponsoring two very successful Sheep and Wool on a Small Scale conferences at USU, we have heeded the request of NSP Advisory Council member Milton Bluehouse to bring the conference to the four corners area. Sheep is Life: A Celebration of Navajo Shepherds and Weavers is scheduled for June 1997 at the Henderson Conference Center in Farmington, NM. We hope to visit the NSP flock in nearby La Plata, NM, and then celebrate the centennial of the Two Grey Hills Trading Post, with a gathering of all living weavers of that area. More information will be forthcoming, so let us know if you want to be involved.

DR. MCNEAL HONORED BY AMERICAN SHEEP INDUSTRY ASSOCIATION

During the week of January 15-21, 1996, the ASI will hold its annual meetings in Albuquerque, NM. Dr. McNeal will be the 1996 recipient of the Camptender Award which recognizes industry contributions from a professional in a position or field related to sheep production. Recipients must show a strong commitment to the sheep industry and significant contributions to the industry, its organizations and its producers above and beyond that called for in his/her professional capacity. Recipients should be respected and noted in their respective fields by their peers and by sheep producers. Recipients may be involved with the industry as teachers, scientists, youth leaders, promoters, event managers, journalists, or any other positions directly related to the sheep industry, enabling the recipient to affect the industry in a positive and long-lasting way. They may be recognized for lifetime service to the sheep industry or may be recognized for a shorter-term commitment that resulted in significant benefits for the sheep industry.

PLANTS TO PROTECT WOOL AND TEXTILES

by Pam Dyer, Carbondale, CO

There is nothing more frustrating than opening a bag of wool and discovering it has been ruined by wool moths. One way to avoid this is to prevent it in the first place. The challenge is to do this in a non-toxic way using aromatic herbs and natural scents. Anyone handling wool or woolens, especially hand spinners, knitters and weavers, should be aware of the harmful properties of many insecticides such as moth balls (para-dichloro-benzene). Aromatic herbs and natural scents work well and most are not harmful, although you should consult a good herb book for precautions and details on how to use specific herbs

The scent of wool attracts the moth, especially nice greasy wool found in the finer fleeces. Wool moths love wool as a cozy, warm place to lay their eggs. Discourage this by tricking them. Put sachets in with the wool and woolens using such herbs and scents as: lavender, red cedarwood shavings, pennyroyal leaves, camphor basil leaves, southernwood leaves, patchoule leaves, rosemary, sage, indian tobacco, bay leaves, juniper, pyrethrum leaves, tansy, sweet fleet flag, and/or wormwood.

Store your wool in boxes, paper bags or clean cloth bags. Plastic does not allow the wool to breathe, but if you do have to store it in plastic, leave the plastic open with a layer of newspaper covering the opening. We store our raw wool in layers in boxes with sachets and newspaper between layers. We have only had a problem with wool moths once and that was before we took the time for proper care in storage. (We recently had a problem with a pack rat who decided to user our wool as a wonderful place to store his food. It contained a couple pounds of cat food which demonstrated how well our barn cat was working.)

Washing the wool helps prevent infestations as well. Clean wool just does not have the attractive scent that raw wool contains. You can rinse the wool in a nice scent you enjoy such as pennyroyal or mint extract to further this effect.

Raw wool you buy should be carefully inspected for any signs of insects. Store it in the manner mentioned above. We store our wool out in a shed and the freezing temperature in winter also helps to stop the insect problems.

Woolens can be frozen in the freezer overnight, if an infestation is discovered. This kills the eggs and insects. The best policy is prevention, so air your woolens often and keep them stored in cedar boxes or with sachets.

For further information regarding natural protection for wool and woolens I suggest: A Weaver's Garden by Rita Buchanan. 1987 Interweave Press, Loveland, CO.

THE BELL WETHER

by Dr. Lyle G. McNeal, Director Sheep & Wool Specialist, USU



"'The third time he asked, 'Do you love me? - then feed my sheep' "

- John 21:17

"Feeding the pregnant ewe: every undernourished ewe is a candidate for trouble; by acting in time you can avoid it."

Feeding management of sheep is both a science and an art! I remember many years ago as an apprentice shepherd in my youth, a shepherd mentor said, "Lyle, good shepherds are more important than electric augers and self-feeders!" Experience over the years has taught me that statement is certainly true. Obviously, one of the primary advantages of raising sheep, is that they are what I refer to as 'self harvesters', or in other words, they need be fed high fossil fuel input produced feedstuffs, i.e. hay, silage, pellets, bulk or bagged rations, etc. Another fellow sheep producer friend in Nevada refers to sheep as 'nature's scavengers'. Depending upon one's perspective and semantics, the answer should be consistent, that sheep are one of this globe's oldest 'recycling agents'. However, that doesn't imply that we feed them garbage. As shepherds we should provide them with a 'balanced diet, and year around'. I refer to this practice as 'life-cycle nutritional management'.

Successful sheep production depends on proper management of the 'biological cycle' or the 'life-cycle' of the ewe flock to attain production stability and good flock health. Feeding programs must be managed to coincide with the ewe's biological needs. The biological or life-cycle of the ewe is fixed and well defined. Average length of gestation or pregnancy is 148 days (depending on breed).

The biological or life-cycle of the ewe can be divided into 5 definite periods*:

Total		365 days	
Period V	Post-weaning period	106 days	
Period IV	Last 8 weeks of lactation	56 days	
Period III	First 8 weeks of lactation	56 days	
	Last 6 weeks of gestation	42 days	
Period 1	First 15 weeks of gestation	105 days	

(* If not on an accelerated lambing program.)

The biological and chronological cycle of the ewe are important to sheep producers. The nutritional requirements of the ewe correspond to their biological cycle, and a thorough understanding of the cycle will allow sheep producers to develop a sound feeding management program for his/her flock.

For this article, I only want to focus on general considerations of the ewe during gestation.

The First 3 Months of Gestation:

This period is the time when the feed of the pregnant ewe *may* be restricted with the least likelihood of serious consequences. However, we know very little about the effects of serious under-nutrition on such things as failure of implantation of the fertilized egg or early death of the growing embryo during this stage.

The pregnant ewe is less able to act as a buffer against the periods of feed shortages that occur through the winter than are dry or open sheep. However, there is an optimal level for the condition of the ewe in mid-pregnancy. High body condition at this time means that it is more difficult to satisfy the ewe's feed requirement at late pregnancy. It may lead to problems at lambing time due to large lambs. There are indications that excessive fatness or body condition will lead to the production of small lambs, as also can poor feeding. This optimal level of condition, this happy medium will vary, depending on winter weather conditions and range (or pasture) growth characteristics. This certainly varies according to region. The condition of the ewe at midgestation is largely determined by her condition prior to mating.

The Last 2 Months of Gestation:

This is the critical period. It is during this time that the foundation of good health is laid in both the ewe and the lamb. *These facts cannot be over stressed. Poor feeding at this time leads to:*

- 1. Low birth weights in lambs.
- Low fat reserves in lambs, leading to more losses after hirth
- 3. Low wool production from these lambs as adults.
- 4. Shortened gestation period.
- 5. Increased chances of ewes getting pregnancy toxemia (pregnancy paralysis or ketosis).
- 6. Ewes slower to come into lactation (milk) and production of less milk during their lactation.
- 7. Production of "tender" fleeces in the ewes, and possibly even a complete "break".

It is during this time that the unborn lamb makes most of their growth. This growth, increasing the space that the uterus occupies, restricts the space available for the rumen and intestines in the abdomen of the ewe. This means that the ewe may not be able to eat large quantities of a bulky feed during the latter stages of gestation. Instead they require some density in their diet, or energy supplementation.

The last 6 weeks of gestation are very important for the ewes with twins, and the last 4 weeks for the ewes with single lambs. If energy (carbohydrates and fats) of the ewes and

the lambs are not met from the feed, the ewe must increase her feed intake or draw on her body reserves (body condition). If high quality feed is not available to such a ewe, she is unable to increase her intake of low-quality feed and she begins to draw on her own body protein (tissue) to make up the deficiencies. Such a ewe is malnourished.

It is important to realize that under-nutrition in the ewe in late pregnancy is somewhat relative. A diet providing just enough energy for the ewe in medium condition will be inadequate for the ewe in fat condition. Also, a diet just adequate for a ewe carrying only one lamb is completely inadequate for a ewes bearing twins or triplets.

In assessing the status of a pregnant ewe it is important to realize that **body condition** means more than **body weight**. Further, the important criterion of the nutritional state of the ewe is whether condition is being gained or lost. Two principles emerge from these considerations:

- 1. Ewes should be fed so that their **body condition** improves steadily or is at least maintained during the last 2 months of gestation.
- Ewes may not be able to eat large quantities of bulky feed during the later stages of gestation; therefore, at this time, they require feeds or a ration with a sufficiently high nutritive (energy) or calorically dense supplemental diet.

Every undernourished ewe is therefore a potential case of pregnancy toxemia. Feed them well in late pregnancy. A publication that every serious sheep producer should have in their library is the following: Nutrient Requirements of Sheep, sixth revised edition, 1985, National Academy of Science, National Research Council, published by the National Academy Press, 2101 Constitution Ave, NW, Wash., D.C. 20418. The price is very nominal.

In conclusion, I remember well what an old Basque shepherd told me in my younger years and it applies here. It goes like this...."If you take care of your ewes, they will take care of you!"

For more information or questions about sheep nutrition, contact your local county Cooperative Extension Agent, or feel free to call the Navajo Sheep Project office

DIRECTOR'S CLOSING THOUGHTS

It's been an extremely eventful and very busy year for the Navajo Sheep Project. We apologize for not getting a spring newsletter out, but that is indicative of what 1995 has been like. Mid-May through mid-November has been very demanding on us. I know Nancy and our student staff will have included articles about the various projects and

activities we have been involved in this past year, but the printed paper does in no way tell the story! And the year is not over yet. Without our staff, the Board of Trustees, and my wife, It would have been even more difficult to get through this year. I am most grateful for each and every one of these fine human beings.

The health problems that placed yours truly in the hospital this spring have not left this ole body even though I've been under strict medication. I don't like being chemical dependent, but when I've taken matters under my control, the results have not been favorable. Thus, I am on medication that may persists for another year or two. I am not happy about this, but the alternatives are not good and so I tell myself to behave and keep taking the medications.

We were sad to see Marla Brindley, former student and staff assistant, leave us after 8 years of service, and Lyle Coombs, former student and shepherd, leave after 4 years of service. They are missed. But, one thing that I keep reminding myself of is that in a university setting the dynamics of the student population is 'ever changing'. We were lucky to have those two fine individuals with us as long as they were. In Marla's case, new experiences and new scenery will be good for her. I am sure her parents, Bill and Vivian miss her much more than we at the Project. In Lyle's situation, it was a matter of an expanding family (new baby in late October), and the need for increased salary and benefits. He was hired by Circle Four Farms, a large swine production company moving into central Utah. Lyle will be learning about farrowing sows, and rearing piglets in nurseries. certainly wish Marla, Lyle and Sherise a very successful and rewarding future. Fortunately, we have been able to replace Lyle and Marla with some outstanding new undergraduate students. Kerby Barker of Wyoming is now the new shepherd, Shanelle Boyd of Salt Lake City, and Ami Burleson of Hesperus, Colorado replace Marla. More about them will be in future editions of Update.

Finally, I want to share with you another event on the horizon that concerns us at the Navajo Sheep Project, that being our loss of our present home; barns, offices, sheds, pastures, etc. in North Logan. Once again, the NSP is homeless. We have had to move 9 times over our almost two decade history. Hopefully, our lease negotiations with the Church of Jesus Christ of Latter-day Saints (Mormon) on the farm and ranch properties will work out. If not, we may have to consider liquidation and dispersal of the flock and termination of the NSP! I believe the Church will work with The advantages of such a move outweigh the disadvantages. However, the NSP is going to need the resources to fix, repair, and convert these beautiful properties into facilities suitable for sheep utilization. If you think moving your home and furnishings is a chore, try moving an entire flock, ewes, lambs, rams, llamas, office and barn equipment, portable corrals, wool inventory, etc. I appeal to

all who read this, we need the funds, as well as major donors to help make this move a reality! The NSP will remain under the USU umbrella and continue to give taxable deductions for our generous donors. If all works out, moving day will be in mid-June 1996. We will provide you with further information on this major issue as it becomes available.

We still need letters of support or endorsement to come into the NSP office. Letters, explaining the value of what we have done and are doing are needed in our quest of future and stable funding. The NSP *must become self-sufficient* with its flock operations. Unfortunately, this year's Vesicular Stomatitis Virus outbreak in the 4-Corners region devastated our 1995 sheep sales. Although we didn't have the disease in our flock, we were affected, due to being in a quarantine zone. As of November 8, 1995 we were out of quarantine, and we do have breeding sheep for sale. Please contact us if you're interested.

Lastly, I want to sincerely express my gratitude to all who have shared their talents, given of their time, and provided valuable resources to the Navajo Sheep Project. For without that support, NSP would have closed its gates long ago. I also want to thank the NSP Board of Trustees; as a collective body they have done so much this past year to help the Project. I am truly honored by their sacrifices. They are an outstanding group of human beings, and their hearts are in the right place. Their names are listed on this newsletter. I also want to repent and apologize to those of you that either have written or called my office, and didn't get a response! I don't have a personal secretary, and the demands on my time have been extremely high. I put in close to 80 hours per week, and if anything my family and personal life have suffered because of the needs of the NSP, especially these past two years. Bear with me and don't take my lack of a timely response personal. I do have voice mail now and a cell phone. If it's an urgent need, please call!

In closing, I am reservedly looking forward to the challenges of 1996 and wish all who read this correspondence a happy and healthful holiday season. Sincerely.......

A M E R I C A N S H E E P I N D U S T R Y REFERENDUM/CHECKOFF - VOTE TO BE TAKEN IN JANUARY 1996!

The proposed national sheep checkoff program is critical for the survival of the Utah and American sheep industry, according to most industry leaders. The checkoff vote is scheduled to be taken in January of 1996. The checkoff is the sheep industry's replacement of the recently retired (at end of 1995) National Wool Act of 1954 or the Wool Incentive program. Without passage of the checkoff, basically all industry lamb and wool promotion, product development, producer services, and other educational services presently provided by the American Sheep Industry Association will cease to be! Failure of the referendum to pass will leave the U.S. sheep producers without a national organization and oracle. Once the checkoff is passed, a new organization called the *National Sheep Promotion*, *Research and Information Board* would be established to serve the industry's promotion and education needs. This organization would assume the *American Sheep Industry Association's (ASI)* promotion and education activities and would be governed by a board of 85 producers, 10 lamb feeders and 25 importers nominated by producer groups and appointed by the U.S. Secretary of Agriculture.

ASI President Pierce Miller says the board structure was selected by producers from across the country in order to fairly represent participants in all aspects of the industry including growers, feeders, importers and wool-industry representatives. Navajo Sheep Project Director, Dr. Lyle McNeal encourages our readers and supporters to get out and **VOTE YES, for the checkoff!**

WHY GOD NEVER RECEIVED TENURE AT ANY UNIVERSITY!

- 1. HE HAD ONLY ONE MAJOR PUBLICATION.
- 2. IT WAS IN HEBREW.
- 3. IT HAD NO REFERENCES.
- 4. IT WASN'T PUBLISHED IN A REFEREED JOURNAL.
- 5. SOME DOUBT HE WROTE IT HIMSELF.
- 6. HE MAY HAVE CREATED THE WORLD, BUT WHAT HAS HE DONE SINCE?
- 7. THE SCIENTIFIC COMMUNITY CAN'T REPLICATE HIS RESULTS.
- 8. HE NEVER GOT PERMISSION FROM THE ETHICS BOARD TO USE HUMAN SUBJECTS.
- 9. WHEN ONE EXPERIMENT WENT AWRY, HE TRIED TO COVER IT UP BY DROWNING THE SUBJECTS.
- 10. HE RARELY CAME TO CLASS AND JUST TOLD STUDENTS, "READ THE BOOK."
- 11. SOME SAY HE HAD HIS SON TEACH THE CLASS.
- 12. HE EXPELLED HIS FIRST TWO STUDENTS.
- 13. HIS OFFICE HOURS WERE IRREGULAR AND SOMETIMES HELD ON A MOUNTAINTOP.

14. ALTHOUGH THERE WERE ONLY 10 REQUIREMENTS, MOST STUDENTS FAILED.

SOURCE: ANN LANDERS, The Washington Post, Monday, February 1995

BASQUE SHEEPHERDER STEW by Vicencia Echeverria

3 lbs. lamb stew meat, cut into 1½ inch cubes

½ cup flour

3 Tablespoons Olive Oil

3 cups water (or beef broth)

1 15 oz. can tomato sauce

1 can beer

4 cloves garlic, finely chopped

½ onion, chopped

Dash of Tabasco sauce

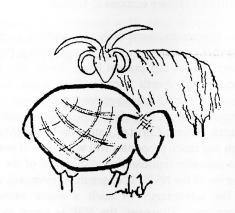
1 Tablespoon basil

Salt and Pepper to taste

4 carrots, peeled and sliced

4 potatoes, peeled and quartered

Combine flour, meat, salt and pepper in plastic bag and shake until meat is coated. Empty the flour and meat into large pot and brown slowly in oil. Add water, tomato sauce, beer, garlic, onion, Tabasco sauce, basil, salt and pepper. Simmer for 2 hours. Add carrots and potatoes. Simmer for 1 more hour, or until tender. Serves 8-10. (I like to add some Tarragon, Rosemary, Thyme and Garlic Salt.)





NAVAIO SHEEP PROIECT

College of Agriculture Logan, UT 84322-4850 (801) 797-2150 (801)753-7950 FAX (801) 797-2118

ADVISORY COUNCIL

JOHN ERNST, CHAIR President & CEO Bloomingdale Properties,Inc.

ROBERT REDFORD Actor/Director

DR. SUZANNE BAIZERMAN Professor, University of Minnesota

IOSEPH ZOLINE Executive Director The Zoline Foundation

MILTON BLUFHOUSE The Navajo Nation Tribal Council

TOM BOLACK Governor, 1962 State of New Mexico

REEVE LINDBERGH-TRIPP Vice President

DON BIXBY, DVM Executive Director The American Livestock Breeds Conservancy

DR. RODNEY BROWN Dean, College of Agriculture **Utah State University**

ANTONIO MANZANARES General Manager Ganados del Valle

BILL MALONE Resident Trader Hubbell's Trading Post

LESLEY GOSLING El Paso Natural Gas Foundation

BOARD OF TRUSTEES Ben Hatch, Chair

Vern Vivion, Vice Chair Anne Butler, Secretary Sharon Begay Ceanne Mitchell Robert Simonsen loe Benally Stephen Williams Larry Warren Weston L. Harris Nancy Bush Tom Allen, (of counsel)

OOPS!!! Failure To Communicate! When our donor list was being assembled for this newsletter, our new staff received an emphasized plea to be sure to include the year end donors after last Fall's newsletter went out. Unfortunately the donors for the rest of 1995 up to mid November got omitted. Hopefully all have been included in the following list.

Saddleblanket (\$1-19)

Ames, John T. Branon, Mark E. Brewer, Janet B. Collier, Richard W. Jr. Dennis, Suzanne Deutsch, Wayne Earl, Elise Engel, Franklin Estey, Janice G. Heaton, Sophia W. Johnson, Warren Jones, Brendan Krauthause, Carl Lee Lichtmann, Theodor Luzader, William Thiessen, Challis Walker, Bernice Westfall, Deborah Wilcox, Joseph F. The Charles A. and Anne Morrow Lindbergh Younker, Keith C. Brown, Nancy A. Coughlin, Jerry R. Ferens, James Humphreys, Kenneth Mainly Fibers Spinners Group McClung, Steve

Pictorial (\$20-49)

Absalon, Marie Alhona, Richard Antrim, Prescilla Bailey, Susan A. Bell, Mary M. Bornholdt, Elizabeth Bowditch, Walter G. Crom, Scott E. Davis, Laurel H. Dohner, Janet Doyle, Kevin T. Dugan, Linda J. Edgar, John Erbs, Ronald L. Ertel, Grace C. Faulkner, Charles S. II

E

George, Reagan Givens, Rhoda A. Graham, Elizabeth Hamilton, Ruth M. Hardesty, Phobe M. Hector, Susan M. Helmer, Mildred B. Jaeger, Robin R. Killick, Charles W. Layton, Elizabeth M. L'Hare Herding Company McIntire, O. Ross McNeery, John Minnesota Mining and Manufacturing Mitchell, Ceanne Nichols, William Phillips, Virginia A. Suzuki, Hisako Thomas, Alan L. Wohlenberg, Charles Brooks, Michael Cummings, Oletta W. Marino, John F. Marino, Sandy McGovern, Frank Davis, Sally

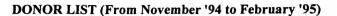
Chinle (\$50-99)

Bergerson, Lars Burchard, Duncan Christensen, Arthur Connors/Smith, Denita Dalton, Stephanie Dickson, Judith A. Estermann, Eva Fowler, Don D. Hellenschmidt, Richard J. Hononhan, Bonnie Houghton/Brown, Nancy A. Illinois Prairie Spinners Inazuka, Tomoko Lawton, M.D. Lopez, Kristy Mall, Margaret R. McGriff, Marylin McNeal, Darrell Moss, Roger Poole, Morris Rogoff, Salem Magarin San Juan Weavers Guild The Wooley West Thompson, Robert E. Twedt, Curtis M. Werner, Nels III Calderwood, Richard D. Clark, Barbara J. El Rancho de las Golondrinas Ganado (\$100-499) Anderson, Albert F. III Asbornsen, Muriel T. Babb, Jean Bartholomew, Edwin Bloomingdale, Lyman G. Bock, Gail Silber Branstiter, Dennis Breckon, Ruth D. Brown, Alice Burnham, Bruce Butler, Jerry Corrigan, John E. Cowles Media Foundation Creechan, Mary Lou Dostale, Joyce Duke, H. Benjamin Edstam, James S. Fawley, J.R. Jr. Griese, Cynthia Hall, Virginia R. Hering, Sarah M. Heyl, Maxine L. Hosler, Robert Irving, David Lawrence, Donald Linicome, David R. Mainley Fibers Spinning Group North Shore Weavers Guild Schenker, Rebecca Shipman, Charles Watson, Craig White, William Cameron, Deborah Hall, Anthony John Harris, Weston Lemon, James

Two Grey Hills (\$500-599)
Evans, Sandra F.
Labeck, Barbara Hill



Chief (\$1,000)
El Paso Natural Gas
Eskuche Foundation
McGreevy, Susan
Olsen, Ross Keith
Steinhardt, Michael
Ernst, Richard
Anschutz Family Foundation
Broadbent, Jay
Danziger, Fredrick M.
Simonsen, Robert
Williams Companies Foundation





NAVAIO SHEEP PROIECT

College of Agriculture Logan, UT 84322-4850 (801) 797-2150 (801) 753-7950 FAX: (801) 797-2118

ADVISORY COUNCIL

JOHN ERNST, CHAIR President & CEO Bloomingdale Properties, Inc.

ROBERT REDFORD Actor/Director

DR. SUZANNE BAIZERMAN Professor, University of Minnesota

JOSEPH ZOLINE Executive Director The Zoline Foundation

MILTON BLUEHOUSE

Councilman
The Navajo Nation Tribal Council

TOM BOLACK Governor, 1962 State of New Mexico

REEVE LINDBERGH-TRIPP Vice President The Charles A. and Anne Morrow Lindbergh Foundation

DON BIXBY, DVM Executive Director The American Livestock Breeds Conservancy

RONALD MALOUF President & CEO, Malouf Co. Inc.

DR. RODNEY BROWN Dean, College of Agriculture Utah State University

ANTONIO MANZANARES General Manager Ganados del Valle

BILL MALONE Resident Trader Hubbell's Trading Post

LESLEY GOSLING President El Paso Natural Gas Foundation

DR. CLAIR E. TERRILL Retired Sheep Scientist, USDA

BOARD OF TRUSTEES

Ben Hatch, Chair Vern Vivion, Vice Chair Anne Butler, Secretary Sharon Begay Ceanne Mitchell Robert Simonsen Joe Benally Stephen Williams Larry Warren Weston L. Harris Nancy Bush Tom Allen (of counsel)

Saddleblanket (\$1-19)

Brown, Lianne D.
Coughlon, Jerry R.
Johnson, Warren & Lorna
Kindt, George & Anita
Rudd, Ellen J.
Thiessen, Challis
Wilcox, Joseph F.
Younker, Keith C.

Pictorial (\$20-49)

Absalon, Marie Antrim, Priscilla J. Baily, Susan A. Bell, Mary M. Crom, Scott E. Davis, Laurel H. Dohner, Janet & John Ertel, Grace C. Givens, Rhoda A. Graham, Elizabeth Graham, Arlene Gruener, Stanley Hall, Mary & Howard Hamilton, Ruth M. Heise, Laura A. Heyl, Allen & Maxine Killick, Charles W. Layton, Elizabeth M. L'Hare Herding Company Lichtmann, Theodor Mathews, Harvey V. Minnesota Mining & Manufacturing Nichols, William & Helen Peterson, Ronald & Annie Sayres, Meghan N. Solomon, Micheal & Leah Suzuki, Hisako Ward, Maris E. West, Neil & Alexa Wilson, Dale & Elaine Wohlenberg, Charles & Nancy Younker, Keith C. Zinsmeister, Anna

Chinle (\$50-99)

Bush, Nancy Christensen, Arthur Clark, Barbara J.
Dalton, Stephanie
Estermann, Eva
Fowler, Don D.
Honohan, Bonnie
Illinois Prairie Spinners
McGriff, Marilyn
Moss, Roger
Rogoff, Salem Magarian
Romanov, Alisha
The Wooly West

Ganado (\$100-499)

Babb, Jean Bock, Gail Silber Branstiter, Dennis N. Brown, Alice Butler, Jerry & Anne Cant. Martha M. Edstam, James S. Evans, Sandra Froehner Fawley, J.R., Jr. Hall, Virginia R. Hosler, Robert & Joan Irving, David James, Janice E. Jones, Leon L. Mitchell, Martha J. Murdock, Steve Peckham, George & Mary Robinson, Frances Ryan, Patricia & Jerry Seeler, Allan & Barbara Shipman, Charles & Marilyn Statnekov, Mara B. White, William & Amy Vannatta, Janice

Chief (\$1,000+)

Anschutz Family Foundation
Broadbent, Jay & Lorna
Danzinger, Frederick M.
El Paso Natural Gas
McGreevy, Susan
Olsen, Ross Keith
Simonsen, Robert
Steinhardt, Michael & Judy
Williams Companies Foundatio
Zoline Foundation

