

Barron County

2015 SOIL & WATER CONSERVATION PROGRAM

Attention Farmland Preservation Program participants, time is running out!!!!

In order to avoid losing your future tax credits of \$7.50/acre (\$300/40 ac. parcel), you must acquire a **Certificate of Compliance** from the Barron Co. Soil & Water Conservation Department by no later than December 31, 2015.

In order to obtain your certificate of compliance you must first comply with the NR 151 state agricultural performance standards and prohibitions incorporated into ATCP 50 (state conservation standards). These performance standards consist of the following:

- You are following an up-to-date conservation plan, cropped fields meet tolerable soil loss ("T"), grassed waterways are maintained, and gully erosion is controlled.

- A certified nutrient management plan has been implemented according to the NRCS 590 standard based on soil tests not older than 4 years and no less than one sample per 5 acres.

- Manure storage facilities have no visible signs of leakage or failure.

- Manure storage facilities are maintained to prevent overflow.

- Manure storage facilities that have not had manure added or removed within 24 months have been closed according to standards or continued use has been approved.

- Runoff is diverted away from all feedlots, manure storage areas, and barnyards within a Surface Water Quality Management Area (SWQMA), 300 feet from a stream and 1000 feet from a lake.

- There are no unconfined manure piles in a SWQMA.

- There are no channels or other indicators of significant discharge from a feedlot or stored manure into waters of the state.

- There is self-sustaining sod or vegetative cover adequate to preserve streambank or lakeshore integrity in areas where livestock have access.

In early January, annual self-certification forms will be mailed to participants of the Farmland Preservation Program for completion. **Please note, the annual self-certification form is not a certificate of compliance** but rather a means of determining your level of compliance with the Farmland Preservation Program. Please return these self-certification forms along with your nutrient management plan checklist to our office no later than April 15, 2015.



To be eligible for the tax credit, landowners must certify their compliance with a variety of standards, including following a certified nutrient management plan. If you have not yet established a current nutrient management plan, do not delay. **The State of Wisconsin required all farmers to follow a certified nutrient management plan that meets the NRCS 590 standard regardless of whether you apply manure or commercial fertilizer.** If you are a landowner and rent out your cropland, you need to confirm with your renter that they are following up to date conservation and nutrient management plans. Remember, compliance is your responsibility. If you have any questions please contact the Barron County SWCD at (715)537-6315.

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Visit http://datcp.wi.gov/Environment/Working_Lands_Initiative/index.aspx for more answers regarding the Farmland Preservation Program.

2015 SWCD Conservation Assistance Program

Sign up is ongoing.

Our funding priorities will continue to be the State Runoff Prohibitions:

- No overflow of manure storage facilities.
- No unconfined manure piles within 300' of a stream or 1000' of a lake.
- No direct runoff from feedlots into streams, lakes or wetlands.
- No unlimited access to streams, lakes or wetlands where high concentrations of animals prevent the growth of sod cover.

Of these, direct runoff from feeding areas is most prevalent in Barron County. If you have one of these situations, please contact us this winter, so together we can develop a plan to remedy the situation and achieve compliance with the State Law and maintain eligibility for the Farmland Preservation tax credit. In most cases we are able to find a source of cost sharing to assist with the project. These situations will receive priority for cost sharing, and we are happy to discuss these at any time.

The heavy rainfall of the last year has created many gullies in cropland areas and there may be cost sharing available for constructing waterways as well.

Cropping Practices	Incentive Payment	Maximum Funding
No-till (for novices only)	\$20.00 / acre	TBA
Cover Crop (see pg 5 for info)	\$25.00 / acre	40 acres

SOIL HEALTH

Infiltration is the issue...

It's been said that we have a runoff problem in this country; however, what we really have is an infiltration problem. Utilizing no-till and/or cover crops will go a long way toward fixing our infiltration problem. By allowing better infiltration, we reduce runoff (both soil and nutrient) and increase storage capacity, yielding healthier soils and higher yields.

To till or not to till...

Tilling of the soil has been part of agriculture since the first farmer loosened the soil with a stick to place a seed. Unfortunately, tillage can result in unfavorable conditions such as soil compaction, loss of organic matter, degradation of soil aggregates, damaging soil temperatures, death of microbes and other organisms, and, of course, soil erosion.

It may be hard to believe, but by tilling fields that are more prone to wetness in the spring, the tillage is actually destroying the soil structure thus preventing infiltration. Tillage on wet fields has been an ongoing practice to help to "dry out" the soil in preparation for spring planting; however, it seems tillage is doing more harm than good.

The benefits associated with no-till farming are numerous. In addition to reducing fuel costs and time associated with tillage, no-till farming can reduce soil erosion, increase organic matter, and improve water retention and infiltration in our soils. No-till farming can also result in increased yields due to higher water infiltration and storage capacity and help control soil erosion. Not disturbing the soil keeps the structure intact which allows for adequate water infiltration while keeping the soil in place during rain events.

Barron County hosted a Conservation Field Day on June 19th, and we wanted to showcase soil health. We selected a corn/soybean field on a heavy silt loam that hadn't been tilled in at least 8 years. While many area fields were impassable, this farmer had been able to plant corn on May 10th, because the soil structure allowed the moisture to infiltrate. The day before the tour, we dug a 3' deep soils pit. The soil was crumbly, mellow and looked like Swiss cheese with all the earthworm holes. We did an infiltration test and found that it infiltrated 1" of water in 7 ½ minutes. That is 8" per hour! And remember, this was a heavy silt loam. The rain doesn't have a chance to run off. But the real test came the day of the tour. It had rained ½ inch in the 4 hours before we arrived at the site, and yet the soil was not muddy, and when you dug a shovel full at the surface, it was still that nice crumbly structure.

On October 9, they were finishing up combining the field. It had achieved black line 2 weeks earlier, all because they were able to get into the field in a 3-day window in early May and plant.

Steps to building soil health:

1. Minimize soil disturbance
2. Cover the soil at all times
3. Always have live roots growing in the soil
4. Use diverse plants, rotations, and (where possible) animals

The Red Cedar: Land, Water and People Coming Together
A One Day Conference March 12, 2015
University of Wisconsin-Stout Menomonie, Wisconsin

The Red Cedar River flows through some of the best farmland and lake country in Wisconsin. It is the soil that is the most valuable asset of the region. We

are at a tipping point where decreasing soil and water quality are threatening our growing economy and recreation. Rather than looking only for government programs to solve this problem, we must all come together and find a new route towards improving soil health, thus improving water quality.

The **Red Cedar River Conference** is just such an opportunity to hear what others are doing around the country to improve soil health and water quality. **March 12th** will be the fourth annual conference with a growing emphasis on soil health solutions and farmer-led councils. **Keynote speaker, Rod Olson, MD**, will enliven the audience with his kayak story: "Wounded Waters," a status report on what is happening in the Red Cedar River watershed from headwaters to the river's mouth.

Ray Archuleta, a nationally known NRCS soil scientist, will give a dynamic demonstration on how producers can use no-till and cover crops to increase the health of their soil and reduce input costs without losing production. He is entertaining and has a wealth of knowledge on soil health. For the past 23 years, he has promoted soil-building practices that improve water quality, reduce erosion, maintain soil micro-ecosystems, and ultimately boost the productivity of crops. He will discuss how modern-day farming practices that improve soil health allow rural communities "to absorb disturbance and maintain function" into the future.

A soil panel breakout session with Ray and local farmers will allow an active conversation about transitioning to better soil health.

Damon Reabe from **Reabe Spraying Service** will be present to exhibit aerial cover crop application. Damon is researching methods to increase the success of the cover crops he plants. His company aerial applied Cereal Rye on 7000 acres in Dunn and Barron Counties this fall and plans to do much more this next growing season.

Last year, 250 attendees, including 40 farmers, were at the conference. This year we hope to see over 100 producers eager to hear how to improve the health of the soil, their most valuable asset. It's all good news, good food, good networking and free admission for farmers to get you started for the next growing season!

There will be plenty of other topics relating to soil health and water quality discussed during the day. Urban residents, lakeshore owners and rural non-farmers are all part of this effort as well.

Check out the website to register and for more details: [www.uwstout.edu/profed/red cedar](http://www.uwstout.edu/profed/red%20cedar) There will be a spot for farmers to sign up and have their registration covered . See box below.



The Farm Bureau and Farmer's Union will sponsor the registration for **all** farmers and their spouse.

When registering online, register as 'FARMERGUEST' or your affiliation, if any, and the registration fee will be paid by one of the organizations above.

In this day of increased electronic communication, I maintain a list of email addresses and send out information dealing with conservation issues and programs. Don't worry about me filling your inbox with something every other day.

If you would like to receive notices of conservation issues and programs, please send an email to:

tyler.gruetzmacher@co.barron.wi.us

Tyler Gruetzmacher, Barron County Conservationist

COVER CROPS

Cover crops are a popular and emerging conservation practice that many farmers have recently started utilizing on their farms. The benefits of cover crops are impressive - cover crops reduce soil erosion, add nitrogen through fixation (leguminous cover crops), combat weeds, cycle excess nutrients not utilized by the previous crop, and break disease cycles. Additionally, cover crops improve soil quality through increased porosity (reduced compaction), soil organic matter, water holding capacity, beneficial microbes, and micro/macroinvertebrates.

Most of the cover crops planted in Barron County have been rye, radishes, and oats. But there are many other possibilities including:

1. Spring barley instead of oats after snap beans or sweet corn. The barley residue breaks down faster than oat residue, aiding in subsequent plantings.
2. Frost seeding red clover into winter wheat in the spring to establish a cover for after the harvest.
3. Cover crops before late planted snap beans and sweet corn. There can be 8-10 weeks of growing season when a cover crop can protect the soil, tie up nutrients, and suppress weed growth. There are some crop insurance regulations that need to be kept in mind such as killing the cover crop before it heads out and it cannot be harvested for forage.

Keeping a living root in the soil after harvest allows photosynthesis to continue and ultimately transforms sunlight energy into additional carbon in the soil. The carbon builds organic matter which feeds microbes who break down the organic matter, making nutrients available to crops. Tilling in the cover crop for "Green Manure" is counterproductive and causes the loss of more organic matter than is in the cover crop. Simply allow winter to kill it in the case of summer covers, and use herbicide in winter annuals and leave it on the surface.

Different scenarios have different seeding deadline dates:

1. Frost seeding red clover into winter wheat, barley or rye that will be harvested for grain April 10th
2. Spring cover crops before vegetable crops that will be planted after June 20th April 20th
3. Summer cover crops (radishes, oats, spring barley, annual rye, cocktails) Aug 20th
4. Cereal rye aerial seeded into standing soybeans or corn silage Oct 1st
5. Cereal rye no-till drilled into corn silage or soybean residue Oct 10th
6. Cereal rye manure slurry seeded with aerated injection Oct 10th
7. If there is another cover crop scenario that you would like to try, let us know.

The cover crop cannot be harvested for forage or tilled in the fall, but it can be harvested for forage in the spring in the case of winter wheat or rye as long as the 2016 crop will be no-tilled into that residue. Check with your crop insurance agent if harvesting forages from the cover crop. The cover crop cannot be harvested for grain.



Winter rye into corn silage

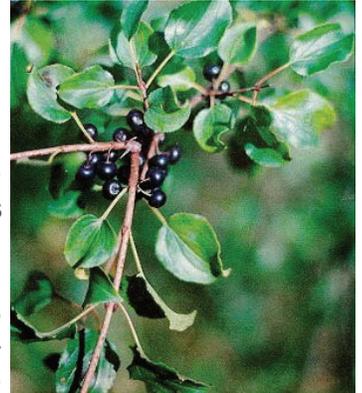
Barron County has cost sharing available for cover crop establishment: \$25/acre with a maximum of 40 acres. You must sign a contract with us prior to planting the cover crop. Funds are limited so stop in sometime this winter to get signed up.

INVASIVE SPECIES: The Top Five

Invasive species and their impacts and control, have become much more of a topic in the last 10 years. Several of them have the potential to change the landscape as profoundly as the work of the Knapp - Stout Lumber Company did 125 years ago. Fortunately, increased awareness has led to the conversation of how to control them.

Barron County Top Five Terrestrial Invasives

1. Buckthorn - Left unchecked it will outcompete all other plants and in time will change a forest into an impenetrable brush thicket. It is also the winter host site for soybean aphids. It is common throughout the county. Look for green leaves in the fall after others have turned and fallen.



2. Spotted Knapweed - These are the pink flowers growing in the Highway 53 right of way. It can invade pastures and decrease the forage volume because cattle avoid it. It has a deep taproot that allows it to thrive in limited moisture situations. It is also considered to be allelopathic, meaning a toxin is released from the roots that inhibits the growth of nearby plants.



3. Garlic Mustard—A forest biennial that is only known to be at 3 sites in Barron County: a woodlot in eastern Prairie Lake Township, along the Rod & Gun Club Road in the Town of Stanley and a residence in the City of Rice Lake. It covers the forest floor and outcompetes all other plants. We are working on controlling this plant in hopes we can avoid the problems it has caused in other portions of the Midwest.

4. Leafy Spurge - A serious threat to pasture land. Leafy Spurge invades open areas including pastures and grass hay fields, prairies, and roadsides. It can quickly create monocultures, reducing forage and decreasing wildlife habitat value. Tolerant of a wide range of habitats, from dry to moist and sunny to semi-shade; it is most aggressive in areas where soil moisture is limited. Currently identified on the HWY 8 right of way east of the Red Cedar River and along Hwy 48 one mile south of Washburn County.



5. Japanese knotweed - Also called Mexican Bamboo, it is a perennial plant with hollow stems that can grow to 12' tall in a single season. It is very difficult to control. In Barron County it is found at numerous sites, with the appearance that it is spreading from ornamental plantings in yards. In New England the infestation has occurred for long enough that it is forming continuous impenetrable thickets along streams.

An enthusiastic group of diverse partners jump started the new **St. Croix-Red Cedar Cooperative Weed Management Area** in early 2014. Interest in action combined with lots of questions about CWMA's initiated formation of a steering committee and an appointed coordinator to guide the group through its first year. Early activities included a grant application and a series of invasive removal activities open to the general public along with a training event for citizens and an in-service training for foresters. The group hopes to provide support for local initiatives, and training and general education in classrooms and during field events across the five county area. For more information, please visit:

<http://blogs.ces.uwex.edu/haack/st-croix-red-cedar-coop-weed-mgt-area/>

NUTRIENT MANAGEMENT FARMER EDUCATION GRANT

Write your own plan and receive cost sharing for soil tests!

The Nutrient Management Farmer Education Program (NMFEP) will once again be offered this coming February on the 18th and 20th from 1:00pm to 4:00 pm in Rooms 110 A & B of the Government Center. Your participation in this program will allow you to write your own state approved nutrient management plan. The program consists of two workshops and an individual plan writing session which we will schedule with you once you've attended the workshops and you have obtained current (within 4 years and 1 sample per 5 ac.) soil test results.

If you wish to do your own soil sampling the Soil & Water Conservation Dept. has soil sampling probes available for use (security deposit required).

Know your application rate!!!

If you apply your own manure, you must contact our office to schedule a manure spreader calibration free of charge. Custom haulers should have calibrated tankers. Knowing your manure application rate is crucial for the accuracy of your nutrient management plan.



Samples should be taken at a 6-8" depth.



FARMLAND PRESERVATION PLAN

Do you farm in a zoned township? You can receive \$7.50/ac (\$300 per 40 ac) in tax credits if you qualify for FPP!

In 2009 the Wisconsin Working Lands Initiative was signed into law and as a result of the new rule the Dept of Agriculture Trade and Consumer Protection (DATCP) revised the rules associated with Farmland Preservation. Wisconsin Administrative Code ATCP 49 was created and with these new standards Barron County is required to amend our existing Farmland Preservation Plan (FPP) which was originally adopted in 1978.

Beginning in 2015 Barron County will start the process of developing and adopting a new FPP. Through this process there will be public information meetings at which time public input will be sought. With the completion of the FPP, the zoning standards in the Exclusive Agricultural District must be amended to be consistent with the new FPP and ATCP 49.

Agricultural Enterprise Area (AEA)

Included in the Working Lands Initiative was a new program, Agricultural Enterprise Areas. Through this program, the community can encourage continued agricultural production and investment in the agricultural economy. Participants in an approved AEA, zoned and unzoned towns, would qualify for Farmland Preservation Tax Credits with an agreement.

Contact the Soil & Water Conservation Office at 715-537-6315 for additional information.

QUALIFIED NUTRIENT MANAGEMENT PLANNERS

The following crop consultants are listed on the WI DATCP website as Qualified Nutrient Management Planners working in Barron County. (http://www.privacy.wi.gov/Farms/Nutrient_Management/).

If you wish to have your company name added to the list, contact Sue Porter at sue.porter@wi.gov or 608-224-4605.

Breezer Haven Farms	Dietsche, Aaron	Bloomer	WI	54749	715.933.1330
Precision Ag	Stearns, Tim	Rice Lake	WI	54808	715.579.8344
Farm Fixation LLC	Klish, Mark	Stevens Point	WI	54481	715.347.0545
Rock River Laboratories	Luther, Matt	Spencer	WI	54479	715.207.1279
Larry Melanhn	Melanhn, Larry	Amery	WI	54001	715.491.3052
Popple Consulting	Popple, Tim	Osseo	WI	54758	715 597 2424
Northland Crop Consulting	Tollberg, David	North Branch	MN	55056	651.587.3860
Kow Consulting	Weaver, Tom	Cuba City	WI	53807	608.762.6948
Weisenbeck, Curtis	Weisenbeck, C	Duran	WI	54736	715.672.8317
Dairyland Laboratories, Inc.	Ellwanger, Rod	Ladysmith	WI	54848	715.415.7254
Kerr Agronomics	Kerr, Greg	River Falls	WI	54048	715.425.8473
Ag Source Laboratories	Boerner, Tim	Chetek	WI	54754	715.308.6770
AB Seed & Consulting	Andy Benseid	Dallas	WI	54733	715.296.7628

IS YOUR MANURE PIT FULL? Emergency Manure Storage Options

The fall of 2014 marked at least the 4th manure spreading season in a row that started late and ended early. On top of that, we have received 34 inches of moisture between April 1st and Nov 20th. This has created a situation on many farms which will result in full storage facilities long before the snow melts and the sun dries out the soil to once again safely spread manure.

If you feel that you will be in this situation this winter, please contact the Barron County Soil & Water Conservation Dept, and we can help identify fields that would have reduced risk for runoff that could be spread on this winter.

An alternative is that there are many manure storages in the County that are no longer being used. We maintain a database of the facilities and their status, and there may be an option for some of them to accept manure on a temporary basis. If you have storage available and would be willing to participate, please contact us as well. Long term, we would like to establish a system where facilities could be inspected and be made available for emergency situations. Our preference would be that these are lined with concrete or HDPE plastic.

Roughly 75% of the 25,000 cows in Barron County are on farms with manure storage. So, in theory, winter spreading of manure and its associated risk of runoff should be minimized. However, years like this lead to an increase of winter spreading. We can work with you to identify fields with less risk for runoff.

Barron County Soil & Water Conservation Dept
A Division of Land Services
330 E Monroe Ave #2104
Barron WI 54812-1478

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Just The Numbers

All of the soil microbes in the top 1 foot of an acre of healthy soil weigh more than 2 cows.

A healthy earthworm population consumes 2 tons of dry matter per acre per year, partially digesting and mixing it with soil.

Every 1% increase in organic matter results in as much as 25,000 gallons of water available to the soil per acre.

Barron County Stats - 2013 numbers

- Corn: 102,000 acres
- Alfalfa: 22,100 acres
- Soybeans: 34,600 acres
- Dairy Cows: 24,500
- Dairy Herds: 230 Grade A, 12 Grade B

Precipitation at Rice Lake through Dec 1st 37.25 inches
Precipitation March 22nd - Sept 12th 30.25 inches

*Post our calendar
to keep important
dates in mind.*

SOIL CONSERVATION: Getting running water to walk.