

Farm & Field

Chippewa Valley Agriculture Newsletter

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April 2008

Volume XII Issue IV

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Good Day!!

The winter of 2007-2008 may be remembered as the winter that held on forever. I've heard people complain about the weather a lot this year and people keep talking about old time winters. Try reminding your friends in the Madison-Milwaukee area about those winters and they'll tell you about this year with over 100 inches of snow. I think old fashioned winters are like knee high corn – everything is relative. I do remember a 26 inch snowstorm in April 1972 that basically shut down eastern Iowa for a week.

Neighbors had seeded oats the week before and after the snow melted the oats were four inches tall. Ah memories!

Thanks to all of you who were able to attend one of our Extension-sponsored programs over the winter months.

Have a safe and prosperous planting season!

“Continue to Farm Smarter”

Mahlon Peterson

Mahlon Peterson
UW-Extension Agricultural Agent

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Calendar

April

- 5 Rural Living Day—Beaver Creek Reserve
- 11 & 12 Swine & Sheep Weigh-in - Exposition Center
- 17 Beef Cow/Calf Meeting—Rusk/Washburn County
- 21 MAQA Training— Ag & Resource Center

Please call our office for more details, registration fees, etc.

Rural Living Day is April 5 At Beaver Creek Reserve

Are you new to country living? Do you ever wonder where to get information and ideas for making your dream into a reality? Rural Living Day is designed to answer those and many other questions. The event will begin at 8:30 AM at Beaver Creek Reserve's Nature Center Auditorium.

Eight short presentations will follow on numerous topics including: “What Can I Do On My Land?”; “Living in the Country – Sights Sounds and Smells of Country Life”; “Trees and Invasive Plants”; “What About Buffers and Other Farm Programs?”; “Dealing With Nuisance Animals”; “Ponds and Wetlands – Where Do I Start?”; “Prairie Establishment and Managed Grazing” and “Composting, Rain Gardens and Regulations.”

There is a \$5.00 registration fee to cover materials and facility use. The Friends of Beaver Creek Reserve will

For more Extension Information go to our website:
www.uwex.edu/ces/cty/eauclaire/

Something To Chew On . . .



Mahlon Peterson Ag Agent
Eau Claire County

Fertilizer Management Considerations for 2008

Carrie Laboski, Dept. of Soil Science, UW-Madison

Fertilizer Price Overview

Fertilizer prices have increased significantly over the past six months and are at record levels. The Fertilizer Institute (www.tfi.org) has described the reasons behind the high fertilizer prices. I will briefly summarize The Fertilizer Institute's information. First, fertilizer is a world commodity and global demand for nitrogen, phosphate, and potash are up 14, 13, and 19 % respectively from 2001 to 2006, because of increased demand from China, India, and Brazil. Second, U.S. corn acres increased from 78.3 million in 2006 to 93.6 million in 2007 largely because of ethanol production. More corn acres mean more fertilizer is used, in particular nitrogen. Third, all transportation costs have increased. Fourth, a weak U.S. dollar increases the cost of imported goods to the U.S. consumer. The U.S. imports more than 50% of its nitrogen and over 90% of its potash, but is the largest exporter of phosphate. Fifth, high natural gas prices have driven up the cost of producing ammonia, which results in higher prices for all nitrogen and ammoniated phosphate fertilizer materials.

Fertilizer prices from around Wisconsin for the time period of roughly March 1 through March 15 are presented in Table 1. When contacted, most retailers said that current March prices were valid now, but subject to change, perhaps on a weekly basis. They also said that it is difficult to estimate May/June or fall pricing. The range in prices can be attributed to when and for what price retailers purchased the fertilizer. There appeared to be no regional differences in price; that is prices near the maximum and minimum could be found in any given county or region.

To put these fertilizer prices into perspective, the increase in price relative to 1998, 2003, and 2006 are shown in Table 2.

Table 1. Reported fertilizer prices from numerous Wisconsin locations during the period of March 1 through 15, 2008.

Fertilizer Material	Fertilizer Price, \$/ton			Average Nutrient Price, \$/lb			Number of locations
	Average	Min.	Max.	N	P ₂ O ₅	K ₂ O	
Ammonium sulfate	352	310	400				9
Anhydrous ammonia	777	750	805	0.47			5
Urea	523	495	599	0.59			16
UAN, 28%	374	359	408	0.67			11
UAN, 32%	423	411	435	0.66			2
DAP*, 18-46-0	820	650	926	0.47	0.71		15
10-34-0	673	655	690	0.47	0.85		2
Potash, 0-0-60	566	486	600			0.47	49
9-23-30	659	643	675	0.47	0.53	0.55	4

* Price of MAP (11-52-0) per ton was similar to DAP.

Table 2. Approximate percentage increase in fertilizer prices as of March 2008 compared to 1998, 2003, and 2006.

Year	NH ₃	UAN, 28%	Urea	MAP (11-52-0)	Potash (0-0-60)
% price increase = [(current price - past price) / past price] x 100					
1998	204	190	170	200	252
2003	111	128	105	219	249
2006	43	55	42	142	109

Several but not all retailers said that current supplies of 10-34-0, anhydrous ammonia, ammonium sulfate, DAP, and/or potash may be tight this spring. Of particular concern is 10-34-0 and any other liquid fertilizer that is a derivative of it, because 10-34-0 is in shortest supply. Availability in May/June will likely be a concern for these same fertilizer materials along with 28% UAN. *Thus, it is important for farmers to communicate with their suppliers regarding changes in prices and current/future fertilizer needs.*

While these fertilizer prices are at record high levels, we need to keep in mind that grain prices are currently very good. Figure 1 shows corn, soybean, and wheat grain prices over the last 7 years. Average alfalfa hay price as of March 7 was 122 \$/ton FOB for prime hay (http://www.uwex.edu/CES/forage/pubs/hay_market_report.htm). Thus, decisions regarding how much fertilizer to apply to maximize return may not be all that different than in years past, but availability of fertilizer might influence decisions more. The remainder of this article will discuss various things to consider when making fertilizer decisions this spring.

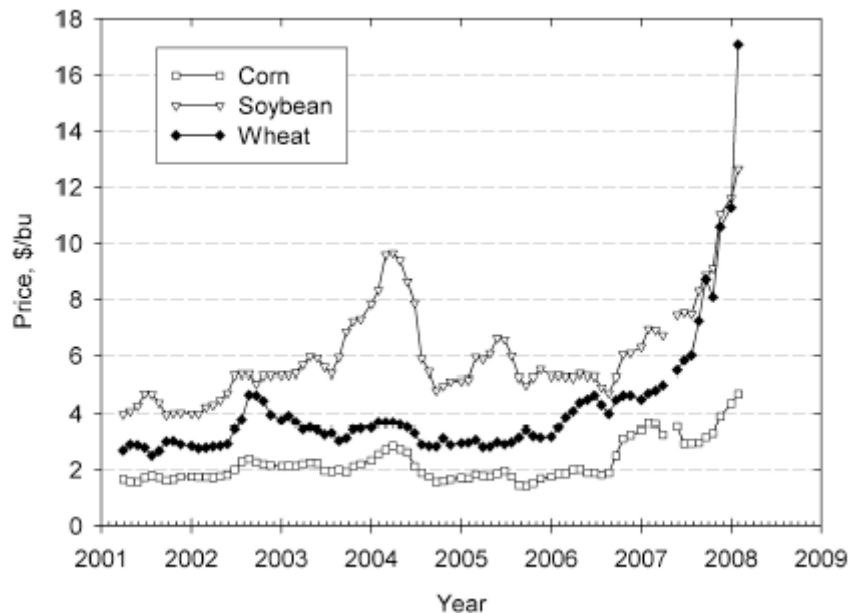


Figure 1. Average corn, soybean, and wheat prices from five Wisconsin locations by month from 2001-2008. Source: www.aae.wisc.edu/renk

General Considerations for Phosphorus and Potassium

If phosphate and/or potash fertilizer supplies becomes limited, or if a farmer is unable to afford all of the P and K fertilizer that they would like to apply, then it may be necessary to prioritize which fields should have fertilizer applied. *A current soil test is crucial for prioritizing fertilizer applications.* A current soil test is one that is no more than 3 to 4 years old and is based on samples collected following guidelines in UWEX A2809. Crops such as alfalfa and corn silage remove large quantities of P and K relative to other crops. A more recent soil test (within the past 2 years) may be beneficial in fields where these crops have been recently grown. With the higher costs of nutrients, the value of good soil tests has increased because soil tests are the primary tools used to assess nutrient need.

After assessing the soil test P and K levels and determining how much fertilizer is suggested, subtract P and K credits from any manure, biosolids, or other waste materials applied to the field since the harvest of the previous crop. Use UWEX A2809 *Nutrient application guidelines for field, vegetable, and fruit crops in Wisconsin* (<http://www.soils.wisc.edu/extension/>) to assist in determining nutrient credits. High fertilizer prices have dramatically increased the nutrient value of manure. For example, solid dairy manure was worth \$2.90/ton in 1997 and \$5.10/ton in November 2007 based on the first year available nutrient content of the manure and the price of fertilizer. Today solid dairy manure is worth \$8.00/ton in nutrients. Depending on how much a farm is paying for manure hauling/application costs, it may be beneficial to spread manure over more acres and purchase less fertilizer, as long as the manure applications are in compliance with the farm's nutrient management plan

After subtracting manure P and K credits from the nutrient needs of a field, P and K fertilizer should be allocated in such a manner as to obtain the greatest return on the fertilizer investment. In many Wisconsin fields, soil test P levels are above optimum and the expected yield response to phosphate fertilizer is small and may or may not be economical. Thus, when soil test P levels are high or excessively high, consider not applying P fertilizer or consider using lower rates (less than 10 lb P₂O₅/a) in starter fertilizer. This strategy will permit growers to allocate limited dollars for other more needed nutrients. Where soil test P levels are optimum, apply the recommended rate. P application rates should be maintained near the recommended rate on low and very low P testing soils, but could be reduced by 10% in the short term if needed.

Soil test K levels are much more variable across Wisconsin fields. All fields that test low or very low should have K fertilizer applied. Fields with optimum soil test K levels will also benefit from potash application. If possible apply some of the required K in bands to increase efficiency. This is especially important in no-till corn or on soils where compaction is a concern. There is a smaller probability of a yield response to applied K on soils testing high or above; thus K application rates may be reduced or deferred on these fields. Caution is advised when deferring K applications on fields in corn silage and alfalfa because these crops remove large quantities of K which may result in soil test levels moving into the optimum or low soil test category before the next soil sampling time period.

Don't Forget About Lime

In the current fertilizer price climate, it may be tempting to ignore lime recommendations and focus solely on fertilizer prices and application rates. Farmers should avoid this temptation. Maintaining pH at the target level for the most sensitive crop in a rotation is the cornerstone to a good soil fertility program. If the pH is not suitable for crop production, yields will suffer and applied fertilizers will not be used efficiently. Table 3 demonstrates how soil pH influences alfalfa yield response to K fertilization.

Table 3. Effect of soil pH and annual topdressed potash applications on alfalfa yield and stand density from 1998 through 2001 at Hancock, Marshfield, and Spooner, Wisconsin.

Soil pH	K ₂ O rate	Yield			Stand Density		
		Hancock	Marshfield	Spooner	Hancock	Marshfield	Spooner
	lb K ₂ O/a	Yield (T/a)			Plants/ft ²		
5.0-5.3	0	2.03	1.97	2.24	3.3	1.3	3.2
	100	2.32	2.20	2.41	3.5	1.0	4.5
	200	2.41	2.33	2.00	3.6	1.1	3.2
	400	2.42	1.94	2.00	3.3	1.0	3.8
6.5-6.8	0	3.42	3.47	3.47	4.0	6.0	7.5
	100	3.53	3.95	3.77	5.1	6.5	7.9
	200	3.54	3.96	3.74	4.1	7.2	8.2
	400	3.48	4.22	3.79	4.5	9.7	7.5

Additional Considerations for Alfalfa

In addition to making sure pH is adequate for alfalfa, annual potash applications are necessary for good yields and maintenance of stand (Tables 3). Splitting higher K application rates will reduce luxury consumption of K and help maintain feed quality. It may be tempting for producers to reduce K applications on alfalfa given the current potash prices and generally larger K application rates compared to other crops. This decision should not be taken lightly for several reasons. First, alfalfa removes approximately 60 lb K₂O/ton of dry matter. Thus, reducing or eliminating K fertilization will cause soil test levels to decrease and may limit production in future years particularly on low testing soils. Second, K is required to enhance disease resistance and winter hardiness as shown by the data in Table 3. Nitrogen credits from alfalfa to future crops is dependent on stand at the time the alfalfa is killed, ie. better stands produce more N credits. With high N fertilizer prices it may be beneficial to consider the N credit to future crops as part of the overall economic evaluation of a rotation. Finally, if producers are feeding all of the alfalfa produced on their own farm, they may want to produce the highest alfalfa yields to insure an adequate feed supply.

Remember that annual applications of sulfur and boron may be required on sandy soils. For medium- and fine-textured soils use soil and tissue tests to evaluate sulfur and boron needs.

Additional Considerations for Corn

Nitrogen fertilizer is probably the biggest concern for most corn growers. Fortunately the high fertilizer prices are offset by good grain prices. Depending upon when N fertilizer was purchased and if/when grain was contracted the N:corn price ratio for any particular farm may range from 0.05 to 0.15. The maximum return to N (MRTN) fertilizer rate is influenced by price ratios not prices of fertilizer or grain. For example, the MRTN for corn following corn on a high yield potential soil is 135 lb N/a at a price ratio of 0.10 regardless of whether that price ratio was obtained with \$0.33/lb N and \$3.30/bu corn or \$0.55/lb N and \$5.50/bu corn (Figure 2); but when the price ratio is 0.05 (for example \$0.30/lb N and \$6.00/bu corn) the MRTN is 165 lb N/a. To select the most appropriate N rate use the MRTN rates outlined in UWEX A2809.

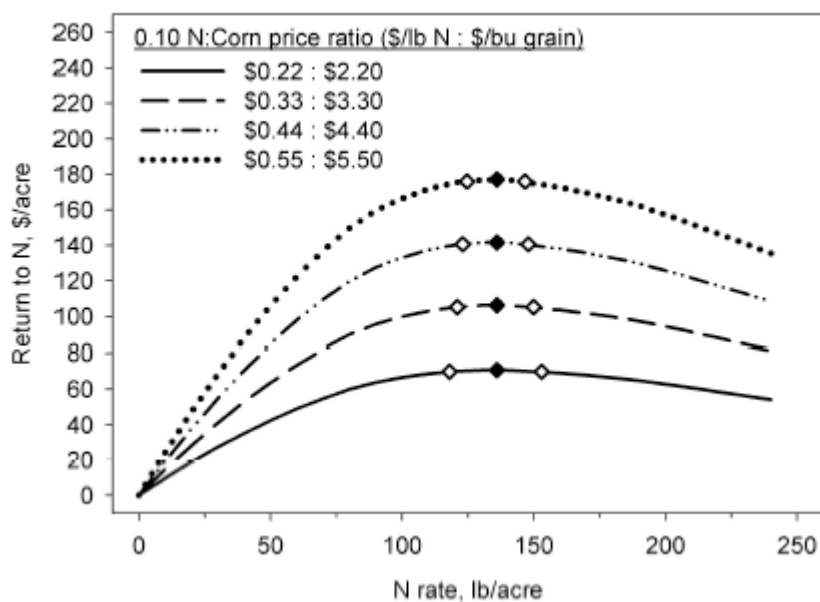


Figure 2. Effect of price level on return to N fertilizer at the 0.10 N:corn price ratio for corn following corn on a high yield potential soil. Black diamonds indicate the MRTN of 135 lb N/a. White diamonds indicate the range of N rates that have profitability within \$1/acre of the MRTN.

High prices have increased the economic risk of over and under application of N fertilizer. Figure 2 shows the effect of the price level on return to N fertilizer at a N:corn price ratio of 0.10 for corn following corn on a high yield potential soil. Higher grain price levels result in more economic risk for under fertilization as shown by the steepness of the left hand side of the curves in Figure 2. At current record high N fertilizer prices, the economic penalty for over application of N fertilizer is greater than at fertilizer prices more typical of 5 to 10 years ago as shown by how quickly the right hand side of the curve drops. The profitable range of N fertilizer rates become narrower at higher price levels. At current higher price levels, there is still overlap in the MRTN profitable range for different price ratios, but the overlap is not as great as when price levels are lower.

Because of high N fertilizer prices, many farmers are asking if there is an ideal timing of N fertilizer that would result in greater efficiency for crop uptake. For sandy soils, sidedress N applications are a must to reduce the probability of N leaching before the crop has a chance to use it. On medium- and fine-textured soils that are moderately well- to well-drained, there is probably minimal benefit to sidedressing N compared to preplant applications because there is usually not much opportunity for N loss via leaching or denitrification. However, some preliminary research results from Lancaster Ag Research Station in 2007 suggest that there is likely a benefit to having some N applied preplant or in a starter fertilizer if the majority of the N will be applied at sidedress, if growing silage corn. On poorly- and somewhat poorly-drained soils, there may be a benefit to sidedressing N to minimize the opportunity for denitrification. If conditions for denitrification exist (warm, wet soils), then use of a nitrification inhibitor would be economically beneficial. Remember that urea containing fertilizer must be incorporated into the soil by tillage or rainfall. Ammonia volatilization will usually be prevented if 0.1 to 0.2 inches of rain falls within 24 hours of application. If 0.1 to 0.2 inches of rain falls within 2 to 4 days after application, then some ammonia volatilization will occur. Significant volatilization losses occur if no rainfall occurs within 5 days of surface urea application. If physical incorporation is not possible and rainfall is not predicted, consider using a urease inhibitor to prevent urea volatilization for 10 to 14 days. Use of both nitrification and urease inhibitors is economically viable only if conditions for N loss are likely.

Fertilizer N use efficiency is maximized when weeds are controlled as shown in research conducted at Arlington Ag Research Station in 2006 and 2007. When weeds were controlled preplant or when 4 inches tall, the economic optimum N rate was generally similar and less than the MRTN rate at the 0.05 N:corn price ratio. However, when weed control did not take place until the weeds were 12 inches tall, corn required about 100 lb N/a more to maintain yield compared to when weeds were controlled earlier. Failure to control weeds resulted in yield losses that could not be overcome by applying more N. Thus, the moral to the story is to control weeds early to maximize N use efficiency.

With high fertilizer prices, producers are wondering if they should be applying P and K with the planter as starter fertilizer. If soils test optimum or lower in P and K, then starter placement is an excellent way to supply P and K and increase fertilizer use efficiency. On irrigated sandy soils when soil test P and K levels are high or greater, then response to starter fertilizer is unlikely. On these same soils, if soil test P is high or greater and soil test K is optimum or lower, then it may be beneficial to use a starter fertilizer that contains K. On medium- and fine textured soil (eg. silt loams) with excessively high soil test P and K levels, the benefit of obtaining an economic response to starter fertilizer increases with both later planting dates and longer relative maturity hybrids. On these soils, yield can be maximized with application of about 10-20-20 (lb N-P₂O₅-K₂O/a) in a 2x2 band and rates lower than this, typical of seedplacement, have been shown to be inadequate to produce an economic yield response. When using seed-placed fertilizer, a general rule of thumb is that no more than 10 lb/a of N + K₂O should be applied in order to reduce the risk of injury.

Additional Considerations for Soybean

Manganese (Mn) is a key micronutrient of concern for soybean production. Manganese deficiency in soybean is more likely on Wisconsin soils with high pH (>7.0) and/or higher soil organic matter contents (>6.0). Soils that meet these criteria are typically, but not exclusively, found in eastern Wisconsin. In 2007, Mn was confirmed to be deficient in many fields over an area from eastern Waupaca Co. south to Jefferson Co., and mostly east of Lake Winnebago. In every case that was

onfirmed with soil and tissue analysis, the soil had high pH and/or higher organic matter content. In most cases, glyphosate resistant soybean varieties were planted in the field. Research in Indiana has shown that application of Mn, in starter fertilizer or as a foliar applied at least 8 days after glyphosate, increased yield of glyphosate resistant varieties growing on soils where Mn would not be considered limiting. Research in Kansas found that application of Mn to conventional varieties resulted in reduced yields because of Mn toxicity.

Start with a soil test to determine if Mn application may be justified. If soils have organic matter $\leq 6.0\%$, have your soil tested for Mn and then follow the recommendation. For soils with organic matter $> 6.0\%$ and pH > 6.9 , apply starter fertilizer containing 3-5 lb/a Mn in the sulfate form or apply foliar Mn (1.25 or 0.2 lb Mn/a as sulfate or chelate forms, respectively) at first flower and/or first pod. If Mn is not recommended based on the conditions above, it would be best to not apply Mn because there is a risk of Mn toxicity especially on acid soils in central Wisconsin. Further research on this topic is beginning this spring.

Additional Considerations for Wheat

With the current high price of N fertilizer and very good wheat prices, some growers are wondering if 70 lb N/a for soil with 2.0 to 9.9% organic matter is still valid. To answer this question data collected over the past 12 years in southern Wisconsin was re-evaluated using current wheat and N fertilizer prices following the MRTN approach used for corn N recommendations. The amount of N needed for wheat is strongly related to preplant soil nitrate levels (PPNT). PPNT for wheat is determined on 0-1' and 1-2' soil samples taken in late summer prior to planting wheat in the fall. If the PPNT is < 50 lb NO₃-N/a, then the MRTN rate is 70 lb N/a (with a profitable range of 65 to 80 lb N/a) which matches the recommendations for soils with 2.0 to 9.9% organic matter. If the PPNT is between 50 and 100 lb NO₃-N/a, then the MRTN rate is 45 lb N/, and if the PPNT is > 100 lb NO₃-N/a, then the MRTN is 0 lb N/a (no N is needed). In these studies if wheat followed soybean then the MRTN rate was about 20 lb/a less. If PPNT soil samples were not collected last year, then it would be appropriate to use 70 lb N/a on soils with 2.0-9.9%. Also remember to take any N credits for manure applications or legumes if appropriate.

Resist the Temptation

With high crop prices, there will likely be any number of products marketed to farmers that will claim to boost yield. Resist the temptation to use products that sound too good to be true. Ask to see independently verified research results. To learn if any university has conducted research on a non-traditional soil additive or growth stimulant, check out Iowa State University's Soil Fertility web page at <http://www.agronext.iastate.edu/soilfertility/nutrienttopics/addbyproducts.html> and follow the link to the searchable compendium of non-traditional soil amendments and growth stimulants.

Additional materials

For additional information on **macro and micro nutrient fertilizer recommendations, benefits of starter fertilizer, manure and legume credits, and lime recommendations** see UWEX A2809 *Nutrient application guidelines for field, vegetable, and fruit crops in Wisconsin*. It is a featured topic at <http://www.soils.wisc.edu/extension/>

For additional information on the benefits of **N inhibitors and salt index of fertilizers**, use the searchable online Proceedings for the Wisconsin Fertilizer, Aglime, and Pest Management Conference to find papers and presentations on these topics and more. Visit <http://www.soils.wisc.edu/extension/wfapmc/>



Horticultural News . . .

Tom Kalb - Eau Claire County Horticulture Educator

Perennials brighten up shady spots

All of us have shady areas in our home landscape, whether they are caused by trees or buildings.

Believe it or not, shady areas do have their benefits. Plantings in shady areas require less watering than plantings in sunny areas. Flowers in shady areas hold their color longer and stay in bloom longer than flowers in full sun. Best of all, shady areas are great places to relax and enjoy the beauty of your yard during hot summer days.

Some *annual* flowers (particularly impatiens and begonias) tolerate shade, but they require planting every year. This adds up to a lot of work and expense. Fortunately, some *perennials* also tolerate shade.

Among the first perennials to bloom in spring are bleeding hearts (shown). These plants get their name by their delicate heart-shaped flowers. Rose-colored varieties are most popular, but white-flowered types are very appealing in evening light.

Another early bloomer is primrose. This perennial is beloved for its brightly colored flowers. Primrose is well suited for planting among spring-flowering bulbs, as an edging material, or in woodland gardens.

Astilbe is an outstanding choice in moist, shady areas. In late spring it develops showy, feathery plumes that come in shades of red, pink and white. Astilbe has attractive foliage, grows well in containers, and its flowers spikes are useful for cut flower and dried flower arrangements.

Columbine is also suitable for moist shady areas. Its fancy flowers have long, nectar-filled spurs that attract hummingbirds and butterflies.

Coral bells are popular for their delicate, long-lasting flowers. This summer-blooming plant has attractive deep green or purplish foliage and does well in any location with good drainage.

Hosta is nicknamed "the King of the Shade." This plant is widely adaptable, vigorous, and easy to grow. Its foliage comes in a variety of colors, sizes and shapes. Foliage may be green, gold, blue or variegated with bands of yellow or white. Leaf texture may be smooth or puckered. Besides their attractive foliage, hostas produce white or purplish flowers, some of which are fragrant and attractive to hummingbirds and butterflies. Hostas can be used as edging plant along walkways, in drifts for a natural effect, or as accent plants.

Ferns do not bloom but their richly-textured foliage adds a special sense of tranquility to a shade garden. Maidenhair, hay-scented, cinnamon, interrupted, wood, and ostrich ferns are popular choices.

There are several other attractive perennials for partially shaded areas: peach-leaf bellflower, daylily, bergenia, forget-me-not, monks-head, cranesbill geranium, foxglove, goat's beard, snakeroot, and turtlehead (don't you love these flower names?). Colorful, low-growing plants for edging include lungwort and Canadian phlox.

Randy's Rumors . . .

Randy Knapp, Chippewa County Agricultural Agent



Using Farm Records Effectively for Business and Financial Management

Dairy farming is a complex business which demands accurate records and careful financial management. Both financial and production records are required in order to provide the information on which the farm manager can make critical decisions. Unfortunately, the financial management tools long available in other industries have not been universally embraced by producers.

There are many reasons why farmers' financial management skills have been slow in developing. Despite greater reliance on debt financing, many farmers' primary reason for record keeping is the satisfaction of Internal Revenue Service tax reporting requirements. Since cash basis accounting provides farmers very significant advantages in managing income tax liabilities, more than 98 percent of all Wisconsin farmers report on a cash basis. Unlike the typical manufacturing or marketing firm which must use GAAP method accounting for outside reporting purposes, most farm record systems are designed around the income tax reporting function.

Accounting is one of the "least liked" tasks on the farm. A survey by John E. Carlson found that farmers admit to the importance of good record keeping, but rank it 4th behind field work, buying and selling (machinery and crops), and working on farm machinery. The same survey found that the average farmer estimated spending about 1-10 hours per week on farm record keeping during the winter and much less during the summer.

Information Needs of the Manager

Despite the small amount of time typically given to managerial planning, complete and accurate farm records, when effectively used, can help increase profits for the farm operator. Farm records have four basic uses: (1) service tool, (2) diagnostic tool, (3) indicator of progress, and (4) forward planning.

As a service tool the records system can provide income tax information for filing tax returns and Social Security reports, as well as providing a basis for tax management decisions. The records system can provide a basis for developing equitable business arrangements for operating agreements, partnerships, and corporations. Records also help in obtaining and

effectively using credit by showing factors relating to the profitability, liquidity and solvency of the farm business.

As a diagnostic tool, records can help determine the absolute and relative profitability of the business by identifying the strengths and weaknesses of the business. The manager can see strong points and capitalize on them while recognizing weak points and taking corrective steps.

The records system can be used as an indicator of progress from both the business management and financial management standpoints. As a business indicator, records can show the manager changes in size, productivity, and efficiency, and organization factors unique to his business and farms similar to his. He can measure actual performance in comparison with budgeted performance and/or standards of performance for his type of business.

As a financial indicator, records help the farm manager and/or his lender to measure the changes in the financial condition of the business and to compare actual and planned performance. This needs to be done on a regular basis so problems can be worked on as soon as they develop.

Finally, records should be used as a forward planning device for short and long-term planning. Past records can be used as a basis for projecting cash flows. The manager can then compare actual performance with the plan. The records system can provide cost information and coefficients of production unique to his situation for budgeting in both the short and long run. He can project short and long term credit needs and repayment capacities. The manager can schedule purchases of inputs, compare various inputs as to costs and returns, select the kinds and sizes of enterprises, and determine capital generation capacities of different alternatives. In these volatile economic times, forward planning is becoming increasingly crucial; good computer tools are available to help with the task.

Next month, we'll review the types of records

Jerry Jargon

Jerry Clark

Chippewa County Soil & Crops Educator



GROWING AND MARKETING SPRING WHEAT IN WISCONSIN

With the increasing prices of wheat, there is interest in learning about spring wheat production to capture these high prices. Growing wheat in our area is not a big issue, but producing a marketable product is. Variety selection is one very important key to success in any grain production program. In 2007, the UW-Madison Department of Agronomy tested 14 spring wheat varieties for their yielding ability and disease resistance. Results from these trials are available at <http://learningstore.uwex.edu/pdf/A3397.PDF>. Consult these variety trials as well as others in your area and neighboring states to pick a high yielding variety with good disease and lodging resistance.

Nitrogen is the plant nutrient that usually limits wheat yields if it is not present in the right amounts at the right time. Generally, 60 lb/a of N is adequate for soils with 2% to 10% organic matter. Applying too much N fertilizer can have detrimental effects on yield. Excessive N fertilization encourages excess vegetative growth, which increases the possibility of lodging, making harvest more difficult, and increases disease potential due to a dense canopy.

Spring wheat is generally planted as soon as possible in the spring when field conditions permit. Spring wheat should be seeded at 1.2 to 1.4 million seeds/acre. Use seeds/lb and not just pounds/acre to determine seed needs. Optimal seeding depth for wheat is 1". Seeding too deep results in delayed emergence.

Foliar applied fungicides fit into intensive wheat management systems that use practices such as high N rates, high seeding rates, and high yielding varieties. The primary purpose of applying foliar fungicides is to protect the health of the flag leaf. The flag leaf is the largest leaf on a wheat plant and is the first leaf below the head. Severe levels of scab infection can cause yield losses of more than 50% and significant reductions in grain quality.

A sound weed control program combines cultural, mechanical and chemical control. Post emergence applied herbicides need to be applied at the correct stage of weed and crop growth, and the herbicide should match the weed spectrum present in the field. Growers should be especially careful of applications of 2,4-D and dicamba after jointing because these herbicides can reduce yield or cause blank heads.

Marketing Spring Wheat — How well do you handle rejection!

When considering whether to grow spring wheat in Wisconsin, one of the most important things to determine is if the crop can be marketed. The opportunities for selling spring wheat in Wisconsin and neighboring states is very limited. Growers are urged to call prospective buyers well before buying seed and, certainly, before planting.

Spring wheat is typically sold on a 14% minimum protein basis. Some elevators will reject loads that do not meet this requirement, and others will discount the price if the protein is below 14%. Several grain handlers we contacted warned about long waits at unloading terminals because the protein content has to be determined before the elevator will accept the grain. Trucks may have to wait up to 6 hours before learning the fate of the load. Be prepared to pay the freight costs back to your farm and find another use for the wheat if the load is rejected. Spring wheat can not be legally blended with winter wheat and sold on the open market.

Other factors in marketing include moisture at 12%, falling numbers which is used to determine its alpha-amylase activity or sprout damage, and ash content. Dockage is also considered as any material removed before the protein test.

Prices and Economics

As of the end of January 2008, prices for 14% spring wheat in Minneapolis, MN and Superior, WI were about \$13.75 to \$14.00/bu. 2008 new crop prices were about \$10.50/bu. Although these may sound like lucrative prices, transportation and storage costs must also be factored in. Additionally, a comparison to growing winter wheat should also be assessed.

Spring Wheat Grain Buyer Contacts

ConAgra
Superior, WI and Minneapolis, MN
Contact Andy @ 888-765-6455

Olsen's Mill, Inc.
Minneapolis, MN
Contact Dennis @ 800-850-3450

Farm & Field Newsletter

Chippewa Valley Agriculture Newsletter

*A newsletter designed to meet the needs of farmers and agribusiness professionals
in Eau Claire and Chippewa Counties.*

Published monthly by the Eau Claire County Extension Office, Altoona, Wisconsin

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