February 2002

Extended Visions January-February 2002

Follow this and additional works at: http://digitalcommons.unl.edu/ardcextendedvisions

Part of the Agriculture Commons

http://digitalcommons.unl.edu/ardcextendedvisions/9

This Article is brought to you for free and open access by the Agricultural Research and Development Center at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Extended Visions Newsletter of ARDC by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.
ARDC Director's Comments

Recently I asked Jon Swanson, an employee at the ARDC, what he thought of a new project we were starting. Jon said, “I figure that if I work here long enough, I will see just about anything and everything.” Jon was referring to a new project at the ARDC involving growing large freshwater prawns (shrimp)...yes, freshwater prawns can grow in Nebraska and may be a way to diversify our agricultural economy.

We are currently raising these prawns in a hog barn that was not being utilized. Technology developed by Professor Jim Rosowski may make this happen. Jim and Keith Gleven (NU Cooperative Extension) have teamed up to get this project off and running. The idea is to utilize the numerous abandoned hog buildings across the state to grow prawns. The prawn's diet can consist of up to 52% soybean meal; hence, the Nebraska Soybean Board has been the main funding partner in the project to date. Keith has estimated that if all the hog barns in the state were converted to prawn production it could take up to 25% of the soybeans grown in Nebraska to feed them. The trick will be to develop management systems and technologies that could make prawn raising a profitable endeavor. This project is indicative of many projects at the ARDC whether we are improving or developing new crops, feedstuffs or industries.

I am delighted that Jon and hopefully the rest of you shake your head at some of the things you see at the ARDC. We are the weird neighbors that put towers in fields and then modify center pivots to go over the towers. We are the crazy neighbors that utilize very productive land for pasture instead of corn and soybean production. We are the ones with the goofy small cattle feedlot pens, funny looking equipment and computers on virtually everything.

We do things differently and do different things than our neighbors. However, we are the ones that develop most of the wheat varieties planted in Nebraska, figured out that the by-products of ethanol production from corn could be valuable feedstuffs, and hopefully will figure out how to profitably grow freshwater prawns in Nebraska.

So Jon (and everyone else), I hope you will continue to be amazed at the weird and different things we try. That is why we exist...to dream, to test, to fail, to learn, and to develop knowledge useful to Nebraskans. Who knows, someday Nebraska may be the leading producer of freshwater prawns in the nation.

Susan Williams

Williams Named Interim District Director

S usan Williams has been named Interim Director of the Southeast Research and Extension Center at the University of Nebraska.

As Interim Director, Williams will focus on several key areas, including working with stake holders, strengthening funding, urban programming, staffing strategies, and staff development.

While she is in the interim position, NU Extension Educator, Lance Brown, will assume some of the projects that Williams worked on. Brown will be working in Saunders County on several major projects, including: Adventures in Mentoring, TeamMates, Leading with Character, Hospital Leadership Program, Master Navigator and E-Commerce. Other programs will be covered with the assistance of several educators from surrounding counties.

Williams is a native of Kansas City, Kansas. She earned her B.S. degree in Home Economics Education and her M.S. degree in Education, School Administration at Kansas State University. She taught home economics for three years and was a high school assistant principal for eight years in Kansas City Kansas Public Schools. Susan joined the University of Nebraska Cooperative Extension in 1983 as an Extension Educator in Custer County. She has served in the Saunders County area since 1985. Susan’s

ARDC Operations at the ARDC

The Animal Science Feedmill at the ARDC consists of two buildings. The south building, built in 1971 is used by the beef feedlot. This building has an overhead mixer in which feed can be mixed and then dropped into a feed truck. There is a roll mill in this facility so that all of the shelled corn used at the feedlot can be processed therein. It also has smaller, two to three ton capacity bins for the storage of bulk dry supplements and a small enclosed area for the storage of sacked supplements. Sitting outside of this building are several polyethylene tanks for the storage of liquid supplements.

-- FEEDMILL OPERATIONS - Continued on Pg. 2
FEEDMILL OPERATIONS - Cont. from Page 1 -------

The larger north building, built in 1975, is used by all units of the Animal Science Department. It has storage capacity for 18,000 bushels of shelled corn in two outside bins. The south part of this mill consists of eleven storage bins with the capacity to hold 400 bushels each. In these bins feed ingredients are stored, such as different kinds of specialty grains, feed meals, wheat middlings, dehydrated pellets, oats, milo and other ingredients used at the mill on a regular basis, but in small amounts.

In the main part of this mill is a hammer mill for the grinding of corn or milo for all of the swine, poultry and dairy diets made at the mill. Also, corn or milo can be fine ground for the making of supplements. There is also a roller mill for the making of carnage feed for cattle, sheep and horses.

There are two ton-mixers plus two smaller premixers in this mill. All the swine and poultry feed are mixed through the same mixer and all the cattle, sheep and horse feeds are mixed through the second ton-mixer. This is done to prevent the cross contamination of different feed additives used in diets. Also the flushing of the mixers with 200 to 300 lbs of ground corn between the mixing of different diets.

Approximately 300 tons of feed are mixed through this north mill monthly. About 250 tons are bulk and 50 tons sacked. Fifty to sixty different ingredients are kept at this mill ranging from corn and soybean meal which are used in feeds for all units to fish meal, dried whey, urea, feather meal, trace minerals and oyster shell used only in a few diets. Accurate records of feed mixed are maintained for billing purposes and an up-to-date drug inventory is kept. All drugs used at this mill fall under FDA jurisdiction and FDA inspectors check the drug inventory log each year. This drug log must be kept up to date daily and must be accurate. The FDA requires all users of drugs to account for the use of each drug from the moment it is received at the mill, how it is used, and what feed it is in when it leaves the mill.

WILLIAMS - Cont. from Page 1 -------

area of specialization is in Human Development and Community Development. She is currently working on her PhD in Leadership at UNL.

The Southeast District is part of the Cooperative Extension Division of NU’s Institute of Agriculture and Natural Resources (IANR). Cooperative Extension specializes in developing and delivering educational programs that impact individuals, their families, their farms, ranches and businesses, and their communities. Extension focuses on: Ag Profitability, Natural Resources and the Environment; Family Life, Healthy, Lifestyles; Youth and Community Vision.

According to Williams, the districts include 21 counties of southeastern Nebraska. There are 108 professional staff, including extension specialists, educators and assistants. Funding sources include federal, state, grant and county dollars.

According to Williams, estimates from the U.S. Bureau of Census for 2000 indicate a population for the district of 1,084,316 persons. That population is equal to approximately 63% of Nebraska’s total population.

“Approximately 138,000 youth or 37% of the state’s total are served by our youth development and 4-H program efforts,” says Williams.

“Agriculture is also very important to the Southeast District, with agricultural products in the 21 counties having an annual market value of more than $2.3 billion (about 24% of Nebraska’s $9.8 billion in agricultural products),” said Williams. The region is home to 15,530 farm operations or 27% of all operations in the state.

Even with such a large farming base, the area is very diverse. The people in Southeast Nebraska reside in urban neighborhoods, suburban neighborhoods, medium-size communities, small towns and on acreages.

According to Williams, in some communities, as many as 40-50% of the workforce commute to work in urban centers. And ten southeastern counties are among the top quarter of all Nebraska counties in number of wage and salary jobs they support.

The research-based information Cooperative Extension provides helps people make more informed decisions on issues that affect their economic, environmental and social well-being.

Alternative Ag Enterprises Satellite Conference

Alternative Agricultural Enterprises is the topic of two satellite conferences to be held this winter. The sessions will be held on Thursday, January 31 and February 7 at 8:00 p.m. CST at the ARDC Research and Education Building.

The January session will provide participants general information on the types of alternative agricultural enterprises in use in Nebraska at this time. Five different enterprises will be showcased. These include a family that markets organic products in various ways, a commercial gardener utilizing wholesale and direct marketing, a family engaged in community supported agriculture, an individual who is developing a grape enterprise and an enterprise showing entertainment farming where pumpkin patches and other items are marketed.

The second session on February 7th will focus more on business operations. Al Prosch, University of Nebraska Pork Central Coordinator, will provide information on goal-setting for those involved in alternative agriculture. A banker will discuss the requirements of people needing loans involved in alternative agriculture. The Nebraska Department of Agriculture will be on hand to provide information on where to find rules and regulations for these types of enterprises.

If you are interested in beginning an alternative agriculture enterprise, these two satellite conferences should help you make decisions. In addition, the second session will be helpful to anyone looking at or currently involved in alternative agriculture.

For more information or to register, call (402)624-8030 or (800)624-8030. The conferences are sponsored by NU Cooperative Extension—a division of the NU Institute of Agriculture and Natural Resources.
**January/February 2002**

**Upcoming Integrated Crop Management Winter Programs**

- Send us an e-mail with "add me to your e-mail list" in the subject line

---

**CROP PRODUCTION DECISION AID COMPUTER SOFTWARE**

**January 30, 2002**

9 am - 4 pm CST

NU Ag Research & Development Center, Near Mead, NE

- Fine-tune nitrogen rate applications
  - Calculate preplant nitrogen rates
  - Estimate nitrogen volatilization losses
  - Estimate nitrate leaching
- Determine nutrients available from manure
- Assess site for phosphorus loss to streams and lakes
- Weed Problem identification
- Determine Cost Effective and Environmentally Sound Herbicide Treatments
- On-line decision worksheets for 1st and 2nd generation European corn borer: How to use them in the context of your field.

- Understand how economic thresholds are developed for insect pests in order to maximize their use.
- Treatment thresholds for insect pests: All thresholds are not created equal. Learn how to recognize and use the different types of treatment thresholds.
- Learn about geospatial applications in crop production.

- How much do weeds cost you? Learn to apply economics to weed management decisions using WebSPT.

**Instructors:**

- Dr. Alex Martin, NU Extension Weed Specialist; Dr. Charles Shapiro, NU Extension Soils Specialist; Dr. Robert Caldwell, NU Extension Cropping Systems Specialist; Dr. Tom Hunt, NU Extension Entomologist; Keith Janvit, NU Extension Weed Management Specialist; Brady Kappler, NU Extension Weed Science Educator; Dr. Maribeth Milner, NU GIS Specialist

---

**SURFACE WATER QUALITY MANAGEMENT: WATERSHED PLANNING, TMDL’S AND HERBICIDE RUNOFF**

**February 7, 2002**

9 am - 4 pm CST

NU Ag Research & Development Center, Near Mead, NE

- Total Maximum Daily Loads (TMDL’s) in Nebraska - Status and Development
- Local Watershed Planning for Surface Water Quality - Planning Process and Implementation Practical Movement in Soil and Water - Chemical and Soil Factors
- Basin Management Practices to Reduce Herbicide Runoff - Practices and Herbicide Trial Results

**Instructors:**

- Paul Brishake, DEQ; Pat O’Brien, DEQ; Paul Sweeney, NCRS; Dr. Steve Comfort, NU Soil Environmental Chemist; Dr. Fred Roeth, NU Extension Weed Specialist; Dr. Thomas Franti, NU Extension Animal Health Specialist

---

**IDENTITY PRESERVED CROPS FOR LIVESTOCK MANAGEMENT**

**February 12, 2002**

9 am - 5 pm CST

NU Ag Research & Development Center, Near Mead, NE

- Understand the dietary needs of swine and cattle and how grains contribute to those needs
- Learn the role that enhanced corn (i.e., high protein, high oil, high oleic acid, high lysine) may have for a pork or beef producer
- Compare the genetics and breeding of specialty grain traits with commodity corn
- Predict the role of soil nitrogen availability on grain traits that impact livestock nutrition

This workshop is designed to bring industry professionals up to speed on the importance of quality traits in corn and soybeans including hybrid varieties and understand how they impact the performance of livestock. A more profitable system for livestock and grain producers can be developed when grain that better meets the nutritional needs of livestock is grown to target that end use. Livestock and grain producers will benefit from understanding how the nutritional needs of the animal are met with specialty and conventional corn. Grain producers will better understand when these specialty varieties have implications on yield potential and crop management.

**Instructors:**

- Dr. Olaf Gramlich, NU Extension Educator; Tom Holman, NU Extension Educator; Steve Johnson, NU Extension Physician; Dr. Greg Hoss, NU Extension Animal Health Specialist; Dr. Thomas Franti, NU Extension Animal Health Specialist

---

**CONCEPTS IN SOIL FERTILITY AND NUTRIENT MANAGEMENT**

**February 14, 2002**

9 am - 4 pm MST

- NU Panhandle Res. & Ext. Center, Scottsbluff, NE

**February 20, 2002**

9 am - 4 pm CST

- NU Ag Research & Development Center, Near Mead, NE

- Understanding soil for maximizing profits
- What is the Right Soil Testing Strategy - What Measurements are Needed? What do they Mean? How can you Optimize Soil Sampling?
- Interpreting Soil Test Results - What do the numbers really mean?
- Fertilizer Recommendations and why they differ
- Emerging issues related to higher yields
- Economics of Fertilizer Use

**Instructors:**

- Dr. Olaf Gramlich, NU Extension Educator; Dr. Greg Hoss, NU Extension Animal Health Specialist; Dr. Robert Wilson, NU Extension Weed Specialist; Dr. Robert Caldwell, NU Extension Cropping Systems Specialist; Dr. Thomas Franti, NU Extension Animal Health Specialist; Dr. Olaf Gramlich, NU Extension Educator; Tom Holman, NU Extension Educator; Steve Johnson, NU Extension Physician; Dr. Greg Hoss, NU Extension Animal Health Specialist; Dr. Thomas Franti, NU Extension Animal Health Specialist

---

**SOYBEAN INSECT MANAGEMENT**

**February 14, 2002**

9 am - 4 pm CST

- LifeLong Learning Center, Norfolk, NE

**February 27, 2002**

9 am - 4 pm CST

- College Park, Grand Island, NE

- Soybean growth and development
- Assessing soybean defoliation
- Soybean tolerance to defoliation
- Economic threshold development and use
- Scouting methods/procedures
- Biological identification and management of common soybean insects in Nebraska

**Instructors:**

- Dr. Olaf Gramlich, NU Extension Educator; Dr. Ron Seymour, NU Extension Entomologist

---

**ALFALFA MANAGEMENT & PEST PROTECTION**

**February 19, 2002**

9 am - 4 pm CST; 8 am - 3 pm MST

- 3 Pest Mgmt.
- 1.25 Nutr. Mgmt.
- 1 Soil & Water

- Lifelong Learning Center, Norfolk, NE
- NU Ag Research & Development Center, Near Mead, NE
- NU Panhandle Res. & Ext. Center, Scottsbluff, NE

**VIA SATELLITE**

- College Park, Grand Island, NE
- NU West Central Res. & Ext. Center, North Platte, NE

- Irrigation Management Sprinkler and Fumon from East to West
- Disease Management in Alfalfa
- Alfalfa Soil Fertility Management Plan
- Understanding Insect Management of Alfalfa
- Developing an Effective Weed Control Program

**Trainers will be available to cover the topics for all areas of the state.**

**Instructors:**

- Keith Steffen, NU Extension Educator; Dr. Bruce Anderson, NU Extension Forage Specialist; Paul Swanson, NU Extension Educator; John Wilson, NU Extension Educator; Steve Geesey, NU Extension Educator; Tom Holman, NU Extension Educator; Dr. Loren Giesler, NU Extension Plant Pathologist; Dr. Blumenhart, NU Extension Soils Specialist; Dr. Charles Shapiro, NU Extension Soils Specialist; Dr. Charles Wurm, NU Extension Soils Specialist; Dr. Thomas Franti, NU Extension Animal Health Specialist; Dr. Maribeth Milner, NU GIS Specialist

---

Send us an e-mail with “add me to your e-mail list” in the subject line and we will let you know about upcoming programs! Let us know what types of programs you are interested in, too.
March 5, 2002  9 am - 4 pm CST  
College Park, Grand Island, NE  
- Understanding herbicide leaching, runoff, biodegradation and absorption  
- Learn how herbicide action is affected by dissipation processes  
- Why glyphosate has no preemergence activity  
- What herbicides impose environmental risks  
- Practical ways to reduce environmental risks while increasing crop safety and weed control  
- After taking this class, one should understand the dynamic processes that affect herbicides in soil and water environments  
Instructor: Dr. Fred Reeth, NU Extension Weed Specialist; Dr. Steve Comfort, NU Extension Soil Environmental Chemist  

March 7, 2002  9 am - 4 pm CST  
NU West Central Res. & Ext. Center, North Platte, NE  
- Hands-on identification of grasses and broadleaf weeds found in Nebraska fields  
- Understand the biology of weeds and how it impacts you  
- Use hands-on techniques to learn how to identify difficult characteristics in grasses and broadleaf weeds  
Instructors: Brady Kaspier, NU Extension Educator; Aaron Waltz, Graduate Student, NU Agronomy & Horticulture Department  

March 12, 2002  9 am - 4 pm CST  
NU Ag Research & Development Center, Near Mead, NE  
- Growth staging of corn and soybean plants  
- Recognizing fertilizer deficiencies  
- Identification of major pests in corn and soybeans  
- Understand economic thresholds of insects  
- How to handle soybean cyst nematodes  
- Weed and disease identification and management  
Instructor: Dr. Dale Flowderday, Agronomist, Dalmar Consulting; Keith Gliewen, NU Extension Educator; Dr. Barb Ogg, NU Extension Educator  

Private Pesticide Applicator Training  
Certification as a private applicator allows farmers to purchase and use restricted use pesticides in their farming operations. Private pesticide applicators with expiring certification and those seeking first-time certification will need to attend certification training sessions in 2002.  
Extension provides the educational program, while the state ag department is responsible for certification. The training costs $10 per person. This year's program includes information on spray booms, drift reduction nozzles, herbicide mixing, sprayer cleanup, time of day for best Roundup applications, protective pesticide clothing and equipment, gray leaf spot and an update on pesticide laws and regulations. Pesticide storage security will be a special emphasis. Private Pesticide Applicator Training will be offered at the ARDC Research and Education Building on the following dates:  
- Monday, January 28 - 1:00 p.m.  
- Thursday, January 31 - 7:00 p.m.  
- Saturday, February 2 - 9:00 a.m.  
- Monday, April 1 - 9:00 a.m.  

This year's Nebraska Soybean Day and Machinery Expo provided soybean growers with information for enhanced profits, yields and practices. The annual expo was held at the Saunders County Fairgrounds in Wahoo in December with 250 in attendance. Presenters included NU researchers and specialists, Nebraska Soybean Board representatives, soybean growers and private industry representatives. Participants also visited with agribusiness companies and viewed new farm equipment. Some of the participants noted that they found soybean diseases and insects, early planting, biodiesel and 8t corn topics beneficial to their operations, as well as interaction with agricultural representatives and other participants. The program was sponsored by Cooperative Extension in NU’s Institute of Agriculture and Natural Resources, the Nebraska Soybean Board, Saunders County Soybean Growers Organization, and private industry representatives.  

This issue of Extended Visions was produced and edited by Deloris Pittman, Marketing & Promotions Manager. Extended Visions is published bimonthly by the University of Nebraska ARDC & NU Cooperative Extension in Saunders County, 1071 County Road G, Room A, Ithaca, Nebraska, 68033-2234. For more information, call 402-624-8000 or 1-800-529-8030. Check out our web site at http://ardc.unl.edu. E-mail dpittman1@unl.edu.

REMEMBRDER  
Upcoming  
4-H dates...  

Have you registered for the 4-H Leaders’ Training Banquet?  
I f you haven’t registered for the 4-H Leaders’ Training Banquet, do so TODAY!!! It will be held on Wednesday, January 18th at Saunders County Extension Office located at the ARDC Research and Education Building. Registration begins at 6:15 p.m. with the meal starting at 6:30 p.m. As always, the evening will feature a scrumptious dinner and sparkling conversation. But there will also be discussion on Quality Assurance, Quiz Bowl/Judging Teams, Conversations, State Fair Changes, and horse level testing. This is also a good time to interact with other leaders and learn new ideas. All 4-H leaders and volunteers are welcome to attend. But you need to sign up today so that we can make adequate preparations.  

Market Beef Weigh -In  
- January 19  
The first 4-H Market Beef weigh-in will beon Saturday, January 19th at the Wahoo Sale Barn from 1:00 p.m. to 3:00 p.m. Your animals do not need to be broke to load at this time.  

Private Pesticide Applicator Training  
C ertification as a private applicator allows farmers to purchase and use restricted use pesticides in their farming operations. Private pesticide applicators with expiring certification and those seeking first-time certification will need to attend certification training sessions in 2002.  
Extension provides the educational program, while the state ag department is responsible for certification. The training costs $10 per person. This year’s program includes information on spray booms, drift reduction nozzles, herbicide mixing, sprayer cleanup, time of day for best Roundup applications, protective pesticide clothing and equipment, gray leaf spot and an update on pesticide laws and regulations. Pesticide storage security will be a special emphasis. Private Pesticide Applicator Training will be offered at the ARDC Research and Education Building on the following dates:  
- Monday, January 28 - 1:00 p.m.  
- Thursday, January 31 - 7:00 p.m.  
- Saturday, February 2 - 9:00 a.m.  
- Monday, April 1 - 9:00 a.m.  

Participants always enjoy looking over exhibits.  

This year’s Nebraska Soybean Day and Machinery Expo provided soybean growers with information for enhanced profits, yields and practices. The annual expo was held at the Saunders County Fairgrounds in Wahoo in December with 250 in attendance. Presenters included NU researchers and specialists, Nebraska Soybean Board representatives, soybean growers and private industry representatives. Participants also visited with agribusiness companies and viewed new farm equipment. Some of the participants noted that they found soybean diseases and insects, early planting, biodiesel and 8t corn topics beneficial to their operations, as well as interaction with agricultural representatives and other participants. The program was sponsored by Cooperative Extension in NU’s Institute of Agriculture and Natural Resources, the Nebraska Soybean Board, Saunders County Soybean Growers Organization, and private industry representatives.  

This issue of Extended Visions was produced and edited by Deloris Pittman, Marketing & Promotions Manager. Extended Visions is published bimonthly by the University of Nebraska ARDC & NU Cooperative Extension in Saunders County, 1071 County Road G, Room A, Ithaca, Nebraska, 68033-2234. For more information, call 402-624-8000 or 1-800-529-8030. Check out our web site at http://ardc.unl.edu. E-mail dpittman1@unl.edu.