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Spider mites building up in corn

I have begun receiving reports of spider mite populations increasing in south central Nebraska corn. With the possibility of hot dry weather in August, this may become more common, and fields should be watched carefully to determine the need for treatment. Corn is unlikely to benefit from treatment for spider mites after the dent stage.

The economic injury level table (see page 163) accounts for the low value of corn and can be used to help decide whether to treat. This table works for both two-spotted spider mites and Banks grass mites.

The first row refers to the expected value of the crop ($/acre), determined by multiplying the expected yield (bu/acre), by the expected crop price ($/bu). For example, if the expected yield is 200 bu/acre and the expected price is $1.50/bu, then the value per acre is $300.

The decision process involves two steps. First, determine the percentage of leaves infested with mites (an infested leaf has one or more live mites). Compare that number with the first number in the table. If the field average is less than the table value, you don’t need to treat, but should continue to monitor the field. If the field average exceeds the table value, then estimate the percentage of total leaf area damaged by mites. If the field average exceeds the table value, it is likely that treating for spider mites will increase yield above the treatment cost.

Also, note that control costs are a factor in this table. Depending on the product chosen, the critical values may change greatly. For example, under the $300 market value column, the critical value for percent infested leaves varies from 20% if control costs are $10, to 49% if control costs are $25.

Labelled products for spider mite control include dimethoate (several formulations), Comite 6.55EC and Capture 2EC. Dimethoate has performed reasonably well in Nebraska against Banks grass mites, but not two spotted spider mites. If two spotted spider mites are present, either Comite or Capture would provide better control.

For more information see:
- NebGuide G1167, Spider Mite Management in Corn and Soybeans (http://www.ianr.unl.edu/pubs/insects/g1167.htm)
- Managing early season spider mites in corn, June 16 Crop Watch, story by Gary Hein
- Miticide use information; http://www.ianr.unl.edu/ianr/entomol/instabls/spmitecon.htm

Bob Wright
Extension Entomologist
South Central REC

August tours/meetings showcase research and agricultural diversity in Nebraska

Learn about the latest research, discuss current issues, or learn how to implement changes into your operation at upcoming meetings:

Aug. 15-18 Soybean Management Days, four sites (pages 160, 166)
Aug. 16 Dry Bean Field Day, Panhandle REC, Scottsbluff (page 167)
Aug. 17 Biotechnology Field Day, Haskell Ag Lab, Concord (page 166)
Aug. 10 - Sept. 28 Sustainable Agriculture tours, various sites (page 168)
Keith Jarvi, Extension Integrated Pest Management, Haskell Ag Lab: Bean leaf beetles have been reported causing increasing damage in Nebraska soybean fields. Most of these beetles are the new first generation beetles that have been emerging over the last week or so.

Foliage feeding, which may seem heavy now, would still need to reach high levels (35% leaf loss or higher) to justify an insecticide treatment. Be aware that most people tend to greatly overestimate true leaf loss since feeding is concentrated on the upper leaves, while feeding in the mid and lower canopy is usually much less. The vast majority of fields should not need treatment at this time. However, now would be the ideal time to scout for beetles to determine if treatment would be necessary for the next generation of beetles which will begin feeding on pods in about three weeks. For more information on this, see the July 21 Crop Watch.

Terry Gompert, Extension Educator in Knox County: The rains have missed us for the most part. Range and pasture have slowed or stopped to grow. Some cattle producers have run out of pasture to graze. Corn and soybeans are losing yield potential by the day. Some are haying, green chopping, or grazing their corn and considering early weaning calves and/or dry lotting cows.

Gary Hall, Extension Educator in Phelps County: Got a question today about using smutty corn for silage. With all the hail damage we are seeing a lot of smut. In many cases the corn isn’t worth harvesting. Jim Stack, Extension plant pathologist, said it would be fine to use this corn for silage.

Irrigated crops are doing well but the irrigators are certainly getting tired of pumping water. Most rains have avoided our area and irrigation has continued since early June with little or no relief. Hail damaged corn and soybeans continue to create challenges in determining what to do with certain fields.

Ralph Anderson, Extension Educator in Buffalo County: Area crop consultants this week were discussing problems related to uneven and poor kernel set in corn. Some ears may have just a thumbnail sized area at the butt of the ear that is missing kernels. Others may be missing kernels in spots through the length of the ear.

Keith Glewen, Extension Educator in Saunders County: Crops are looking good, given recent timely rains in some areas. Late season precipitation will still be necessary to support the crop to maturity. We are seeing tremendous numbers of bean leaf beetles and some soybean pod mottle virus.
Table I. Economic injury level for the Banks grass mite or twospotted spider mite on corn, based on the percentage of infested leaves per plant and percentage of total leaf area damaged.

<table>
<thead>
<tr>
<th>Control cost per acre</th>
<th>Market value per acre ($)</th>
<th>% Infested leaves per plant / % of total leaf area damaged</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>250 300 350 400 450 500 550 600 650 700</td>
<td></td>
</tr>
<tr>
<td>$5</td>
<td>15/8 12/6 10/5 8/5 7/4 7/3 6/3 5/6 5/3 5/2 4/2</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>29/16 24/13 20/10 17/9 15/8 13/7 12/6 11/6 10/5 9/5 8/4</td>
<td></td>
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<tr>
<td>15</td>
<td>44/23 35/19 29/16 25/13 22/12 20/10 18/9 16/9 15/8 14/7 13/7</td>
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<tr>
<td>20</td>
<td>59/31 47/25 39/21 34/18 29/16 26/14 24/13 21/11 20/10 18/10 17/9</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>74/39 59/31 49/26 42/22 37/20 33/17 29/16 27/14 25/13 23/12 21/11</td>
<td></td>
</tr>
</tbody>
</table>

Source: Texas Agricultural Extension Service.

Timely rains continue to aid eastern Nebraska while drought worsens in southwest areas

Drought conditions across the state are varied in their coverage and intensity. Episodic heavy rains from mid-June to mid-July alleviated severe to extreme drought conditions across eastern Nebraska. These same weather patterns, however, have contributed to drought intensification across portions of central, southwest, south central, and the southern panhandle of Nebraska.

The latest satellite imagery (July 30) indicates that severe vegetative stress conditions are most significant in southwest Nebraska, west of McCook and south of North Platte. There are additional isolated pockets along the Kansas-Nebraska border from McCook to Fairbury, northeast of Grand Island, west-northwest of Columbus, and across the southern third of the Panhandle.

Outside of the eastern three tiers of counties and the extreme northeastern tier of counties, most locations are showing moderate stress to normal conditions. However, the overall vegetative health for the state is much worse conditions than for the similar time frame of last year. Some of the vegetative information is probably contaminated from constant irrigation.

Eastern Nebraska counties continue to show the benefits of heavy downpours since mid-June. High satellite vegetation index values, indicating no stress, appear with the Missouri River Valley north of Omaha and from Nebraska City south to just north of Falls City. Another pocket is south of Lincoln to Beatrice and eastward to Pawnee City.

As good as crop conditions appear on satellite imagery, I have witnessed a slow deterioration over eastern Nebraska during the last 14 days. Precipitation has returned to a more normal pattern and crops are now extracting moisture at a faster pace than is being replenished by rainfall. With crop water use at 20-30 inch per day, timely rains will be needed for these conditions to persist or improve.

Another interesting point gleaned from this satellite imagery of vegetation is that the amount of area in the central United States with fair to excellent vegetative health is considerably smaller this year than in 1999, although average yields are projected to be greater in 2000. The August USDA field surveys should shed crucial information on whether yield model projections for this year are obtainable or just wishful thinking.

Looking into the future, long-lead models have been inconsistent at best for use as predictive tools this growing season. What appears to be established is a persistent storm track that favors the northern and eastern tier of counties. As one moves south and west, precipitation tendencies have decreased along with higher temperature tendencies.

If a dry and warm pattern reestablishes itself in August like the (Continued on page 164)
Climate update (Continued from page 163)

last two years, crop damage in southwestern Nebraska will further intensify, especially when one considers that irrigators are working with limited water allocations. This would also mean that irrigators in central Nebraska would face additional costs in an already expensive watering year. Some deterioration would be expected across eastern dryland sections of the state, with the extent dependent on how much rain is received through the end of the growing season.

Long-lead outlooks indicated a cooler August for the entire state, with above normal precipitation over the southwest and southern panhandle. Forecasters at the National Weather Service felt that the southwest monsoonal flow would be stronger than normal; however so far it has been virtually nonexistent, as the tremendous outbreak of forest and rangeland fires over the inter-mountain west will attest.

Short-term precipitation deficits have been alleviated for the most part across the eastern third of the state. Incipient to moderate drought conditions assigned to this area are attempting to capture precipitation shortfalls from last fall, as precipitation departures for the last 12 months are still running 3-6 inches at most locations.

Moderate to severe drought conditions across central Nebraska are reflecting dry fall conditions, and sporadic dry conditions from this spring and summer which have not been eliminated by periodic heavy rains. Severe to extreme drought conditions across southwestern Nebraska reflect that 10 of the last 12 months have seen below normal precipitation, with many locations receiving less than 50% of normal precipitation during the last 4-, 9-, and 12-month periods.

If forecast models are correct, August should bring substantial relief to Nebraska producers; however the monsoonal flow would have to begin quickly. Otherwise, we can expect stress problems to continue.

Al Dutcher
State Climatologist

Research update: irrigation management strategies to conserve water

Note: This year’s demonstration trials on irrigation management (described in detail below) are pushing the previously defined research to the limit, providing valuable information on how limited soil moisture as well as limited irrigation will affect crops under the four management strategies being demonstrated. This is the first time in this five-year project that soil moisture profiles were low at the beginning of the season.

In 1996, a project was initiated in the Republican Basin to demonstrate:

1) techniques to better manage irrigation systems; and
2) alternative management strategies when water resources are limited. These alternative management strategies increase the use of stored soil moisture and allow for more efficient use of precipitation when it occurs. This is a critical factor in areas where irrigation water is limited.

There are certain growing season periods, such as the vegetative and late grain fill stages when, in general, irrigation amounts can be reduced with little or no effect on grain yield, given there is a full profile of water.

This demonstration project is located in six areas within the basin with soil types ranging from Valantine fine sand to Holdridge silt loam. Four irrigation management strategies have been conducted at each site: current farmer management (FARM); university best management practices (BMP); late initiation (LATE); and allocation (ALLOC). These four strategies are as follows:

1. FARM - irrigation water is applied according to farmer’s current management strategy.
2. BMP - includes bi-weekly soil-water monitoring, use of predicted crop water use (ET), and maintaining plant available soil-water (in the active root zone) in the range of 50% depletion and field capacity (minus a rainfall allowance during the vegetative and reproductive growth stages).
3. LATE - emphasizes water application during the crops reproductive growth stage. Irrigation is not applied until two weeks prior to tassel emergence for corn unless soil-water becomes 70% depleted during the vegetative growth stage. Once the crop reaches the reproductive growth stage, LATE is managed the same as BMP.
4. ALLOC - managed the same as LATE except only 6 inches of water per acre are allocated at North Platte, Elsie and Benkelman sites and 10 inches at the other sites. These allocations are applied during a period beginning with the reproductive growth stage and continuing into the grain fill growth stage (approximately five weeks).

The following results are from years where extreme dry periods of 30 or more days occurred. Unlike the

(Continued on page 165)
Grain yields and irrigation amounts for selected sites and years.

| Site          | Year | Grain Yield
<table>
<thead>
<tr>
<th></th>
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<th>Bu/acre</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Farmer</td>
</tr>
<tr>
<td>Arapahoe</td>
<td>1997</td>
<td>199</td>
</tr>
<tr>
<td>Benkelman</td>
<td>1999</td>
<td>191</td>
</tr>
<tr>
<td>Elsie</td>
<td>1998</td>
<td>175</td>
</tr>
<tr>
<td>North Platte</td>
<td>1998</td>
<td>216</td>
</tr>
</tbody>
</table>

situation this year, these fields started with a full profile of moisture.

**Arapahoe – 1997.** Effective precipitation during 1997 was 8.0 inches during the growing season. The farmer applied 15 inches of irrigation water while BMP management used 12 inches of irrigation. Grain yields were similar for each treatment. Late initiation and Allocation management reduced applied water to 10 and 8 inches with no reduction in grain yield as compared to Farmer management. Decreasing the amount of water applied increased the use of stored soil moisture.

**Elsie – 1998.** No precipitation occurred from June 10 to July 25. Precipitation in August was above normal and was 8 inches. Severe water stress was observed prior to tassel emergence for both the Late and Allocation corn; however, grain yields for Late were only 10 bu per acre less than that of BMP or Farmer management with a water savings of approximately 3 inches as compared to Farmer management. Decreasing the amount of water applied and precipitation was not enough water to meet ET demands of the Allocation treatment during the reproductive growth stage.

**Benkelman – 1999.** No precipitation occurred during the entire month of July. Precipitation during August was above normal at 5 inches. Moderate water stress occurred prior to tassel emergence. Grain yields were similar for all treatments except for a small area in the Late and Allocation. This area was less than 5 acres in size and the farmer noted that this area typically has reduced yields. The amount of savings in irrigation was approximately 4 inches of water when comparing Farmer management to Allocation management. Using better estimates for soil moisture resulted saving 1.1 inches of applied water when comparing Farmer to BMP management.

**North Platte – 1998.** Precipitation in 1998 was below normal during the growing season but what precipitation that did occur was timely. This field is furrow irrigated with a surge controller. Dryland grain yields were above normal even with below normal precipitation. The interesting point with this site is the yield response of different amounts of water. The increase in grain yield when 6 inches of water were applied as compared to dryland was 90 bu/acre or 15 bu/acre on average for each additional inch of water applied. The yield response for the next 6 inches (BMP management) was 12 bu/acre or 2 bu/acre on average for each additional inch of water applied. In situations where pumping costs are relatively high, the additional yield gained beyond that of the alloc may not pay for the additional cost of water.

Joel Schneekloth
Extension Educator
Republication Valley Water Management, North Platte

## Does genetic engineering reduce crop pesticide use?

Planting genetically engineered crops appeals to producers because of the potential to simplify pest management, reduce pesticide use, and help control costs. Analysis by USDA’s Economic Research Service indicates that adoption of genetically engineered corn, soybeans, and cotton is associated with a decrease in the number of acre-treatments of pesticides (number of acres treated multiplied by number of pesticide treatments).

Reduction in volume of active ingredients applied is less consistent, since adoption alters the mix of pesticides used in the cropping system, as well as the amounts used. Comparison of different mixes of pesticides involves evaluating tradeoffs between the amounts used and the environmental characteristics, primarily toxicity and persistence. For example, the herbicide-tolerance trait in soybeans allows substitution of glyphosate herbicides for other synthetic herbicides that are at least three times as toxic as glyphosate and that persist in the environment nearly twice as long.

USDA Economic Research Service Report (July 20)
Avoiding harvest losses part of Soybean Management Field Day

On average producers lose 10% of their yield during harvest, according to research. Improving combine and harvest efficiency to reduce losses and kernel damage is one of several topics being featured at this year’s annual Soybean Management Days Aug. 15-18.

Other topics will include weed management technology, soybean value enhancement and disease and soil fertility management.

The field days, which run from 9 a.m. to 2 p.m. and include lunch, are scheduled for:

- Aug. 15, Cozad, Ray Mundell farm;
- Aug. 16, Beatrice, John Bargmann farm;
- Aug. 17, York, Jerry Stahr farm;
- Aug. 18, Norfolk, Northeast Community College field site.

For more information about the program see the July 28 Crop Watch or the Web site at http://ianrwww.unl.edu/ianr/ardc/soydays.html.

The event is sponsored by the Nebraska Soybean Board, United Soybean Board, and NU Cooperative Extension.

Biotechnology Field Day Aug. 17

The Haskell Ag Lab field day, “Biotechnology: Global Issues, Local Decisions”, is fast approaching. The University of Nebraska and local business are sponsoring the field day on August 17 from 9 a.m. to 3:30 p.m. The field day is in response to a variety of questions that have been raised concerning the impact of biotechnology on Nebraska agriculture. We believe all Nebraskans, not just rural citizens, will find the day informative.

Registration and morning sessions will be at the Dixon County Fairgrounds near Concord. Registration and lunch are free. The afternoon will feature a tour of the NEREC Haskell Agricultural Laboratory near Concord where participants can view biotechnology research.

Speakers at the morning session include:
- Dr. Susan Harlander, who will speak on GMOs and food production in the United States, has just become president of BIOrational Consultants, Inc. Dr. Harlander has made more than 350 presentations to a variety of audiences on the impact of biotechnology on agriculture and the food industry.
- Dr. Roy Frederick, UNL Agricultural Economist, is well known to those who follow public policy issues. He will discuss the impact of biotechnology on U.S. public policy.
- In addition, a panel of experts will address questions from the audience on issues ranging from grain handling to resistance management. Potential panelists include Chuck Hassebrook, NU Regent and program director of the Center for Rural Affairs, Walthill, Neb.; representatives from Cargill, Inc.; NU beef specialist Terry Mader; NU weeds specialist Stevan Knezevic; and NU entomology specialist Tom Hunt.

CEU credits have been applied for and information will likely be available at the field day.

Field day participants should register by 9 a.m. at the Dixon County Fairgrounds on the east side of Concord. For more information contact Tom Hunt, Extension Entomology Specialist, Haskell Ag Lab, (402) 584-2863, thunt2@unl.edu.

Tom Hunt, Extension Entomologist
Haskell Ag Lab, Concord

Crop condition update

Areas receiving rain this past week continued to show improved crop conditions and good plant growth, according to the Nebraska Agricultural Statistics Service. These timely rains provided a growth boost for crops and pastures, as subsoil moisture supplies remain quite limited.

The winter wheat harvest is virtually complete with 99% cut to date, compared with 96% last year and 90% for the five-year average.

Corn condition rated 9% very poor, 13% poor, 26% fair, 38% good, and 14% excellent. Irrigated corn at 66% good to excellent was virtually unchanged from last week while dryland corn improved to 32% good to excellent.

Eighty-nine percent of the crop was in or beyond the silking stage, compared to last year’s 88% and the average at 74%. Reports indicated that 19% of the crop had reached the dough stage, this compared with 10% last year and 6% average.

Soybean condition rated 9% very poor, 15% poor, 34% fair, 30% good, and 12% excellent. Blooming had occurred on 87% of the crop acreage as of Sunday, ahead of 81% last year and 75% average. By week’s end, 46% had set pods, compared to 26% last year and 21% average.

Sorghum condition rated 7% very poor, 17% poor, 43% fair, 26% good, and 7% excellent. The crop was 50% headed as of Sunday, well ahead of 23% last year and 17% average.

Oat harvest was 85% complete and compares with 79% last year and 76% average.

Alfalfa third cutting progressed to 19% harvested, this compared to 4% last year and 2% average. Condition of the crop rated 19% very poor, 22% poor, 36% fair, 19% good, and 4% excellent.
Dry bean field day offers latest research results

If you’re currently producing dry beans or are interested in adding them to your operation, you can learn the latest information about production research at this year’s Nebraska Dry Edible Bean Field Day. The field day will be at the NU Panhandle Research and Extension Center near Scottsbluff, beginning at 1 p.m. Wednesday, Aug. 16. The event is being co-sponsored by the Nebraska Dry Bean Grower’s Association and the University of Nebraska.

Nebraska currently has about 200,000 acres planted to dry edible beans, much of which is in the Panhandle or southwest Nebraska, although pockets of production are developing in central and eastern Nebraska.

Nebraska ranks third nationally in dry bean production and first in great northern production. (About 70% of the national crop of great northerns is grown in Nebraska.) Dry edible bean production in the state is divided mainly among great northerns, 40%, pintos, 40% and light red kidneys and others, 20%.

In recent years there has been increasing interest from a wider group of potential producers. Several groups of farmers in eastern Nebraska have done well producing it as a specialty crop, managing production for a specific quality or attribute and selling to a previously arranged market, said John Smith, Extension machinery systems engineer at the Panhandle Research and Extension Center.

Traditionally we think of dry edible beans doing best with lower rainfall and lower relative humidity; however, if a person selects the right variety, population, row-spacing and soil and provides good water management, dry beans can be grown across the state.

“Dry beans may required increased management in central and eastern Nebraska, but it can be done,” Smith said.

The Aug. 16 field day will offer growers and potential growers an opportunity to learn the latest on dry bean production while developing a network of resources with other producers, processors and dealers.

Tour stops

Tour topics and the NU faculty presenting at each stop:
- 2000 dry bean crop and harvest update, an industry representative
- Integrated methods for controlling weeds in dry beans, Robert Wilson
- New herbicides for dry bean weed control, Robert Wilson
- Early season irrigation for dry beans, Dean Yonts
- Breeding Great Northern and Pinto Dry Beans with multiple disease resistance, high yield, and seed quality for Nebraska, Dermot Coyne
- Root rots — cultivar response and biological control, Gary Yuen
- Variety performance for yield and disease reaction, David Nuland
- Two newly introduced combines for dry edible beans — Deere STS and Pickett Doublemaster Plus, John Smith with representatives from Deere and Pickett
- Plant growth regulators to aid recovery after hail, Jim Schild
- Response of two bean cultivars to inoculation with selected Rhizobium strains, Constanza Montealegre

The tour will be followed at 5 p.m. by a hog roast with baked beans and a bean dessert. For more information on the tour or a specific tour topic, call the Center at (308) 632-1230.

Other sources of information on dry bean production in Nebraska include:

Nebraska Dry Bean Commission (Includes processors and growers; uses checkoff funds for research and market development.)
NU Panhandle REC
4502 Avenue I
Scottsbluff, NE 69361-4939
(308) 632-1258
http://www.nebraskadrybean.com/
Email: office@nebraskadrybean.com

Nebraska Dry Bean Growers Assn.
NU Panhandle REC
4502 Avenue I
Scottsbluff, NE 69361-4939
(308) 632-1387

John Smith
Extension Agricultural Engineer
Panhandle REC, Scottsbluff

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Diagnostic Clinic Update
July 26-31

Alfalfa disease diagnosed was nutritional (Buffalo County).
Corn diseases diagnosed were bacterial stalk rot (Dodge County), common rust (Adams county), drought (Dawson County), eye spot (Dodge County), maize chlorotic mottle virus (Franklin County), and nutritional (Adams County).
Soybean diseases included bean pod mottle virus (Dodge and Saunders counties), Phytophthora rot (Saunders County), Rhizoctonia stem rot (Lancaster County), and stem canker (Buffalo County).

Jane A. Christensen
Plant and Pest Diagnostic Clinic
August, September sustainable ag tours to explore state’s agricultural diversity

The Nebraska Sustainable Agriculture Society is hosting the following tours to showcase the diversity of ag enterprises in Nebraska.

**August 10, 6 p.m., David City, Twilight Tour with the Butler Cattlemen’s Association.** Tour several farms in Butler County that incorporate grazing. Look at water systems, fencing and cattle breeds. Observe how other grazers are managing during dry weather. A meal will be served after the tour.

**Location:** Meet at the west side of the Butler County Courthouse.

**August 12, 9 a.m.-noon, Milford, Dave and Deb Welsch.** A one-mile walk of their farm will include management intensive grazing; crop rotations including corn, beans, wheat, alfalfa, milo and sweet clover; ridge till equipment; and their direct marketing livestock operation of chickens, beef and lamb.

**Location:** From the west edge of Milford, follow the detour signs to the church (5 miles south and 2 miles east). For more information call the Welsches at 402-826-5880.

**August 25, 1 p.m. registration, tour at 2 p.m., Ogallala, Dennis Demmel Farm.** Dennis will discuss his modified ridge-till system for corn, soybeans, wheat, sunflowers, forage peas, and clover legumes in dryland and irrigated production with reduced herbicides. His daughter, Sarah, will discuss her pastured poultry system.

**Location:** From Ogallala, go 10 miles south on Hwy 61 (or 2 miles south of Keith/Perkins county line) and 1/2 mile west. From Grant, go 9 miles north on Hwy 61 and 1/2 mile west. For more information call 308-352-4078.

**August 30, 2-5 p.m., Rose, Dave Hutchinson of Perfect 10 Ranch and an organic bison and grass ranch.** Tour will include low stress management, grazing, fencing, natural fly control and health care, windmills, solar well and artesian wells. An excellent example of a ranch that works in harmony with nature.

**Location:** Follow 183 to mile marker 151, the gravel road is just north of the actual mile marker, turn west for approximately 5 miles. At the sign: “Hutchinson Buffalo Ranch” turn left and follow the road 2 miles back to ranch. You will cross over 3 cattle guards. For more information call 402-273-4574.

**September 2, 2-5 p.m., St. Edward, Tom and Deb Larson.** Tour a certified organic farm that integrates a rotational strip cropping system of corn, soybeans oats and turnips, and examine a sustainable and highly efficient rotational grazing system.

**Location:** From the St. Edward coop-gas station, go 4 blocks north, two blocks west, two blocks north, and 1/2 block west. Follow this road 1 1/2 miles northwest out of town. The road runs parallel to the railroad tracks. The Larson farm is on the west side of the road. For more information call 402-678-2456.

**Price index down slightly in July**

The preliminary All Farm Products Index of Prices Received in July was 98 based on 1990-92=100, down 1 point (1.0%) from the June index. The USDA Agricultural Statistics Service reported Wednesday (Aug. 2) that lower prices for corn, wheat, soybeans, and eggs more than offset price increases for cucumbers, onions, and potatoes.

The seasonal change in the mix of commodities farmers sell often affects the overall index; however, these changes were essentially offsetting in July.

Compared with July 1999, the All Farm Product Index was 3 points (3.2%) higher. Price increases from July 1999 for hogs, cattle, wheat, and soybeans more than offset price decreases for milk, corn, grapes, and oranges.