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Experts assess drought indicators, outlook

The Nebraska Climate Assessment Response Committee met this week to discuss the current status of the drought and the outlook for the fall and winter. Representatives from a variety of disciplines and state agencies were briefed on climate updates and outlooks, reservoir situations, mountain snow pack, and hay availability this winter.

By now, most Nebraskans are well aware of the ongoing drought. During the last 45 days temperatures have averaged up to 8 F above normal and precipitation has been only 30-60% of normal. Subsequently, yields have suffered, even after factoring in the beneficial rains that fell in June and early July.

Soil scientists from the Nebraska Natural Resources Conservation Service (NRCS) took soil samples across the state in mid September (see table, page 202) and found soil moisture to be virtually non-existent. At a couple test sites, NRCS personnel had to use pick axes to break up the surface layer in order to start the drill.

Samples from 16 sites across the state indicated that 15 locations were below the wilting point at 4 inches. At 10 inches, every site sampled was below the wilting point. At 20 inches, 14 of 16 sites were below the wilting point, and at 40 inches 13 of 16 sites were below the wilting point. This data does not include the September 19-25 rains.

The High Plains Climate Center (HPCC) soil moisture reports mirror the NRCS readings. Soil moisture at six (Alliance, Arthur, Indian Cave Park, McCook, Mead, and West Point) of the 10 sites tested on September 18 were actually below the record lows set in February. The remaining sites (Ainsworth, Elgin, Mitchell, and O'Neill) were at or within one inch of the lows set in February. HPCC data measures soil moisture down to 40 inches.

Rainfall September 19-25 helped soil moisture supplies across the

(Continued on page 202)

Skip fall tillage; conserve soil moisture

Once crops are harvested, producers should stay out of their fields for the rest of this fall, salvaging any available soil moisture and protecting existing residue.

Tillage dries soil that is already dry, destroys soil structure, and increases erosion and runoff. Even producers who shred their stalks should consider skipping that step this fall. Shredding or tilling stalks now will cut them loose and allow them to blow away. Standing, attached residue is one of the most effective ways to protect soil from the erosive forces of wind and to capture snowfall.

Tillage costs include far more than just fuel, labor, and equipment. Too often the soil will dry to the depth of tillage. An average silt loam soil can hold about 2 inches of soil moisture per foot of soil. Disking 6

(Continued on page 201)
You’ve got our ear!

Give us your feedback

We value our readers and would like to know how you use Crop Watch and what you like or dislike about it. Are there things you would add or things you would drop? On the last two pages of this issue is a readership survey to help us learn more about how you use Crop Watch.

Please take a few moments to complete this survey, fold it and return it. Each survey is carefully read and the results are shared with contributors. Your suggestions often lead to stories or changes as we plan for next year.

Note: Just complete, fold and mail the survey. The mailing is free to you — we’ll pay the postage on this end. Thanks in advance for your comments. And, as always, if you have any questions about the newsletter, please feel free to contact me. (See box below for more contact information.)

Lisa Jasa, Editor

Crop updates

Jim Peterson, Extension educator in Washington County: Farmers are working to harvest their crops. There is concern regarding the lodging of corn due to stalk rots that are being found. Both corn and soybeans are extremely dry with moisture contents for corn at about 14% and soybeans down to 9% and 10% moisture. The farmer has to make a decision as to which crop to do first. Amazingly, crops in Washington County are yielding much better than expected with reports of 130 to 150 bushels corn and 40 to 45 bushel soybeans.

Terry Gompert, Extension educator in Knox County: We had our first killing frost on Monday, which helped to speed up the already fast harvest. Corn harvest is nearly one-third completed. Soybean harvest is now about 25% completed. Yields are from 0 to good. It is the year of the have’s and the have not’s. Yields should be 30% below normal.

Jennifer Chaky, director of the NU Plant and Pest Diagnostic Clinic: The following diseases were identified during phytosanitary analysis (counties not identified): corn -- Stewart's wilt, gray leaf spot, northern corn leaf spot, physoderma brown spot, common rust and southern rust; sorghum -- gray leaf spot, leaf blight, head smut, zonate leaf spot, sooty stripe, rust, bacterial stripe, and bacterial leaf streak; soybean -- Bean pod mottle virus, soybean mosaic virus, bacterial pustule, bacterial blight, and septoria brown spot.

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- corn -- Stewart's wilt, gray leaf spot, northern corn leaf spot, physoderma brown spot, common rust and southern rust
- sorghum -- gray leaf spot, leaf blight, head smut, zonate leaf spot, sooty stripe, rust, bacterial stripe, and bacterial leaf streak
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Lisa Jasa, Editor

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Avoiding tillage  (Continued from page 199)

inches deep or chiseling 12 inches deep and allowing the soil to dry to the depth of tillage could result in a soil moisture loss of 1 to 2 inches of water. Shallower tillage, even with a rolling stalk chopper, can still result in moisture losses of about ½ inch per trip. If the producer irrigates, irrigation costs are increased because more water must be applied to replace the lost moisture.

Some say the soil needs to be tilled to “open it up to let water in”. Unfortunately it dries to the depth of tillage and the initial water entering the soil is just replacing what was lost, not adding to the soil moisture reserve. Tillage breaks up and pulverizes the soil surface, making the soil prone to crusting from raindrop impact. Thus, the tillage thought to open the soil up actually creates a condition that seals the soil, resulting in more runoff.

Tillage will reduce or eliminate the residue cover that protects the soil from raindrop impact, reducing erosion and crusting of the soil. Reduced crusting allows more rainfall to soak in. With more soaking in, less runs off. The residue will also slow runoff giving it more time to soak into the soil. The residue acts as a mulch reducing evaporation from the soil surface, further conserving moisture. A moist soil with residue cover next season doesn’t get as hot as a bare soil. This will allow for better root development, especially if the drought continues.

Even without drought concerns, the fuel costs for tillage will be approximately 40% higher this year because of the current crude oil shortages. The diesel fuel requirements for the typical chisel-disk-field cultivate tillage system is about 4.08 gallons per acre including knifing in fertilizer, planting, and one row crop cultivation. By switching to a no-till system, the fuel use decreases to about 1.43 gallons per acre including knifing in fertilizer, planting, and two sprayings. There is a corresponding decrease in labor requirements and an improvement in timeliness without the tillage.

With the soil moisture losses from tillage and reduced soil structure, yields are lower and production costs are higher as tillage increases. No-till tends to be the most profitable tillage system, especially when there are soil moisture concerns. The next issue of Crop Watch will feature yield results from this year’s studies comparing different tillage systems.

Paul Jasa
Extension Engineer

Assessing the value of damaged corn for swine

With low commodity prices and low-yielding drought damaged corn, feeding swine may be an efficient alternative this year. When considering the nutrient of this grain, consider three quality characteristics: higher crude protein level, low test weight and mycotoxin contamination.

Corn grown under drought conditions usually contains more crude protein than that grown under more favorable conditions. Protein content of drought-stricken corn may be increased by 1 to 1.5 percentage units; however, this doesn’t mean you can reduce supplemental protein in swine diets. The problem is that as the protein content of corn increases, the lysine content (the most limiting amino acid in corn for swine) doesn’t increase at the same rate. Pigs don’t require protein in their diet. Instead they require amino acids found in protein. If diets using higher protein corn are formulated on a crude protein basis, they may be low in lysine, resulting in reduced pig performance. Be sure to maintain the same level of supplemental protein in swine diets when using drought-stricken corn.

The test weight of corn this year usually has been reduced. Most previous research indicates low test weight corn contains more fiber and less starch and metabolizable energy than normal corn, implying that low test weight corn has a lower feeding value than normal corn. However, more recent research on corn suggests there is a poor relationship between test weight and nutritional value. There is general agreement that pig growth rate is seldom affected by corn test weight as long as the test weight is not reduced by more than 25%; however, if low test weight corn has less metabolizable energy pigs will compensate by increasing feed consumption, resulting in a poorer feed efficiency. Fat can be added to diets containing low test weight corn.

In general, it is best to use low test weight corn in finishing and gestation diets (if they are free of mycotoxins) because older pigs use lower energy feedstuffs better than younger pigs. The feeding level during gestation may have to be increased to compensate for the lower energy value. Include low test weight corn in the diet by weight, not volume.

Corn weighing between 40 to 56 pounds per bushel has the same feeding value for growing-finishing swine when compared on an equal moisture basis. When test weight drops below about 40 pounds per bushel, growth rate and feed efficiency may decrease by 5% to 10%.

Also, watch for mycotoxin contamination, particularly zearalenone, vomitoxin, and fumonisins in this year’s corn crop. Aflatoxin seldom is a problem in Nebraska, but this year could be different. Drought causes stress on plants which increases the risk of mycotoxin development in the grain.

(Continued on page 206)
Climate experts (Continued from page 199)

western third of the state. In fact the rains were beneficial enough to bring western soil moisture monitoring sites back up to or slightly above the February lows. Most of gains have been limited to the upper 12 inches of the profile. Further east, the rains have had virtually no effect on soil moisture. The Mead and Indian Cave Park sites reported less than 0.50 inches of improvement in soil moisture.

With the dry soils, pastures have suffered extensive production shortfalls. Fires have caused significant damage to rangeland across the northern Panhandle and western Sandhills. For seven straight weeks of agricultural statistics, Nebraska has led the nation with the worst pasture conditions. As of September 25, 86% of the pasture across the state was rated poor or very poor.

Members of CARC expressed concern about forage shortfalls going into the winter. Since drought conditions have not broken in the southern and central High Plains, states to our south are also experiencing reduced hay carryover stocks and poor rangeland forage conditions. Because of poor pasture growth this spring and summer, some producers have been forced to dip into hay stocks from last year. Committee members felt that a severe winter could lead to forage shortages. In addition, spring pasture growth will need to be above normal to offset expected shortfalls of carryover stocks.

Outlooks: What’s next

The greatest concern was with the weather outlook going into winter, especially the potential for soil moisture recharging and expectations for the mountain snow pack that feeds the southern branch of the Platte River.

The United States Geological Survey (USGS) indicated that streamflow rates in southwestern Nebraska continue to be abysmal. At numerous monitoring sites along the southern branch of the Platte River, flow rates are less than 1 cubic foot per second. Swanson Reservoir near Trenton is at 22% of capacity and within 1 foot of its all-time low. Enders Reservoir near Imperial is not much better.

Adding to this gloomy scenario is the fact that reservoirs in northeastern Colorado have been drawn down substantially. An above normal snow pack will be required in northern and central Colorado, east of the Continental Divide to alleviate water shortfall next summer.

The long-lead seasonal forecasts do offer a glimmer of hope. Western Nebraska is projected to have a greater tendency for above normal precipitation during the next four months; however, models have not been especially accurate since early June. A consistent wet bias has been forecast for the western third of the state since early summer, but has failed to materialize.

Hopefully the recent precipitation is a step in the right direction. Since the upper air pattern is beginning its transition into a winter pattern, it is too early to tell where the preferred winter storm track will set up. It will take numerous storms similar to the recent snow event in Colorado and Wyoming to alleviate water shortfall concerns.

A return to normal conditions is anticipated; however, there is a large range for normal conditions across the United States.

Producers should concentrate on two trends this winter. Both will go a long way in determining whether we see substantial relief from the drought. First, if the high pressure that has been parked over Texas moves west, more moisture will be drawn up from the Gulf of Mexico. Storms will develop along the front range of Colorado and move into Texas, then up through Missouri. Typically, Nebraska gets ample precipitation with normal to below normal temperatures.

If the high pressure over Texas remains in place, moisture from the Gulf of Mexico will be limited and precipitation over Nebraska should be below normal. Storm systems will move out of Montana and Canada ushering in periods of cold inter-spersed with periods of above normal temperatures. Under this pattern, significant easing of the drought is unlikely.

The best scenario would be for a large tropical system to come ashore in southern Texas. There is historical evidence suggesting that most droughts across the southern United States end with the onset of hurricane and tropical storm activity. The ability of these systems to produce rainfall in excess of one foot can rapidly alleviate precipitation shortfalls. Some areas of Texas now have two-year shortfalls approaching 40 inches.

Most importantly, information presented at the CARC meeting indicated that most locations in Nebraska are in worse shape now than at this time last year. There is ample time to build up soil moisture reserves. It will require a combination of wetter and colder than normal conditions over the next six months.

Al Dutcher
State Climatologist
Agricultural Meteorology
Soil moisture depleted statewide

With all the discussion about how dry it was in most of Nebraska during the 2000 growing season, it should be no news to anyone that soil water contents are extremely low going into the fall. Representatives from the Natural Resources Conservation Service recently repeated their measurements of soil moisture at four depths: 4, 10, 20 and 40 inches to assess just how dry it is. Their results are summarized in the table below. (An earlier soil moisture survey was reported in the May 26 Crop Watch.) The purpose of this article is to discuss the current data and to help you interpret it.

As with all data sets, read the fine print that describes how and from where the data was collected. In addition, be aware that this type of soil sampling can be extremely variable. If the data were from replicated trials, there may not be any statistical difference between the results in the ‘Sample’ and ‘WP’ columns.

Samples were collected within about 100 feet of automatic recording weather stations near the towns listed. All sites were dryland. The data are presented in percent water content on a wet soil basis or stated another way, gravimetric samples were acquired from each site. This involves weighing the samples wet (or soil with water), drying the samples, and then weighing them dry (or soil without water). Dividing the water lost during drying by the original wet soil weight gives the percentage of sample that was water.

The results of the soil water content determination are compared to two numbers that are typically based on laboratory estimations for field capacity and permanent wilting point. Field capacity (FC) gives an estimate of how much water the soil can hold against the force of gravity. A ball park estimate can be obtained by essentially saturating a soil and letting it drain for two to three days. Another estimate presented in textbooks is the water content of a soil subjected to 0.3 bars of tension. The values for field capacity in the table are the latter and are based on soil texture at each site. The actual value may be higher or lower depending on how accurately the book value represents the field value.

Soil moisture levels at the 4-, 10-, 20- and 40-inch depths, as recorded by Natural Resource Conservation Service staff Sept. 11-15
Readings indicate percent moisture by weight at each site.

<table>
<thead>
<tr>
<th>Location</th>
<th>FC Sample</th>
<th>WP</th>
<th>10 inches FC Sample</th>
<th>WP</th>
<th>20 inches FC Sample</th>
<th>WP</th>
<th>40 inches FC Sample</th>
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<tbody>
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<td>Ainsworth*</td>
<td>26</td>
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<td>11.1</td>
<td></td>
<td>27.8</td>
<td>6.8</td>
<td>15.8</td>
<td></td>
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<tr>
<td>Alliance**</td>
<td>16.6</td>
<td>1.3</td>
<td>4.3</td>
<td></td>
<td>16.6</td>
<td>2.9</td>
<td>4.3</td>
<td></td>
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<tr>
<td>Arthur County**</td>
<td>16.6</td>
<td>0.2</td>
<td>4.3</td>
<td></td>
<td>16.6</td>
<td>0.8</td>
<td>4.3</td>
<td></td>
</tr>
<tr>
<td>Beatrice***</td>
<td>27.8</td>
<td>6.8</td>
<td>15.8</td>
<td></td>
<td>30.5</td>
<td>10.8</td>
<td>20.2</td>
<td></td>
</tr>
<tr>
<td>Concord****</td>
<td>27.8</td>
<td>8</td>
<td>11.1</td>
<td></td>
<td>27.8</td>
<td>8.3</td>
<td>11.1</td>
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</tr>
<tr>
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<td></td>
<td>17</td>
<td>2.2</td>
<td>6.9</td>
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<tr>
<td>Gudmundsen**</td>
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<td>1</td>
<td>2.6</td>
<td></td>
<td>11.8</td>
<td>2</td>
<td>2.6</td>
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<tr>
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<td>6.7</td>
<td>11.1</td>
<td></td>
<td>27.8</td>
<td>9.2</td>
<td>15.8</td>
<td></td>
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<tr>
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<td>6.6</td>
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<td>26</td>
<td>5.2</td>
<td>11.1</td>
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<tr>
<td>Mead**</td>
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<td></td>
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<tr>
<td>O’Neil**</td>
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<td>York**</td>
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<td></td>
<td>26</td>
<td>10.3</td>
<td>11.1</td>
<td></td>
</tr>
</tbody>
</table>

FC = field capacity; WP = wilting point. Shaded areas = samples with soil moisture below the wilting point. The field capacity and wilting point of the soils were determined by comparing soil textures at the sites with known soil textures and their average soil moisture percent for field capacity and wilting points as determined by the National Soil Survey Laboratory, NRCS, Lincoln.

* Plant cover = brome/alfalfa
** Plant cover = native grass
*** Plant cover = brome grass
**** Plant cover = soybeans

(Continued on page 204)
Soil moisture
(Continued from page 203)

The wilting point (WP) value depends on the soil texture, type of plant at the site and soil depth. Most of the sites listed were in either native pasture or brome grass. Only Concord had a row crop growing close by. Native grasses are extremely good at removing soil water, as are soybeans. The numbers under the ‘WP’ columns are estimates of the wilting point determined in the laboratory where the soil is subjected to 15 bars of tension. Again, depending on how closely the book values represent the given field site will determine the accuracy of the data.

Comparing the values listed under the ‘Sample’ column with the ‘WP’ column verifies what we all know to be true in a gross sense. Dryland fields are really dry down to 3.5 feet below the soil surface. In only seven of the 64 samples recorded was the soil water content higher than the WP value. This means that the plants were very good at extracting water from the soil down to this depth. And it is safe to say that water was also removed from deeper in the soil bringing the total needed off-season precipitation value to a very high level. For example, using the field capacity values in the table, soybeans at Concord removed approximately 11.5 inches of water. To get this value I assumed a soil bulk density value of 1.3g/cm³. Since the soybeans died due to lack of water, these data give some indication of what the true crop-based wilting point is for soybeans at Concord. Though coarse textured soils like those at O’Neill, Scottsbluff, or Alliance are dry, the difference between the FC (field capacity) and WP (wilting point) is less so the water needed to refill the profile is lower. Finally, though the soil water content values under corn may be slightly higher than those estimated by these samples, the bottom line is the soil is still very dry.

Bill Kranz, Extension Irrigation Specialist, Northeast REC, Norfolk

Dry alfalfa fields may warrant additional irrigation this fall

Irrigators may want to consider irrigating their alfalfa at least one more time before winter. Alfalfa needs some surface soil moisture to prevent its roots from drying out and dying over winter. Soil moisture also helps keep soil temperatures from dropping too low for alfalfa plants to survive.

The crop will also need water in its subsoil to provide top yields next year. During the peak water use period in summer it may be impossible to irrigate enough to keep up with the water demand of alfalfa. It’s important to have a water reserve available in the deeper portion of the root and soil profile. Irrigating now and into November until soils freeze can protect plants and improve yields.

Advantages

Irrigating alfalfa now offers several advantages to the producer: irrigation is not currently needed for other crops and evaporation is low now compared to summer, permitting very high irrigation efficiency.

Another advantage relates to the alfalfa plant itself. Most irrigated alfalfa fields never get much water below 4 feet deep, but alfalfa can develop roots down 8 feet or more. You waste some of the water collection ability of alfalfa by not building water reserves below 4 feet.

Don’t waste this ability. That reserve water will keep your alfalfa growing rapidly during next summer’s heat and allow you to irrigate on a more timely basis. In addition, you won’t need to worry much about winter survival or getting water immediately on your alfalfa after each harvest because you’ll have a water reserve.

Irrigate alfalfa today for both winter survival and more alfalfa next year.

Bruce Anderson
Extension Forage Specialist

Delay anyhydrous applications until soil temps drop; adjust for dry soils

With harvest proceeding rapidly for many producers, it may be tempting to start fall field work earlier than usual this year. While tempting, this may destroy valuable residue cover and waste inputs if anyhydrous ammonia is applied too early.

Anyhydrous ammonia should be applied when soil temperatures fall below 50°F. On average this usually doesn’t occur until Oct. 22-25 in much of central to eastern Nebraska, and will be even later this year if the unseasonably warm temperatures continue.

Application into dry soils can also be problematic. When soils are drier than normal, anyhydrous ammonia will spread out more in the soil. If the application is too shallow, there may be more nitrogen loss than normal. Check to make sure the anyhydrous ammonia isn’t leaking from the surface. If that happens, the applicator needs to go deeper if the soil hardness will allow it. In most cases six inches should be deep enough.

Charles Shapiro
Extension Soils Specialist
Haskell Ag Lab, Concord
Tips for filing LDPs

Understanding market loans and LDPs and timing their use to your benefit can help in a year when commodity prices are low. The following tips for using LDPs were provided by the State Farm Service Agency. For more information on these programs and tips for producers, check the University of Nebraska website Rural Routes at http://ruralroutes.unl.edu. Check with your local county FSA Office for your loan rates, differentials and PCP prices.

What can I do to be ready for a marketing gain or LDP if the price of grain stays this low?

LDPs and Marketing Loan Repayments are much like the "olden" days of PIK and ROLL where timing is a critical factor in how much profit you can realize in the transaction. We suggest the following if you think there is a chance the market prices will stay below loan levels.

1. Take accurate measurements of your grain including moisture and test weight if you plan to certify your production or have your grain measured by FSA ahead of time.

2. Watch markets daily. Check on daily PCP. You can telephone your local FSA Office.

3. Prepare a plan to get the required signatures of all producers who have an interest in the commodity. The PCP of any day cannot be locked in until all signed forms are in the county office. Power-of-attorney forms are available in the FSA Office. Arrange for power-of-attorney forms to be signed now that can allow someone else to sign for an individual on the market gain forms. If you will be faxing forms, sign FSA-237s in the county office.

4. If your grain is stored in an elevator, get your summary sheets assembled.

5. If you will be hauling directly from the field to a buyer or feed yard, you can still maintain your eligibility for an LDP by signing Form CCC-709, Direct Loan Deficiency Payment Agreement, before the grain is harvested. Then, if the PCP is lower than the loan rate on any of the days you deliver to your buyer, you will be eligible for an LDP on that amount of grain. Any grain harvested and sold before you sign Form CCC-709 will be ineligible for an LDP.

6. Have blank CCC-666 LDP and CCC-709 forms at home for your use. The forms will be effective the day they are received in the office. A faxed CCC-666 or CCC-709 will be effective the day it is received, if the form is completed correctly. Forms can be downloaded from the Forms Page on the FSA web site. For FSA to accept a facsimile signature, you must execute an FSA-237 in the county office. This can be done anytime, but a faxed LDP request will not be paid without an FSA-237 authenticating your signature.

Cover crops can help reduce soil erosion

Weather-damaged corn and soybeans harvested early as forage can leave farm ground bare for eight to nine months and susceptible to wind and water erosion. Planting cover crops can help decrease the potential for erosion while providing a crop.

The lack of moisture this fall, however, creates a dilemma for the farmer weighing the advantages of erosion control against potential moisture loss. The first question to consider is whether sufficient soil moisture is available for planting and sustaining a cover crop. If not, seed and resources would be wasted. If there is enough moisture, the producer needs to weigh the advantages of the cover crop with the loss of soil moisture. In many cases, moisture in the top few inches would likely evaporate over the winter and contributing it to a cover crop might be a better use.

Small grains almost always are the best choice for cover crops to stabilize soils; however which small grain depends on what you want to achieve with your cover crop. Consider choosing an inexpensive option, such as wheat or rye, given the late planting date and dry soil conditions this fall. To maximize late spring forage yield and quality, especially as hay or silage, triticale would be an excellent choice. It may be more expensive to plant, but it's excellent for spring forage.

If you're considering planting a cover crop, don't delay. In the Panhandle, the most opportune time for planting has passed, although it's still possible.

Bruce Anderson
Extension Forage Specialist

See the Rural Routes website at http://ruralroutes.unl.edu to view a recent Market Journal broadcast dealing with LDPs and commodity loans.
Assessing alternative ag opportunities

Every farmer is interested in improving farm profitability. There are many approaches including cutting expenses, increasing yields, expanding acreage, marketing, and improving crop and variety choices. Adding value to the crop is another alternative which becomes even more important when commodity prices are low. There are many levels and definitions of "value-added crops.

Value added generally refers to adding more labor or management to the farm operation to increase the value of the product being sold. This would be the flip side of adding more land and machinery. It could refer to adding livestock to market grain as meat rather than as grain. It could refer to switching to organic farming to sell grain with higher market value. It could be the growing of fruit, vegetables, Christmas trees, or specialty grains to command a higher market value. It could be raising a higher quality product which can be sold for seed or meets export demands.

In all cases, it probably requires more labor, management, and marketing skills. In most cases the success of value added products hinges on finding a 'niche' in the market where the consumer is willing to pay more than what would be possible with adding value. These markets are usually small, easily oversupplied, and may have high risks.

The first step in finding a value added enterprise is to match consumer demands with products you can produce efficiently on your farm. The second step is to find methods of insuring a sale for the product, usually through contracts. The contract not only obligates a buyer, it also obligates you to meet some quality standards. It is usually the higher quality standards which will require additional labor and management skills. The third step is to plan for the crop, including getting a source of seed, proper machinery, and land area which best suit crop needs.

Generally, choosing a new crop which you have never raised before is a high risk venture. For example, crops such as sunflower, safflower, pinto bean, crambe, canola, sesame, and castor would all present first time growers with a multitude of challenges with insects, diseases, fertility, machinery demands, and weather which would almost assure a disaster the first year. A safer option might be to look for variations of current crops which may be used for specific purposes. Examples of this might be soybean varieties which can be used in the Oriental market for tofu, natto, sprouts, etc. In the case of corn, it might be white corn, high oil corn, or food grade corn. For wheat, there are now some opportunities for white wheat which can meet some export and domestic demands.

Before planting any of these options, do your homework. You need to know where you are going to sell the crop and how much premium will be paid. (Also consider potential crop yields, which may be significantly less than commodity grains.) You need to have a contract which assures the premium prices and states the quality standards and your options if the quality standards are not met. You need to know what other costs you may incur from seed, fertilizer, pesticides, and additional harvest expenses. If these costs are covered and leave an opportunity for some profit, then it would seem worth pursuing value added crops.

Lenis Nelson
Extension Crop Variety Specialist

Crop condition update

Corn condition rated 17% very poor, 14% poor, 35% fair, 24% good, and 10% excellent. Reports indicated that 93% had matured, well ahead of last year at 73% and the average at 56%. Harvest was 30% complete and three early.

Soybeans condition rated 22% very poor, 23% poor, 32% fair, 20% good, and 3% excellent. By week’s end, 96% of the crop had dropped its leaves, well ahead of the 64% last year and a 59% average. Harvest was 18% complete and compares with 6% last year and 4% average.

Sorghum was 90% mature by week’s end, well ahead of last year at 45% and average at 42%. Harvest progressed well last week with 49% combined, well ahead of last year.

Wheat seeding progressed to 65% planted as of Sunday and compares with 72% last year and 63% average.

Feeding corn

(Continued from page 201)

The main signs of mycotoxin contamination to watch for in pigs include swollen vulvas in 4- to 6-week old gilts, feed refusal, and respiratory problems. The University of Nebraska Diagnostic Center or commercial laboratories will analyze corn for these mycotoxins.

Duane Reese
Extension Swine Specialist
in IANR’s Educator Extra
2000 *Crop Watch* Reader Survey

Dear Subscriber,

We value your opinion and want to know what you think about *Crop Watch*. Is it meeting your needs? How can we improve it? Please take a moment and fill out this survey. Then fold, staple or tape it, and return it to us, postage free. **Thank you.**

1. **What is your occupation?**
   
   (Please categorize below.)
   
   - [ ] Producer
   - [ ] Sales/Applicators
   - [ ] Consultant
   - [ ] University Extension/Research
   - [ ] Farm manager/investor
   - [ ] Fert./Imp. Dealer
   - [ ] Other (specify)

2. If you are a **producer**, how many acres do you farm and what crops do you grow? (Optional)

3. **What is most valuable about *Crop Watch***?

4. **What subject matter areas would you like to add or delete?**
   
   **Add:**
   
   **Delete:**

5. **What “special focus” topic would you suggest for next year?**

6. **Have you changed any pest management or crop production practices as a result of information in *Crop Watch***? Yes [ ] No [ ] If yes, in what areas? (Please check all that apply.)
   
   - [ ] Pesticide selection
   - [ ] Pesticide timing
   - [ ] Weed scouting
   - [ ] Disease scouting
   - [ ] Soil sampling for fertility
   - [ ] Reduced insecticide rates
   - [ ] Crop rotation
   - [ ] Reduced fertilizer rates
   - [ ] Insect scouting
   - [ ] Reduced tillage
   - [ ] Nonchemical controls
   - [ ] Other (Please describe)

7. **Can you assign a dollar value per acre of any savings that might have occurred because of these changes?**
   
   $[ ]/acre per [ ] (how many?) acres. For what changes?

8. **Do you anticipate making any changes in management/production practices in the future as a result of information in *Crop Watch***? Yes [ ] No [ ] If so, on how many acres and in what areas?

9. **Will the change potentially reduce pesticide, fertilizer or irrigation requirements?**

10. **What kinds of information do you need to change or adopt practices, as described in the newsletter?**

11. **Are you getting the information you need on a timely basis?** If not, please give specific examples.

12. **Do you plan to subscribe to *Crop Watch* next year?** Yes [ ] No [ ] Printed [ ] Web [ ]
13. With “1” being most important and “12” being least important, please rank the following subject matter areas in the order of their importance to you.

   - Agronomic information
   - Pesticide updates
   - Fertility
   - Tillage issues
   - Insect control
   - Meeting/training notices
   - Variety trials
   - Disease control
   - Weed control
   - Weather data
   - Weather data
   - Disease control
   - Weather data

14. Do you have or use any of these “new” technologies?

   - Yield monitor without GPS
   - Spray rate controller without GPS
   - Fertilizer rate controller without GPS
   - Yield monitor with GPS
   - Variable rate sprayer with GPS
   - Variable rate fertilizer with GPS

15. Do you have a computer with access to the World Wide Web? Yes_____ No_____. If yes, would you use an expanded version of Crop Watch on the Web? Yes_____ No_____.

16. Please add any comments to help us better meet your information needs.

Fold on this line.

Be sure to check out the hundreds of Cooperative Extension publications on the Web at http://www.ianr.unl.edu/pubs