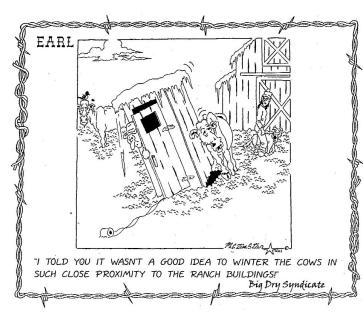
PRESS&DAKOTAN

Saturday, 2.9.13 ON THE WEB: www.yankton.net NEWS DEPARTMENT: news@yankton.net



'Managing Change Seminar' Series To Begin

BROOKINGS - SDSU Extension Economics will host a five-week Managing Change seminar series beginning Feb. 12. The series covers a range of topics of interest to agricultural producers, the business community and investors.

The seminars run from noon to 1:30 p.m. CST on the campus of South Dakota State University at Pugsley Hall in room 214. The seminar will also be broadcasted to SDSU Extension Regional Centers; see http://igrow.org/events/ for details on attending at the centers. The series will be available as podcasts after each session.

The seminar agenda includes:

• Feb. 12 — "Grain Market Outlook Strategies," presented by Lisa Elliott, SDSU Extension Commodity Marketing Specialist. This presentation will provide a fundamental outlook by exploring the drivers in

the grain and oilseed markets for 2013.
Feb. 19 — "Tax Talk" presented by Vicki Koch, SDSU Accounting Instructor. As part of National Entrepreneurship Week 2013, this presentation will teach attendees about tax deductible expenses related to small businesses and their Schedule C filings. Topics include: tests for deductibility, issues related to certain deductible expenses, and deductions for home office use.

• Feb. 26 — "Cattle Markets and Risk" presented by Matthew Diersen, SDSU Extension Risk/Business Management Specialist. Diersen will discuss market fundamentals, the long-range outlook, basis trends and volatility levels with the intent of helping cattle producers make sound risk management decisions.

• March 6 — "Macroeconomic Outlook" presented by George Lan-gelett, SDSU Extension Small Business Specialist. Langelett will discuss the fundamentals of the U.S. economy, both effects of recent history and near term outlook, with the intent of helping local businesses make sound decisions based on the health of our macro economy.

• March 13 — "Ag Land Rental Markets" presented by Burton Pflueger, SDSU Extension Agribusiness Management Specialist. Results from the SDSU Farm Real Estate Market Survey will be presented. Discussion will consider factors influencing market decisions and impacting farmland markets.

I-29 Dairy Conference Feb. 27-28 In S.F.

BROOKINGS - SDSU Extension together with the I-29 Dairy Outreach Consortium will host the eighth annual I-29 Dairy Conference Feb. 27-28 in Sioux Falls.

The mission of this multi-state event is to prepare and develop a sustainable dairy community. In addition to dairy producers from South Dakota, producers from North Dakota, Minnesota, Iowa and Nebraska are expected to attend, along with allied industry personnel.

The conference will be held at the Best Western Ramkota Inn Conference Center, 3200 West Maple Street, Sioux Falls, S.D. (Exit 81 off I-29 South of I-90).

To make a lodging reservation at Ramkota Inn, call 605-336-0650. Reserve your room by Feb. 18.

To view program details and register visit http://igrow.org/events/i-29-dairy-conference/.

Livestock Production Forums To Be Offered

PIERRE — The South Dakota Department of Agriculture (SDDA) and South Dakota State University (SDSU) Extension will hold forums across the state to discuss South Dakota's vision for livestock production this winter.

"South Dakota has progressive, forward-thinking entrepreneurs ie exciting

A Changing Nature

Mediating Climate Change's Effects on Crop Insect Pests

BY RITA BRHEL P&D Correspondent

The jury is still out as to whether the extreme drought conditions that continue to grip more than half of the country are the result of global climate change, but the majority of scientists do believe that a major shift in weather around the world is occurring.

Among the believed effects of this phenomenon will be increased stress on agricultural production. According to his research, Washington State University entomologist David Crowder finds that climate change is expected to contribute to both habitat and species loss globally. But, surprisingly, the weather change should result in an increase in agricultural productivity in the Yankton area and much of the upper half of the Northern Hemisphere. The same can't be said for the rest of the world. To compound the problem, due both to changing ecosystems and growing urbanization, arable land worldwide is decreasing.

At the same time, the demand on agricultural production will rise sharply as population growth continues, Crowder says. While the population in developed nations, like the United States and much of Eastern Europe, will remain steady, others will be gaining.

"A lot of human population growth that is accelerating climate change is in less developed countries in Asia and Africa," said Crowder, whose research centers on insect biodiversity of agricultural systems. This will not only stress agriculture by putting on more demand for food, but also by adding to greenhouse gas production and the climate change effect.

"Obviously, this presents a big problem for the human popula-tion as a whole," Crowder said.

So, human survival isn't just a matter of increasing yields, as many of the technologies to do so — synthesized fertilizer application, for example - also contribute to climate change, he adds.

Specifically, Crowder's research focuses on agricultural insect pests, and like other mostly conventional farming practices, chemical insecticides add to the climate change problem — both through fuel usage of the sprayer as well as changing the cropping ecosystem.

"Člimate change is reducing biodiversity, and some farming practices can promote biodiversity," he said. Ecosystems, and the species that live within them, have an intricate interaction with the climate. Easily forgotten is that the climate also reacts to long-term changes in the ecosystem. For example, 200 years ago, the Yank-



ton area was a prairie as far as the eye could see and the climate was drier. Over the last century, as the landscape turned into mostly row-crop cultivation, so has the climate changed.

Al Dutcher, University of Nebraska state climatologist, said that the Great Plains was once referred to as a grassy desert and that, during the past 30 years, the Upper Midwest has been in an overly wet period.

As cultivation took hold in the heartland, the overall ecosystem of the Great Plains changed and so did the species it contains as well as that species' behavior, Crowder says. He blames agricultural production on increasing insect pest outbreaks in the United States.

"If you're a bug, you might see a field of crops as an all-you-caneat buffet," Crowder said.

His hope is to find farming practices that alter the behavior of insect pests accustomed to cultivation, that lead to increased insecticide use. Crowder considers both conventional and organic cropping systems in his research, seeking out an ecological-economic balance between the two.

Conventional farming practices consist of calendar-based sprays of broad-spectrum insecticides and soil fumigation that kills all insect species it comes in

between the two.

Interestingly, in his research, Crowder finds that conventional pest control doesn't eliminate all insect pests. Rather, it disrupts the natural biodiversity so that while there are fewer insect pests, pathogen incidence rises instead. However, organic methods are not any more effective at protecting biodiversity balance: While organic farming's aim is to preserve predator insects, the result is also more insect pest numbers. However, to organic's credit, there is no negative effect on other forms of biodiversity balance that help to control pathogens as well as enhance natural pollination, soil nutrient cycling, and other natural processes that are harder to achieve in conventional systems.

"Organic increases the number of organisms but does not increase biodiversity more than conventional, but at the same time, there is a more equal proportion of species," Crowder said. "Conventional has the same biodiversity as organic, but the species have fewer numbers and some species are represented much more or much less than others.

Whether conventional or organic, whether using broad-spectrum insecticides or not, what makes insect pest control effective is not how many insects are killed or even certain species or pest insects targeted, but rather what balance of insect predators are achieved for the cropping system, Crowder says. "Not all biodiversity is a good thing," he added. "You really have to understand the interaction of all the species.

PHOTO: RITA BRHEL

says, the goal is for all predator insects to be present in equal abundance: Most cropping systems, whether conventional or organic, have disproportionately higher percentages of one predator insect than others — more than half of the pie chart; the goal is for all insect predators to have an equal piece of the pie.

"It is a more balanced community when everybody is doing their job," Crowder said. "If you have 100 people in a town and 99 are barbers, there are a lot of jobs not getting done."

Most predator insects don't have specific insect pest species that they prey on, he says, but they all have a part in an ecosystem in how the species interact. So, even if one predator insect species is present in large numbers, they interact with the ecosystem differently than if all predator insect species were present in equal numbers.

"In more balanced systems, we see greater numbers of natural enemies." Crowder said.

Furthermore, his research shows that equal proportions of all predator insect species not only increases insect pest mortality but also increases plant biomass, meaning that plants are larger and more productive.

Certain crops are more likely to see an advantage from this biodiversity "evenness," as Crowder defines it: Soybean yield would benefit more so than corn. he said. In addition, farms with more crop diversity will tend to achieve biodiversity evenness easier. "It may seem these little shifts of balance aren't important," Crowder concluded, "but they can really move in your favor as far as improvement to your yield."

place," said S.D. Secretary of Agriculture Walt Bones.

All forums are scheduled to begin at 6:30 p.m. local time but are subject to change.

Dates and places for area forums are as follows: • Feb. 25 — Platte Livestock

Opinion

BY RITA BRHEL

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P&D Correspondent

- March 6 Yankton Livestock
 March 7 Sioux Falls Regional
 March 21 Chamberlain Livestock

For more information, contact Sarah Caslin, SDDA Livestock Development Specialist at 605-773-3649 or visit http://sdda.sd.gov.

contact with. Organic farming practices consist of natural pesticides and bio-fumigation that targets specific insect pests but tries to leave insect biodiversity alone. In conventional farming systems, there is a 15 percent increase in yield over organic practices but there is a definitely different environmental impact

herds that took a lifetime to de-

velop, that tribute might be able to

save some poor farm somewhere

where the owner was about ready

why we do this, why we chose this

going particularly difficult on my

parents' ranch, right after selling

off way more livestock than they

Residential Wiring

Thermal Imagery

Commercial Wiring

Repair Work

605.664.0121

At one point, when things were

to call it quits. It reminded us of

profession.

Imagining a pie chart, Crowder

And then, she said, she found

her answer - standing in the mid-

dle of the pasture, watching the

cows and their newborn calves,

the breeze blowing through her

hair, with the wide open sky and

jackrabbit nibbling nearby and the

call of a pheasant in the distance.

She realized that that was why. Be-

meadowlarks flying by, and a

were farmers.

Super Bowl Commercial Captured Farmers' Special Spirit like farming - none other where the lifestyle is so integrated with the business that they become one and the same, none other that ties

people so closely to the earth and nature and God, and she decided: This is worth the sweat and tears and sleepless nights.

There truly is nothing like farming, and thank you, Dodge Ram, for getting that.



700 Burleigh St., Yankton, 665-9204 · www.riverviewreformed.org



It was a good ad. It made you feel proud to be, or to know, a farmer. And I like how at the end, it proudly displayed the FFA logo. Wow, FFA, you got a great sponsor there — a business that certainly is still trying to sell trucks, but that would carry a nonprofit's logo with it during the most-watched-of-all annual television event. That's the Holy Grail for all nonprofits.

It was an ad that dug deep into your heart, into your soul, into the



roots of your

those farm radio legends that stretched well beyond the cab of the combine and became an American icon. It was Harvey's 1978 "God Made a Farmer" speech given at an FFA convention, just as true today as ever, even with comments of tying wool bales, which hardly anyone ever does anymore.

Probably my favorite part was the bit about how a farmer would stop mowing for an hour to splint a songbird's leg. That in all that

gruffness and workaholism, that there is tenderness that transcends capitalism.

Probably best of all, the commercial wasn't funny. It was poignant. It stopped time. It stopped conversation, all eyes turning toward the TV, hands halfway in the chip bag for a refill. And it could almost stop your heart.

Someone notices us — the farmers of America. Someone notices and recognizes and respects us enough to put it on national TV in front of tens of millions of viewers who aren't farmers themselves. Wow.

Yeah, I'd buy a truck from Dodge. I think anyone would after that ad. And it's not because these trucks are better — well, some people would say so - but it's because you really get a sense that this company cares about production agriculture. Way beyond their pocketbook.

We needed that commercial. In this time of drought-stricken yields and producers dispersing whole



