

# Trempealeau County Agricultural News

Steve Okonek, Agricultural Agent  
Email: [steve.okonek@ces.uwex.edu](mailto:steve.okonek@ces.uwex.edu)  
(715) 538-2311, ext. 376



www.alamy.com - E9XDM6

## Residue and Tillage Management

With recent low grain prices we need to evaluate all crop inputs. Tillage is one of those inputs that we can cut back on in some situations and have little to no effect on farm profits. In some cases, less tillage equals more profit. Work done by researchers at many Mid-West Universities show that higher profits can be achieved with strip till planting rather than full width tillage. Yields of corn following corn are lower with strip till than chisel plowing but not enough to offset the reduced cost of strip till versus chisel plowing. The following table illustrates the cost savings that can be achieved with reduced tillage. While the difference is not great between strip till and chisel plowing with corn on corn it is much more dramatic for corn following soybean and soybean following corn. In this trial a separate trip was made with a strip till machine either in the fall or in the spring one week before planting. This allowed the soil to warm in the row prior to planting so that soil temperature in the strip tilled area was very similar to chisel plowed ground. The no-till was planted with a planter without row cleaners. If a planter is equipped with row cleaners you can realize many of the benefits of strip till without the extra cost of a strip till machine and without making the extra pass across the field.

Reducing tillage does require some management considerations. It is not as easy as parking the tillage tools and expecting the same results. Many failures of reduced tillage can be traced to poor stand establishment, poor weed control, and poor nitrogen management. Poor stand establishment can be prevented by getting off the tractor and checking behind the planter to see that seed is placed at the proper depth and covered. Poor weed control is less of a problem with transgenic hybrids and varieties; however, the proper rate must be applied to a given size of weed before the weed is allowed to compete with the crop for nutrients and moisture. Poor nitrogen management needs to be addressed with ammonification inhibitors for surface applied urea. Using ammonification inhibitors with UAN is not profitable due to the fact that not all of the nitrogen is urea.

Based on this research and many other studies, if you till to plant corn following beans or beans following corn, you are leaving profit behind. Even worse, you may have soil and fertilizer washing into the rivers and creeks of our beautiful county.

## ECONOMIC CONSIDERATIONS

ROTATION/TILLAGE	AVG. YIELD (BU/A)	COP (\$/BU)	COMPARED TO CH (\$/BU)
<b>Continuous Corn</b>			
Chisel	182	2.55	..
Strip-till	174	2.53	- 0.02
No-till	167	2.63	0.08
<b>Corn after Soybean</b>			
Chisel	194	2.39	..
Strip-till	194	2.27	- 0.12
No-till	185	2.36	- 0.03
<b>Soybean after Corn</b>			
Chisel	52	6.41	..
Strip-till	52	6.23	- 0.18
No-till	50	6.15	- 0.26

Arlington, Wis. (1997 - 2007)

## *Corn Planting Depth*

What is the ideal planting depth for corn and why is it important? The quick answer to these questions is, it varies and it depends. This article will explain the importance of proper planting depth for corn under various conditions.

What is the ideal depth? The ideal depth is 1 3/4 inches deep, with a range of 1 1/2 to 2 inches. This depth allows the corn seed to get the three things it needs to germinate; moisture, oxygen and good seed to soil contact. Planting deeper than two inches may be necessary under dry soil conditions, especially on sandy soils.

Planting at 1.5 to 2 inches in depth allows the corn plant to develop properly and to insulate the growing point of the corn from environmental stressors. The crown or first five nodes of a corn plant develop underground at about 3/4 of an inch, regardless of planting depth. If the seed is placed at two inches the mesocotyl (the first internode) will elongate and place the crown, also known as the coleoptile node, at the 3/4 inch depth. You may ask "then why not plant at 3/4 inch depth if the crown is going to end up at 3/4 inch anyway?" If you are trying for 3/4 inch and get seed shallower than that, the crown or growing point will be too close to the soil surface and root growth will begin at a shallow depth. If the soil near the surface dries out, root growth will be impeded. Roots will not grow through dry soil. Roots can follow water through the soil profile but they will not grow in dry soil. The roots that feed the corn plant all grow from the first five nodes, or the crown, of the corn plant. If these roots are trying to grow in dry soil or get damaged by herbicides you have severely limited your yield potential. Shallow placed seed may be more susceptible to bird and rodent feeding. If the soil dries around shallow placed seed after the seed has taken on enough moisture to germinate but not enough to grow, the seed can die. Placing the growing point near the soil surface can make the young corn plant more susceptible to frost damage. Many herbicides also specify a minimum planting depth, even some post emerge products. Having the growing point near the surface will put the young plant into contact with too much herbicide and injury can result.

So what happens if we plant deeper than 2 inches? Planting too deep can slow emergence and reduce your final plant count and this can impact yield. Planting to moisture is generally a good idea if you are in dry soils and the forecast appears dry for a week to ten days. Maximum depth of planting should not exceed 3 inches on sands and 2.5 inches on fine textured soils. Be wary of people that are telling you to plant 2.5 inches deep and apply fertilizer in multiple combinations to boost yield. Often, recommendations are not backed with research. Just because someone won a yield contest and they planted 2.5 inches deep and applied fertilizer in exotic ways does not mean these practices are what are needed to produce high yields. Make them provide replicated data over many sites and many years. Remember, in God we trust, all others bring peer reviewed, replicated data.

Planting depth should be monitored daily and certainly any time soil conditions change. Don't rely on the planter's settings; you must get out behind the planter and dig up seeds to check the depth. Slowly scrape soil away from the seed, keeping the seed in place. You should measure from the top of the seed furrow to the seed to determine your depth. Some things that can change your actual planting depth can be such things as seed firmers pushing seed deeper than intended or row cleaners plowing up ridges that the depth control wheels ride on, reducing actual planting depth. Both of these attachments can be beneficial but I have seen instances where they can impact planter performance. Be sure to monitor planting depth as the season progresses to ensure you are planting at the right depth for conditions. We only get one chance to plant a field, we better make sure it is correct or it can impact the entire season.

## Internal Parasite Control in Beef Cattle

Internal parasite control is very important to the profitability of a beef herd. A review of literature suggests losses can be as high as \$200 per head per grazing season due to poor or non-existent parasite control in beef cattle. Properly dewormed cows will produce more milk and will enter the winter feeding period in better body condition than non-treated cows. Dewormed calves in an Oklahoma field study gained 21 more pounds than the control group. If 500 pound calves are selling for \$1.30 per pound that extra gain is worth \$27.30.

The lungs, abomasum, small intestine and large intestine are all sites that can be infected by internal parasites. *Ostertagia*, or brown stomach worm, is the most common internal parasite in cattle. This pest also causes the most economic damage and the most severe symptoms. *Ostertagia*, as well as other internal parasites, are blood suckers. Nutrients such as protein, vitamins and energy are absorbed into the cattle's blood stream through the lining of the intestines. *Ostertagia* attach themselves to the lining of the stomach and intestines to feed. As a result of this feeding the lining of the intestines become inflamed and thickened and nutrient absorption can be greatly reduced.

To develop an effective parasite control program you should work closely with your veterinarian to determine what parasites are infecting your herd and what products (anthelmintics) will work best for those pests. Fecal egg counts (FEC) are one tool that can be used to set up an effective parasite control program; however, there are limitations to using fecal egg counts. Due to the immune response in older cattle a FEC will not yield a direct correlation to the number of adult worms infecting an animal. In animals less than six months of age a fair correlation between eggs and adult worms can be made. A FEC will not give an estimate of larval infection of cattle as larval stages do not shed eggs. A FEC must be taken from the rectum of an animal, not collected from the ground. Contamination from soil nematode eggs can diminish the accuracy of a FEC.

An effective parasite control program will utilize different active ingredients to get effective control of the parasites and also to slow the development of resistant parasites to one or more active ingredients. Resistance to anthelmintics has been documented in several states, including Wisconsin, when one product has been used repeatedly. There are many effective anthelmintics on the market. Some have two to three days residual control and some products are up to 28 days.

A strategic deworming program is a program that will take into account the parasites present in your herd and your management system as well as the life cycle of the parasites. A common program is to treat cows in the fall to eliminate any parasite load going into the winter feeding period. Cows and calves should then be dewormed eight to nine weeks after pasture season begins. If cows are not wormed in the fall they should be treated in the spring prior to pasture turn out and again with calves eight to nine weeks after pasture begins. Remember to rotate active ingredients and read and observe all label directions and slaughter withdrawal times.

Internal parasites cause economic loss every year and should not be ignored. Work with your vet and county extension agents to develop a deworming program that not only prevents economic loss but also preserves the effectiveness of the products you use.



## Living Stones and Fat Plants

February / March 2017

Judt Haase-Hardie, Master Gardener

It is fun just to research different subject matter. As I was browsing through different postings by the Master Gardening Program, Living stones (Lithops) and Fat Plants grabbed my curiosity. What were these plants to be given such a label? I knew nothing about them—so I thought.

Lithops (both singular and plural) were discovered on a botanical expedition to South Africa in 1811. These small plants get their name from their stone-like appearance—lithos=stone and opsis=like. Native people have named them after animal hoof prints: beeskloutjie (cattle hoof), skaappootjie (sheep hoof), and perdeklow (horse's hoof). In their natural environment, they are camouflaged by stones and sand. These plants consist of two thick succulent leaves that are differentiated by a fissure at the top, have a tap root at their base and have no stems. Lithops' ability to store water, a function of almost the entire plant, allows them to survive in extremely dry environments. During times of drought, the plants shrivel and shrink below the ground surface. Lithops flower a daisy like blossom from the fissure during autumn and early winter.

Lithops are succulents and may be grown as house plants. They take up little room, are long lived (40 to 50 years), and may remain in the same pot for 10 to 20 years. These plants thrive best in a greenhouse but would do well in a sunny southern exposure window. Lithops have a yearly growth cycle and are watered only during specific stages of this cycle. They require well drained soil; over watering is a sure way to kill them.

These plants are non-toxic to humans and pets. Lithops seeds and plants may be purchased from nurseries that specialize in succulents. A list of nurseries may be found on the cactus mall website (<http://www.cactus-mall.com/nurseryusa.html>).

Fat Plants are succulents but not all succulents are fat plants. They inhabit arid parts of the world; their bodies are oddly fat in shape and have the ability to store water. Hundreds of species of fat plants exist and occur in many plant families. A thickened base or trunk, leaves (for most plants), and vines during their growing season are characteristic of fat plants.

Some familiar common names of fat plants are as follows: ponytail palms (*Beaucarnea*), desert roses (*Adenium obesum*), and string-of-hearts (*Ceropegia woodii*). Like other succulents, these plants would grow best as a house plant in a sunny room. They require a fast-draining medium in which to grow and should not be over watered. They may be purchased from nurseries that specialize in succulents and large chain stores.

Maybe Lithops and fat plants are not as unusual as I had thought. After reading about them and looking at pictures, I discovered that my mother had a fat plant when I was a teenager. I did not know it as a *Ceropegia woodii* or a string-of-hearts but as a rosary bead plant. In the Simon & Schuster's Guide to House Plants it is referred to as the rosary vine. Research can be fun and is enlightening; we all have different topics of interest.



This information was taken from the University of Wisconsin-Extension Master Gardener postings, submitted by Susan Mahr.

## COME JOIN US.....

For questions or to register for any programs outlined here, please call the Extension Office at 715-538-2311 ext. 208 or email [michelle.rose@ces.uwex.edu](mailto:michelle.rose@ces.uwex.edu)

**Fresh Market Growers Program:** *Friday, March 3<sup>rd</sup>* Black River Falls - Marketing tips and techniques to cultivate and grow customer base. Multiple expert market vendors will present what they've learned over the years. Also, cover crops for vegetable production - what works, what to avoid when using cover crops to enhance and protect soil for vegetable farmers. 10:00am - 2:00pm \$10/person includes lunch and materials. Registration appreciated. Call Jackson County UW Extension Office at 715-284-4257.

**Grain Marketing,** *Thursday, March 9<sup>th</sup>* at Western Technical College, Independence. 11:00am-2:30pm. No cost and lunch will be provided. Registration appreciated for lunch count.

**Fruit Tree Pruning,** *Friday, March 10<sup>th</sup>* at Ecker's Apple Farm, W27062 St. Hwy. 54 & 35, Trempealeau, WI. 1:00pm-3:00pm.

**Dairy Employee Program:** *Tuesday, March 21<sup>st</sup>* Alma Center Another program for dairy farm employees which will feature hoof health, foot baths, and milking routine (offered in English and Spanish) Tuesday, March 21<sup>st</sup> 1:00pm-3:00pm with lunch at 12:30, registration appreciated for lunch count. Call Jackson County UW Extension Office at 715-284-4257.

**Farm Succession Program:** *Thursday, March 23<sup>rd</sup>* 1:00pm-3:00pm - Medicaid Eligibility and Recovery. Call Jackson County UW Extension Office at 715-284-4257.

**Dairy Goat Meeting,** *March 24<sup>th</sup>,* call the UW Extension Office for more information.

**Backyard Chickens:** *Tuesday, March 28<sup>th</sup>* 6:00pm-8:00pm at the Black River Falls Public Library - details to come. Call Jackson County UW Extension Office at 715-284-4257.

**Soil Health Field Day,** *Wednesday, April 5<sup>th</sup>* at the Bill & Angie Sylla Farm, County Road Q, Whitehall. 10:00am - 3:00pm. Please RSVP by calling the Trempealeau County Extension Office at 715-538-2311 ext. 208.

**Michael Perry,** Author of *COOP:* *Friday April 7<sup>th</sup>* 6:30 p.m. Lunda Theater, Black River Falls Middle School . Call Jackson County UW Extension Office at 715-284-4257.

### Dairy Newsletter

Enclosed is a copy of the El Companero/Dairy Partner newsletter. Please read this and share it with your Hispanic employees.

This newsletter has informative topics and seasonal items that can help you manage your dairy and your farm workers. Topics throughout the year include dairy herd health, proper dressing for cold weather and winter driving just to name a few.

# THINK SPRING

***THANK YOU!***

***This Trempealeau County Extension  
Newsletter is sponsored by these  
Trempealeau County  
Community Agricultural Banks:***



Alliance Bank: 715-597-2626  
Bank of Galesville: 608-582-2233  
Independence State Bank: 715-985-3197  
Pigeon Falls State Bank: 715-983-2295  
State Bank of Arcadia: 608-323-3331  
Union Bank of Blair: 608-989-2541  
United Bank: 715-597-3136  
Waumandee State Bank: 608-323-3555

**IF YOU ARE ABLE TO RECEIVE THE AG NEWSLETTER BY EMAIL, PLEASE SEND ME YOUR  
EMAIL ADDRESS AT [michelle.rose@ces.uwex.edu](mailto:michelle.rose@ces.uwex.edu)  
This will help us with printing and mailing expenses**