



# Conservation Connection

Wood County  
Land & Water Conservation Department

Volume 23 Issue 2

## Wood County Harvestable Field Buffers

By: Adam Groshek - Conservation Engineering Technician

Rain, Rain, Rain; everyone noticed how wet it was this past year, especially during the growing season. All 7 months from January 2017 – July 2017 had above average precipitation. Records taken at the Marshfield UW Agricultural Research Station farm showed the first half of 2017 to be the wettest first half of any year over the past 30 years. All of this extra rainfall caused much stress (like that in the adjacent photo) on crops struggling to get established during the early part of the growing season. This was seen easily by taking a drive in early July and witnessing certain areas of fields being drowned out or stunted. Are these overly wet springs the new norm?



Likely not, but many of us know specific areas of our fields that we have difficulty growing cash crops in every year. We put in all the work preparing these usually lower lying areas for a successful harvest only to have the weather turn more times than not and erase much of our potential profit. Crop insurance may or may not cover it, and can be more of a hassle than it is worth sometimes. We don't want to abandon farming the areas all together —because sometimes they produce — but we know that we lose money on these areas more years than not. Why not try to plant these problem areas into more permanent harvestable field buffers?

Harvestable field buffers can be of many different forms depending on the specific field areas and the goals/needs of each individual producer. Some producers may not need additional forage or bedding, but some may be able to adjust their other crop acreage to accommodate this. The idea is to save time and money by not annually working up these marginal areas while still obtaining a profitable harvest off of it. A few harvestable field buffer ideas include:

- Alfalfa or any high quality forage that may or may not turn into a grassy hay depending on the soils and site conditions.
- Any type of leftover cover crop seed from a previous year that could be put to good use for a future harvest. It would be best to also plant along with a longer term grass as well.
- Cool-season native grasses similar to CRP or CREP areas, with the idea being that they would be harvested at least one time per year to keep Reed Canary Grass or other invasive weeds from taking over.
- Warm-season grasses again similar to CRP or CREP to also provide additional wildlife habitat.
- Wildflower or Native Pollinator plants that would benefit adjacent cash crop pollination efforts by providing better habitat for bees, butterflies, and other pollinator species.

These systems will be more profitable and predictable than gambling with crop losses over the long term. It will be important to cultivate/smooth out any ridges or gullies in the marginal areas to ensure proper drainage in order to prevent ponding and rutting from affecting future harvestability. The Wood County LWCD has the ability to potentially cost-share seeding costs and be able to provide an annual payment for marginal acreage that is better suited to be a harvestable field buffer than a cash crop. A few of the many conservation benefits of these field buffers is that along with being profitable, they also conserve soil, control the flow of water better during heavy rain events, and promote healthier, more productive & fertile soils. Feel free to contact us anytime at (715)421-8475 or [agroshek@co.wood.wi.us](mailto:agroshek@co.wood.wi.us) to discuss your ideas for your edge of waterway or marginal field areas.

# 2018 Tree Sale Order Form

Name: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_

Address: \_\_\_\_\_

Email Address : \_\_\_\_\_

SPECIES	# PER BUNDLE	QUANTITY (# of Bundles)	PRICE PER BUNDLE	SUBTOTAL
Chokecherry - 12" - 18"	25 per bundle		\$21.00	
Gray Dogwood - 15" - 30"	25 per bundle		\$18.00	
Canadian Hemlock - 6" - 12"	25 per bundle		\$20.00	
Common Lilac - 12" - 18"	25 per bundle		\$21.00	
Norway Spruce - 15"+	25 per bundle		\$22.00	
Hybrid Poplar - 12" - 24"	25 per bundle		\$21.00	
Redbud - 2' - 3'	25 per bundle		\$19.00	
Red Maple - 2' - 3'	25 per bundle		\$21.00	
Swamp White Oak - 12" - 18"	25 per bundle		\$20.00	
Tamarack - 10" - 18"	25 per bundle		\$20.00	
White Spruce - 15" +	25 per bundle		\$22.00	
<b>TOTAL DOLLAR AMOUNT OF TREES - SHRUBS ORDERED</b>				\$ _____
<b>SPECIAL ITEMS</b>				
	QUANTITY		UNIT PRICE	
<u>Generic Gel</u>				
4 oz. - \$7.25, 1 lb. - \$12.25, 3 lb. - \$22.25	_____	X	_____	= \$ _____
<u>Tree Shelters</u>				
	_____	X	\$ 2.50	= \$ _____
<b>(Trees/Shrubs + Generic Gel + Tree Shelters) SUBTOTAL</b>				\$ _____
<b>(5.5% Sales Tax) SUBTOTAL x .055</b>				\$ _____
<b>ORDER TOTAL</b>				\$ _____

**ORDER DEADLINE IS JANUARY 12, 2018**

Fillable order form at - <http://www.co.wood.wi.us/Departments/LandConservation/TreeSale.aspx>

Payment must accompany your order. Please make checks payable to: Wood County LWCD

Please mail order along with payment to: Wood County Land & Water Conservation Dept.  
 River Block  
 111 W Jackson St  
 Wisconsin Rapids, WI 54495

# Tree and Shrub Descriptions

**Chokecherry - *Prunus virginiana*:** (small tree) 20-25 feet mature height. A large shrub or small tree, usually found growing in small colonial clusters. It has white flowers that turn to dark purple fruit that is edible. Renowned for making of jelly and wine. Great food and cover for wildlife. Grows well in a variety of soils, but prefers moderately well to well drained sites. Recommended spacing is 8-10 feet

**Gray Dogwood - *Cornus racemosa*:** (shrub) 8 feet mature height. Gray dogwood is useful as a low-growing wild hedge which provides summer food and some cover for small animals and birds. Flowers which bloom in June or July are white and loosely clustered and its white fruit, which appears in September and October is set off by bright red fruit-stalks. Grows well in poor soil conditions. Recommend spacing 2– 5 feet.

**Canadian Hemlock - *Tsuga canadensis*:** (tree) over 40 feet mature height. The Canadian hemlock, also known as the Eastern hemlock is a moderately slow-growing and long lived tree. It is pyramidal or conical in shape. Canadian Hemlock has small needles that give them a fine texture; the needles are dark green on top and light green underneath. Crushing the needles releases the aroma of the hemlock. Canadian hemlocks provide strong windbreaks and majestic focal points in yards. Prefers full sun to partial shade and requires a soil that is moist but that offers good drainage. Prefers a loamy, acidic soil. Recommended spacing is 15-20 feet.

**Common Lilac - *Syringa vulgaris*:** (shrub) 10-12 feet mature height. A Perennial shrub with green foliage and extremely fragrant purple flowers observed in late spring. Prefers moist to dry soils and full sunlight. Spreads by suckering. Provides cover for many birds and mammals. Recommended spacing is 6-8 feet.

**Norway Spruce - *Picea abies*:** (tree) 75-100 feet mature height. Fastest growing spruce. Branches drape and needles are short and green. Great for windbreaks. Used for timber and Christmas tree production. Recommended spacing is 6 feet apart in rows, with rows being 8 feet apart.

**Hybrid Poplar - *Populus deltoides x Populus nigra*:** (tree) 40-90 feet mature height. Once established the hybrids can grow 4-6 feet a year. Diameter increase on a good site will be about an inch per year. First year performance of hybrids and other trees is very dependent on moisture and sunlight availability. Hybrid poplar will not survive in shade. Arid areas or sites that have standing water all summer are not usually suitable for hybrids. The roots of Hybrid Poplars should be planted at least 1 foot deep.

**Redbud - *Cercis canadensis*:** (small tree) 15-30 feet mature height. One of the first trees to bloom in springs. Pink to reddish purple flowers are grown on old twigs, branches and trunks. Flowering occurs in March to May before leaf growth. After bloom, the leaves begin growing and gradually turn dark green. Hummingbirds utilize the redbud for nectar and honeybees use the flowers for pollen. Whitetail deer browse the foliage and twigs during the spring and summer. Squirrels occasionally eat the buds, bark, and seed. Bobwhite quail and songbirds eat the seeds. However, for animal which utilize redbud, it is considered a less desirable or emergency food.

**Red Maple - *Acer rubrum*:** (tree) 50-60 feet mature height. One of the fastest growing of all the hardwood maple species. Produces winged seeds in the spring. It's 2 1/2 - 4" dull green leaves turn a brilliant red, orange or yellow in the fall. Tolerates most soils (excluding extremes) with full to partial sun. Recommended spacing is 10-15 feet.

**Swamp White Oak - *Quercus bicolor*:** (tree) 60-70 feet mature height. Prefers moist to wet soils but adapts well to dry and average soils. Grows in full sun to partial shade. Provides food for wildlife. Recommended spacing is 10-15 feet.

**Tamarack - *Larix laricina*:** (Tree) 30-60 feet mature height. The needles are bright green in spring, soft and flexible, turning golden in the fall just before falling to the ground for winter. Grows best in moist soils, near marshes and swamps. Often found near black spruce, balsam fir and northern white cedar. Recommended spacing is 5-10 feet.

**White Spruce- *Picea glauca*:** (Tree) 60-80 feet mature height. Provides nesting, roosting and winter cover to a variety of wildlife species; also, good for windbreaks. Thrives in full sun and well drained moist soil. Tolerates heat and drought better than other spruces. Used in landscape sites and for Christmas tree production. Extremely hardy with stiff short needles. Recommended spacing is 10-15 feet.

## Tree Shelters

The tree shelter we sell ships flat, pops up to a generous, leaf expanding 3.9 inch diameter, and installs quickly and easily with large tie holes for different staking options. The 4-foot tubes are vented to allow superior air exchange for efficient CO2 replenishment and assuring proper dormancy (hardening off) before winter. Tree shelters are available anytime throughout the year at the Wood County Land & Water Conservation Department.



**Tree Shelters - \$2.50/each + tax**

## Generic Gel

Generic gel is a starch absorbent that retains water and gives it back to the plant during dry periods. The gel increases plant survivability. It comes in granular form and is mixed with water. Roots are dipped into the solution prior to planting. Generic gel is available throughout the year at the Wood County Land & Water Conservation Department. Sizes and pricing as follows:



<u>Size</u>	<u># Seedlings treated</u>	<u># Transplants treated</u>	<u>Cost</u>
4 oz.	1,000	250	\$ 7.25 + tax
1 lb.	4,000	1,000	\$ 12.25 + tax
3 lb.	12,000	3,000	\$ 22.25 + tax

## How you can write your own Nutrient Management Plan

By: Emily Salvinski - Conservation Specialist

An opportunity to write your own nutrient management plan will be available in March of 2018 in Wisconsin Rapids. With nutrient management becoming the norm for a variety of reasons, learning to do it for yourself is a skill worth the effort.

The plan will meet the NRCS 590 standard requirements. Participants will enter soil test information into the software program and develop a plan using the data. Subjects taught include soil test analysis, manure management, and setback requirements. Once the course is completed, you are able to sign off on your plan for an additional 3 years. The course upfront cost is fully reimbursed.

Soil tests are very helpful when completing the course. Now would be the time to pull samples if you plan on signing up!

The full course will be located at the Wood County Courthouse in Wisconsin Rapids from 10 a.m.—3 p.m. on Thursday March 1, Thursday March 8, and Tuesday March 13. If you have attended in the past and need a refresher, attend on the 1st and 8th only.

Because the course partners with NTC, Marathon, Clark, Lincoln, and Taylor Counties, there are other dates and locations available, including one in Spencer. Call 715-421-8475 to get a brochure for full times, dates, and locations.



# 2018 Prairie Grass and Wildflower Mixes Order Form

Name: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_

Address: \_\_\_\_\_

Email Address \_\_\_\_\_

Short Prairie Seed Mixes				Tall Prairie Seed Mixes			
Coverage	Cost/Unit	Dry Soil	Medium Soil	Coverage	Cost/Unit	Dry Soil	Medium Soil
1/4 pound 1000 sq. ft.	\$ 75.00	<input type="checkbox"/>	<input type="checkbox"/>	1/4 pound 1000 sq. ft.	\$ 65.00	<input type="checkbox"/>	<input type="checkbox"/>
1/2 pound 2000 sq. ft.	\$130.00	<input type="checkbox"/>	<input type="checkbox"/>	1/2 pound 2000 sq. ft.	\$ 110.00	<input type="checkbox"/>	<input type="checkbox"/>
1 pound 1/10 acre	\$200.00	<input type="checkbox"/>	<input type="checkbox"/>	1 pound 1/10 acre	\$155.00	<input type="checkbox"/>	<input type="checkbox"/>
Pollinator Mix				Butterfly Prairie Mix			
Coverage	Cost/Unit	Dry Soil	Medium Soil	Coverage	Cost/Unit	Dry Soil	Medium Soil
1/4 pound 1000 sq. ft.	\$90.00	<input type="checkbox"/>	<input type="checkbox"/>	1/4 pound 1000 sq. ft.	\$90.00	<input type="checkbox"/>	<input type="checkbox"/>
1/2 pound 2000 sq. ft.	\$170.00	<input type="checkbox"/>	<input type="checkbox"/>	1/2 pound 2000 sq. ft.	\$170.00	<input type="checkbox"/>	<input type="checkbox"/>
1 pound 1/10 acre	\$250.00	<input type="checkbox"/>	<input type="checkbox"/>	1 pound 1/10 acre	\$250.00	<input type="checkbox"/>	<input type="checkbox"/>
Land Restoration Mix				Erosion Control Mix			
Coverage	Cost/Unit	Dry Soil	Medium Soil	Coverage	Cost/Unit	Dry Soil	Medium Soil
3/10 acre	\$250.00	<input type="checkbox"/>	<input type="checkbox"/>	3/10 acre	\$280.00	<input type="checkbox"/>	<input type="checkbox"/>
1/2 acre	\$380.00	<input type="checkbox"/>	<input type="checkbox"/>	1/2 acre	\$430.00	<input type="checkbox"/>	<input type="checkbox"/>
1 acre	\$600.00	<input type="checkbox"/>	<input type="checkbox"/>	1 acre	\$700.00	<input type="checkbox"/>	<input type="checkbox"/>
<b>Subtotal</b>	\$ _____	→ → → → +		<b>Subtotal</b>	\$ _____	<b>Order Total</b> \$ _____	
<b>(x.055)</b>	\$ _____			<b>(x.055)</b>	\$ _____		
<b>5.5% Tax</b>				<b>5.5% Tax</b>			

\* For more information or a list of seeds included in each mix call our office at 715-421-8475 or go to <http://www.co.wood.wi.us/Departments/LandConservation/TreeSale.aspx>

# Supporting Healthy, Diverse Native Plant Communities in Wood County

By: Joel Ebert - 2017 Summer Intern

Let's have a conversation about native vegetation in Wood County. A good place to start would be asking the question, "What is native vegetation?" Simply put, native vegetation is the mix of plant species that occurs naturally in a certain area. They have adapted over time to the local soils and climate regime and form robust communities that are efficient nutrient cyclers and provide habitat and forage for wildlife and other organisms. Undisturbed native vegetation presents some of the best examples of biodiversity. The different species have developed and adapted to the site in tandem and no one species is totally dominant over others. The system is controlled with natural checks and balances that are a result of interspecies competition and predation by other organisms. And because soil and plants are the bottom links in the food chain, healthy, diverse native plant communities are pivotal in creating healthy, diverse ecosystems.



The next logical question is "What are non-native species?" Non-native species, often called exotics or invasives, are species introduced to an area where they didn't naturally develop and don't naturally occur. Exotics are introduced in a variety of ways. Everything from European settlers bringing plants to the new world to mowers in road ditches has been a cause of exotic species spreading. These days, exotics are ubiquitous. What makes them a problem is the fact that the mechanisms that kept them in check in their native habitats often don't travel with them. With no natural controls, they have the opportunity to vastly out-compete natives and turn once diverse systems into monocultures.

Now, I would like to broaden the scope of this conversation and invite you to think about how native vegetation fits into what I like to call the environmental big picture. The key to understanding this is to see how all environmental functions and processes are connected in some way. Even though climates

and ecosystems change dramatically as you traverse the globe, there is still connectivity. There is always cause and effect, bottom-up and top-down regulating, butterfly effects, etc. This is all to say that healthy native plant communities in Wood County can have positive impacts in a lot of areas, even though it is just one very small part of one very large whole.

Let's get specific...really specific. Consider a Wood County farm field bordered by a small stretch of cold water trout stream. The field is not cultivated to the bank of the stream; instead there is a buffer strip that is 25 yards wide and 100 yards long. That buffer strip is filled with a huge variety of native vegetation. What happens? A whole lot more than you might think.

The obvious effects come first. Healthy water is directly tied to how we manage the land. This buffer strip will trap nutrients and sediment running off the field to keep the stream clear and functioning at normal nutrient levels. Also, the stream bank is stabilized to keep the channel running deep, fast, and cold. This translates to better habitat for species like brook trout and the macroinvertebrates that they feed upon. This in turn could lead to increased fishing and recreational opportunities which draw more people to the area which increases business in nearby municipalities which...Do you see what I'm getting at?

Let's look at this from another angle. Consider the habitat and forage that a healthy, diverse buffer strip will provide. Everything from birds to small mammals to deer will find their way to this patch to eat or find shelter. This could be aesthetically pleasing but it also has some practical affects. For example, high numbers of birds will eat high numbers of insects which could potentially mean less crop pests for the farmer to worry about which leads to less money spent on pesticide which also leads to less environmental impact from pesticide and so on and so forth.



Ok. Just one more perspective and one more set of outcomes. Healthy plant communities build healthy soils. They efficiently cycle the nutrients available in those soils and are essential in soil carbon sequestration. Higher carbon sequestration rates in the buffer strip lead to more carbon stored in the soil where it's supposed to be instead of in the atmosphere where it acts as a greenhouse gas which leads to rising global temperatures and rising sea levels. Higher soil organic carbon also translates into higher water holding capacity and better soil structure which improves infiltration. This means the soil is holding enough water for plants, but not so much that it becomes saturated and mucky.

These are just a few of the *many* possible things that happen when we promote healthy, diverse, native plant communities. Now I'm not saying all of these things are going to happen as soon as you plant a white pine or some short grass prairie. If there's anything guaranteed in the natural world it's that you can expect the unexpected. In every ecosystem there are ten to the thousandth variables so nothing is a given. What I *am* saying is that nature has patterns. It's a system that works. And when the little pieces start coming together (i.e. the 2500 square foot native vegetation buffer we were just talking about) amazing things start to happen. Imagine if every field had that same buffer strip in this county...

state...country. The cumulative effects would be enormous. And buffer strips are just one tiny piece of the native vegetation equation which is just one tiny piece of the environmental big picture which is just one piece of how the entire world functions.

So I'm challenging you to think differently. Change your perspective. Look at how our actions affect our immediate surroundings or how they combine with the actions of others to make a global difference. And if you are interested in some specific ways you can use native vegetation to improve Wood County, Wisconsin, and the world, check out these projects and opportunities sponsored by the Wood County Land and Water Conservation Department:

- ◆ Cover crops
- ◆ Conservation Reserve Enhance Program
- ◆ Invasive species identification and mapping
- ◆ Pollinator project
- ◆ Tree and shrub sale

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## 2017 Venison Donation Program

By: Tracy Arnold, Conservation Program Coordinator

Wood County will be taking part in the venison donation program this year. To donate a deer, field dress the deer and register with the Wisconsin DNR. When dropping your deer off at a processor, please sign the log sheet indicating your desire to donate the deer. We'll do the rest. The donated deer will be processed into hamburger and the venison will be distributed to charitable organizations to help feed Wisconsin's residents in need. Participating Processors in Wood County are A & B Butchering of Rudolph, Strictly Wild of Wisconsin Rapids and Pittsville Meats in Pittsville. For more information about the Venison Donation Program please contact Tracy Arnold with the Land and Water Conservation Department at 715-421-8475.



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Land & Water Conservation Department  
River Block  
111 W Jackson Street  
Wisconsin Rapids WI 54495

Phone: 715-421-8475  
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www.co.wood.wi.us

## YOUTH EDUCATION OPPORTUNITIES

By: Tracy Arnold - Conservation Program Coordinator

### Conservation Speaking Contest

Held on Thursday January 18, 2018 at the Wood County Courthouse in Wisconsin Rapids, WI. Students can pick a topic that deals with conservation and deliver a speech. Gift cards and trophies will be awarded to the top speeches. Registration and contest rules information can be found on Land and Water Conservation website. Registration due Monday January 8, 2018.

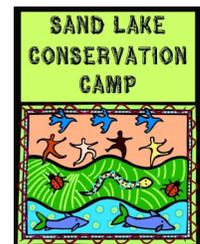


### Conservation Poster Contest

This year's topic for the Conservation Posters will be "Watersheds, Our Water, Our Home" The rules for the poster contest can be found on Land and Water Conservation website. Gift cards and trophies will be awarded to top posters. The posters may be dropped off at the Land and Water Conservation Department or mailed to us by Thursday January 18, 2018.

### Sand Lake Conservation Camp

Held June 20-22, 2018 at Camp Bird near Crivitz, WI in Marinette County. Students entering grades 6-8 in the fall can attend. Natural resource professionals present on conservation topics, give insight to their careers and are counselors for the week. Scholarships are available through Wood County Land and Water Conservation Department.



### WI Land+Water Conservation Camp

Held June 18-22, 2018 at North Lakeland Discovery Center in Manitowish Waters, WI in Vilas County. Students entering grades 9-12 in the fall can attend. Natural resource professionals present on conservation topics, give insight to their careers and are counselors for the week. This camp has off site field trips and a service learning project as part of camp. Scholarships are available through Wood County Land and Water Conservation Department.

### WI Envirothon

Held April 13, 2018 at the Central WI Lions Camp in Rosholt, WI. Wisconsin's annual Envirothon is a combined effort of educators and natural resource professionals who provide the following hands-on, outdoor coaching, and testing areas: soils and land use, aquatic ecology, forestry, wildlife, and an annual current issue. Wisconsin Envirothon gives our middle and high school youth the tools to provide leadership for a more sustainable and environmentally aware community.

If you have questions about any of these programs please contact Tracy Arnold, [tarnold@co.wood.wi.us](mailto:tarnold@co.wood.wi.us).