Town & Country

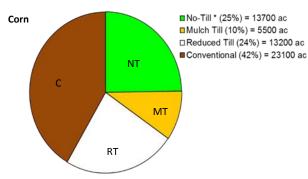
Hamilton County Soil & Water Conservation District

Spring Tillage Transect Results Released Hamilton County Farmers Plow Less and Save More Mark McCauley, Resource Conservationist

The 2018 Spring Tillage and Cover Crop Transect shows that Hoosier farmers continue the trend of plowing less while using sound conservation practices that preserve and build valuable topsoil. Hamilton County is no exception.

Each spring the staff at the Hamilton County Soil and Water Conservation District load up their vehicle to conduct a field survey of tillage methods, plant cover, and crop residue in the county. A tillage transect is an on-the-ground survey that identifies the types of tillage systems farmers are using and long-term trends of conservation tillage adoption. GPS technology is used alongside a statistically reliable model for estimating farm management and related annual trends.

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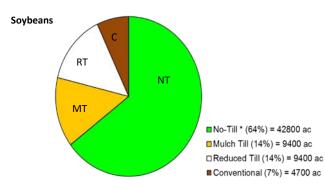


Summer 2018

Conservation tillage helps keep the soil where it belongs-on the

field. Residue cover of just 30 percent can help reduce soil erosion by 50 percent or more compared to bare soil. This is good for our farmers, good for soil productivity, and good for our drinking water.

There are many forms of conservation tillage, but the ultimate method is "no-till". This is where farmers directly plant into the previous crop residue with little soil disturbance. No-till farming methods can reduce soil erosion by 75 percent when compared to a conventional (chisel-disk) tillage system. Also, it is a critical component to improve soil organic matter and soil



Within Hamilton County 25% of the corn acres (13,700 acres) were planted using no-till, and 64% of the soybean acres (42,800 acres) were planted using no-till, ranking us higher than most surrounding counties.

The SWCD plans to conduct another fall tillage transect. Stay tuned for results to be published in our fall newsletter. Tillage transect reports dating back to 1990 can be found at http://www.in.gov/isda/2383.htm.

health.

The 2018 Spring Tillage and Cover Crop Transect report shows that farmers in Hamilton County have saved over 181 thousand tons of soil (which remained on crop fields instead of washing away into our streams, rivers, and lakes) by using reduced tillage methods as compared to conventional tillage. Hamilton County farmers who used reduced tillage systems also required fewer equipment passes in the field. Consequently, they used less fuel which resulted in over 172 thousand gallons of diesel fuel saved!

Guide: *No-Till (NT) – Any direct seeding system, including site preparation, with minimal soil disturbance (includes strip & ridge till)

Mulch Till (MT) – Any tillage system leaving 30% - 75% residue cover after planting, excluding no-till

Reduced (RT) – Any tillage system leaving 16% - 30% residue cover after planting

Conventional (C) – Any tillage system leaving less than 15% residue cover after planting



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Published quarterly and distributed to landowners, farm operators, teachers, local agencies, public officials, conservation organizations and other interested individuals.

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2018 Photo Contest Results

The judging for the 5th Annual Hamilton County SWCD Photo Contest is complete. Judges Jeffrey Engel, Hamilton County resident and professional photographer and our Conservation Administrator, Ginger Davis, selected winners from many wonderful entries! Winners in the Pollinators in Color category are: Nathalia Bedrava: *Two-Winged Pollinators*, 1st Place, Adult; Claire Wiest: A Spring *Feast*, 1st Place, Youth; Larry Raber: *Hummingbird Silhouette*, Honorable Mention, Adult; Addison McMillan: The Mysterious Bug, and Matayia Owen: Ants, Honorable Mention, Youth. Winners in the Then and Now: 50 Years of Conservation are: Andrew Schmidt: Harnessing Wind Energy, 1st Place, Adult; Matayia Owen: Erosion Control and Installation/Land with Prairie Grass, 1st Place, Youth; Andrew Schmidt: To Till or Not to Till, Honorable Mention, Adult; Veronica Pruitt: Light Sources, Honorable Mention, Youth. All photos were displayed at the Hamilton County 4-H Fair in our booth and are available to view on the Hamilton County SWCD website: www.hamiltonswcd.org/photo-contest.



Andrew Schmidt—Then and Now: Harnessing Wind Energy





Nathalia Bedrava: Two-Winged Pollinator



Claire Wiest: A Spring Feast



Matayia Owen— Then and Now: Erosion Control & Grasses



District Staff Meet with State Legislators

Over the past few months District staff had the opportunity to meet with two state legislators to share info on our mission and programs. In March, staff and board Chairman, Rodney Rulon, met with State Senator Victoria Spartz to discuss natural resource concerns and opportunities in the county. In early July, urban conservation staff met with State Representative Donna Schaibley at a community garden in Carmel to go over the exciting conservation and urban agriculture developments in the county. The importance of Clean Water Indiana grant funds through the Indiana State Department of Agriculture continue to be critical to the delivery of District programs and the SWCD appreciated the opportunity to share how we utilize these funds to support community conservation efforts. We thank Senator Spartz and Representative Schaibley for their interest and support of conservation efforts in our county.

District Welcomes Jenny Blake as Outreach and Technical Assistant

A new face might greet you on your next trip to our office. Jenny Blake joined the staff in June as our new outreach assistant and conservation technician. In this part-time role, Jenny will assist with outreach and education efforts including communications, events, workshop planning, and more. Jenny will also be providing support to our technical staff in field work, sampling and data collection, and monitoring efforts.

Jenny has nine years of federal law enforcement experience at several western US National Parks, event coordination experience and is a certified paramedic. Jenny says "I am thrilled to join HCSWCD as a team member. In my short time here, I have been fascinated by all of the programs and services that we provide for our residents. I am excited to move forward with our community conservation efforts!"

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HAMILTON COUNTY Soil & Water	COUN			Mark qua	ntity desir and tota Tree cost	Mark quantity desired next to each tree/shrub and total order in table. Tree cost: \$28.00 plus tax	each tree/sl ble. Is tax		t due with orde Payment m	: with order: Friday, Septembe Payment methods: Cash or check	Payment due with order: Friday, September 28th 2018 Payment methods: Cash or check	2018
CONSERVATION DISTRICT	DISTRIC	E (Wa	rvitae: 5 ga tering bag	Arborvitae: 5 galion container 540/each Watering bag (15 gallon) : \$20/each	r Ş40/each Ş20/each	0	nline ordering available at: v	g and credi www.ham	Online ordering and credit card payment available at: www.hamiltonswcd.org	
Tree Sale	auv	ט	3	All trees/shrubs will be in 3 gallon containers. We guarantee a healthy specimen will be supplied at pick up. Due to variations in planting, site conditions and care,	shrubs wi i healthy s _i tions in plo	All trees/shrubs will be in 3 gallon containers. guarantee a healthy specimen will be supplied at pick Due to variations in planting, site conditions and care,	lon contain be supplied c nditions and		rder pick up: <mark>Fri</mark> Hamilton Count	iday, Octob y 4-H Fair G	Order pick up: Friday, October 5th 12pm-6pm at Hamilton County 4-H Fair Grounds Llama Barn	E
ORDER FORM (please print clearly)	print cle	arly)		no guarantee	e or refund	no guarantee or refunds will be given after tree pick up.	n after tree p	nick up.				
Name:				ш	Email:				Quantity ordered	rdered		Total
Full addrace.									Trees/shrubs		\$28.00 each	
									Arborvitae		\$35.00 each	
Phone:				10					Watering bag		\$20.00 each	
Remember to cons	ider abov	e and belov	w ground u	itilities and m	ature grow	th size when	choosing tre	ees for vour property.	Tax exempt? Submit	Submit	Subtotal	
Need mo	re info on	trees, pest	ts, & growi	ng characteris	tics? Visit	our website f	or helpful in	Need more info on trees, pests, & growing characteristics? Visit our website for helpful info and links.	certificate with order.	th order.	+ 7% sales tax	
* Trees in bold are relation to clime	e noted in ite change	the Purdue	e Indiana C een shifting	limate Change g vegetation h	e Impacts / labitats. M	Assessment a	s good choic are on the t	* Trees in bold are noted in the Purdue <i>Indiana Climate Change Impacts Assessment</i> as good choices for urban areas in relation to climate change and foreseen shifting vegetation habitats. More info/links are on the tree sale webpage.			Total due	
											2	
Name	Mature size	Mature height	Growth Rate	Estimated height at delivery (ft.)	Bloom time	Sun	Soil moisture		Notes			Quantity
15 gallon watering bag								Great tool for sites where nearby water source is unavailable. Fill bag and water slowly seeps out over 5-8 hours. Visit hamiltonswcd.org/treesale for more info and details. \$20.00 per bag	· source is unavailab org/treesale for mo	ole. Fill bag and	d water slowly seeps tails. \$20.00 per bag	out \$20.00/bag
Red Maple (<i>Acer rubrum</i>)	L	40-60	Med-Fast	3-4	March- April	Full sun-part shade	Medium- Wet	Beautiful fall color. Tolerates wet soil and air pollution. Great specimen tree but avoid planting too close to sidewalks/driveway.	l color. Tolerates wet soil and air pollution. Great sp but avoid planting too close to sidewalks/driveway.	llution. Great s valks/driveway	specimen tree y.	
Allegheny Serviceberry (Amelanchier laevis)	S	15-40	Medium	4-5	April	Full sun-part shade	Medium	Edible berries attract birds. Attractive understory tree for lawns, street tree, or screening.	ve understory tree f	for lawns, stree	et tree, or screening.	
Black chokeberry (Aronia melanocarpa)	Shrub	3-6	Medium	2-3	May	Full sun-part shade	Medium	Great for borders and wet areas. Prune unwanted suckers to limit spread. Loved by birds.	une unwanted suck	ers to limit spr	read. Loved by birds.	
Paw Paw (Asimina triloba)	S	15-30	Slow	18"-24"	Fruit in Autumn	Full sun- shade	Medium- Moist	"Indiana Banana" Great understory tree. Tolerates shade and competition. Large, edible fruit ripe in Oct. Need multiple trees for fruit production and/or hand pollination.	e. Tolerates shade al for fruit productior	nd competitiol n and/or hand	n. Large, edible fruit r pollination.	be
*River Birch (Betula nigra)	Μ	30-40	Medium	3-4	April-May	Full sun-part shade	Medium- Wet	Beautiful exfoliating creamy white bark. Tolerates temporary flooding and clay soils. Keep at least 100 feet from any buried drainage pipes.	ating creamy white bark. Tolerates temporary floodir Keep at least 100 feet from any buried drainage pipes	emporary floo d drainage pip	ding and clay soils. es.	
Northern Pecan (Carya illinoinensis)	L	70-100	Medium	2-4	April-May	Full sun	Medium	Begins to bear nuts in 6-10 years. Humans and wildlife love nuts	5-10 years. Humans	and wildlife lo	ve nuts.	
Shagbark Hickory (<i>Carya ovata</i>)	Ľ	60-80	Slow	6"-12"	April-May	Full sun-part shade	Medium	Requires large area to grow. Great shade tree with interesting bark in maturity. Tolerates clay soils. 40 years for nuts.	grow. Great shade tree with interes! Tolerates clay soils. 40 years for nuts.	h interesting b for nuts.	ark in maturity.	
Northern Catalpa (Catalpa speciose)	M/L	40-70	Med-Fast	3-4	May-June	Full sun-part shade	Medium- Wet	Tolerant of wet and dry soils and seasonal flooding. Dramatic flowers, long slender seedpods. Catalpa sphinx moth caterpillars common. Messy for prominent areas.	onal flooding. Dram rpillars common. Mo	natic flowers, lessy for promi	ong slender seedpods nent areas.	
*Hackberry (Celtis occidentalis)	Σ	40-60	Med-Fast	4-5	April-May	Full sun	Medium- Wet	Tolerates wide range of soil conditions, drought, & poor soils. Good shade or street tree. Great for butterflies and birds.	onditions, drought, & poor so Great for butterflies and birds	or soils. Good : birds.	shade or street tree.	

jShrub j - j Medium $2-3$ Medium $2-3$ MediumMediumMedium j <	Common name	Mature size	Mature height	Growth Rate	Est. height at delivery (ft)	Bloom time	Sun	Soil moisture	Notes	Quantity
320-30Medium3-4AprilFull sur- part shadeMedium115-30Slow3-4April-MayFull sur- part shadeMedium2Shrub15-30Slow3-4April-MayFull sur- part shadeMedium2Shrub15-20Medium2-3May-luneFull sur- part shadeMedium3Shrub15-20Medium2-3Fult in Sept.Pult inMedium1N-teregreen30-65Medium2-3EvergreenFull sur- part shadeMedium1Shrub15-20Medium2-3AprilSur-shadeMedium1Shrub15-20Medium2-3April<	Buttonbush (Cephalanthus occidentalis)	Shrub	5-12	Medium	2-3	June	Full sun- part shade	Medium- Wet	Grows well in wet soils. Showy, unique flower heads.	
S15-30Siow $3-4$ April-MayFuil sur- madeMediumShrub $6-3$ Fast $2-3$ May-LuneFuil sur- wetWetiumMay $35-60$ Medium $2-3$ Fuit in Sept.Fuil sur- wetWetiumShrub $35-60$ Medium $4-5$ $0-0-cc$ Fuil sur- butWetiumMay-Lune $35-60$ Medium $2-3$ Fuil sur- butMediumShrub $35-60$ Medium $2-3$ EvergreenFuil sur- butWetiumMay-Lune $5-12$ Medium $2-3$ EvergreenFuil sur- butMediumMay-Lune $5-12$ Medium $2-3$ AprilSur-shadeDry- MediumMay $1-50-30$ Fast $4-5$ May-LuneFuil sur- May-LuneMediumMay $2-30-65$ Siow $2-3$ May-LuneFuil sur- 	*Redbud (Cercis canadensis)	S	20-30	Medium	3-4	April	Full sun- part shade	Medium	Showy pink spring flowers. Avoid poorly drained soils. Tolerates deer, clay soil, and black walnut.	
Shrub 6.9 Fast 2.3 $May-June$ $Full surMediumM35.60Medium2.3Fruit in Sept.purt shadeWetM35.60Medium2.3Fruit in Sept.purt shadeWetShrub15.20Medium2.3EvergreenFull sunMediumM-Evergreen30.65Medium2.3EvergreenFull sunMediumM-Evergreen30.50Needium2.3EvergreenFull sunMediumM8.12Medium2.3May-JuneFull sunMediumM30.50Slow2.4May-JuneFull sunMediumM30.50Slow2.3May-JuneFull sunMediumM30.50Slow2.4May-JuneFull sunMediumM2.540Slow2.4May-JuneFull sunMediumM2.540Slow2.4May-JuneFull sunMediumM2.540Slow2.4May-JuneFull sunMediumM2.540Slow2.54MediumMediumM1.52.00Fast2.54May-JuneFull sunMediumM/L50.80Fast2.54May-JuneFull sunMediumM/L50.90Medium2.54MayFull sunMediumM/L50.70Medium2.54MayFull sunMedium$	Flowering Dogwood (Cornus florida)	s	15-30	Slow	3-4	April-May	Full sun- shade	Medium	Beautiful flowering ornamental tree.	
M35-60Medium 2.33 Fruit in Sept.Endison- part shadeDry- mediumShruib15-20Medium $4-5$ $0ct-bec$ Part shadeMediumM-Evergreen30-65Medium $2-33$ EvergreenFull sunMediumN-Evergreen $6-12$ Medium $2-33$ AprilSun-shadeDry-N-Evergreen $6-12$ Medium $2-33$ AprilSun-shadeDry-N-Evergreen $6-12$ Medium $2-34$ May-JuneFull sunMediumN-N $30-50$ Slow $2-4$ May-JuneFull sun-MediumM $30-50$ Slow $2-4$ May-JuneFull sun-MediumM $30-50$ Slow $4-6$ May-JunePull sun-MediumM $30-50$ Slow $4-6$ AprilPull sun-MediumM $25-400$ Slow $4-6$ AprilPull sun-MediumM $25-400$ Slow $2-3$ AprilPull sun-MediumM/L $50-30$ Slow $2-3$ AprilPull sun-MediumM/L $50-70$ Medium $2-3$ <	Red Osier Dogwood (Cornus sericea)	Shrub	6-9	Fast	2-3	May-June	Full sun- part shade	Medium- Wet	Red branches- great winter interest. Tolerates clay soil, wet soil, and deer. Can be used for erosion control or screening.	
Shrub15-20Medium4-5Oct-DecFull sunMediumM-Evergreen30-65Medium2-3EvergreenFull sun DTY .N-Evergreen6-12Medium2-3EvergreenFull sun DTY .Shrub6-12Medium2-3April $Sun-shade$ DTY .NN30-50Fast4-5May-JuneFull sunMediumM30-50Slow2-4May-JuneFull sunMediumM30-50Slow2-4May-JuneFull sunMediumM30-50Slow2-4May-JuneFull sunMediumM25-400Slow2-4May-JuneFull sunMediumM25-400Fast18"-24"EvergreenFull sunMediumM/L50-80Fast18"-24"May-IuneFull sunMediumM/L50-80Fast2-3MayFull sunMediumM/L50-80Slow2-3MayFull sunMediumM/L50-70Medium2-3April-MayFull sunMediumM/L50-70Medium3-5April-MayFull sunMediumM/L50-70Medium2-3April-MayFull sunMediumM/L50-70Medium2-3April-MayFull sunMediumM/L50-70Medium2-3April-MayFull sunMediumM/L50-70	*Persimmon (Diospyros virginiana)	Σ	35-60	Medium	2-3	Fruit in Sept.	Full sun- part shade	Dry- Medium	Ornamental tree with edible food crop. Male & female trees necessary for fruiting. Prune suckers for central leader.	
M-Evergreen 30.65 Medium 2.3 EvergreenFull sunDry-WetShrub 6.12 Medium 2.3 AprilSun-shadeDry-WetL 60.90 Fast 4.5 May-JuneFull sunMediumM 30.50 Slow 2.4 May-JuneFull sunMediumM 30.50 Slow 2.4 May-JuneFull sunMediumM 30.50 Slow 2.4 May-JuneFull sun-MediumM 25.400 Slow 2.4 May-JuneFull sun-MediumM 25.400 Fast $18"-24"$ EvergreenFull sun-MediumM/L 50.80 Fast $18"-24"$ EvergreenFull sun-MediumM/L 50.90 Fast $18"-24"$ MayFull sun-MediumM/L 50.90 Fast 2.3 MayFull sun-MediumM/L 50.90 Medium 2.3 AprilFull sun-MediumM/L 50.70 Medium 3.5 AprilFull sun-MediumM/L 50.70 Medium 3.5 AprilMayFull sun-MediumM/L 50.70 Medium 3.5 AprilFull sun- </td <td>Witch hazel (Hamamelis virginiana)</td> <td>Shrub</td> <td>15-20</td> <td>Medium</td> <td>4-5</td> <td>Oct-Dec</td> <td>Full sun - Part shade</td> <td>Medium</td> <td>Tolerates heavy clay soils. Promptly remove suckers to prevent colonial spread. Little pruning is required.</td> <td></td>	Witch hazel (Hamamelis virginiana)	Shrub	15-20	Medium	4-5	Oct-Dec	Full sun - Part shade	Medium	Tolerates heavy clay soils. Promptly remove suckers to prevent colonial spread. Little pruning is required.	
Shrub $6-12$ Medium $2\cdot3$ AprilSun-shade $pry-Wet\Gamma\Gamma60-30Fast4-5May-JuneFull sunMediumM30-50Slow2-4May-JuneFull sunMediumM30-50Slow2-4May-JuneFull sunMediumM30-50Slow4-6AprilFull sunMediumM25-40Slow4-6AprilFull sunMediumM25-30Fast5-6AprilFull sunMediumM/L50-30Fast5-6AprilFull sunMediumM/L50-30Fast5-6AprilFull sunMediumM/L50-30Medium2-3MayFull sunMediumM/L50-30Medium2-3April-MayFull sunMediumM/L50-30Medium2-3April-MayFull sunMediumM/L50-30Medium2-3April-MayFull sunMediumM/L50-30Medium2-3April-MayFull sunMediumM/L50-30Medium2-3April-MayFull sunMediumM/L50-30Medium2-3April-MayFull sunMediumM/L50-30Medium2-3April-MayFull sunMediumM/L50-40Medium2-32-3<$	*Eastern Red Cedar (Juniper virginiana)	M - Evergreen	30-65	Medium	2-3	Evergreen	Full sun	Dry- Medium	Good for screen or windbreak. Intolerant of shade.	
L $60-90$ $Fast$ $4-5$ $May-June$ $Full sun Medium$ M M $May-June$ $Susu Susu Medium Medium M$ M $30-50$ $Siow$ $2-4$ $May-June$ $Full sun Medium M$ M $25-40$ $Siow$ $2-4$ $May-June$ $Full sun Medium M$ M $25-40$ $Siow$ $2-4$ $May-June$ $Full sun Medium M$ M $25-40$ $Siow$ $2-4$ $April$ $Full sun Medium M$ Z Sow $Z-3$ $April$ $Full sun Medium M$ M Sow $Z-3$ $April$ $Full sun Medium M$ M Sow $Z-3$ May $Full sun Medium M$ M $Z-3$ $April-May$ $Full sun Medium-$ <td>Spicebush (Lindera benzoin)</td> <td>Shrub</td> <td>6-12</td> <td>Medium</td> <td>2-3</td> <td>April</td> <td>Sun- shade</td> <td>Dry-Wet</td> <td>Good in moist, shady spaces. Larval host to Swallowtail butterfly.</td> <td></td>	Spicebush (Lindera benzoin)	Shrub	6-12	Medium	2-3	April	Sun- shade	Dry-Wet	Good in moist, shady spaces. Larval host to Swallowtail butterfly.	
ModelMay-luneFull sun-Medium-Model $30-50$ Slow $2-4$ May-luneFull sun-Medium-Model $25-40$ Slow $4-6$ AprilFull sun-Medium-L-Evergreen $50-80$ Fast $18"-24"$ EvergreenFull sun-Medium-L-Evergreen $50-80$ Fast $5-6$ AprilFull sun-Medium-Model $75-100$ Fast $5-6$ AprilFull sun-Medium-Molt $75-100$ Fast $5-6$ April-Full sun-Medium-Molt $50-80$ Slow $2-3$ MayFull sun-Medium-Molt $50-70$ Medium $2-3$ April-MayFull sun-Medium-Molt $80-70$ Medium $3-5$ April-MayFull sun-Medium-Molt $50-70$ Medium $3-5$ April-MayFull sun-Medium-Molt $50-70$ Medium $2-3$ April-MayFull sun-Medium-Molt $50-70$ Medium $2-3$ April-MayFull sun-Medium-Molt $5-12$ Fast $2-3$ April-MayFull sun-Medium-Model $2-50$ Medium $2-5$ $2-3$ April-MayFull sun-Medium-Model $2-50$ Medium $2-5$ $2-3$ April-MayFull sun-Medium-Model $2-5$ Fast $2-5$ $2-5$ $2-5$ $2-5$ Medium-Medium-Model $2-5$ <	Tulip Poplar (Liriodendron tulipifera)	L	06-09	Fast	4-5	May-June	Full sun	Medium	State tree of Indiana. Showy flowers. Prefers moist well drained sites. Tolerates part shade and clay soil. Not a good street tree but beautiful landscape/shade specimen.	
M $25-40$ $5low$ $4-6$ April $Full sun-part shadeMediumL-Evergreen50-80Fast18"-24"Evergreenpart shadeMediumL-Evergreen50-80Fast18"-24"Evergreenpart shadeMediumNL75-100Fast5-6AprilFull sun-MediumM/L50-80Slow2-3MayFull sun-MediumM/L50-70Medium2-3MayFull sun-MediumM/L50-70Medium2-3April-MayFull sun-MediumM/L50-70Medium2-3April-MayFull sun-MediumM/L50-70Medium3-5April-MayFull sun-MediumM/L50-70Medium3-5April-MayFull sun-MediumM/L50-70Medium3-5April-MayFull sun-MediumM/L50-70Medium3-5April-MayFull sun-MediumM/L50-70Medium2-33-7April-MayFull sun-MediumM/L50-70Medium2-33-73-7May2-13-7M/L50-70Medium2-33-73-73-73-7M/L50-70Medium2-33-73-73-7M/L5-125-125-123-73-73-7$	Black Gum (Nyssa sylvatica)	Σ	30-50	Slow	2-4	May-June	Full sun- part shade	Medium- Wet	Tolerates standing water and drought. Slow growing, flowers great nectar source for bees. Great ornamental for lawns or street tree.	
L-Evergreen50-80Fast18"-24"EvergreenFull sun- part shadeMedium- wetIL-Evergreen75-100Fast5-6AprilFull sunMedium- WetM/L50-80Slow2-3MayFull sunMedium- WetM/L50-70Medium2-3April-MayFull sunMedium- WetM/L50-70Medium2-3April-MayFull sunMedium- WetM/L50-70Medium3-5April-MayFull sunMedium- MediumM/L50-75Medium3-5April-MayFull sunMedium- MediumM/L50-75Medium3-5April-MayFull sunMedium- MediumM/L50-75Medium3-5April-MayFull sunMedium- MediumM/L50-70Medium3-5April-MayFull sunMedium- MediumM/L50-70Medium2-3April-MayFull sunMedium- MediumM/L50-70Medium2-3April-MayFull sunMedium- MediumM/L5-12Fast2-3April-MayFull sunMedium- MediumM/LShrub2-5Fast2-3April-MayFull sunMedium- MediumM/LShrub2-5Fast2-3April-MayFull sunMedium- MediumM/LShrub2-5Fast2-3April-MayMedium- MediumMedium- Medium<	*Hop Hornbeam (Ostrya virginiana)	W	25-40	Slow	4-6	April	Full sun- part shade	Medium	Nice shade or street tree tolerant of clay soil.	
L75-100Fast5-6AprilFull sunMedium- WetM/L50-80Slow2-3MayFull sunDry-Me- diumM/L50-70Medium2-3April-MayFull sunDry-Me- diumM/L50-70Medium2-3April-MayFull sunDry-Me- diumM/L50-70Medium2-3April-MayFull sunMediumM/L50-70Medium2-3April-MayFull sunMediumM/L50-70Medium3-5April-MayFull sunMediumM/L50-70Medium3-5April-MayFull sunMediumM/L50-70Medium2-3April-MayFull sunMediumM/L50-60Medium2-3April-MayFull sunMediumM/L50-70Medium2-3April-MayFull sunMediumM/L50-60Medium2-3April-MayFull sunMediumM/L50-60Medium2-3April-MayFull sunMediumM/L50-70Medium2-3April-MayFull sunMediumM/L512Fast2-3April-MayFull sunMediumM/L512Fast2-3April-MayFull sunMediumM/L512Fast2-3April-MayFull sunMediumM/L512Fast2-3April-MayFull sunMediumM/L <td>White Pine (<i>Pinus strobus</i>)</td> <td>L- Evergreen</td> <td>50-80</td> <td>Fast</td> <td>18"-24"</td> <td>Evergreen</td> <td>Full sun- part shade</td> <td>Medium</td> <td>Low maintenance, rapid-growing evergreen tree. Great specimen tree – allow for future growth. Susceptible to many pests. Great for windbreaks.</td> <td></td>	White Pine (<i>Pinus strobus</i>)	L- Evergreen	50-80	Fast	18"-24"	Evergreen	Full sun- part shade	Medium	Low maintenance, rapid-growing evergreen tree. Great specimen tree – allow for future growth. Susceptible to many pests. Great for windbreaks.	
M/L $50-80$ $Slow$ $2-3$ May $Full sunDry-Me M/L50-70Medium2-3April-MayFull sunDry M/L50-75Medium2-3April-MayFull sunMediumM/L50-75Medium3-5April-MayFull sunMediumM/L50-75Medium3-5April-MayFull sunMediumM/L50-75Medium3-5AprilPurlMediumM/L50-60Medium2-3April-MayFull sunMediumN1-150-60Medium2-3April-MayFull sunMediumN1-150-60Medium2-3April-MayFull sunMediumN1-150-60Medium2-3April-MayFull sunMediumN1-15-12Fast2-51-1-1/101-1/10MediumN1-12-51-1-1/101-1/101-1/101-1/101-1/10N1-1-101-1-101-1/101-1/101-1/101-1/101-1/10N1-1-101-101-1/101-1/101-1/101-1/101-1/10N1-101-101-101-101-1/101-1/101-1/10N1-101-101-101-101-101-10$	*Sycamore (Platanus occidentalis)	٦	75-100	Fast	5-6	April	Full sun	Medium- Wet	Largest diameter deciduous tree in NA. Prefers rich organic soils, tolerant of urban pollution. Avoid near drainage pipes.	
M/L50-70Medium2-3April-MayFull sunDry- MediumM/L50-75Medium4-6MayFull sunMediumM/L50-75Medium3-5AprilFull sunMediumM/L50-60Medium3-5AprilFull sunMediumM40-60Medium3-5AprilFull sunMediumM/L50-60Medium2-3April-MayFull sunMediumM512Fast2-3April-MayFull sunMediumN512Fast2-5June-JulyPart shadeWetNShrub2-5Fast2-3April-MayFull sun-MediumMShrub2-5Fast2-3April-MayFull sun-MediumMMedium2-3April-MayFull sun-MediumMediumMShrub2-5Fast2-3April-MayFull sun-MediumMUnberdiu2-5Fast2-3April-MayFull sun-MediumMUnberdiu2-5Fast2-3April-MayFull sun-MediumMUnberdiu2-5Fast2-3April-MayFull sun-MediumMUnberdiu2-5Fast2-3Boril-MayPortineMediumMUnberdiu2-5Fast2-3PortinePortinePortineMMetur2-4FastPortinePor	White Oak (<i>Quercus alba</i>)	W/F	50-80	Slow	2-3	Мау	Full sun	Dry– Me- dium	Best grown in rich, moist, acidic, well-drained loams in full sun. Adapts to a wide variety of soil conditions with good drought tolerance.	
M/L50-75Medium4-6MayFull sunDry- MediumMM40-60Medium3-5AprilFull sunMediumM40-60Medium3-5April-MayFull sunDry-L50-60Medium2-3April-MayFull sunMediumShrub5-12Fast2-5June-Julypart shadeWetShrub2-5Fast2-3April-MayFull sun-Medium-Nubul5-12Fast2-3April-MayFull sun-Medium-Nubul5-12Fast2-3April-MayPure-Medium-Nubul2-5Fast2-3April-MayPure-Medium-Nubul2-5Fast2-3April-MayPure-Medium-MUnbul2-5Fast2-3April-MayMedium-MUnbul2-5Fast2-3April-MayMedium-MUnbul2-5Fast2-3April-MayMedium-MUnbul2-5Fast2-3April-MayMedium-MUnbul2-5Fast2-3April-MayMedium-MUnbul2-5Fast2-3May-JuneMedium-MEvergreen20-40FastApril-MayMedium-MShrub12-15Medium18"-24"May-JuneMedium-MMedium18"-24May-JuneMediumMedium-	Scarlet Oak Quercus coccinea)	W/L	50-70	Medium	2-3	April-May	Full sun	Dry- Medium	Low maintenance, shade/street tree with large crown. Tolerates drought and dry soil. Not subject to chlorosis as much as pin oak. Great fall color.	
M40-60Medium3-5AprilFull sunDry- Medium1L50-60Medium2-3April-MayFull sunMedium1Shrub5-12Fast2-5June-JulyPull sunMedium-1Shrub5-12Fast2-5June-JulyPull sunMedium-1Shrub2-5Fast2-3April-MayFull sun-Medium-1Shrub2-5Fast2-3April-MayPurt shadeWet1U-Deciduous50-70Medium4-5DeciduousPurt shadeDry-M-Evergreen20-40Fast3-4EvergreenPurt shadeMedium-Shrub12-15Medium18"-24"May-JunePurt shadePurt	Red Oak (<i>Quercus rubra</i>)	M/L	50-75	Medium	4-6	Мау	Full sun	Dry- Medium	Prefers well drained acidic soils, needs ample space. Tolerates pollution, compacted soils, drought & salt spray though not flooding.	
L50-60Medium2-3April-MayFull sunDry- MediumShrub5-12Fast2-5June-JulyFull sunMedium- MediumShrub5-12Fast2-5June-Julypart shadeWetShrub2-5Fast2-3April-MayFull sun-Medium- MetU-Deciduous2-5Fast2-3April-MayPurl sun-Medium- MetU-Deciduous50-70Medium4-5DeciduousFull sun-Medium- WetM-Evergreen20-40Fast3-4EvergreenPurl sun- Purl sun-Medium- MetShrub12-15Medium18"-24"May-JunePurl sun- Purl sun-Purl sun- Medium	Shumard Oak Quercus shumardii)	Σ	40-60	Medium	3-5	April	Full sun	Dry- Medium	Tolerates wide range of soils, good street tree. Prune early for central leader & strong structure.	
Shrub5-12Fast2-5June-JulyFull sun-Medium-NoteShrub5-12Fast2-5June-JulyPart shadeWetNoteShrub2-5Fast2-3April-MayFull sun-Medium-L-Deciduous50-70Medium4-5DeciduousFull sun-Medium-M-Evergreen20-40Fast3-4EvergreenPart shadeMedium-M-Evergreen20-40Fast3-4EvergreenPart shadeMedium-Shrub12-15Medium18"-24"May-JunePart shadePort-	*Black oak (Quercus veluntina)	L	50-60	Medium	2-3	April-May	Full sun	Dry- Medium	Well drained soils tolerates poor dry soils. Medium shade tree for lawns, streets. Less susceptible to common oak diseases.	v 14
Image: Shrub Shrub Shrub Shrub Shrub Shrub Shrub Shrub I-Deciduous S0-70 Fast 2-3 Mapril-May Bart shade Dry Bart shade Dry Shrub S0-70 Medium Wet Shrup Medium S0-70 Medium	Elderberry (Sambucus canadensis)	Shrub	5-12	Fast	2-5	June-July	Full sun- part shade	Medium- Wet	Fruit attractive to wildlife and for jams etc. Great shrub border or screen and in low, wet spots. Naturalizes via suckers.	
L-Deciduous 50-70 Medium 4-5 Deciduous Full sun Medium- vet M-Evergreen 20-40 Fast 3-4 Evergreen Part shade Medium Shrub 12-15 Medium 18"-24" May-June Part shade Dry-	Coralberry (Symphoricarpos orbiculatus)	Shrub	2-5	Fast	2-3	April-May	Full sun- part shade	Medium- Dry	Coral berries provide winter interest.	
M-Evergreen 20-40 Fast 3-4 Evergreen Full sun- part shade Medium Shrub 12-15 Medium 18"-24" May-June Part shade Dry- part shade	Bald Cypress (Taxodium distichum)	L-Deciduous conifer	50-70	Medium	4-5	Deciduous conifer	Full sun	Medium- Wet	Tolerates wide range of soils- dry to standing water. Loses needles in fall.	
Shrub 12-15 Medium 18"-24" May-June Full sun- Dry-	Arborvitae (Thuja occidentalis)	M-Evergreen	20-40	Fast	3-4	Evergreen	Full sun- part shade	Medium	Intolerant of dry conditions. Winter interest. \$5 gallon container—\$40.00 each	\$40 each
	Blackhaw Viburnum (Viburnum prunifolium)	Shrub	12-15	Medium	18"-24"	May-June	Full sun- part shade	Dry- Medium	Easily grown in dry soil, tolerates drought and clay soil. Can be a multi-stem shrub or trained into single stem small tree.	

Rain on Main—August 18th in Carmel

The annual painted rain barrel silent auction and art competition returns to Carmel for its fourth year this August! Twenty local artists have painted sixty-five gallon urn style rain barrels that serve as great conservation tools and pieces of art. The barrels will be displayed in the Carmel Arts and Design District from August 10th-17th and auctioned off in a Silent Auction at the Carmel Farmers Market from 9-11am on August 18th.

How to see the barrels:

- Visit the Carmel Arts and Design District between 8/10 and 8/17.
- Go online to RainonMain.com to see photos and read about the artists.
- Visit @RainonMain on Facebook to see photos and vote in the People's Choice Competition. "Like" your favorite before 8/17 to vote!
- Join us at the Carmel Farmers Market on August 18th from 9-11am to see the barrels and place a bid in the silent auction. Winners take their barrel home that day!



Carolyn Martens 2017 barrel Water Dancers



Did you know?

Carmel residents are eligible for a \$50 -\$75 rebate on rain barrels via the City Stormwater Program. Visit RainonMain.com for more info!



Market attendees enjoy and place bids on the Rain on Main Barrels in 2017



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Hamilton County Farm Bureau

www.infarmbureau.org 317-773-2431

If one person can make a difference, think what thousands of us can do, working together!



Urban Conservation Spotlight

Claire Lane, Urban Conservationist

Tool Loan Program Now Available

The District's new tool loan program officially launched in June. A variety of tools are available for free check out by county residents for individual or group work days on public or private lands in

Hamilton County. There is no charge for the tool loan, but participants will need to sign a waiver and leave credit card info on file to ensure the return of the tools.

So far, the program is made up of three types of tools. One kick type sod cutter is available. This is a tool to manually remove turf (grass) sod from your yard for the creation of native plant or pollinator gardens. Four weed torches are available to help combat nuisance weeds, like thistle, and for weed control in organic gardens. Two torches run on 20 pound propane tanks and two on small canisters (not provided). Finally, seven puller bars of various sizes are available. These metal tools use leverage to clamp down on invasive shrubs and pull them out by the root. The puller bars can be used to remove invasive shrubs like honeysuckle, autumn olive, buckthorn, and more. Videos of these tools in action are available on the SWCD Facebook page and our website.

This tool loan program supports the SWCD's mission of promoting conservation across the county and improving our natural resources. Removing invasive species, creating pollinator habitat with native plants, and reducing chemical applications that can affect water quality all contribute greatly to a healthy ecosystem in Hamilton County. We plan to add more tools over time and welcome suggestions of what tools you would like to see made available.

Individuals interested in learning more about these tools and the program can visit www.hamiltonswcd.org/toolloan, call 317-773-2181, or stop by the SWCD at 1717 Pleasant St. Suite 100 in Noblesville.

Cooperative Invasive Species Management Area (CISMA)

A survey conducted by the Invasive Plant Advisory Committee found that land owners and managers in Indiana spent \$5.85 million in 2012 to manage invasive plants in natural areas like forests, prairies, and wetlands. Invasive plants and insects are common issues in Hamilton County as plants like asian honeysuckle and garlic mustard take over woodlands, roadsides, and tree lines and the emerald ash borer has nearly eliminated ash trees locally. When these aquatic, vegetative, insect, and disease pests spread they pay no attention to municipal, public/private, or other jurisdictional boundaries. Because of that, a careful and planned approach is needed to combat invasives around the county.

Through help from the Southern Indiana Cooperative Invasives Management (SICIM) program and the USDA Natural Resources Conservation Service (NRCS) the SWCD is planning to bring a group of stakeholders together to form the Hamilton County Cooperative Invasives Species Management Area or CISMA. CISMAs are being formed across the state and nation to address the issue of invasive species at the local level, by local people, with local resources. CISMAs are partnership organizations formed with the goal of managing invasive plants across jurisdictional and landownership boundaries. Partners can include county, state and federal governmental agencies, non-profits, citizen groups, and others. By working together at the local level, CISMA partners are able to pool resources and knowledge to address mutual invasive species problems.

The SWCD plans to host a CISMA call out meeting soon to address this issue. If you are interested, please email soil.water@hamiltoncounty.in.gov to be added to the notification list and please join us in this effort! All levels of interest and knowledge will be welcome.

Urban Agriculture Update

Andrew Fritz, Urban Agriculture Conservationist

Another Successful Container Garden Project

The HCSWCD partnered with local organizations to grow over 200 dwarf tomato and pepper plants for the summer produce donation program. This contribution adds to the District's effort of supporting Hamilton County residents who are experiencing food insecurity with nutritious food. The plants were delivered to seven local food pantries. The plants, grown in 2-gallon containers, will provide fresh produce to food insecure households. Furthermore, free technical assistance via text messaging throughout the year will be provided.

This is the 2nd year that the summer produce donation program has been in operation and its success is largely due to the integral role played by partners and volunteers. Many thanks to these individuals for their substantial and ongoing efforts.



milton County SWCD

Conservation

Urban

Container garden plants were delivered to Mama's Cupboard, a food pantry in Sheridan.

Conservation Happenings

Ginger Davis, Conservation Administrator

Well Water Sampling and Assessment Options Improve



After many requests and well water assessments, the well water program is picking up speed. With the new momentum, additional resources and services are being added to the Soil and Water Conservation District Private Well Water program. Early well assessments were more of an informational session. Now, participants also get an initial screening of some physical and chemical properties of their wells. Testing options have improved too. We are now partnering with the Indiana State Laboratory to offer certified water testing services through our office. We will deliver water samples to the lab on Friday afternoons. People interested in this service can come by the office to purchase a water testing kit, take the sample and return it by lunchtime on Friday for analysis. Cost of the samples ranges from \$15 for bacteria, \$15 for nitrate sampling and \$25 for arsenic, lead, and copper testing. We

are also offering our traditional baseline testing suites that we have carried for a while, but now have more options for annual well water testing and inspections. Additionally, homes on city water can benefit from testing for lead and copper since this often comes from the plumbing in the home as opposed to the water itself. We are asking former well assessment participants to reach out if they would like to be included in this screening along with offering services to new participants.

Conservation & Blue-Green Algae

The Indiana agricultural community has always prided itself on self-governance. Our proud farmers take action into their own hands and pursue conservation in a variety of ways to help with our treasured resources. Recently we have noticed a cry for action and regulation which show how this is needed more than ever. Falling corn and grain prices, the need to increase the bottom line, and crazy weather patterns have made it difficult to get some conservation practices in place, let alone crops. This is why conservation assistance can be so important to the future of our soil and water resources. We are all helping farmers be better stewards of our resources with incentive payments, partner programs, rental options for taking poor producing land out of production, subsidizing the cost of cover crops, and encouraging practices that will reduce nutrient runoff and soil erosion. These types of programs and payments have been in decline with political changes, lack of participation, and delays in the Farm Bill. The results are rearing their ugly heads. In late June, blue-green algae was detected in Morse Reservoir, this strain happened to be a low toxin variety, but the early emergence can be a sign of more problems to come. Luckily several groups from the private sector have stepped up to assist in conservation in other ways. For example, Beck's offered a cover crop fly-on program for this fall and the SWCD has been in discussions as to how we can partner to make this effort even more effective. Cover crops, which increase biodiversity, help cover the soil from erosion over the harsh winters and treacherous springs. This helps lessen the amount of phosphorous leaving fields and causing algal blooms. The living root feeds the soil biome early in the spring, spurring a good home for the new spring crop. If your interested in participating in conservation programs and would like to see us pursue more grant options and partnerships with private companies, contact us at soil.water@hamiltoncoutny.in.gov We want to help our community help the land and be conservation stewards into our future.

Sheridan Student Well Water Sampling Event

Sheridan High School students participated in service learning with a Blackhawk well sampling program at the end of the school year. Students, teachers, and staff were encouraged to take a water sample from their home water wells and bring it to the school for analysis. The students of Mrs. Dillon's AP Environmental Science classes partnered with the Soil and Water Conservation District and helped their community by testing their peer's drinking water for a variety of parameters from arsenic and heavy metals to bacteria, pH, and total dissolved solids (TDS). Reports of the results were generated and sent to participants along with plans for follow-up testing by the Indiana Health Department. Students learned testing, laboratory, and data entry skills and procedures while providing a valuable service to their community. We would like to thank Sheridan High School for encouraging and supporting this great program.



Ginger Davis, conservation administrator, shows Blackhawk students the correct method of arsenic analysis.

SAVE THE DATE

HAMILTON COUNTY Soil & Water



Join us at our office and learn about all of the services that we provide for Hamilton County residents. Snacks and drinks will be provided! Help us celebrate our

50th anniversary by joining us at our OPEN HOUSE

November 1st, 4pm-7pm 1717 Pleasant St. Suite 100 Noblesville, IN 46060

If you wish to be removed from our distribution list, to make a name or address change, or to switch to email newsletters, please call 317-773-2181 or email soil.water@hamiltoncounty.in.gov.

All programs and services of the Hamilton County Soil and Water Conservation District are offered on a nondiscriminatory basis without regard to race, color, religion, sex, marital status or disability.