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University of Nebraska Lincoln | EXTENDED VISIONS

March/April 2008
Vol. 12, No. 2

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UNL Extension in Saunders County

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ARDC Director's Comments

Final Comments from the Director

by Daniel J Duncan, ARDC Director

The ARDC has a storied history that began in April of 1962 when the University of Nebraska acquired most of what we know as the ARDC from the Federal government. Since its inception, the ARDC has been in a constant state of change. We have seen the demolition of over 150 former Nebraska Ordnance plant buildings, movement of ordnance plant buildings to new locations, and most importantly new facilities have been erected to further our mission. Each year new research projects change the look and face of the ARDC. Each year new Extension programs are developed to serve constantly changing needs. The ARDC is all about change. We drive and embrace change to fulfill our mission and serve the citizens of Nebraska.

While many things have changed at the ARDC, there has been one area that has remained remarkably unchanged. In April, the ARDC will be 46 years old. During this time, only two people have had the title of "Director." Warren Sahs held the Director position for close to 30 years. I have held this position for slightly more than 16 years. It amazes me how quickly 16 years has gone by…I never dreamed I would be at the ARDC this long. I cannot speak for Warren, but I think one of the reasons for our longevity is the fact that the ARDC never gets boring. There are always challenges and opportunities that ward off boredom. But most of all I think the reason we stayed is the ARDC offered the opportunity to see into the future through the eyes of hundreds of extremely talented faculty and staff. What they have accomplished with the resources available at the ARDC is really unbelievable. It makes coming to work fun and exciting…it makes you want to stay.

Recently, we engaged a group of talented colleagues from across the country to perform a review of the ARDC management structure and suggest changes needed to meet future needs. One of the recommendations made was the ARDC needed a full-time Director. I have been a part-time Director for a few years, splitting my time with other duties within the Agricultural Research Division. After much reflection and discussion with IANR Administration, we have concluded it was best if I stepped down as Director of the ARDC. This was a very hard thing to do. It is hard to let go of something that has been a big part of your life for 16 years, but it is time.

I have moved my office to Lincoln and look forward to the new challenges that lie ahead. I will still keep in touch with what is going on at the ARDC but from a much farther distance. This will be my last time to offer comments in Extended Visions as the ARDC Director. The next time you read this column, it will be written by the new Director of the ARDC, whom we hope to name soon. Thanks to everyone for making the past 16 years so enjoyable!!!! ❑

Forestry Activities at ARDC

Forestry articles provided by Jim Brandle,
Professor of Forestry in the UNL School of Natural Resources

Forestry projects at ARDC have a key goal of defining and quantifying the role of woody plants in agricultural landscapes. A primary focus on the influence of field windbreaks on crop production has produced over 30 years of positive yield data from fields on the shelterbelt area. A standard corn, soybean, winter wheat rotation is utilized. Manure is added in July following wheat harvest. The rotation includes 3 to 4 years of alfalfa every four or five years. The success of the shelterbelt program is due in no small part to the dedicated support staff that operate the shelterbelt area. Bruce Bolander is the unit manager and has been with UNL since 1977. Mike Cieslik is the technician at the forestry research area and has been with us since 1985.

Studies indicate that these types of riparian forests are critical to maintaining local bird populations.

More recently studies have focused on the relationships between non-crop areas, particularly windbreaks and forested riparian buffers, and associated predator-prey dynamics. Understanding these relationships facilitates management options to boost conservation of birds and other beneficial species, which in turn serve to suppress insect crop pests. Heidi Puckett, a graduate student in Natural Resources, completed a study on foraging behavior of birds commonly found on farms in Saunders County. She had 12 pairs of sites located at ARDC and in the area just south. She was able to determine that most of the birds foraged primarily within 60 feet of the woody area. Using this information, management plans on farms could enhance the 60 foot strip adjacent to the trees to conserve the diversity of birds and, at the same time, boost biological pest suppression. Reducing the use of herbicides and insecticides within this strip would benefit insect-eating birds and invertebrates, and would contribute to better biological control of crop pests and a reduced need for insecticide applications.

Alex Cunningham, a graduate student in Entomology and Natural Resources, and Juxiang Liu, a graduate student in Statistics and Natural Resources, completed a study on the recovery rates of lady beetles in alfalfa following harvest. They developed a growing degree day model for lady beetles common to eastern Nebraska to facilitate timing of alfalfa harvest. The model takes into account stages of lady beetle development, the ability of the lady beetle to recover following the harvest operation, and the desire to produce high quality alfalfa hay. By following temperature patterns available from the High Plains Climate Center, a producer can determine the best time to harvest high quality hay while maintaining active lady beetle populations for effective aphid control. In addition, a guide to the Lady Beetles of Nebraska (EC-1780) was produced and is available either on line or from the Nebraska Extension Division.

A new project in cooperation with the Department of Entomology will continue the work associated with evaluating

FORESTRY ACTIVITIES - Cont. on P. 2

Dave Werner ARDC Employee of the Year

Dan Duncan, ARDC Director (left) presented Dave Werner with the 2007 ARDC Employee of the Year Award.

Dave Werner has been selected as the recipient of the 2007 Employee of the Year Award at the University of Nebraska Agricultural Research and Development Center near Mead.

Sponsored by the ARDC/UNL Extension in Saunders County Social Committee, fellow employees nominate candidates and supervisors, employees and the social committee then submit scoring forms.

Dave Werner is an Ag Research Tech II at the Farm Operations Unit at the ARDC. A nominator for Werner stated that he has worked at the farm shop for 35 plus years and has

EMPLOYEE OF THE YEAR - Cont. on P. 2

It is the policy of the University of Nebraska-Lincoln not to discriminate on the basis of gender, age, disability, race, color, religion, marital status, veteran's status, national ethnic origin or sexual orientation.

IANR

Organic Cropping Systems at ARDC

In late 2005 a team of seven researchers at UNL representing Agronomy and Horticulture, Entomology, and the School of Natural Resources received a grant from USDA to establish four certified organic research sites around the State. One of those sites is located on 44 acres within the shelterbelt systems at ARDC. We will be focusing on problems encountered during the transition period from a conventional production system to an organic system. One of the main problems is nutrient management. We are following the same rotation (corn, beans, winter wheat) used for our other studies with the added goal of using green manures as a nitrogen source. Weed control is carried out with tillage and cultivation. Timing of early rotary hoe operations is critical.

We are planting several legumes (Berseem clover; AC Green Fix, a vetch; and soybean) immediately following wheat harvest. In addition, we are using dairy manure as a control. Nitrogen levels are determined and the impact of the three treatments on subsequent corn yields are recorded. The first year (summer 2006) we were short of moisture until August and our stands got a late start but by late October we had a decent stand of our cover crops. Nitrogen analysis at the time of corn planting showed as expected that the manure gave the most available nitrogen but while the clover gave corn yields comparable to the manure, corn yields on the vetch plots was slightly lower. Last summer we dropped the vetch and added soybean as a cover crop following wheat. Corn will be planted on these plots this spring and nitrogen levels and corn yields will be determined. A variety trial of potential organic varieties of winter wheat was planted last fall by Steve Baenziger. This spring we will be seeking certification of our wheat and soybean crops.

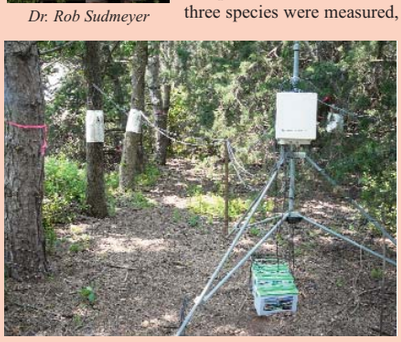
Aerial view of the organic plots 44 acres. Top of the slide is north. Photo Copyright 2008. DigitalGlobe, Inc. All rights reserved.

As part of the study, each site has a local citizen advisory group composed of organic farmers in the area. We have received excellent input from our group of advisors and have held several field days over the last two growing seasons. A third field day will be held in August. If you would like to attend this field day we need to hear from you so that we can be sure to send you an announcement. Send you name and email (or address) to Liz Sarno at esarno2@unl.edu or Jim Brandle at jbrandle@unl.edu. ❑

Down Under Visitor Works at ARDC

Dr. Rob Sudmeyer

During 2007, the School of Natural Resources hosted Dr. Rob Sudmeyer, an agroforester from Esperance, Western Australia. Rob's work in Australia focused on tree/crop interactions and particularly on the competition of windbreaks and crops for soil moisture. He spent much of the summer at ARDC working on a project to determine just how much water trees in a field windbreak use. The first step was to determine water use by the individual species found in the windbreak. In this case, three species were measured, green ash, eastern red cedar and Austrian pine. (Figure 2 - inside view of the windbreak) The windbreak is a mix of all three species and was planted in 1968 by Walt Bagley and has been used for the past 40 years to assess crop benefits from field windbreaks.



View within one of the windbreaks with instruments.

The study clearly indicated that Austrian pine used the most water and green ash the least with eastern red cedar slightly more than green ash. While Rob has returned to Australia, he is continuing to assist us in analyzing the data to determine total water use by the ARDC windbreaks.

Preliminary analysis indicated that on average, the windbreaks at ARDC were using approximately 3800 gallons of water per mile per day. Combined with data on crop water use we hope to develop a total water budget for ARDC windbreak systems.

The study indicates that in terms of the amount of water used, both green ash and eastern red cedar are excellent choices for field windbreaks. Unfortunately green ash is susceptible to Emerald Ash Borer, a new pest making its way toward Nebraska from the east, but eastern red cedar remains one of the best choices for field windbreaks in much of Nebraska. Hackberry and bur oak are good deciduous species for inclusion in windbreaks in eastern Nebraska. ❑

FORESTRY ACTIVITIES - Cont. from P. 1

the advantages of non-crop habitat in agroecosystems. Ken Miwa, a graduate student in Entomology will be studying which pollinating insects are visiting sunflowers in eastern Nebraska and when those visits occur. He will also be looking at nectar sources and quality within sunflower varieties ❑

Windbreaks and Climate Change

Issues related to global climate change remain in the news as we approach another election season. While other issues may dominate the various discussions, how society will address increasing levels of carbon dioxide remain a serious issue. From our agricultural point of view, the increasing use of ethanol from corn and the impacts of increased corn production on farm operations remain of interest to many Nebraskans. But Nebraska farmers have many other options as well.

Windbreaks have been a part of the Nebraska landscape since the early 1940s. While many were removed to make way for irrigation systems, many new single or double row field windbreaks have been planted. Research at the ARDC clearly demonstrates the economic advantages of field windbreaks in corn, soybean and wheat production systems. Over the last 10 years, researchers at ARDC have been evaluating the ability of field and farmstead windbreaks to store carbon in agricultural landscapes and reduce carbon dioxide emissions from reductions in fuel, fertilizers and pesticides while maintaining or increasing profitability.

In cooperation with the National Agroforestry Center biomass estimates of many of Nebraska's tree species have been determined. Emphasis has been on trees grown in shelterbelts rather than under typical forest conditions. Our early research indicated that the amount of biomass of shelterbelt trees was being underestimated by traditional forest based equations for biomass. Sampling of shelterbelt trees indicated that more biomass was located in the canopy of the trees due to their being grown under different light conditions. In a forest situation, many of the lower branches are lost due to low light. This is a plus if you are trying to grow timber where long straight trucks are desirable to produce quality lumber. In a shelterbelt we would like to retain as much of the lower portions of the canopy to provide additional density to the windbreak.

This winter, forestry researcch is concentrating on seven common shrubs grown in Nebraska and used in many farmstead windbreaks. Shrubs are being harvested, measured for diameter and height and then weighed. Data will be used to develop better estimates of shrub biomass for use in carbon storage projects.

Table 1. Carbon storage and carbon dioxide emission reductions by typical field and farmstead windbreaks in Eastern Nebraska.

Type of windbreak	carbon stored (tons)	carbon dioxide equivalent1 (tons)	Reduction in emissions[2] (tons)
Field windbreak[3,4]	8.7 to 14.7	31.6 to 53.6	10
Farmstead windbreak[5]	5.9	21.3	48.66

1. To convert tons of carbon to equivalent tons of carbon dioxide multiply tons of carbon by 3.65.
2. Reductions in carbon dioxide emissions flow from reductions in fuel use over the 50 year life of the windbreak.
3. A single row eastern red cedar or single row hardwood, windbreak width = 20 feet.
4. To fully protect a 160 acre field requires 2.5 miles of single row windbreaks occupying approximately 4.8 acres or 3% of the land area. Removing 4.8 acres from crop production saves between 2 and 5 gallons per acre of fuel depending on crop. Average annual fuel savings in a corn/soybean/wheat rotation would be 17.7 gallons of fuel, reducing carbon dioxide emissions by 400 pounds of carbon dioxide per year for 50 years.
5. Four row windbreak: 25% hardwoods; 50 conifers; 25 shrubs, with a length of 800 feet.
6. Based on a 15% savings in fuel (natural gas or propane) use for the protection of the farmstead. ❑

University of Nebraska Lincoln EXTENSION

Know how. Know now.

UNL Extension offers a variety of programs that are of great value to Nebraskans. Here is this edition's UNL Extension "Know how. Know now." quick fact...

*** Nebraskans have benefited from UNL Extension horticulture expertise, resulting in faster and more accurate plant diagnostics, through the *Hort Update* Newsletter. A survey of users indicates this newsletter has increased their knowledge of sustainable landscaping practices, integrated pest management (IPM) techniques, and changed their attitudes that will allow them to implement the new strategies they have learned.** ❑

About the People

Bruce Bolander

Bruce Bolander is the Unit Manager of the Forestry research area at the ARDC. He also helps maintain the research area at the Horning Farm in the Plattsmouth area for forestry-related research. Bruce has worked at the ARDC since 1977 and has a Bachelor's Degree from Kansas State University. He and his wife, Debbie, live near Greenwood. They have one son and one daughter.

Mike Cieslik

Mike Cieslik, Ag Research Technician, also assists with research projects at both the ARDC and the Horning Farm. He assists with equipment, field records, planting, spraying and other various duties. He has worked at the ARDC since 1985 and holds a Bachelor's Degree in Animal Science from the University of Nebraska-Lincoln. He and his wife, Marsha, live near Weston and have two sons

Jim Brandle is a professor of forestry in the School of Natural Resources and conducts forestry research at the ARDC.

His main research emphasis is the role of woody plants in agricultural systems, particularly windbreaks and their effects on all aspects of crop production. One part has to do with how windbreaks and shelterbelts work. The other major components focus on the economic value of various forms of shelter and the role that windbreaks play in maintaining biodiversity on our farms and ranches.

Jim Brandle, PhD and a student conduct research on the effects that windbreaks have on soybeans.

Key projects involve research into the physics, or the mechanisms, of woody plant shelter and an increasing emphasis on the economic benefits of shelter, especially crop response. These studies are being pursued in cooperation with colleagues at Iowa State University and the U.S. Forest Service.

Brandle received his bachelor's in botany from the University of Tennessee in 1966 and his master's and doctorate in forestry from the University of Missouri in 1970 and 1974, respectively. ❑

Eating For a Healthy Heart

by Casey Campbell, RD

Now that Valentine's Day has passed you may look around the room and see remnants of pink and red wrapped chocolates and candy hearts. You may smile when you think of the romantic dinner you shared with your someone special. However, how many of you really took the time to think of your own heart? How many of you truly love YOUR own heart, too?

This question may seem strange, but according to the Center for Disease Control, heart disease is the number one cause of death and disability in the United States. In fact, almost 700,000 Americans die of heart disease every year! The scary thing is most of us don't have any idea about the condition of our own hearts. Furthermore, most of us have no clue when it comes to eating for a healthy heart. However, our hearts are truly in our own hands, and it seems imperative that we do something before we become part of this devastating trend.

With all the confusing medical and nutrition advice, it can seem overwhelming and impossible to make positive choices. For instance, how many times do you hear that the way to go is a low carbohydrate, high protein diet? Or, nope, it is actually important to eat plenty of grains, but fat is what is really important. Or, you cannot eat after seven pm or nope, you have to eat every two to three hours! All of these messages seem to contradict themselves and can leave our heads spinning! Below are a few easy tips that I have put together to help you care for your heart. All of them have been backed up by scientific research and are known to make a difference!

1. Consume a diet rich in fruits, vegetables and whole grains: According to the recommendations set fourth by MyPyramid, the average adult should aim to consume at least 2 cups of fruit and 3 cups of vegetables every day. This may seem like a lot at first; however, by visiting www.mypyramid.gov you can access a lot of easy tips and ideas for increasing your daily consumption! Secondly, it is imperative that we consume a diet rich in whole grains. This can be really confusing, especially when it comes to figuring out if something is truly a whole grain. For instance, we can buy white, wheat, 7 grain and 12 grain breads and that is just the beginning! However, all you have to do is look at the first ingredient on the nutrition facts label. If it contains the words whole wheat, whole oats, whole rye, wild rice or brown rice, you can be assured that you are consuming a whole grain.

2. Know your fats: Fat is another topic that can be extremely confusing; however, there are a few things that you need to know. First, there are two main types of fats (for simplicity) saturated and unsaturated. When you think of the word saturated look at the first three letters. If you "sat" all day long that would be bad, so this is your bad fat. Saturated fat is found in food sources like beef, chicken, whole milk and butter. Unsaturated fat, on the other hand, is our good fat. This is found is olive oil, salmon and walnuts. Another great resource for more information is www.americanheart.com.

3. Watch your salt intake: Even if you don't touch the salt shaker, you may still be consuming too much salt due to your food

EATING FOR A HEALTHY HEART - Cont. on P. 4

Casey Campbell is a Registered Dietitian with the Nutrition Education Program in Dodge, Saunders and Washington Counties. The Nutrition Education Program (NEP) is sponsored by the University of Nebraska, Extension and the Nebraska Department of Health and Human Services. NEP is a program designed to teach nutrition education to those on food stamps or those who qualify. If you think you or your family may qualify for NEP and are interested in free nutrition education, please call Casey at (402) 624-8022.

Calendar of Events

4-H Beef Weigh In
Mar. 15
1:00 - 3:00 p.m.
at the
Wahoo Sale Barn

March

10	4-H Shooting Sports Training	6:30-8:00pm
10	4-H Project Fair	6:30-8:00 pm
11	NSFGPP Annual Meeting/Program	9:00-3:00
11	25x25 Tour	12:00-5:00
11	Train the Trainer	7:00-9:00pm
12	Unit Managers Meeting	1:00-3:00
15	4-H Public Speaking Clinic	8:30-11:30
17	Field Scout Training for Pest Managers	8:00-5:00
17	4-H Shooting Sports Training	6:30-8:00pm
18	NE Forestry Service Tree Care Workshop	8:00-3:30
18	Sub District Conference Meeting	12:00-5:00
20	Nitrogen Management Training	7:00-9:00 pm

April

1	Private Pesticide Applicator Training	1:00-4:00
10	Youth Election Seminar	8:00-4:00
12	UNL Bull Sale - East Campus	1:00
24	Nebraska Federal Women's Council	8:00-3:30
28	4-H Public Speaking Contest	6:30-10:00pm

May

13	Field Scout Training for Pest Managers	8:00-5:00
14	Unit Managers Meeting	1:00-3:00
19	Co-Product Storage and Utilization	9:00-6:00
20	Co-Product Storage and Utilization	8:00-1:00

EMPLOYEE OF THE YEAR - Cont. from P. 1

always conveyed a positive attitude towards fellow employees.

Werner and his wife, Jan, live near Wahoo. They have three sons and a daughter.

In addition to receiving a plaque, Werner was also honored with prizes solicited and organized by the ARDC/UNL Extension in Saunders County Social Committee. This includes: 2 one-day passes to the Champions Club, $50 gift certificate to the UNL Dairy Store;$20 gift certificate to the Barn Door restaurant and 18 holes of golf with cart for four people at the Hilltop Country Club, and recognition on a plaque to be displayed indefinitely at the ARDC August N. Christenson Research and Education Building.

Also nominated were, Cheryl Sheary (shown above with Dan Duncan) and Doug Watson (not pictured.).

Also nominated were Cheryl Sheary and Doug Watson. ❑

4-H Summer Workshops Taking Shape – A Sneak Peak!

by Karna Dam, UNL Extension Educator

Exciting things are happening in Saunders County. Kicking off the workshop schedule this year will be the **4-H Speech Contest Clinic on Saturday, March 15th**. The clinic will be held at the ARDC near Mead and will be from 8:30 a.m. – 11:30 a.m.. This clinic is open to any 4-H member who would like to improve their speaking skills. Participants will learn about selecting a topic for their speech and basic fundamentals of a good speech. They will also learn techniques in delivery and tips on preparing for the contest. Each participant will have the opportunity to go home with at least an outline for a speech. **This will be an excellent opportunity for new or inexperienced speakers to gain confidence before the contest which will be held on Monday, April 28th.**

June will be packed full of 4-H fun with a variety of workshops available to 4-Hers. The excitement surrounding the new technology of GPS and personal navigation systems is increasing in popularity. Youth attending the **GPS workshop on June 17th** (9:00 – 3:00) will participate in activities to understand the history of Navigation, need for compasses, build their own compasses, read and find bearings and receive basic orienteering skills. In addition, participants will learn about GPS technology, the responsibility of using such technology,

4-H SUMMER WORKSHOPS - Cont. on P. 4

Upcoming Ag Training and Workshops

At the Saunders County Extension Office at the ARDC August. N. Christenson Research & Education Bldg.

Extension continues to offer training opportunities for ag producers and professionals. Contact us at (800)529-8030 to register or for more fees, pre-registration deadlines, and other details on any of the programs or training sessions listed in this article. **Or log onto the "What's New" link at http://ardc.unl.edu**.

Landlords and tenants attended the recent Farmland Lease Agreements workshop at the ARDC..

***NSFGPP On-Farm Research Update** ** Mar. 11 * 9-3:00 p.m.*
Corn and soybean growers are invited to attend the Nebraska Soybean and Feed Grains Profitability Project on-farm research update. Producers will obtain valuable crop production-related information from on-farm research projects conducted on Nebraska farms by Nebraska farmers. Registration is $30 for non-NSFGPP members and includes a copy of the annual on-farm research report, refreshments and noon luncheon.

***Crop Scout Training for Pest Managers** ** Mar. 17 * 9-5:00 p.m.*

***Nitrogen Management Training** ** Mar. 20* * 7-9:00 p.m.*

***Pesticide Applicator Training** ** Apr. 1 * 1-4:00 p.m.*❑

4-H SUMMER WORKSHOPS - Cont. from P. 3

the basic usage of a GPS garmin, and take part in an exploration and scavenger hunt. The entire day is full of hands-on activities to strengthen the lessons taught. Each participant will have their own compass and GPS unit to use during the activities. *Lessons are built for maximum learning and for FUN!*

Ready, Set, SEW will provide hands-on opportunities for those boys and girls wanting to learn sewing skills. June 18 is designed for the beginning sewer in Sewing for Fun. This is a two-part workshop where participants may pick and choose if they want to attend the morning session (9:00 a.m. – 12:00 noon) and make a pillowcase or if they want to attend the afternoon session (1:00 – 3:00) and sew a dirndl skirt. Participants are welcome to participate in both sessions. For the more advanced members, a Clothing Level I workshop is set for June 19 and will be held from 9:00 – 3:00. Participants will be able to make a simple top and a simple bottom. All items made at the workshop will be eligible to be entered at the Saunders County Fair.

On June 25th, those who want to improve their modeling skills will want to attend this day-long workshop. Participants will learn about color, hair care, make-up and face care, nails and general personal care. Former Saunders County 4-Her Jenna Spect will be helping the participants learn what to do when they are modeling in front of the judge and how to prepare and practice. This is a fun day that helps young people gain confidence and poise.

Watch for more details and registration information in the near future. ❑

4-H Reaches BEYOND

Students in Valparaiso and Ceresco recently had the opportunity to experience a "taste" of 4-H. Both schools conduct a BEYOND (Being Enriched Yields Opportunities in New Directions) after-school program. The PTO works to invite programs of enrichment for students in their K-6 program.

In February, Karna Dam, Extension Educator in Saunders County took 4-H to BEYOND. Utilizing materials from the Road to Good Cooking curriculum, students learned about the name and purpose of kitchen utensils. Learning about the different items found in the kitchen helps them to see the need for the different tools. Reading recipes, learning about the measurements and their abbreviations and having hands-on opportunities to practice and implement their knowledge was all part of the program. Each child learned about measuring dry and liquid ingredients the correct way. After learning, they were able to apply that knowledge directly to making a batch of Eskimo Snowball cookies.

"It is always fun working with young people and watching them learn. I was pleased that so many of the kids already spend time in the kitchen cooking. Hopefully, they can take this experience home and share it with their families." Dam said.

4-H will be returning to BEYOND again this spring with programs scheduled at Valparaiso March 18 and May 6, and at Ceresco on March 27 and May 13. During March participants will be learning about the 4-H Aerospace project and will be building mini-rockets. In May, we will be gearing up for planting season with a program on Gardening.. ❑

M.E.A.D

Making Education in Agriculture Different

Ag Science Courses Gear Up For Spring

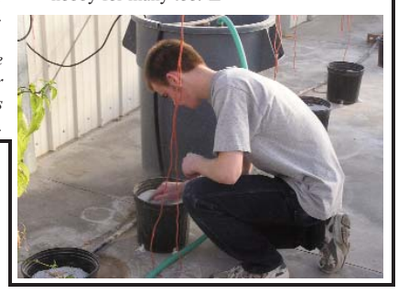
by Jenny Kocian, Ag Educator

Several courses at Mead High School have been gearing up for spring. Students in several courses including Horticulture, Landscape Design, Ag Literacy,

Advanced Ag and Ag Exploratory have been busy both in the classroom and the greenhouse preparing plants for a number of projects. Some of the activities include hydroponic vegetables, annual and perennial plant production, propagation, plant growth trials, along with interior and exterior landscaping projects just to name a few.

The greenhouse serves as an extension of the classroom and is an awesome opportunity for students to gain a host of life long skills along with the exposure of horticulture careers, science and business applications, and fulfills a past time family hobby for many too. ❑

Landscape design students Emily Garcia, Stephanie Fredrickson, and Sam Evans transplant geranium cuttings in the greenhouse.



Tim Hickman prepares the hydroponics system for cucumbers and tomatoes during horticulture.

EATING FOR A HEALTHY HEART - Cont. from P. 3

choices. The American Heart Association recommends that you try and limit your sodium intake to less than 2,300 milligrams a day. To do this, try and eat a diet rich in fresh, frozen or low sodium canned fruits and vegetables, limit your intake of salty snacks such as chips, pretzels and salted nuts, use unsalted broths and try using spices and herbs instead of salt when adding flavor to dishes.

4. Eat at regular intervals throughout the day: It is true that eating small meals throughout the day is a good thing. By eating small, healthy meals, you are less likely to overeat at meals. You also keep your metabolism running on high. Try having three small, healthy meals and two snacks every day.

5. Seek the advice of a Registered Dietitian: With all the confusing nutrition information out there, one person you can count on to be your nutrition expert is the Registered Dietitian. For help with nutrition information, plus to find out more ways you can eat for a healthy heart, visit www. eatrightnebraska.org to find a dietitian in your area. ❑

Get Your Green Thumb Ready!

Creating a Horticulture Paradise Series

March 11- Diseases of Trees, Laurie Stepanek
March 18- Small Fruit Selections for Eastern Nebraska, Vaughn Hammond
Time: 7-9 p.m.
Location: UNL Extension, 1206 W. 23rd Street, Fremont.
Pre-registration requested for these free programs, but is not required. For more information contact Sarah Browning, (800) 830-4855. ❑

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