Texas Rice

Texas A&M University System Agricultural Research and Extension Center
Beaumont, Texas

August 2002 Volume II Number 6

The US Rice Producers Association:

Working for Farmers through Market Development and Education

Rice cooking demonstrations and tastings in Mexico City sponsored by USRPA and the Foreign Agricultural Service.

The US Rice Producers Association (USRPA) is a non-profit corporation representing all rice farmers in Mississippi, Missouri and Texas, and many farmer and other affiliate members in Arkansas, California and Louisiana. USRPA was created in 1997, when it became apparent there was a need for an organization whose primary purpose is to represent farmers. Still, USRPA President and CEO Dwight Roberts recognizes the need to work with other rice organizations representing different segments of the industry, and strives to keep communications open.

Supported mainly by rice check-off funds, the Association's mission includes market development and on-going support for domestic and export sales of U.S. rice, legislative and government affairs, member information and public education.

When USRPA was formed, much of its market development and government grant money was earmarked for the promotion of rough rice exports. This emphasis was right on target, as this form now accounts for about a million tons, or over 30 % of the total U.S. export sales. According to Jim Willis, President of International Programs, targeting low-income consumers in Mexico, the largest long grain market for U.S. rice makes valuable check-off funds go much further. "Even though these people have less money to spend on food individually," explained Willis, "collectively they represent more buying power than higher income consumers." The lower income groups represent more than 60 million people, over 60% of the Mexican population. When you crunch the numbers, it shows that a mere 1 kilo increase in consumption would mean an additional 100,000 tons of imported U.S. rice. An additional 60,000 acres of U.S. long grain rice would be needed to meet this demand.

This kind of market potential is what led to the *Mas Por Menos* campaign USRPA launched in Mexico two years ago. Through a matching grant from the Foreign Agricultural Service (FAS), USRPA sponsored cooking demonstrations in open-air markets in 50 cities throughout Mexico. Cooking demonstration personnel were trained to present information about the nutritional value and superior taste of U.S. grown rice. Thousands of consumers received simple, but elegant, recipes for sampling, and were shown how to make their food dollars go further, without sacrificing taste. The brochure handed out at the events presented nutritional information about rice, cooking suggestions, price comparisons and tasty recipes with simple ingredients that can easily be obtained. The response was favorable. Few brochures were left behind, and sales of U.S. grown rice increased by 7% or more after the promotions.

In Jamaica, a similar program was launched in 2001, where in-store demonstrations and tasting exposed consumers to the superior quality and value of U.S. grown rice. The project was executed in Montego Bay over a two-month period. Records indicate that the

continued on back page

From the Editor...

This past month marked two of the best attended Texas rice field days on record. Although rainy weather prevented us from conducting the Eagle Lake field tour, we had tremendous attendance at the Community Center with nearly standing room only as visitors listened to our TAES and USDA scientists describe their research.

The Eagle Lake field day was particularly important in that it served as an opportunity to honor David R. Wintermann for all of the contributions that he made to the Texas rice industry and to the people of Texas. Until his death in 1997, David was a stalwart of the Texas Rice industry.

The following week, the Beaumont Center Field Day dodged the rains and was rewarded with near-record attendance. Over two hundred visitors attended the morning tour, where they received a first hand glimpse of the latest varieties, presentations on ground-breaking research on plant physiology and molecular biology, and presentations on the newest and best agronomic and pest management research.

Four hundred and twenty visitors attended the morning program and luncheon and an additional 44 visitors participated in the afternoon weed management tour. The Beaumont Field Day also served as an opportunity to honor Robert Bauer for the support he has given to the rice industry through his years of service as the President of the Texas Rice Improvement Association.

Three additional Texas rice producers recently made the news. Bill Dishman, Jr. from Beaumont was honored with the "Outstanding Man of the Year in Agriculture" presented by the Texas Cooperative Extension. Loy Sneary from Bay City and Jack Wendt from Richmond were recognized for their contribution to agriculture by being appointed to the Texas Council on Agricultural Research, Extension, and Teaching (Texas CARET). The council will assist Texas A&M university leadership by serving as advisors, spokespersons, and advocates for Texas Cooperative Extension, Texas Agricultural Experiment Station, and the Texas A&M University College of Agriculture and Life Sciences.

With the pride that those of us at the Center get from working for and interacting with the rice industry also sometimes comes the sorrow of seeing one of our friends pass away. On July 30, John Jeffrey a rice farmer in the Liberty area was killed in an auto accident. John was a member of the Texas Rice Producers Board and was well respected by the rice industry and by those who live in the Liberty community. Those who know him will dearly miss John. His mother, wife, and his two young children survive John. We wish them the very best in this trying and difficult time.

Sincerely,

L. T. Wilson

Ted Wilson
Professor and Center Director

Inside This Issue

Cover Story:
US Rice Producers Association

Texas Rice is published 9 times a year by The Texas A&M University System Research and Extension Center at Beaumont. Interviews, writing and layout by Jay Cockrell. Editing by Ted Wilson, Jay Cockrell and Tammy Tindel. Technical support by Jim Medley. Information is taken from sources believed to be reliable, but we cannot guarantee accuracy or completeness. Suggestions, story ideas and comments are encouraged.

Professor and Center Director: L.T. (Ted) Wilson
lt-wilson@aesrg.tamu.edu
Ag Communications Specialist: Jay Cockrell
j-cockrell@aesrg.tamu.edu
Texas A&M University System Agricultural Research and Extension Center
1509 Aggie Drive, Beaumont, TX 77713
(409)752-2741
Access back issues of *Texas Rice* at
http://aesrg.tamu.edu

Researcher in the News...

Dr. Shannon Pinson - Research Geneticist

Although her roots in agriculture trace back to the family corn and wheat farm in Indiana, Shannon's research in rice has had worldwide impact.

Shannon with Senior Biological Technician Faye Seaberg, looking at rice seedlings that are being evaluated for resistance to Liberty herbicide.

Shannon was the third of four children, and being the only girl, was treated as the princess of the house. Her father, Leroy Murphy was a third generation farmer who produced hogs, corn and wheat on their 500-acre farm just inside the city limits of Indianapolis. Being a family concern, he also farmed an additional 500 acres with his dad and brother. When the pork market crashed in the late 60's they went to a wheat-corn-soybean rotation, and only kept hogs for the boys' 4-H projects.

Shannon's mom, Rose, worked full time caring for their home and taxiing the kids back and forth from numerous activities. Shannon played piano and flute and participated in 4-H like her brothers, but focused on sewing, cooking, gardening and flower arranging. From a very young age, Shannon was fascinated with plants and what made them grow. She believes that it was no coincidence that she was born 100 years after Mendel conducted his gene-discovering experiments, and that she was destined to study the genetics of plants.

Shannon's dad was also a corn seed salesman for PAG Seed Company (now Cargill), which further sparked her interest in Agronomy. As a PAG representative, Mr. Murphy had to keep detailed records of seed fields, including yield, fertilizer, chemical inputs and rotation history. Shannon followed her dad's work closely, and came to understand how all these factors could affect the crop. Her freshman year in high school, Shannon took a career development class and was asked to pick three careers from a list provided, and then interview a person in that field. "The very first card I pulled was Agronomy," recalls Shannon, "and I was thrilled to learn there was a career that was tailor made for my interest - studying the science of agriculture."

For Shannon, the road to higher education began at Purdue University were she acquired a Bachelor of Science Degree in Agronomy. Although her dad would have preferred for Shannon to specialize in soybeans, she chose to focus on rice. Shannon had determined early in life that she wanted a career that would help alleviate world hunger, and since a majority of third world countries depend on rice as a staple food, she felt drawn to study this crop.

It was during her sophomore year that Shannon met her future husband, Tom Pinson. They met at an *Octoberfest* Polka dance, and their first date was a square dancing event. Tom was also studying at Purdue and participating in the ROTC program, with plans to join the Navy after graduating.They were married soon after Shannon graduated from Purdue.

Tom's first training school was in Florida, where he finished near the top of his class. This was fortunate as it gave Tom first pick on where he wanted to continue his training. Since Shannon was planning on the University of California at Davis to continue with her higher degrees, Tom picked a training school that was nearby.

At U.C. Davis, Shannon began to focus her studies on rice. Her mentor and major professor was Dr. Neil Rutger, who is now the Director of the Dale Bumpers National Rice Research Center in Stuttgart, AR. Rutger remembers Shannon as a very capable and enthusiastic student. She volunteered to take notes in the rice nursery and URRN trials just to become more familiar with the growth and development of the crop. "She never complained about the hard work and heat," said Rutger, "and never seemed to loose her enthusiasm for learning." As an added bonus, Shannon landed

continued on next page

several fellowships while at Davis, which meant she placed little financial burden on Rutger's research budget. As a testament to his faith in her abilities, Rutger often had her speak to the rice producer board that funded a portion of his research. It was uncommon for him to put graduate students before the grower board, but her enthusiasm was contagious and she had a talent for persuasion. "She did talk very fast though," mused Rutger, "and after one presentation at an Agronomy meeting, I congratulated her on giving a 30 minute talk within the 15 minute time limit!"

After completing her MS in Agronomy and PhD in Genetics at U.C. Davis, Shannon had three job offers to choose from, one of which was at the ARS Rice Research Unit in Beaumont. From her early days at Beaumont, Shannon was recognized as an expert in the field of using anther culture as a breeding and genetics research tool. Through laboratory studies, she developed new knowledge that clarified both the advantages *and* limitations of this technology - including the economic and genetic efficiency of rice anther culture. Shannon also identified regenerable U.S. rice germplasm (which was found to be lacking, thus limiting parental material), verified that diploid regenerants originate from pollen and thus are useful for breeding purposes, and significantly simplified techniques for handling regenerants and progeny seed.

Shannon is a rice geneticist, and it is clear that the work of a geneticist is very different from that of a breeder, not just in technique but also in philosophy.

Clarissa Hernandez, Michael Collins and Nathan Whitman checking plots for insect infestation and plant development.

According to Shannon, a geneticist studies the 'junk' that a breeder would throw out. By comparing plants with both desirable and undesirable traits, geneticists can determine how to capture the genes that produce favorable varieties.

Development of a gene-mapping population derived from a cross between 'Lemont' and 'Teqing', a very high yielding, disease resistant variety from China, is one of Shannon's proudest achievements. This population is currently being used as a research tool by 15 research groups in the U.S. and abroad. Shannon began her work on the gene-mapping population when she first arrived in Beaumont, and to date there are over 300 lines in the population stabilized at the F15 stage. The population gives researchers a way to efficiently determine genetic linkage between molecular markers and cereal genes, both desirable and undesirable. Once markers associated with genes of interest are identified, they can be used by breeders to indicate which of their materials contain the desired gene. Using a single population to study genes for multiple traits, as Shannon is doing, enhances knowledge because now gene-to-gene and trait-to-trait relationships can be clarified.

On the left, two rows of Lemont treated with gibberellic acid. On the right, one of the seedling vigor germplasm releases that exhibit increased mesocotyl elongation.

Using this population, Shannon's project has determined the chromosomal location of more than 160 genes, including those affecting resistance to rice sheath blight and blast, plant height, maturity, yield component traits, and mesocotyl elongation, which is associated with seedling vigor. Shannon's work with seedling vigor provides a good example of how the information she develops as a geneticist will work its way through the variety development process to ultimately benefit rice producers.

The problem with lack of seedling vigor in semidwarf varieties has been known since the first releases in the early 1980's. It is now known that the *sd1* gene used worldwide to produce semi-dwarf rice cultivars is genetically linked to poor seedling vigor caused by shortened mesocotyls. The gene associated with re-

continued on next page

duced mesocotyl elongation is also closely linked to the gene for short stature, so when breeders were selecting for reduced height, they were inadvertently picking up the undesirable gene as well. To date, all U.S. semidwarf cultivars have short mesocotyls and require costly and risk-inducing agronomic practices that accommodate their lack of seedling vigor. These include seed treatment with gibberellic acid and shallow planting, which increases water cost and damage from birds.

During the development of the gene-mapping population, Shannon noticed significant and consistent segregation for emergence rates between the lines. She found this particularly interesting because both parental varieties were known to contain the *sd1* gene and produce short mesocotyls. When genes affecting seedling vigor and stand establishment were subsequently studied in this population, three genes affecting mesocotyl length were identified. One of the genes originated in Lemont and the other two in the Chinese cultivar, Teqing. One of the Teqing genes mapped to the same region of chromosome 1 known to contain the *sd1* semidwarf gene, and is presumably the gene identified elsewhere as lacking in U.S. semidwarfs. Soon after this discovery, Shannon released five breeding lines from this population which have superior stand establishment combined with good seedling development, plant height, heading time and yield. Breeders will use them to incorporate these favorable traits into semidwarfs with superior grain shape and quality traits.

Shannon having fun at the Christmas banquet with her daughters Marisa and Liana, and husband Tom.

In addition to ongoing work in these areas, future research for the Genetics Lab at Beaumont will include identifying the genetic, chemical and physical factors that determine grain fissuring in rice, investigating the relationship between iron content and rate of bran rancidity, determining the inheritance of high iron content in *Dragon Eyeball 100*, a Chinese rice variety, identifying the genetic, chemical and physical factors that determine tillering in rice, and determining the rates and distances of out crossing in order to establish guidelines for physical separation of varieties in the field that will ensure genetic purity.

What else could Shannon possibly have time for? Working with young people for one thing. Throughout her career Shannon has served as major professor to numerous graduate students, including Dr. Rodante Tabien, who will be joining the Beaumont Center this fall as our new state breeder. She also works with local schools on science fair projects, and has opened the door for many gifted high school students to find summer work at the Beaumont Center.

Her two daughters, Marisa (8) and Liana (5), are already showing the signs of being aspiring young scientists. Shannon enjoys reading *Ranger Rick* to the girls and thrills them with many science related projects - such as collecting tadpoles and watching them grow into frogs, before releasing them back to the wild. Shannon is also a Brownie Scout Leader and often volunteers to teach science classes at All Saints Episcopal, where the girls go to school. She especially likes working with the art teacher there, who Shannon believes has a real appreciation for bringing hands-on observation into the classroom. “Marisa has learned the art of observing details,” said Shannon, “which is obviously very important for a science career.” Shannon and her husband Tom, who teaches Business Management Information Systems (includes both management and computer courses) at Lamar University, are very proud of the girls and take every opportunity to encourage their interest in the natural world.

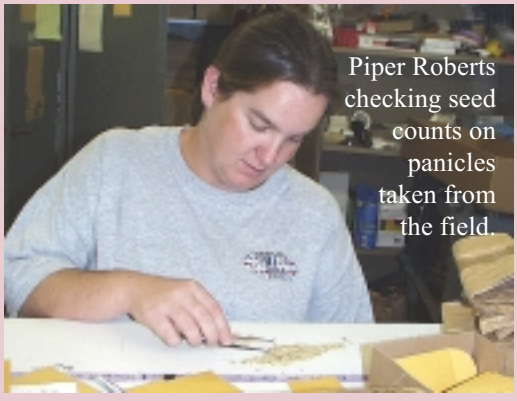
In addition to a skilled and dedicated crew to conduct the science studies Shannon designs, enthusiasm, dedication and a gift for ‘playing at her work’ have been the secrets to her success. She delights in all things unexplained, and has the tenacity to find real life solutions that have a positive impact on the farmers she has pledged to serve. “I love my job,” said Shannon, “and I could not ask for a better working environment or more dedicated team of scientists than we have here at the Beaumont Center.” *

Spotlight on Support

Faye Seaberg - Senior Biological Science Technician
Faye has 36 years service with the USDA-ARS. She started out at the Beaumont Center working for Dr. Bill Webb in the Quality Lab, but has been Shannon's "right hand" providing her with critical technical support since the Genetics program began. Faye is both capable and willing to do any task required by the Genetics program – from detailed, sterile culturing of rice anthers to management of field plots – and her exceptional technical skills have earned her several USDA awards. Faye's duties include maintaining a DNA mapping population, collecting and analyzing phenotypic data, statistical analyses and molecular mapping. Faye recently developed a protocol that is now being adopted by Aventis to evaluate rice plants for resistance to Liberty herbicide. Dr. Pinson's Genetics Program is using this protocol to determine how far rice pollen travels (via wind and/or insects) and outcrosses under southern U.S. growing conditions.

Faye grew up in Baton Rouge and got her BS in Bacteriology from Louisiana State University. Her husband John owns one farm equipment business, and is co-owner in another. The couple likes to travel, especially on cruises, and Faye also enjoys painting, stain glass design, gardening, swimming and bird watching. Faye also donates time to the research station – she can be thanked for the flowers (and the butterflies they attract) in the planter that stands in front of the USDA building on the research station!

Piper Roberts - Biological Science Technician - Plants
Piper has worked in the Genetics lab for four years. She is responsible for coordinating student labor, organizing harvest, milling, germinations as well as other lab work. She is skilled in tractor and backhoe operations. Her organized supervision of the field harvests is exceptionally critical to Dr. Pinson's study on fissure resistance. Prior to conducting rice research, Piper obtained a B.S. in Agriculture from Stephen F. Austin State University, then went on to manage a turkey farm for a few years in Waco, TX.


Piper Roberts checking seed counts on panicles taken from the field.

Piper's husband Keith is the operations manager for a mobil x-ray unit. Their first baby, Austin Layne, was born August 4th, weighing in at 7 pounds 1 ounce and 20 inches long. Growing up, Piper's dad was the Ag Advisor at Central High School in Beaumont, so Piper participated in 4-H raising animals and gardening competitions. These days her pastimes include tending her animals, making crafts, cross-stitching, crochet and of course, Baby Austin!

Clarissa Hernandez - Biological Science Technician - Plants
Clarissa is from Houston, and obtained her B.S. in Biosystems Engineering from Texas A&M University this past May. While an undergraduate at TAMU, she was a student worker with Dr. Scott Osborn, and had the opportunity to work on Dr. Pinson's collaborative study on fissure resistance. She was an exceptional undergraduate within the TAMU Engineering program, and was supported for several years on scholarships. During her college years, Clarissa interned with NASA Johnson Space Center and spent some time in Washington D.C. interning with Representative Kevin Brady. Clarissa is supervising the Genetics field program during Piper Robert's maternity leave. In January 2003, she plans to begin working on a Master's Degree in Biosystems Engineering. Purdue University is strongly recruiting Clarissa as a graduate student. Clarissa would like to work with one of Purdue's NASA-related engineering projects.

Nathan Whitman - Biological Science Aide
Nathan was born in Beaumont but grew up in Vidor, the younger of two children. He is currently pursuing a Bachelors degree in Geology at Lamar University, and scheduled to graduate in August. Nathan plans on attending graduate school, possibly for a MBA. He enjoys duck hunting, saltwater fishing and fly fishing (he ties his own flies.) He also likes to read and is an accomplished guitarist. Nathan came to work for Shannon in April 2001 and his duties include: watering, chemical applications, field notes, harvesting and some lab work.

Michael Collins - Biological Science Aide
Michael is a junior at Lamar University majoring in Psychology, with plans to attend graduate school and become an Analytical Psychologist. He began his schooling at Kansas Wesleyan, where he played football as a defensive end. He went to Texas A&M University for a few years before transferring to Lamar. Michael was born in Newton, but moved to Vidor when he was in second grade. He played soccer when he was younger, and loves to hunt, fish, *and* has a talent for cooking. Michael has been in the Genetics Lab for less than a year, but plans to stay on through graduation. His duties include: field preparation, planting, data collection, harvesting and processing seed.

Joseph Moore - Student Worker
A senior in high school, this was Joseph's third summer in the Genetics Lab. He first learned about the opportunity to work at the Beaumont Center when Shannon collaborated on a project with his freshman science class. His plans are to attend college and study to be an Anesthesiologist. A native of Beaumont, Joseph enjoys going to the beach, watching movies, and participating in live theatre with the Beaumont Community Players. Joseph's duties involve mostly lab work, and some field responsibilities.


Joseph Moore counting germinated seedlings in the Genetic's Lab.

Grower Profile...

Garrett Farms: Quality Seed Rice Since 1983

Jack Garrett, otherwise known as 'Pappy' to his family and friends, was farming rice in Texas long before the advent of machine harvesting and commercial drying.

Jack Garrett with his youngest son Bob, who has a crop dusting business with his son Will. Bob has over 17,000 hours in the air.

Jack grew up in Houston, the youngest of four children. Although his dad worked for Gulf Oil, Jack had an interest in the cattle and farming business. After spending a year at Texas A&M studying agriculture, Jack went to Missouri City and worked for the Houston Packinghouse earning only breakfast, lunch and supper as wages. After a year he was put on the payroll at $75 a month. Shortly after he began dating Mary Blackshear, the widow of a close friend who had been killed in an airplane crash. After dating for a year, he told his boss he was getting married, and promptly got a $25 a month pay raise! The couple rented a small house outside of Houston and Jack continued to work for the packinghouse. He was a cattle buyer then, which gave him many opportunities to talk with ranchers and learn more about the business. He came to know a wizened cattleman named Bassett Blakely, who affectionately called Jack 'Pods'. It was through Blakely that he found out about some land available in Brazoria County.

When Jack went to see the property he met Andrew Moller, who was running cattle for Blakely. Moller told Jack that the cattle did not do well there because of loin disease, caused by a mineral deficiency. With help from his dad, Jack financed a loan at 4% interest and bought the land to start farming rice. In 1936 Jack bought the property in Danbury, and by 1940 had built a beautiful home surrounded by majestic live oak trees, where he and Mary still live today.

Sixty-three years ago, when Jack first started in the rice business, things were certainly very different than they are now. Mule teams and manpower did the work of plowing, planting and harvesting. Rice had to be left in the field to dry, at the mercy of the elements, and milling quality often suffered due to late season rains. Being an innovator and leader in the fledging Texas rice industry, Jack was one of the first farmers to buy a combine and machine harvest his rice. This required that he build a dryer in Danbury, which was only the second in the state.

During his time at the university, a professor told Jack that Brahman cattle would never be of economic importance in Texas. He remembers that statement well, because he didn't believe it then, and has been successfully raising Brahman in Brazoria County for the past 55 years. Today Jack has a registered herd of 125, although he said there is no market for the bulls, as people are only interested in buying heifers to cross with Hereford or Angus bulls. The cattle are range-fed, with hay supplemented in the winter months.

These days Jack only farms about 220 acres of seed rice for the operation. In his spare time Jack has always enjoyed fishing and hunting. He was great friends with David Wintermann and they fished all along the Gulf Coast together, often joined by George Bush Sr. and artist Jack Cowan. Jack also loved flying, but had to give up his pilot license a few years ago due to his eyesight. He remains very active in all aspects of the family operation, and spends many hours during harvest running a combine. Jack and Mary have 4 children - Susan Garrett Baker, Jacko, Klinka Garrett Lollar, and their youngest son Bob.

Jacko and his wife Nancy have 1800 acres of seed rice this year including Cocodrie, CL161, Cypress, Saber and Francis. They are also growing hybrid rice lines for RiceTec, Inc. and do contract work for Aventis (now Bayer Crop Science) and BASF/Horizon. In addition to rice, the Garrett's have 300 acres of wheat and 200 acres of milo.

The roguing crews come to Garrett Farms the first

continued on next page

part of June and stay through harvest. There are two crews of 12-20 men per crew, with one crew chief. The men working with Jacko this season have been part of his summer crews for at least 3 years, and some have been here for as many as 15 years, so they are experienced and very conscientious workers. Even at the end of the long 10-hour workdays, the men are diligent about getting every off-type out of the field. They move down roguing lanes as a group, carrying buckets to make sure all undesirable plants are extracted and removed from the field. And although each man ties a color-coded ribbon at the start and finish of his lane to identify the individual who worked that area (for quality control), they all work together to make sure the fields are left clean. "They function as a team," Jacko said, "and watch out for each other to make sure nothing is missed. Sometimes the hardest off-type to see is the one right underneath your nose. They all look out for the man working in the next lane over, and point out anything that is missed." Jacko is semi-fluent in Spanish and gets along well with his men, who obviously have a great deal of respect for him.

The Garrett's employ 50 to 65 workers annually, and some that have been there for nearly 20 years. Jim Cardoza is the manager of the seed plant, and lives on the farm year-round with his family. Jamie Barron is the field manager and Pedro Fernandez oversees maintenance of combines. Pablo Gonzales tends to the trucks. Jacko and Nancy's daughter, Traci Harvey, works in the office and helps handle all of the contracts and sales paperwork. Traci is also very involved in the tracking, processing and distribution of the seed rice. Traci, along with Jeanette Zajicek (Assistant Manager at Eagle Lake Rice Dryer), has taken the point position for *Share the Harvest*, a non-profit organization that was established in 1997 to provide a vehicle for people within the rice industry to help feed the needy.

Besides diligent roguing, other factors contribute to the consistent high quality of Garrett Farm seed rice. Jacko contracts with the Mennonite community near El Campo to do all his dirt work and land leveling. "We try and get several fields done each season," said Jacko, "because laser leveling saves water and labor, two factors that directly effect production costs."

They try to keep a rotation of one year in and two years out, but it does not always work that way. This year the Clearfield is on land that has laid out for four

continued on next page

Roguing crew working their way across a 50 acre field of seed rice. The crews often work 10 - 12 hour days.

Share the Harvest

Share the Harvest is a non-profit organization founded in 1997 to provide a means for rice farmers in Texas to help feed the hungry. The organization is headquartered at the Garrett Farms office in Danbury, and Traci Harvey, daughter of Nancy and Jacko Garrett, along with Jeanette Zajicek at Eagle Lake Rice Dryer, handles all the paperwork and day-to-day activities for the non-profit organization.

Most of the rice that is donated to *Share the Harvest* goes to the Houston Food Bank, the southeast's largest food collection and distribution agency. They distribute this much-needed staple in the fight against hunger to more than 500 nonprofit member agencies in a 25-county area.

Share the Harvest brings together not only farmers, but also the people who own or manage the companies and agencies that are essential to the complex chain of events that culminates with the delivery of bagged rice to the Houston Food Bank. These donations include land by I.P. Farms and Garrett Farms; seed from RiceTec, Inc. and Garrett Farms; water from Chocolate Bayou Water Company; fertilizer from Helena Chemical Company; chemicals from Zeneca, Novartis, Rohm&Haas, FMC, BASF and DuPont; aerial applications provided by Garrett's Flying Service; grain transportation by T&S Transport of Alvin and Helena Chemical in East Bernard; crop drying and storage by Eagle Lake Rice Dryer and Rice Belt Warehouse; and processing by Colorado County Rice Mill, American Rice Mill, Gulf Rice Mill and Doguet's Rice Mill. Local farming families provide planting and harvesting equipment, in addition to donating labor and management.

Jacko's wife and partner, Nancy, is thrilled with the response to *Share the Harvest*. "It is amazing," said Nancy, "how people came together to support this cause. Even the high school kids that work for me in the summer wanted to get involved. They asked not to be paid for the time spent harvesting or processing the donated rice so they could also contribute to this worthwhile cause."

This year Jacko and Nancy planted 224 acres of rice for *Share the Harvest*. More than 20 farmers and 30 agricultural companies are participating in the program. It is estimated that over 1.5 million pounds of milled rice from the 2002 Texas crop will be shared with the needy. For more information on how you can help *Share the Harvest* through commodity or cash donations call Traci at (979) 922-8405.

years. In fallow years the fields are sprayed and disked, to insure that weeds are not allowed to gain a foothold. Jacko uses a minimum till system, which insures that early March planting is possible. The fields are worked in the fall and 18-46-0 fertilizer is applied, then smoothed down. If necessary, the field may be sprayed with herbicide in late winter to insure a clean seedbed. Planting begins in early March with a precision planter, allowing exact placement and seed depth. Forty-five units of nitrogen in the form of ammonium sulfate is usually applied at the three-leaf stage, and the crop is closely monitored for insects and disease. "For the first 30 days we live with the rice," said Jacko, "and care for it as though it was our first born." According to Jacko, timing of fertilizer is critical as the rice approaches greening (GR), as it is during this time between GR and PD that the panicle is formed. Urea is put down 8-10 days before GR, and then another shot right after GR. Jacko believes these are the two most important applications all year to influence yield, although he watches the crop closely and may apply more fertilizer if necessary.

This seed rice field of Francis was planted at 2.5 lbs/ac, resulting in larger stems and improved tillering.

The fields are drained approximately 10-12 days before harvest, so they can dry enough to prevent rutting, which is bad for the second crop. For the same reason, they make every effort to keep the auger carts out of the fields during harvest. They run 6 Case combines at about 1.5 mph to prevent losing rice out the back, and the rotor and fan speed are closely monitored from the cab. To enhance ratoon production, the rice is cut fairly low, leaving only 10-12 inches of stubble. This allows light to penetrate down to the developing tillers, and helps prevent disease due to better air circulation. "We would cut the first crop 6-8 inches if we could distribute the straw from the combine better," said Jacko, "and it wouldn't slow harvest so much." They bring in the rice at around 16% moisture, rather than 18-21%, as this allows the grain to fully mature, and it also makes it easier on the drying facility, and reduces cost. All of the seed rice is dried and stored on the farm. To prevent contamination, the combines are meticulously cleaned after each variety is harvested, often taking 3 workers 2 days to complete the job. Rice on the levees is harvested, but not used for seed, with most of it going to *Share the Harvest*. "My roguers are the best," said Jacko, " but because of irregular growth on the levees, we can't be sure all the off-types are removed. Rather than take a chance, that rice is harvested and handled separately from the seed rice."

Nancy Garrett taking her turn on the combine, after a busy morning moving cattle.

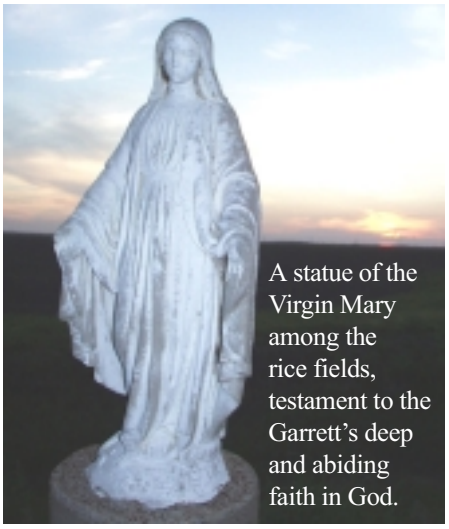
Jacko has experimented with different seeding rates over the years, working with Dr. Garry McCauley to conduct replicated field trials. They have tried 20, 40, 60, 80, 100 and 120 lbs/ac on both 7.5 and 10 drill rows with a Great Plains 2420 Drill Planter and Keyton Seed Firmers. Jacko believes this is the best method for planting rice in blackland conditions. Their highest yields on average came from plots seeded at 40-60 lbs/ac. They have also conducted seeding experiments using a Monosem Drill Vacuum Seeder at 2.5, 11, 16, 24 and 34 lbs/ac.

Jacko is interested in the lower seeding rates for two reasons. As a producer of seed rice, he is often given only a small amount of a new variety, but the company wants as much back as possible. For every pound of seed they send, his goal is to produce 800 pounds to return, thus giving a 1/800 multiplier. This year he has some ultra low seeding rates of 2.5, 5, 7, and 8 lbs/ac which they are hoping for a multiplier of 1200-1500 to 1. While most years he achieves at least a 1/500 ratio, Jacko is continually striving to improve his numbers. The other reason he is interested in the seeding rate studies is because he believes lower rates are the way of the future for production farmers. "Growers using the new technology, whether that be

continued on next page

hybrids or herbicide resistant rice, may pay $60 cwt or more for seed," said Jacko, "and it won't be as profitable to continue planting at 80 – 100 lbs/ac. Besides, McCauley's 5 year studies have shown that the higher rates are not necessary to achieve optimum yields."

A strong proponent of research, Jacko believes that in addition to the seeding rate studies rice scientist should conduct experiments for all new varieties using staggered planting dates. "The growers need to know how long between planting and green ring for each variety at different planting dates," said Jacko, "as this information is critical for making good management decisions." Innovations Jacko believes will be important for successful rice production in the future include planting hybrid and herbicide resistant varieties, laser leveling, precision seeding and ground rig herbicide applications. "Owning your land is also a definite plus," said Jacko, "and may be the only way to turn a profit in the years to come."



A statue of the Virgin Mary among the rice fields, testament to the Garrett's deep and abiding faith in God.

Jacko began farming with his dad right after completing his Business Management degree from Texas Christian University. Although he knew Nancy when she was in junior high, it wasn't until much later that they met again at a dance. They began dating regularly, and worked together caring for the cattle. "We worked cattle till 5:30 pm the day of our wedding." recalls Nancy, "We got married at 7 pm, went to a supper with our families that evening, and announced the marriage. The next morning, we were back working cattle!"

Nancy was raised in Alvin, with an older sister and younger brother. She recalls many happy memories of hunting and fishing trips with her family. "It was definitely a family affair," said Nancy "and we would go every weekend and on holidays." She once built a boat from scratch with her dad, and took a jeep completely apart to paint it. Not exactly a stranger to hard work!

From the very beginning Nancy helped Jack care for his cattle, and over the years has taken all of that responsibility. She now has 600 head of registered Brahman and F1 Brahman/Angus cows, with plans for more growth in the future. The day I visited Garrett Farms, Nancy was on a combine doing her share of the harvest. She adores Jacko, and is quite happy with the farming and ranching lifestyle they have chosen.

Besides Traci, Jacko and Nancy have another daughter, Christy, who is attending college at St. Edwards University. They also have two grandchildren from Traci, Garrett (11) and Meagan (8). This year Jacko and Nancy took Garrett on a hunting trip to South Africa, where he was very successful and came back with many stories of his 'kills'. Their namesake grandson is very interested in the farming and cattle business, and participates in 4-H each year raising heifers, steers, hogs and chickens. Meagan also raises animals for show, and is quite an accomplished softball player. Both children are eager to help out whenever they can with the farming and cattle.

Jacko and Nancy's longtime friend, Donnie Bulanek, works very closely with them in their rice and cattle business. They often combine resources and manpower to get the rice in early and harvest it on time. Often, when Jacko has to travel, Donnie steps up to help Nancy keep things running smoothly. "It's a comfort to have good friends close by," said Jacko, "The working relationship has turned out well for both of us."

Moon rise at Garrett Farms. During the growing and harvest season, Jacko is often in the fields before daybreak and long after sunset.

Like many other successful producers in Texas, farming is a family affair for the Garretts. Pappy could not have imagined when he began farming rice over 60 years ago how many changes and innovations the industry would see in his lifetime. Yet through shear determination and a powerful work ethic, he laid the foundation for Garrett Farms' success. *

State and National News...

INDUSTRY UPDATE

Robert Bauer, a local rice farmer stepped down as President of the Texas Rice Improvement Association (TRIA) after 25 years of dedicated leadership. TRIA recognized Robert by distinguishing him as President Emeritus, effective July 12, 2002 for his exemplary service to TRIA and the Texas rice industry.

A bronze plaque was unveiled honoring Robert's unselfish contributions for the improvement of Texas rice, the research programs and foundation seed production at the Texas A&M University Agriculture Research and Extension Center at Beaumont. The plaque will be on permanent display at the Beaumont Center.

Robert was honored with additional presentations at the Beaumont Center's annual field day including: The Friends of Texas A&M Agriculture Award, The Friends of the Beaumont Center Award, and a plaque from the USDA-ARS expressing gratitude for many his years of support and service to the USDA programs of the Beaumont Center.

An extremely humble man, Robert was honored to receive these rewards by saying, "I just used the talents that God gave me and did the best I could for my family and fellow farmers." Robert Bauer began farming in 1945, carrying on a tradition his father began 20 years before.

In 1976 Robert took his father's place on the Texas Rice Improvement Association Board and served as president of the association until July 12 this year.

FSA TAKES STAND ON STAIN ISSUE

USRPA - The decision by the Farm Service Agency of USDA to rescind implementation of the 75 cent discount for rice with light stain which is forfeited under the loan program is "extremely positive for all rice producers", according to Dwight Roberts, USRPA President. USDA will soon schedule meetings with the industry to solicit assistance in developing a method to determine the market discount for stained rice and potentially modify the procedures under which light stain is handled. "We all owe a debt of thanks to Secretary Veneman and the capable program staff at FSA", Roberts said. USRPA assembled a group representing farmers, warehousemen, and buyers of rice, which was able to supply FSA officials with information on the current market handling practices and discounts for light stain.

TEXAS COUNTRY CLEANUP

Texas Country Cleanup is a Pesticide Amnesty Day, sponsored by the Texas Natural Resource Conservation Commission. It will be held at the Texas A&M Research and Extension Center in Beaumont on Saturday, October 12 from 8am – 1pm. Substances that can be dropped off for disposal include agricultural and household wastes (including paint), used oil and filters, batteries, rinsed pesticide containers, pool chemicals, fluorescent bulbs and some lab wastes. Also, you can bring in household mercury thermometers and they will be exchanged for new non-mercury thermometers.

Materials not accepted include radioactive wastes, explosives, biomedical wastes, fertilizers, tires and gas cylinders. The Center is located 6.2 miles west of Major Drive off Hwy 90 on Aggie Drive. Open to all Texas residents free of charge. For more information call 409-752-2741 or Ronnie May with the TNRCC at 512-239-4749.

TEXAS RICE FESTIVAL

The 33rd Annual Texas Rice Festival is scheduled for October 2nd – 5th in the Winnie-Stowell Park, Winnie, TX. The event is held annually the first weekend in October in celebration of the rice harvest and as a tribute to generations of rice farmers and the agricultural industry throughout the state of Texas. The festival features family entertainment in a safe, country atmosphere.

Each year the Festival honors farmers and other citizens who have contributed to the agricultural industry. This year's list includes: Texas Rice Festival Honoree, Pat McGown of Winnie; Pioneer Farmer of the Year, J.H. 'Sonny' Broussard of Nome; Farmer of the Year, T.F. 'Tommy' Jeffcoat of Beaumont; and Young Farmer of the Year, Paul Haidusek of Devers. We are very proud of their outstanding achievements in the field of agriculture, and extend our sincerest congratulations.

Parade Marshall for the 2002 event will be State Representative Allan Ritter of Beaumont, who represents District 21 that includes much of the state's rice acreage. Bring the children and join us for all the great food, live music and family fun this year at the 33rd Annual Texas Rice Festival!

USRPA continued...

sale of U.S. rice increased by one-third during the promotion, and increased sales were sustained for a month or more afterwards.

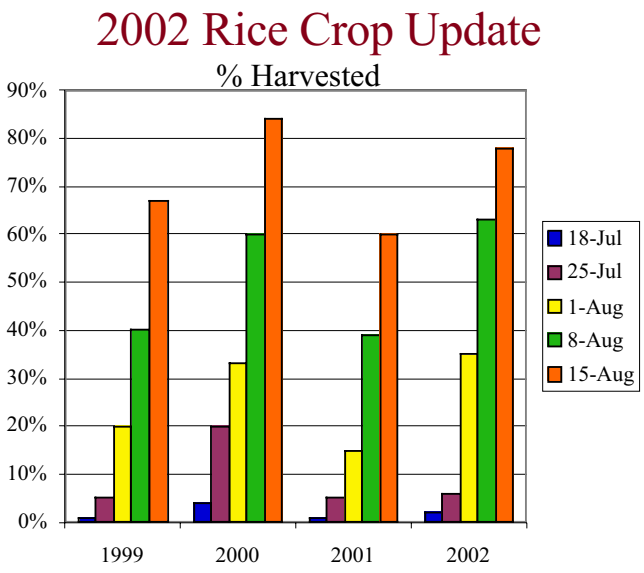
Support from FAS also allowed USRPA to expand markets in Turkey. Through the 'Quality Samples Program' (QSP) a specific variety of U.S. medium grain rice, Baldo, was sent to Turkish mills to be processed and distributed to consumers. This is the type of rice most preferred in this market but only limited quantities are produced in Turkey, Italy and recently in Missouri. The QSP will help to develop a niche for this specialized product and, in turn, allow U.S. producers to obtain a premium price. Mills continue to be built in Turkey for the express purpose of importing this medium grain rough rice.

These are but a few examples of the efforts by USRPA to increase awareness and consumption of quality U.S. grown rice in other countries. Closer to home, market research has indicated a cost effective way to increase rice consumption here in the United States. Studies conducted by USRPA staff reaffirmed that influencing the eating habits of children will affect life-long patterns of consumption. This led to the creation of *Rice Romp*, an interactive educational website for students and teachers.

The idea of *Rice Romp* was presented to the USRPA Board of Directors at the 2000 Rice Outlook Conference in Las Vegas. "The Board was a little bit skeptical at first," recalls Roberts, "but they quickly realized the value of using computer technology to reach children." Once approved by the Board, Roberts created a planning committee that included rice farmers, educators, and others in the rice industry. BlockDot, a highly acclaimed website design company out of Dallas, was chosen for the task. "We brought the team in and flooded them with information about the rice industry," said Roberts, "including production, nutritional information and consumption patterns. After that, we just turned them loose!" For the course outlines provided for teachers, USRPA hired Strategic Studies of Illinois to design lesson plans that would easily fit into science curriculums. The result is a fun, interactive, educational site that encourages children to eat more rice. Over the summer, there were 6000 hits a day on the website, indicating high traffic even when school was not in session. The site will be advertised to teachers throughout the U.S. (not just in rice growing regions) by direct mailings, national education magazines and state conventions.

When talking to Roberts about the USRPA staff, he spoke highly of their combined talents, comparing them to the 1927 New York Yankees! "I encourag producers to get to know our staff better," said Roberts, "and they will learn firsthand the level of dedication and commitment we have for the Texas rice industry."

For more information call 713-974-7423 or see www.riceromp.com or www.usriceproducers.com



Texas A&M University System
Agricultural Research and Extension Center
1509 Aggie Dr.
Beaumont, TX 77713

NONPROFIT
ORG.
U.S. POSTAGE
PAID
BEAUMONT, TX
PERMIT NO. 367