2005

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CROP WATCH

University of Nebraska Cooperative Extension
Institute of Agriculture and Natural Resources

University of Nebraska Lincoln

No. 2005-1, March 4, 2005

Stay the course

Corn-soybean rotation still the best option

The 2002 Farm Bill adjusted the loan rates for two of Nebraska's primary crops, increasing the rate for corn and decreasing the rate for soybeans. This change, along with the long-term prospect of lower soybean prices due to increased production in South America, recent soybean aphid outbreaks, and the presence of soybean rust across the southern United States, has spurred discussion of a potential shift to more corn and less soybean acreage in Nebraska.

From a crop science view, a continuous corn cropping system must address a multitude of negative yield influencing factors. In *Consider the Risks of Second Year Corn* and *Mitigate the Downside Risks of Second-year Corn*, Dr. Robert L. Nielsen of Purdue University discusses why producers should think twice before making such a change. (See online storues at *http://www.agry.purdue.edu/ext/corn/news/*)

Research has shown that both corn and soybeans produce higher yields when rotated rather than when cropped continuously. Research in selected Corn Belt states shows that average yield benefits are over 17% for corn grown in rotation with soybeans compared to continuous corn. The higher yield advantages have been observed in both low-yielding and high-yielding environments. In low-yielding environments, increases of more than

(Continued on page 3)

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Inside

Switching to no-till can save inputs and 3-5 inches of water

Using no-till or ridge-till can save you far more than fuel, labor, and equipment costs. The savings in soil moisture can be just as important, especially in a year when soil moisture and precipitation are limited or when irrigation is costly and water supplies are limited. With continuous no-till, the improved soil structure and erosion control will enhance productivity and profitability even more.

In hot dry conditions, the no-till grain sorghum in the background continues to grow while plant growth in the plowed plot in the foreground slowed, resulting in more than a 35-bushel-per-acre difference at harvest. (June 2000)

Too often the soil will dry to the depth of tillage. An average silt loam soil holds about 2 inches of plant available soil moisture per foot of soil. Tilling 6 inches deep and allowing the soil to dry to the depth of tillage could result in a loss

(Continued on page 4)

Ag briefs

Field update

Del Hemsath, Extension Educator in Dakota, Dixon, and Thurston counties: Field activities currently involve applying animal manures and moving hay. The February rains caused some soil erosion even though they came very slowly. Most of the rain infiltrated the soil up to the frost line. Since the rain, the frost has been coming out and for the most part, the frost line is deep, if present at all.

The cool season grasses are actually showing a green color and some early growth. Seed delivery has begun and there has been a lot of interest in soybean rust at the pesticide training sessions. Farmers are wary of the rust situation and have the most questions about whether drilled soybeans will be more susceptible to rust than 30-inch row soybeans.

Focus on
Soybean Rust
March 11
CropWatch

Crop Scout Training set for March 14

A March 14 University of Nebraska Cooperative Extension class offers training for to help pest managers better scout corn and soybeans for fertilizer deficiencies, pests and diseases. *Crop Scout Training for Pest Managers* will be held from 8:30 a.m. to 4:30 p.m. at the University's Agricultural Research and Development Center near Mead.

The indepth training will cover growth staging, identifying fertilizer deficiencies and major pests, understanding insect economic thresholds, handling soybean cyst nematode, and weed and disease identification and management. Certified Crop Advisor credits are available: 4 in pest management, 1 in crop management and 0.5 in fertility/nutrient management.

For more information or to register visit the Web site at *http://ardc.unl.edu/cmwp.htm*, call (402) 624-8000, fax (402) 624-8010, e-mail cdunbar2@unl.edu or contact the ARDC, CMDC Programs, 1071 County Road G, Ithaca, Neb. 68033.

Early registration is recommended as space is limited. Registration is $65 before March 7 and $75 afterward. Registration includes lunch, breaks, workshop materials and an instruction manual.

Control winter annuals

Winter annual bromegrasses like downy brome, cheatgrass, and wild oats are a problem in pastures, but they can controlled with timely herbicide treatments. First, before deciding to spray, remember that seed from these grasses lasts several years in the soil. That means you need to plan to repeat any spraying for at least a couple years.

Herbicides can easily kill these weeds in pastures dominated by warm-season grasses. One option is to spray one pint of glyphosate per acre early in the spring after weedy bromes green up but before warm-season grasses start growing. You also can use four to six ounces of Plateau herbicide and get similar results. With Plateau, residual herbicide activity will control some later emerging weeds as well.

If your pasture is cool-season grass, the job is tougher. Both glyphosate and Plateau harm cool-season grasses, so they aren't a good option. Gramoxone is a better choice but don't spray until the weedy bromes are about to form seed heads. Then Gramoxone will kill all the green top growth it contacts, even your good grass. Although you will lose some early grazing, your good grass will start to regrow after two or three weeks.

Herbicides can control winter annual bromes if you use them right.

Bruce Anderson
Extension Forage Specialist

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Rotations *(Continued from page 1)*

25% are frequently reported while in high-yielding environments; increases of 5-10% have been frequently reported. Research conducted at the University of Nebraska's South Central Agricultural Laboratory near Clay Center from 1985 to 2004 reported a 6.6% increase from a continuous corn average yield of 177.7 bushels per acre to a rotated corn (with soybeans) average yield of 189.4 bushels/acre.

The following table is based on research conducted by Cooperative Extension Cropping Systems Specialist Bob Klein and Farm Management Specialist Roger Selley, (see April 30, 1999 *CropWatch*, available online at *http://cropwatch.unl.edu/archives/1999/crop99-7.htm*). The table was developed using current input prices and average November prices for corn and soybeans received by Nebraska producers from 1995 to 2004, the net for land, management, machinery depreciation and interest and overheads (based on a center-pivot irrigated, ridge-till system with one-half corn following soybeans and one-half soybeans following corn vs. continuous corn, using conventional hybrids and conventional herbicides).

Continuous corn	$ 64.19/acre
Corn following soybeans	$138.44/acre
Soybeans following corn	$149.14/acre
Corn/Soybeans (average)	$143.79/acre

Corn/soybean (average) of $143.79/acre minus Continuous corn (average) of $64.19/acre = **$79.60**

There is an almost $80 per acre advantage to growing corn in rotation with soybeans compared to a continuous corn system. Certainly there will be some differences in the management required because of additional demands due to growing soybeans; however, in the rotation, the demand for labor, management and machinery time would be spread out to due to the later planting and earlier harvesting of soybeans compared to corn.

The decision to plant more second-year corn acres by decreasing soybean acres in 2005 must be made by carefully evaluating both the agronomics and economics of such a choice.

Terry Hejny
Extension Educator

Note: *This topic was one of more than 20 presented during the 2005 Extension Program Series,* 10 Easy Ways to Boost Profit $20/Acre *(see story at right). Look for the 10-20 icon in future issues of CropWatch for more tips on how to improve efficiencies and profits for your operation.*

More 10-20 programs scheduled for March

The new Cooperative Extension program series -- "Ten Easy Ways to Boost Profit $20/acre" is continuing across the state in March with four more meetings.

Each meeting features 10 practices that are easy to adopt and can improve an operation's margin of profit by at least $20.

Individuals should register at least seven days prior to the workshop. To register, contact the Extension educator in the host county, call the toll-free number 877-854-6554, or call the Hamilton County Extension Office at P.O. Box 308, Aurora 68818-0308.

Cost is $20 for the first person from an operation and $10 for another from the same operation. All workshops begin at 10 a.m. and end at 3 p.m.

Remaining dates and locations:

- **March 8**, Minden, Fairgrounds, Kearney County Community Building
- **March 16**, Clay Center, Fairgrounds, 4-H Building
- **March 18**, Columbus, Ag Park, The Starter Cafe
- **March 23**, Stanton, VFW, 126 E. Main St.

EPA okays cotton glove liners

If you have ever hesitated to wear chemical-resistant gloves on scorching hot days or because your hands were sensitive to the glove material, you have a new option that won't jeopardize your safety. The EPA has approved the use of cotton liners inside chemical resistant gloves for agricultural pesticide applications.

While there are some restrictions to using the liners, there also are many benefits. Restrictions outlined in the EPA Worker Protection Standard include: 1) liners may not be longer than or extend beyond the glove, and 2) they must be disposed of after 10 hours of use or whenever they become contaminated. Benefits include: 1) increased comfort to applicators' hands, especially during periods of extreme heat (and profuse sweating) and cold; 2) reduced risk of allergic reaction to glove materials; 3) reduced risk of pesticide exposure; 4) potentially reduced risk of dermatitis on the hands.

The glove liner approval only applies to agricultural pesticide applications under the Worker Protection Standard. That means it applies only to pesticide applications to growing ag crops on farms and in nurseries and greenhouses. It does not include pesticide applications on pastures, rangelands, home lawns, gardens or to livestock. Cotton glove liners are relatively inexpensive, costing as little as $5 for 25 pairs (*www.gemplers.com*). Check the EPA Web site at *http://www.epa.gov/oppfead1/safety/workers/gloves.htm* for details.

Larry Schulze, Pesticide Education Specialist

No-till saves *(Continued from page 1)*

of up to 1 inch of soil moisture with each trip. Shallower tillage, even row crop cultivation, can still result in moisture losses of about ½ inch. By not tilling or cultivating, you can minimize these moisture losses.

Soil water conservation. Greater yet are the soil moisture losses from evaporation once tillage destroys residue cover. The residue mulch reduces evaporation in several ways: by reducing solar heating of the soil, by keeping drying winds off the soil surface, by insulating the soil to keep it cooler, and by intercepting some of the water as it evaporates. Research has shown that the residue mulch can reduce water losses from evaporation by as much as 3 to 5 inches during the season. This can mean as much as 25 to 50 extra bushels of corn per acre in dryland production or greatly reduced watering costs in irrigated production, about $14 to $23 less per acre.

Erosion control. While flattened residue makes a better mulch, leaving standing residue until planting is preferred for crop production. Standing residue that is anchored to the soil is more effective in blocking wind from the soil surface, reducing wind blown soil losses and the dust storms common in the spring. In addition, anchored standing residue doesn't have to be cut or handled during fertilizing or planting and is far less likely to move with the wind, surface water runoff, or during furrow irrigation. Unlike a flattened mat of residue which may keep the soil surface too cold and wet for planting, the air movement among the standing residue allows more timely field operations while maintaining the benefits of the residue.

Mythbusters. While some say "the soil needs to be tilled to open it up to let water in," unfortunately the soil often dries to the depth of tillage so the initial water let into the soil just replaces what was lost with tillage rather than adding to the soil moisture reserve. Tillage breaks up and pulverizes the soil surface, destroying residue cover and making the soil prone to crusting from raindrop impact. Tillage actually creates a condition that seals the soil, resulting in more runoff and less effective rainfall or irrigation. With residue, the raindrop impact is absorbed and erosion is reduced. The residue also slows the runoff allowing more time for infiltration.

Another reason sometimes given for tillage is that "the field has to be tilled to dry out wet soil or a wet spot." Driving on or tilling a wet soil is the major source of compaction. The wet soil particles are lubricated such that they slide below the weight of tillage implement, causing compaction. While the surface may dry out, the tillage itself compacts the soil below the tilled layer, slowing infiltration and making the soil surface stay wetter next time. With less water infiltrating into the soil and some compaction restricting root growth, those tilled wet spots are often the first areas in the field to show moisture stress during hot dry weather.

Reduced input costs. Higher fuel costs — about 30% more this year — also are a factor when considering reducing tillage. The diesel fuel requirements for the typical disk-disk-field cultivate tillage system is about 3.77 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. Decreasing the tillage results in a corresponding decrease in labor and improves the timeliness of other field operations.

Switching to no-till can save $14-$23 an acre in reduced irrigation costs and more than $22 an acre in reduced tillage costs.

However, the fuel cost is a small percentage of the total tillage cost when fixed costs, depreciation, repairs, maintenance, and labor are included. For instance, the typical custom rate for disking is about $8 an acre and requires about 3/4 gallon of diesel fuel. Even if farm fuel prices doubled from $1 per gallon to $2 per gallon, the custom rate for disking would only go up $0.75 an acre, less than a 10% increase.

While switching from a disk-disk-field cultivate system to no-till would save 2.34 gallons of fuel, the reduction of tillage costs would be much greater -- more than $22 an acre, based on custom rates. This added to the savings of 3 to 5 inches of soil moisture makes switching to no-till a wise management decision. The improved soil structure, reduction in erosion, and opportunity for more timely field operations add even more benefits when no-till is properly managed.

Paul Jasa
Extension Engineer

For a list of spring ag programs visit the ***Events*** page on the ***CropWatch Web*** site at

cropwatch.unl.edu

Resistance management strategies vary with the corn hybrid being planted

With the registration of YieldGard Rootworm corn, we now have several types of Bt corns which differ in pest efficacy and resistance management requirements. It is important to distinguish YieldGard Rootworm hybrids from YieldGard Corn Borer or Herculex I hybrids. The YieldGard Rootworm corn hybrids contain a coleopteran (beetle)-specific Bt protein (Cry3Bb) that is toxic to corn rootworm. They have no effect on corn borers or any other caterpillars.

As with past Bt corn hybrids, insect resistance management (IRM) will be required of farmers who grow YieldGard Rootworm corn. Although the IRM program is similar to those for earlier Bt corns that targeted European corn borer, there are some significant differences. This only makes sense since the biology of the corn rootworm is very different from that of the European corn borer.

Resistance management: YieldGard rootworm corn

The resistance management requirements for YieldGard Rootworm corn are:

1. Growers must plant a structured refuge of at least 20% non-YieldGard Rootworm corn that may be treated with insecticides as needed to control corn rootworm larvae. Growers will not be permitted to apply insecticides labeled for corn rootworm to the refuge for control of insect pests while adult corn rootworm are present unless the YieldGard Rootworm field is treated similarly. Refuge acres should be planted as blocks in or adjacent to YieldGard Rootworm cornfields or as in-field strips.

2. External refuges must be planted adjacent to YieldGard Rootworm fields.

More information on Bt corn, European corn borer, and resistance management is available in *Resistance Management for European Corn Borer and Bt Transgenic Corn: Refuge Design and Placement*, NebFact NF425, available online at *http://ianrpubs.unl.edu/insects/nf425.htm* or at your local Cooperative Extension office.

3. When planting the refuge in strips across a field, refuges must be at least six rows wide, preferably 12 consecutive rows wide.

4. In addition, the refuge must be planted in similar ground as the YieldGard Rootworm corn. If the YieldGard is planted in ground that was in corn the previous year, the refuge must be planted in ground previously planted to corn. General management of the YieldGard Rootworm corn and the refuge should be similar.

Additional information is available from NebFact 594, Resistance management for YieldGard Rootworm™ Bt corn, *http://ianrpubs.unl.edu/insects/nf594.htm*

Bt corns for European corn borers and other caterpillars

YieldGard Corn Borer or Herculex I hybrids, both provide high levels of control of European corn borer in whorl stage and reproductive stage corn. Herculex I hybrids also provide control of black cutworms, fall armyworms, and western bean cutworms. This difference in pest efficacy is due to different Bt toxins being expressed in the two types of hybrids. YieldGard Corn Borer hybrids express the Cry1Ab Bt toxin, Herculex I hybrids express the Cry1F Bt toxin.

While most producers who grow Bt corn resistant to European corn borer are aware of the associated resistance management requirements, it's always good to review requirements prior to the growing season.

Resistance management: Bt corns for European corn borer

The resistance management requirements for Bt corns resistant to European corn borer (YieldGard CornBorer, Herculex I) are:

1. Growers must plant a refuge of at least 20% non-Bt corn that may be treated with insecticides as needed to control lepidopteran (caterpillar) stalk-boring and other pests.

2. Refuge planting options include: separate fields, blocks within fields (e.g. along the edges or headlands), and strips across the field.

3. External refuges must be planted within 1/2 mile of the Bt field (1/4 mile or closer preferred).

4. When planting the refuge in strips across the field, the strips should be at least four rows wide, and preferably six or more rows wide.

5. Insecticide treatments for control of European corn borer, corn earworm, southwestern corn borer (Cry1Ab or Cry1F corn hybrids) and/or fall armyworm and black cutworm (Cry1F corn hybrids only) may be applied to the refuge only if economic thresholds are reached for one or more target pests. Economic thresholds will be determined using methods recommended by local or regional professionals (e.g. Extension educators,

(Continued on page 9)

Crop insurance options for 2005

The deadline for buying crop insurance for 2005 spring planted crops is March 15. Ag Economist H. Doug Jose explains the options available and how to determine the best choice for your operation.

Prices for 2005

The prices established by the Risk Management Agency (RMA) to calculate the premiums and indemnities for the standard APH/MPCI program for 2005 are:

Corn	$2.20 per bu.
Gain Sorghum	$2.15 per bu.
Soybeans	$5.00 per bu.

The spring base prices for Crop Revenue Coverage (CRC) and Revenue Assurance (RA) are the averages of the closing prices during February for the December and November CBOT contracts for corn and soybeans, respectively. The *unofficial* prices for this year are:

Corn	$2.31 per bu
Soybeans	$5.58 per bu

Revenue Assurance or Crop Revenue Coverage

Revenue Assurance (RA) was available for the first time in Nebraska in 2004. There are three differences between Revenue Assurance and Crop Revenue Coverage (CRC). The basic revenue assurance contract has only one price: the price established in February. The harvest price is not part of the basic contract; however, the "harvest price option" is available for RA insurance, making it almost the same as CRC. The "almost" qualifier is that the harvest price for RA is determined from the December Chicago Board of Trade (CBOT) contract during November rather than in October as with the CRC. The "whole farm" option is available for RA but not CRC and coverage levels below 65% are not available for RA. A key consideration in choosing CRC or RA is the premium rates.

Recommendations

1. Only consider RA with the harvest price option.
2. Buy the cheapest policy for your county.
3. Chart the December contract for corn and November contract for soybeans during February and begin planning forward pricing strategies if you plan to buy either revenue policy.

Group Risk Income Protection (GRIP)

The GRIP program is being offered for the first time in 2005 in Nebraska. GRIP is an area-based revenue insurance product that pays the insured in the event a county average per acre revenue falls below the insured's county "trigger revenue." GRIP is similar to GRP in that participation is driven by the relationship of individual yield to the county expected yield, except that price is added into the equation.

Coverage levels are the same as for GRP, 70% to 90% in 5% increments.

GRIP Prices for Corn

Expected: Average of the final closing prices for the last five trading days in February for the CBOT December corn futures contract for the current crop year.

Harvest: Average of the final closing prices in November for the CBOT December corn futures contract.

GRIP Prices for Soybeans

Expected: Average of the final closing prices for the last five trading days in February for the CBOT November soybean futures contract for the current crop year.

Harvest: Average of the final closing prices in October for the CBOT November soybean futures contract.

GRIP Prices for Grain Sorghum

Expected: Average of the final closing prices for the month of February for the CBOT December corn futures contract for the current crop year multiplied by the price percentage relationship between grain sorghum and corn as determined by RMA based on the January estimate of corn and sorghum prices.

Harvest: Average of the final closing prices in October of the CBOT December corn futures contract multiplied by the price relationship between grain sorghum and corn as determined by RMA based on the January estimate of corn and sorghum prices. The harvest price cannot be less than the expected price minus $1.50, or greater than the expected price plus $1.50.

Dollar amount of protection per acre is selected from amounts specified in the actuarial tables.

The payment calculation factor and the loss payment or indemnity are calculated using formulas similar to those used for the Grassland Reserve Program (see page 9).

(Continued on page 9)

Soil water recharge levels still below normal

Heavy precipitation during the past 30 days across east central, southeast, and portions of south central Nebraska help alleviate some concerns about inadequate soil moisture recharge heading into the spring planting. Dry conditions across western Nebraska are a concern, but above normal precipitation last fall has helped minimize the impacts of this recent dry stretch.

Figure 1 shows that the southeastern third of the state has received more than 4 inches of moisture from October 1, 2004 to February 27, 2005. Most of this moisture came in the last 30 days. The northwestern two-thirds of the state had 2-4 inches of precipitation during that five-month period, with most of it in October-November 2004.

Since Nebraska generally receives only 7% of its annual precipitation from December to February, it's helpful to look at moisture in terms of percent of normal (*Figure 2*). First, the Panhandle, southwest, south central, central, and east central portions of Nebraska had above normal moisture during the five-month period. Drier than normal conditions occurred in the Sandhills, northeast, and southeast. Even with the heavy moisture across southeastern Nebraska during the last 30 days, this area remains in a moisture deficit due to the extremely dry fall.

Why am I keying in on the period from October 1 to this week? Fall and spring soil moisture recharge gives us an idea of the potential risk producers face as they enter the production season. Dryland corn producers in eastern Nebraska should be able to expect 11.5-12.0 inches of moisture from October 1 to April 30. Studies have found that if this occurs along with normal growing season moisture, average corn yields can be expected. For each inch shy of 12 inches, coupled with normal growing season moisture, dryland corn yields can be expected to drop 2.5%-3.0%.

Because water supplies are tight or non-existent for gravity fed irrigation across western Nebraska, above normal fall and spring moisture can help offset the loss of

Continued on page 8

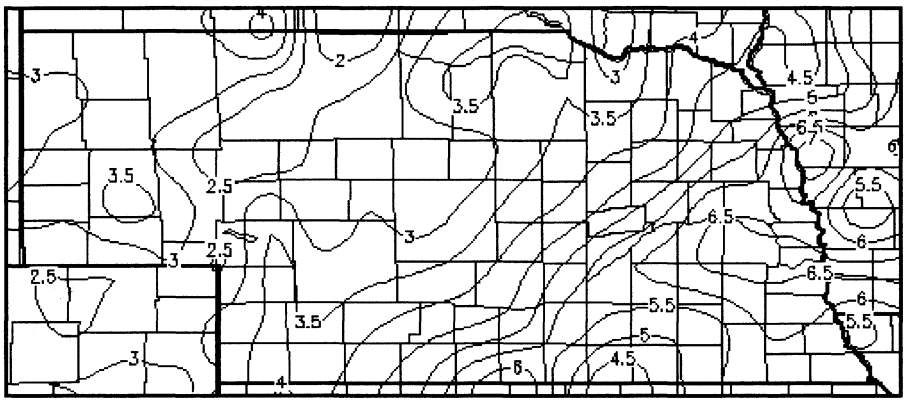

Figure 1. Precipitation from October 1, 2004 to February 27, 2005. *(Map courtesy of the Nebraska State Climate Office.)*

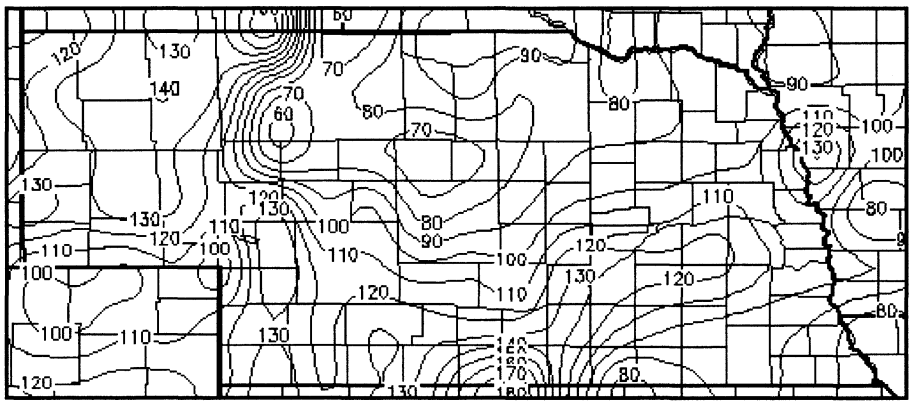

Figure 2. Percent of normal precipitation from October 1, 2004 to February 27, 2005. *(Map courtesy of the Nebraska State Climate Office.)*

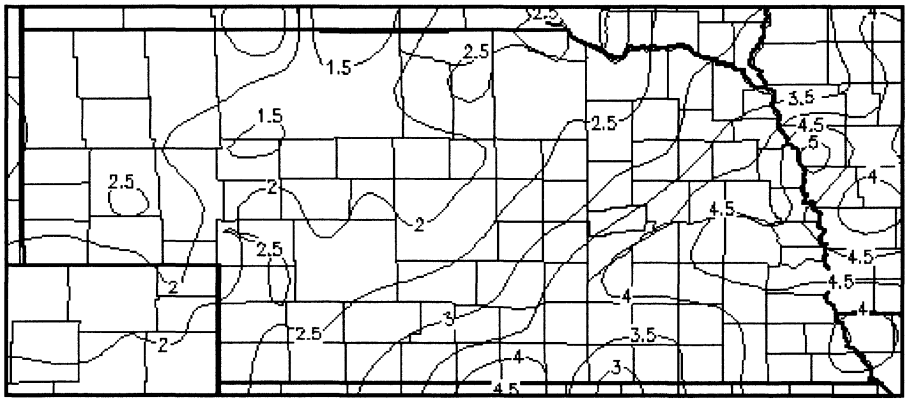

Figure 3. Estimated soil water recharge in inches in field root zone. *(Map courtesy of the Nebraska State Climate Office.)*

Spring cleaning?

See the March 11 ***CropWatch*** for a list of dates and places for pesticide container disposal.

Soil water *(Continued from page 7)*

growing season irrigation. It also can provide a valuable moisture base for seed germination and early root development. For center pivot operators, above normal off-season moisture can help reduce summer applications and lower fuel costs as long as normal growing weather is observed.

Research was conducted in the early 1990s at Mead on the effective rate of off-season soil moisture recharge on fields not receiving fall tillage. An average of 70% of the precipitation was effective; 30% was lost to evaporation or runoff. The variance of moisture recharge ranged from 60%-80%, with the lower values observed when soils froze up before December 1.

Applying the 70% effective precipitation rate to the moisture received from October 1, 2004 through Feb. 27, 2005, Figure 3 was created. The western Sandhills have the smallest estimated soil moisture recharge with an average of 1.5-2.0 inches, while the remaining western two-thirds of the state has 2-3 inches of soil moisture recharge. Most of the southeastern third of the state has an estimated 3.0-4.5 inches of soil moisture recharge, except for the I-80 corridor between Lincoln and Omaha which shows 4.5-5.0 inches of recharge.

How do these estimates stack up against normal expectations. *Figure 4* shows the difference between recharge based on normal precipitation and the current recharge season. Positive values indicate recharge is ahead of normal, while negative values indicate recharge is lagging. Soil moisture deficits approaching 1.5 inches are evident across the central Sandhills, while most of northeast and southeast Nebraska have deficits under an inch. Surplus moisture is present across the remainder of the state, with amounts between 0.5-1.0 inches indicated across the northern Panhandle, south central, central, and western parts of east central Nebraska.

With two months left in the off-season recharge period, what is the likelihood of normal recharge by May 1? The last 100 years of March-April precipitation data were added to moisture received during the previous five-month period to see what the odds are that there will be normal recharge by May 1. The lowest odds for normal recharge were found to occur across the Sandhills, with a 25-40% likelihood of achieving full recharge. For northeast and southeast Nebraska, there is a 40-55% chance, while the remainder of the state falls in the 55-70% range.

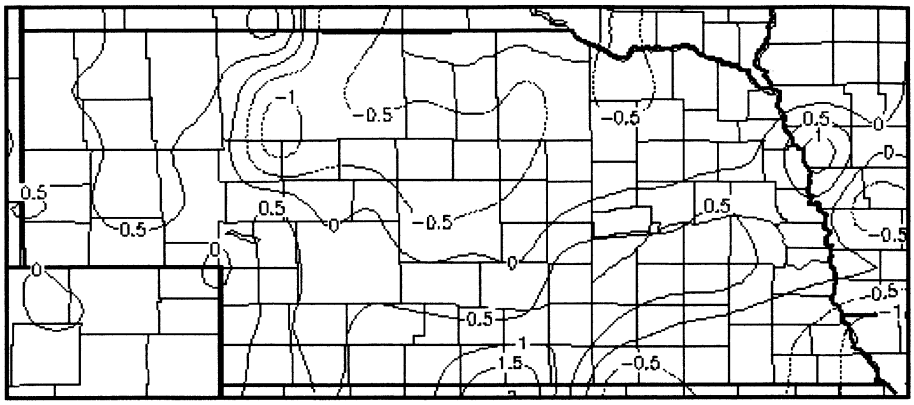

Figure 4. Estimated soil moisture recharge departure from normal (in inches). *(Map courtesy of the Nebraska State Climate Office.)*

Soil moisture levels were much better at this point last spring across northeast and southeast Nebraska; however, if northeast and southeast Nebraska see 120% of normal precipitation in the next 60 days, the recharge season deficits will be eliminated. Although soil moisture recharge looks more promising across western Nebraska in comparison to the last few years, long-term hydrological drought issues have not been resolved.

Critical snowpack data and streamflow projections will be released in early March and should tell us more about how severe water restrictions are likely to be for Platte River irrigators. A summary of these reports will appear in an upcoming issue of *CropWatch.*

Al Dutcher
Extension State Climatologist

Test 'miracle' products first

"Increase your profits and your production for just a few pennies per acre."

Haven't we all seen or heard such tempting product claims. You know the pitch. Maybe it's a bermudagrass that yields 20 tons per acre or a foliar fertilizer that doubles alfalfa yield. It could be a soil enhancer that makes water wetter or releases more soil nutrients.

These claims sound good and often have a reasonable explanation about why they would work. But will they work? I can't summarily discount every "miraculous" product. But let's face it. You know the old adage -- if it sounds too good to be true, it probably is. Still, what if it is true? Why not take the gamble?

Maybe the big question should be -- how much should you gamble.? I have no problem with trying something new -- that's how we improve -- but start slow. Spray a couple test strips or plant just a couple acres. Make the product prove itself before you bet the farm. If it really is good, it will be available next year. If the salesperson won't let you try just a little, just say no.

We all want something that will make us richer, but be careful not to jeopardize what you already have for a "miracle product" that can't deliver.

Bruce Anderson
Extension Forage Specialist

Crop insurance *(Continued from page 6)*

Payment Calculation Factor =
(Trigger Revenue - County Revenue) / Trigger Revenue

Indemnity =
Payment Calculation Factor x Policy Protection.

Expected County Revenue =
Expected County Yield x Expected Price

Trigger Revenue =
Expected County Revenue x Coverage Level Selected

County Revenue =
Final County Yield x Harvest Price

GRIP is available in 74 counties for corn, 20 counties for grain sorghum and 35 counties for soybeans.

Recommendation

Check with your agent to determine what the GRIP history would have been for your county for the past five years.

H. Doug Jose
Extension Agricultural Economist

More info? Visit the USDA RMA Web site at:
www.rma.usda.gov/news/whatshot/

Jagalene most popular wheat planted for 2005

For the first time, Jagalene was the most popular winter wheat variety planted in Nebraska, replacing Alliance, which was the top planted variety the previous four years, according to a report from USDA's Nebraska Agricultural Statistics Service.

Jagalene first appeared in the state in 2003 and quickly rose in popularity. Pronghorn, introduced in 1997, increased to become the second most popular variety, with Millennium slipping to third.

For the 2005 crop, Jagalene accounted for 16.8% of the acreage while Pronghorn was planted on 11.4%. Millennium was planted on 10.7% with Alliance dropping to fourth place at 10.1%. Wesley improved to finish fifth with 5.5%.

Jagalene was the most popular wheat variety in the south, southwest, east and southeast districts. Pronghorn came in first in the northwest, helping it become the second most popular variety planted in the state. Arapahoe was the most popular in the Northern District. Wesley was ranked first in the Central District, helping it improve to fifth overall.

USDA Nebraska Agricultural Statistics Service

Resistance management *(Continued from page 5)*

crop consultants). Microbial Bt insecticides (e.g. Dipel) must not be applied to non-Bt corn refuges.

There are several reasons why farmers should comply with resistance management requirements. First, and most important, compliance will slow the development of Bt-resistant corn borers and preserve Bt as an effective pest management tool for the future. Many of us have seen how efficacious Bt corn hybrids are against the European corn borer. Loss of this management tool could mean going back to the days of large-scale spraying and the problems associated with treatment timing, chemical application, etc.

Second, compliance is part of the contractual agreement that a grower is required to sign when buying Bt transgenic corn seed. By doing so, growers state that they are aware of and will comply with resistance management requirements. Specific resistance management information will be a part of each corn seed bag label and must be followed. Failure to comply with the resistance management requirements could result in a grower losing access to the Bt corn hybrids for a year.

And finally, if the EPA feels that compliance is not high enough, it could seek future regulation of Bt corn use.

Tom Hunt, Extension Entomology Specialist
Haskell Agricultural Laboratory
Bob Wright, Extension Entomology Specialist
UNL, Lincoln

Warm stored grain

With recent temperature swings, don't forget to monitor your stored grain. Take advantage of air temperatures of 30-35°F to warm grain that was cooled to below freezing last winter. The objective now is to warm the grain to above freezing, not necessarily to remove much water.

Waiting until the air is warmer to aerate the bin invites problems. Ice dams can form in the bin when the grain temperature is below the dew point temperature of the air and the grain temperature is below freezing.

Once grain temperatures are above freezing, run aeration fans intermittently to finish drying the grain to a safe storage moisture content. An *Equilibrium Moisture Content Table* can be found in Natural Air Corn Drying at *http://ianrpubs.unl.edu/farmbuildings/g760.htm*

Tom Dorn
Extension Educator

Southeast wheat on par

The condition of the wheat crop in southeast Nebraska appears normal for this time of year, according to field surveys conducted the week of February 14. No evidence of serious winter injury was noted, although wheat in some of the later planted fields that followed soybeans was short and from the road the stands appeared thin compared to wheat planted earlier. Plants in these field had healthy roots and crowns and should put on normal growth this spring.

Any evidence of winter injury or crown and root rot usually doesn't become evident until late March or early April when the wheat resumes growth. Additional surveys will be conducted in April as the crop comes out of dormancy.

Reports to the south indicate that leaf rust survived the winter in much of Texas and Oklahoma. Also, abundant leaf and stripe rust was found on wheat plots in south-central Texas. Active powdery mildew was found on plants in Oklahoma and, as with leaf rust, appears to have survived the winter. These diseases will become more prevalent as temperatures increase.

As the growing season gets underway, I will continue to monitor the development of both rusts and powdery mildew in states south of Nebraska.

John Watkins
Extension Plant Pathologist

Subscribe now for 2005

For most of you, this *CropWatch* is a reminder that it's time to resubscribe. This first issue is free to all 2003 and 2004 subscibers, but if you don't resubscribe soon, you'll miss the next 25 information-packed issues targeted specifically to Nebraska crop production. (***Next week:*** The potential impact of soybean rust in Nebraska, including identification tips, recommended fungicides and sprayer attachments and adjustments.)

If you have any questions now or throughout the year about *CropWatch*, please feel free to phone me at (402) 472-7981 or email me at ljasa1@unl.edu

Lisa Jasa
CropWatch Editor