### neighbors

**SDSU Extension Wheat Walks June 11-12** 

BROOKINGS — SDSU Extension will host Wheat Walks in the Delmont and Winner areas June 11 and at the Dakota Lakes Research Farm and the Gettysburg area on June 12.

The drought and cool spring created significant challenges for winter wheat producers. The goal of these educational events is to help optimize the wheat producers have in place and effectively manage the crop in the future. Winter wheat producers may find these walks to be of particular interest as some SDSU Winter Wheat CPT plots have been abandoned and it is unsure how many Variety Plot Tours will be held

SDSU Extension Agronomy Field and State Specialists will be on hand at each location, providing expertise in plant pathology, weed control, entomology, soil fertility and agronomic information. Each specialist will give a brief presentation, followed by time for discussion and questions. Those attending are welcome to bring samples from their fields for the agronomists to assess. CCA credits have been applied for.

Area agribusinesses have agreed to sponsor the Wheat Walks and there will be no charge to attend. Those attending will receive several Extension publications, including the "iGrow Wheat - Best Management Practices for Wheat Production in South Dakota and the "Crop Protection Guide-Wheat," as long as the supply lasts. Refreshments will be provided.

Wheat Walk dates, times, locations and sponsors:

• June 11 at 9:30 a.m. CDT — Agland Coop, 2 miles south and 3 miles west of Delmont or 5 miles south and 6 miles east of Armour. Sponsored

• June 11 at 2:30 p.m. CDT - Jorgensen Farm, from Winner, 8.5 miles north on N County Road, 2.5 miles west, 4 miles north and 0.5 miles west. Also 1 mile east, 1 mile north and 0.5 miles west of the Ideal, SD Post Office. Sponsored by Winner Seed, Simplot Soil Builders and Coun-

• June 12 at 9:30 a.m. CDT — Dakota Lakes Research Farm, 17 miles east of Pierre on S.D. Highway 34, sponsored by AgriPro Wheat. June 12 at 2:30 p.m. CDT — Robbenault Farm, from the junction of S.D. Highway 83 and 212, 5 miles west of Gettysburg, go 1 mile south on 305th Ave. Sponsored by Northern Plains Čoop.

For more information, visit http://igrow.org/ and check the calendar and upcoming events or call 842-1267.

#### **Conservation Stewardship Program Signup**

LINCOLN, Neb. — Nebraska landowners and operators have until June 14 to sign up for the Conservation Stewardship Program (CSP) at their local USDA Natural Resources Conservation Service (NRCS) office. The Conservation Stewardship Program is a voluntary program that encourages agricultural and forestry producers to address resource concerns by undertaking conservation activities and improving and maintaining existing conservation systems.

CSP provides financial and technical assistance to help farmers and ranchers conserve and enhance soil, water, air, and related natural resources on their land. Applications are accepted on a continuous basis. However, only applications received by the June 14 cutoff date will be considered for the current ranking and funding period.

Craig Derickson, NRCS state conservationist in Nebraska, encourages Nebraska farmers and ranchers to not miss out on this opportu-

"The Conservation Stewardship Program is unique in how NRCS provides conservation program payments. CSP participants will receive an annual land use payment for the environmental benefits they produce on their operations. Under CSP, participants are paid for conservation performance - the higher the operational performance, the higher their payment," Derickson said.

According to Derickson, CSP has been a very successful program for Nebraska's farmers and ranchers. More than 2,000 CSP contracts occur in all 93 counties and cover 3.9 million acres in Nebraska.

"CSP is popular in Nebraska because farmers and ranchers don't have to take land out of production to participate. CSP helps conserve natural resources on working lands. Keeping land in production while protecting natural resources creates a win-win for all Nebraskans. CSP makes it possible to produce crops and livestock while also improving water quality, soil health and wildlife habitat," Derickson said.

CSP is available statewide to individual landowners, legal entities, and Indian tribes. Eligible land includes cropland, grassland, prairie, improved pastureland, non-industrial private forestland, and agricultural land under the jurisdiction of an Indian tribe. Contracts are set at five years and include all the land controlled by an operator.

For more information about CSP, including eligibility requirements and a self-screening checklist to see if CSP is right for your operation, producers can visit http://www.ne.nrcs.usda.gov/programs/ĈSP.html or stop by their local NRCS field office.

### **Stewardship Program Apps Due June 14**

HURON — The Natural Resources Conservation Service's Conservation Stewardship Program (CSP) will provide about \$175 million in funding for up to 12.6 million additional acres enrollment this

Although applications are accepted all year, farmers, ranchers and forestland owners interested in CSP should submit applications by June 14 to their local NRCS office to ensure they are considered for this year's funding. The deadline was extended from May 31.

"CSP is different than our other financial assistance programs," said NRCS Acting Chief Jason Weller. "It offers payments to producers who maintain a high level of conservation on their land and agree to adopt higher levels of stewardship. It's about conservation activities on the entire operation, focusing on multiple resource

South Dakota CSP Coordinator Jessica Michalski states "CSP has been an extremely successful program in South Dakota. Many South Dakota producers are interested in continuing a tradition of improving our states' natural resources and increasing productivity of their operations by enrolling in this voluntary program.

Playing a significant part in conserving and improving our nation's resources, producers enrolled an additional 12.1 million acres in CSP last year, bringing the total number of acres to more than 50 million. South Dakota currently has more than 1,100 contracts totaling more than 2.9 million acres.

Many of the CSP enhancements improve soil quality, which helps land become more resilient to extreme weather. Several other improvements are available for producers, including intensive rota-

tional grazing, intercropping and wildlife friendly fencing. Because of the extreme weather in 2012, more interest and participation in the cover crop enhancements is expected this year, ac-

cording to NRCS experts. A CSP self-screening checklist is available to help producers determine if the program is suitable for their operation. The checklist highlights basic information about CSP eligibility requirements,

stewardship threshold requirements and payment types. For the checklist and additional information, visit the CSP website (http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/csp/, visit your local USDA NRCS office, or contact South Dakota CSP Coordinator Jessica Michalski at (605) 532-3686



PHOTO: RITA BRHFI

For small areas, sprinklers can provide some much needed small-scale irrigation to vulnerable parts of a dryland farm such as a vegetable crop raised to be sold at the farmers market or even a patch of pasture seeded specifically to extend the grazing season.

# **Best Small Irrigation Systems**

**BY RITA BRHEL** 

P&D Correspondent

Unlike other portions of the Corn and Soybean Belt, not much of the Yankton area has a readily available supply of water for widespread crop irrigation. Center pivots and pipe irrigation are not a common sight around here, and most farmers are intimately aware of the challenges of raising dryland.

But while field irrigation may not be practical, there are options for producers who want to provide extra water to a small plot of land, be it a vegetable garden or seeded pasture. And with last summer's hot, dry weather still fresh in the mind, small-scale irrigation may be the security blanket some farmers need.

"Often when people are making decisions on their farm, they are rolling the dice between money, time, and quality," said Chris Blanchard, a consultant with Flying Rutabaga Works in Decorah, Iowa. "Overall, people who have solid irrigation systems have solid busi-

Blanchard didn't set out to be an expert on small-scale irrigation when he joined the team at the Deep Springs College Farm in Novato, Calif., in 1990, but the farm's location in the high desert made watering the crops efficiently an art form.

"We watered constantly. The four years I was there, it rained twice," he said.

Through his post-graduate career in farming, Blanchard has worked on or managed eight farms. He bought land near Decorah, Iowa, in 2000 to start Rock Spring Farm, which has grown rapidly through the years. Annual gross revenue for that first year was less than \$50,000, and today, the farm pulls in roughly \$300,000 a year in income. Flying Rutabaga Works is a side project through which he provides assistance to producers in business planning, farm management, and marketing.

"Most of the time, having an irrigation sys-

tem is managing the fact that it may not rain as much or when you want it to," Blanchard

There are a lot of factors to keep in mind, such the average precipitation amount, current climate trends which now includes a drought situation, soil type, and the crop's water usage. In addition, while too little water will obviously affect crop yield and quality, too much water will promote disease and weeds. Watering also needs to promote root growth downward into the soil profile.

Blanchard's rule of thumb is to make sure that there is one acre-inch of water getting onto the crop every week, whether in rain or irrigation water. A sandy soil may require more than this, and a clay soil may need less unless well drained, but for the most part, this advice works to ensure the maximum yield without tipping the balance toward overwatering. He told of one client who followed this guideline and reaped triple his average annual yield.

"Providing water is saying to that plant, let's make babies," Blanchard said. "Your yield is going to be directly correlated with how much water is getting on there.

Field irrigation systems are constructed to be as efficient as possible because of the area they cover, but small-scale models are typically more labor intensive to achieve the best efficiency ratings. For example, many vegetable growers like drip tape-hoses with holes-to apply water to the soil and reduce water sitting on foliage, which promotes fungal infections, but drip tape requires a great deal of labor to move and tends to wear quicklywithin one to three years depending on whether placed above- or below-ground. Blanchard says that while drip tape is inexpensive, its best use is for backyard gardens and that they are simply not practical for producers who are counting on the crops for their liveli-

"I started farming out west, where sprin-

klers have a really bad rap, but I really like overhead irrigation for a lot of reasons," Blan-

Sprinklers are inexpensive and far less labor intensive than any other small-scale irrigation system, but they are not fool-proof.

"The real issue is that if you don't set the irrigation up right, you got some wet spots and some dry spots," Blanchard said. "If you run it at too low of a pressure, you end up with really large droplets and they'll shatter the soil surface. If you run at too high a pressure, you end up with a fine mist that mostly evaporates before it can get to the plants.

The biggest misconception of small-scale irrigation is that any common sprinkler and hose will do. The water pressure is the key ingredient in using sprinklers as a reliable irrigation tool. It not only affects the water droplet size but also the wetting pattern and the throw of the water from the sprinkler, Blanchard says. Hose size and a pressure gauge are

"It's not enough to run garden hoses a cou-ple hundred feet out into the field. You're just going to get a dribble out of that," Blanchard added. "Those engineers, they put a lot of work into making sure those sprinklers get enough water in the right area, but if you don't have enough pressure, it's not going to work

Small-scale irrigation may not be for everyone, but it does offer an option to producers looking for ways to drought-proof portions of their dryland farms.

"It's important that people are really evaluating their decisions," Blanchard said. "We've been through a lot. This past year was a really rough year on the farm. It's easy to keep applying our resources to things right in front of usthe newest and brightest ideas-but it's important that we keep investing toward our

### Opinion:

## The Shame That Is Global Food Waste

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BY RITA BRHEL

P&D Correspondent

Globally, agriculture produces about 4.5 billion tons of food each year. That should be more than enough for our world's population. So, why is there still hunger and famine? And why does food cost as much as it does? Because an estimated 50 percent of that food goes to waste, according to the Institution of Mechanical Engineers.

Half of the food grown each year is lost in inefficient processes in harvesting, storage, and transportation before it even gets in front of the consumer. Think about how much food is wasted by us as consumers! I have cleaned out my fridge more than a couple times and found moldy leftovers way in the back.

As a society, we are throwing out great amounts of food without a second thought until news comes in of higher food prices and famine in Africa and then we start pointing fingers. But the fault actually lies with us. We have allowed this to continue on without informing ourselves of what really goes on in our food infrastructure.

A report by the Institution of Mechanical Engineers finds that while fully developed countries like the United States tend to have the most efficient farming practices and better transport, storage, and processing facilities to ensure less waste, there are certain char-



BRHEL

markets will reject entire crops of edible fruit and vegetables because they do not meet consumer expectations for physical standards. Globally, 1.75 billion tons of food waste is generated each year in this way. And then of the produce that does appear in the supermarket, 30 to 50 percent of what is purchased will end up

wasted by the purchaser anyway. Food waste, in the reality of hunger and famine around the world, is one thing. Wasting inputs, like fertilizer and herbicide and fossil fuels, is another. The Institution reports that nearly half of the arable land surface in the world is being used for agricultural production, but that any further increase in farming area will have a negative impact on the world's natural ecosystems. While technologies are able to expand crop yields without requiring additional land, the reality is that increases in ani-

mal-based production will require more land use. It just will. Two and one-half acres of land can produce enough rice or potatoes to feed 20 people each year. However, the same area can only produce enough lamb or beef to feed one or two people each year.

Another huge waste is in water usage. Every year, 100 quadrillion (that's what comes after trillion) gallons of water is used by humans globally. About 70 percent of this water usage is used by agriculture, and 40 percent of the global food supply comes from irrigated land. It's predicted that total water usage-agricultural and not-will triple by mid-century as our worldwide population climbs toward its estimated 2075 mark of 9 million. No doubt that agricultural water waste will also climb, as overhead sprinkler-type systems prove not only to be significantly cheaper to install but also quite a bit more inefficient than drip or trickle irrigation that helps prevent evaporation during delivery. In addition, meat production uses 50 times more water than crops, mostly in

Realistically, there can't be no food waste. Even in the most efficient systems, there is still waste at least part of the time. But, according to the Institution, better practices and more emphasis on technologies that increase efficiencies can reduce current annual food waste by at least 60 percent. That's almost 2 billion tons less food waste each year at the current rate. But as with anything, it would require a shifting of attention and funding and human resources, and as with anything, changing our society's focus takes time and maybe a crisis. Let's hope it doesn't get to that point.

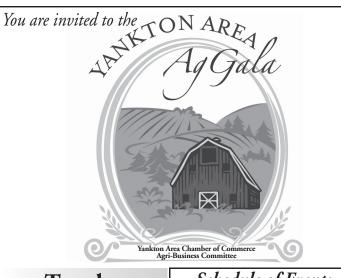


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Tuesday, June 18, 2013

Riverfront Event Center 121 W. 3rd St., Yankton Catered by Hy-Vee

Schedule of Events 5:00 p.m. Social Hour 5:30 p.m. Wine/Cheese Tasting

Variety of Exhibitors 6:45 p.m. Ribeye Steak Dinner 7:30 p.m. Program Keynote Speaker: **Amy Kirk** Master of Ceremonies:

**Matt Michels** 

Tickets and more information is available by calling the Yankton Area Chamber of Commerce at 665-3636 or online at www.yanktonsd.com/aggala. Deadline for tickets - June 11
Proceeds from the auction will go to benefit the P.A.Y. scholarship fund.