



# Shiawassee Conservation District

## Your Land, Your Water ~ Your Michigan

1900 S. Morrice Road • Owosso, MI 48867 • (989) 723-8263, Ext. 3 Winter/Spring 2017

### Featured Stories

- Invasive Species in Shiawassee County
- Electronics Recycling
- Watershed Planning and Inventories
- Together We Can Save the Monarch Butterfly
- The Stone Family and MAEAP's Impact on Their Unique Farm
- 2017 Tree Sale

### Important Dates

- February 11 - Wildlife Habitat Workshop
- March 23 - Farming for the Future II
- March 30 - 67th Annual Meeting
- April 7 - Tree orders due
- April 20 - Tree order pickup 9AM - 7 PM
- April 21 - Tree order pickup 9AM - 4:00 PM

### Winter/Spring Workshops

*More details available soon!*

#### Wildlife Habitat Workshop

Saturday, February 11, 2017  
Shiawassee Conservation Association

#### Farming for the Future II

Thursday, March 23, 2017  
Venue to be announced

**Contact the Shiawassee Conservation District to reserve your seat!**

## Shiawassee Conservation District

# 67<sup>th</sup> ANNUAL MEETING

Thursday, March 30, 2017

Doors open at 6:00 PM. Dinner served at 6:30 PM

**D'Mar Banquet & Conference Center**

1488 N. M-52, Owosso MI 48867

\$15.00 per person

**RSVP March 23, 2017**

**Shiawassee Conservation District (989) 723-8263 x3**

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**David Mitchell**

will be honored as the

**2016 Conservation Farmer of the Year**

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Special presentation by  
**Suzanne Pish, M.A., CFLE**  
MSU Extension Educator

Farming is a very rewarding occupation, but with variables such as unpredictable weather, untimely equipment breakdowns, and financial markets, farming can be stressful. That stress can have many effects on a person and their family. Join us as we explore what we can do to keep the right mindset to manage our farms and take care of our families and ourselves.



Natural Resources Conservation Service



If you need accommodations to participate in this event, please contact the Shiawassee Conservation District at (989) 723-8263, ext. 3 by March 23, 2017. USDA is an equal opportunity employer, provider, and lender.

## Invasive Species in Shiawassee County

Having an issue with weeds growing out of control on your property? Maybe you've noticed that your old secret fishing spot isn't as good as it once was. It may be caused by an invasion of plant, animal or disease. Invasive species are a problem everywhere and Shiawassee County is no exception.

Invasive species are introduced plants, animals and diseases that out-compete native species. They have few predators, spread quickly, and can easily adapt to many environments. When they grow out of control, they change the natural balance in nature on which we depend. These exotics cause harm to the environment, economy and human health.

Invasive species cost the United States more than \$120 billion per year. They damage infrastructure and harm habitats. They also affect water quality and can ruin recreation. Invasive species are brought here from around the world, either intentionally or by accident. Finding them early and quickly treating them is crucial to avoid unwanted takeovers.

## Electronics Recycling in Shiawassee County

Through a partnership with Comprenew recycling based in Grand Rapids, MI, the Shiawassee Conservation District has conducted six electronic waste recycling events since the Fall of 2013. A total of 138,478 lbs of electronic waste was taken in and recycled responsibly.

Electronic waste, or e-Waste, is the fastest growing waste stream in the country. Untreated e-Waste may contain hazardous materials which can adversely affect the environment and human health. Toxins contained in electronics, such as mercury and lead, can leach into drinking water and accumulate in plants and animals. Electronics have been collected from

Shiawassee County is home to many invasive species and is at risk to new invasions. Problem invaders in Shiawassee County include:

Phragmites, Japanese knotweed, Garlic mustard, Autumn olive, Bell's honeysuckle, Dame's rocket and Multiflora rose.

The Shiawassee Conservation District has taken steps to address invasive species in Shiawassee County. During surveys done this past summer, the Conservation District found Phragmites and Japanese knotweed across the county. The Conservation District is also focusing on early detection species such as Black and Pale Swallow-worts, Chinese yam and European frog-bit. Early detection species are not yet found or are not well established in Michigan, but can cause extreme damage.

The Shiawassee Conservation District, in partnership with the Shiawassee County Road Commission and Shiawassee County Parks and Recreation Commission, has treated Phragmites at 11 selected road ditch locations within the county as well as

residents across Shiawassee County, helping to protect our watersheds from these dangerous materials.

Comprenew is licensed and registered by the State of Michigan. All e-Waste collected through the SCD's program has been destroyed and recycled in the U.S. and in accordance with all local, state and federal guidelines.

Due to the success of the recycling program and the overwhelming need, the SCD approached the Shiawassee County Commissioners in 2015 to garner their financial support to continue the program.



*Dames Rocket is commonly found along railroad tracks, roadways and forest edges.*

a Phragmites infestation at Shiatown Park, located in Shiawassee Township.

Control of this plant requires professional skill, long term management and multiple treatment techniques. If you need help with invasive species identification on your property or would like more information on invasive species, contact the Shiawassee Conservation District at (989) 723-8263 ext. 3.

In 2016, the SCD was awarded financial assistance from the Shiawassee County's Waste Management donation to hold two collections.

"We recognize that there continues to be a real need in Shiawassee County for electronics recycling," stated Shiawassee Conservation District Executive Director Melissa Higbee. "We hope to continue working with Shiawassee County Commissioners to provide this service in the future."

For more information about the Electronics Recycling Program contact the SCD office.

## Watershed Planning and Inventories

No matter where you live, work or play, you are in a watershed. Careful watershed planning does more than protect water, plants and animals. It paints a picture of the watershed, highlighting features that need restoration and protection efforts.

For the past two years, the Conservation District has worked to characterize the Upper Looking Glass and Upper Misteguay Creek watersheds. Several inventories have been undertaken, uncovering similar and different issues. This summer, the District collected water samples weekly and tested for *Escherichia coli* (*E. coli*) bacteria levels in both areas. Samples were taken monthly in the Misteguay and analyzed for phosphorus.

*E. coli* is a bacteria that lives in the guts of warm-blooded animals. It is used to determine if a water body meets standards for recreation. If found at high enough levels, that water is not safe for wading or swimming. Sources of *E. coli* include septic systems, illicit connection pipes, manure runoff, wastewater discharges and wildlife. *E. coli* was found at high levels in both



SCD Watershed Technician Andrea Wendt, collects water samples in the Upper Looking Glass River Watershed.

watersheds, indicating that these waters may not be safe for recreation.

High phosphorous levels were found in Misteguay water samples. Phosphorus is essential for plant life. When there is too much phosphorus in water, it can cause excess algae to grow. As this algae dies, it consumes oxygen in the water, resulting in poor

habitat for fish and other aquatic species. At times, the algae that grows can become toxic and impair recreation and drinking water sources.

Currently in Michigan, there is not a numerical target for phosphorus levels from nonpoint source runoff to achieve water quality.

*(Article continued on page 4)*

## Together We Can Save the Monarch Butterfly

The monarch butterfly's majestic orange and black wings make them

one of the most recognizable species in North America. Butterflies are more than just beautiful, they are beneficial to the environment. North American monarch butterflies are in trouble. We can help by learning about them and doing our part to create and protect butterfly habitat.



*A monarch butterfly spotted in a Shiawassee County field enrolled in the Conservation Reserve Program.*

Butterflies are pollinators. They flutter from plant to plant drinking nectar, taking pollen with them as they move. The pollen gets deposited onto other plants as they travel. This pollination process is important to the health and growth of many plant species. In fact, about one-third of the food we eat is pollinated by pollinators such as butterflies.

The Monarchs are the only North American butterfly that migrate to Mexico and California for the winter, some flying as far as 3,000 miles. Once adults, monarchs live two to six weeks in the summer and the migration takes several generations to complete. Unfortunately, the monarch butterfly is losing its habitat, specifically milkweed, to modern farming methods and development. Milkweed

is the only plant monarchs lay their eggs on, and the only food source for

their larvae. With fewer milkweed plants along their migration path, the monarch butterfly population has declined 90% over the past 20 years. The U.S. Fish and Wildlife Service is now considering if the monarch butterfly should be classified as "threatened" under the Federal Endangered Species Act.

Together, we can save the monarch! Every place outside can become an oasis for monarchs and other pollinators, even in cities. Butterfly friendly plants such as milkweed can be planted in our home, school, and community gardens. Consider organic gardening to minimize impacts to native plants and pollinators. Become involved in protecting monarch habitat along roadsides, right of way, and other public and private lands. Look for monarchs in your area, and educate others about pollinators, conservation, and how they can help.

The Shiawassee Conservation District works with landowners to develop conservation plans to protect wildlife, including pollinators. Contact the Conservation District for more information on conservation planning and pollinator habitat.



## The Stone Family Explains MAEAP's Impact on Their Unique Farm

We visited with Richard and Katy Stone from Laetus Pullus Farm to learn more about their farm and recent MAEAP verifications. They are a great example of how MAEAP can fit and benefit any size and type of farm.

### **Briefly describe your operation:**

We moved to our home in Perry and started Laetus Pullus Farm (Latin for Happy Chicken) in 2009. We dreamed of owning chickens and having a large family garden. In 2010, we bought our first laying hens and about 2 dozen market chickens. Fast forward to 2016, we now raise 45 laying hens for egg sales. We also raise 60 to 100 turkeys for Thanksgiving and 650 market chickens all on pasture, and have a large garden that supplies fresh produce for the family as well as excess for sale. We are new to farming and have no farming experience. We have learned from other farmers, online research, reading books and networking.

### **Why is MAEAP important to you?**

MAEAP is important to us because we want to be good stewards of the land as well as learn the best practices for our farm. We wanted to be certified to show our customers that we have accountability for our practices. It has been a great learning experience to learn about all the environmental practices. We did not have to make many changes to become certified. We just had to add a better



*The Stone family standing in front of their newly constructed high tunnel.*

recordkeeping system for the chicken litter, add a spill kit and fire extinguisher to our barn.

**What do you perceive as the benefits to MAEAP?** We feel that being MAEAP Verified is an added bonus to our farm, because it shows our customers that we are preventing agricultural pollution and being proactive in protecting the environment. We feel the nice big sign and being able to use the logo on our social media and website is a huge bonus too. It leads to good conversation with our customers too. Not everyone understands what MAEAP is.

**What are your plans for the high tunnel?** This past year we applied for

and received funding for a High Tunnel and establishing pollinator habitat through the Natural Resources Conservation Service Environmental Quality Incentives Program (EQIP). The plan for the high tunnel is to grow vegetables and sell right from the farm like we do our chickens and eggs. We have been talking with a grocery store about selling our products to them as well. The pollinator habitat will cover the portion of the field that is not being used for the pastured chickens and turkeys.

Contact the Shiawassee Conservation District to see how MAEAP can work on your farm too.

*(Watershed Planning and Inventories- Continued from page 3)*

However, the Part 4 Water Quality Standard states "nutrients shall be limited to the extent necessary to prevent...growth of aquatic...plants, fungi or bacteria which are or may become injurious to the designated uses of the surface waters of the state".

Because of its chemical nature, phosphorus accumulates in the surface layers of soils. Most

phosphorus is attached to sediment, and clay soils have higher levels of phosphorus. When soil is left bare, such as after crops are harvested, phosphorus is lost when soils wash off a field.

The main land use in the Upper Misteguay Creek Watershed is agriculture. Conservation practices such as cover crops and residue management are critical to minimize phosphorus loss through soil erosion from agricultural lands.

Findings from inventories were recently presented to the project Steering Committees and priorities were identified. The information gathered will guide in developing watershed management plans for these two areas. The management plans will include recommendations to address issues and be utilized to obtain funds to restore watershed functions. For more information about watershed planning and inventories, please contact the District.

# SPRING 2017 TREE SALE ORDER FORM

SHIAWASSEE CONSERVATION DISTRICT

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zip \_\_\_\_\_

Phone-Day \_\_\_\_\_ Evening \_\_\_\_\_

Email \_\_\_\_\_

Office Use Only	
Order Number	
Date Received	
Processor's Initials	

TRANSPLANTS		Size	Age ▲	5	10	25	50	100	QUANTITY	TOTAL
CONIFERS	Balsam Fir	12-22"	P+2	\$15.00	\$30.00	\$60.00	\$100.00	\$170.00		
	Norway Spruce	15-24"	2+1	\$15.00	\$30.00	\$60.00	\$100.00	\$170.00		
	White Pine	10-16"	2+1	\$15.00	\$30.00	\$60.00	\$100.00	\$170.00		
	White Spruce	15-24"	2+1	\$15.00	\$30.00	\$60.00	\$100.00	\$170.00		
BARE ROOT SEEDLINGS		Size	Age ▲	5	10	25	50	100	500	1000
CONIFERS	Norway Spruce	9-15"	2-0	\$4.00	\$7.00	\$15.00	\$25.00	\$45.00	\$160.00	***
	Red Cedar	10-16"	2-0	\$6.00	\$10.00	\$20.00	\$40.00	\$70.00	***	***
	Red Pine	6-14"	2-0	\$4.00	\$7.00	\$15.00	\$25.00	\$45.00	\$160.00	***
	White Cedar	6-12"	2-0	\$4.00	\$7.00	\$15.00	\$25.00	\$45.00	\$160.00	***
	White Pine	6-12"	2-0	\$4.00	\$7.00	\$15.00	\$25.00	\$45.00	\$160.00	***
	White Spruce	9-15"	2-0	\$4.00	\$7.00	\$15.00	\$25.00	\$45.00	\$160.00	***
DECIDUOUS	Butternut	12-18"	1-0	\$10.50	\$19.50	\$45.00	\$70.00	***	***	***
	Chinkapin Oak	12-18"	1-0	\$10.50	\$19.50	\$45.00	\$70.00	***	***	***
	Red Oak	12-18"	1-0	\$10.50	\$19.50	\$45.00	\$70.00	***	***	***
	Shagbark Hickory	12-18"	2-0	\$10.50	\$19.50	\$45.00	\$70.00	***	***	***
	Sugar Maple	12-18"	2-0	\$10.50	\$19.50	\$45.00	\$70.00	***	***	***
	White Oak	12-18"	1-0	\$10.50	\$19.50	\$45.00	\$70.00	***	***	***
SHRUBS	Highbush Cranberry	12-18"	1-0	\$10.50	\$19.50	\$45.00	\$70.00	***	***	***
	Nannyberry	12-18"	1-0	\$10.50	\$19.50	\$45.00	\$70.00	***	***	***
	Red Elderberry	12-18"	1-0	\$10.50	\$19.50	\$45.00	\$70.00	***	***	***
	Red Osier Dogwood	12-18"	1-0	\$10.50	\$19.50	\$45.00	\$70.00	***	***	***
SINGLE LARGE TREES		SIZE	PRICE EACH							
DECIDUOUS	Machurian Crabapple	4-5'	\$19.00							
	Paper Birch	4-5'	\$12.00							
	Quaking Aspen	5-6'	\$20.00							
	Redbud	5-6'	\$20.00							
	Red Maple	5-6'	\$20.00							
	Sycamore	5-6'	\$20.00							
	Tulip Poplar	5-6'	\$20.00							
SMALL FRUIT PLANTS		SIZE	AGE	PRICE EACH						
FRUIT	Heritage Red Raspberry	14"	1-0	\$5.50						
	Arapaho Thornless Blackberry	14"	1-0	\$8.50						
	Niagara Grape	14"	2-0	\$10.00						
	Blue Concord Grape	14"	2-0	\$13.50						
									<b>SUBTOTAL</b>	

Supplies are limited. First orders received will take first priority. See ordering guidelines on page 9.

\*\*\* Contact the District to place a special order

# FINAL DATE TO ORDER

**April 7, 2017**

## Pick up dates and times

**Thursday, April 20**

**9 AM to 7 PM**

**Friday, April 21**

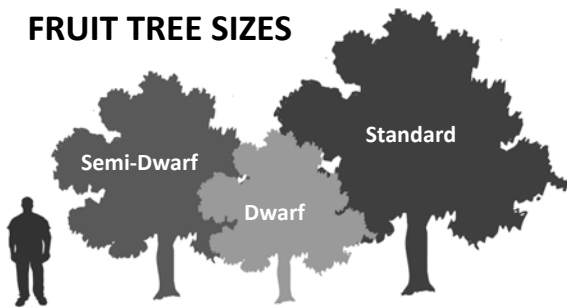
**9 AM to 4 PM**

Orders can be picked up at the  
**Shiawassee County Fairgrounds**

**Draft Horse Barn**

2900 E. Hibbard Road, Corunna

## FRUIT TREE SIZES



### ▲ Age definitions

**P+2:** 3 years old, 1 year in plug container and 2 years in transplant bed

**2+1:** 3 years old, 2 years grown in seedling bed and 1 years in transplant bed

**1+0:** 1 year old, 1 year grown in seedling bed

**2+0:** 2 years old, 2 years grown in seedling bed

## Send order form & full payment to:

Shiawassee Conservation District

1900 S. Morrice Road, Owosso, MI 48867

Phone: (989) 723-8263 Ext. 3

FRUIT TREES - BARE ROOT	SIZE	EACH	QUANTITY	TOTAL
Gale Gala Apple *	4-6'	\$19.00		
Ginger Gold Apple *	4-6'	\$19.00		
Honeycrisp Apple *	4-6'	\$19.00		
Northern Spy Apple *	4-6'	\$19.00		
Red McIntosh Apple *	4-6'	\$19.00		
Montmorency Cherry	4-6'	\$19.00		
Santina Cherry	4-6'	\$19.00		
Redhaven Peach	4-6'	\$19.00		
Potomac Pear *	4-6'	\$19.00		
Sunrise Pear *	4-6'	\$19.00		
Stanley Plum	4-6'	\$19.00		
Tilton Apricot	4-6'	\$19.00		
Fantasia Nectarine	4-6'	\$19.00		

TREE PLANTING ACCESSORIES				
Tree Flag		\$0.25		
Tree Protector		\$2.50		
WILDFLOWER MIXES				
Butterfly Mix		\$5.00		
Pollinator Mix		\$5.00		
MOSQUITO BARRIER				
1 quart, covers 1.25 acres		\$25.00		
1 gallon, covers 5 acres		\$80.00		
PLANTSKYDD - DEER, ELK & RABBIT REPELLENT				
1 qt Pre-Mixed Spray <i>protects 80-100 plants 1' high</i>		\$22.00		
1 lb Soluble Powder Package <i>protects 200-400 plants 1' high</i>		\$28.00		
1 lb Granular <i>protects 600 sq ft</i>		\$15.00		
3 lb Granular Shaker Bag <i>protects 1,800 sq ft</i>		\$25.00		
1.32 gallon Pre-Mixed Spray <i>protects 400-800 plants 1' high</i>		\$60.00		

*\* Requires cross pollination*


For use with credit card payment		
Card Number - Visa or Mastercard	Exp. Date	Security Code
Authorization Signature	Name as it appears on Credit Card	
Address - Street / City / State / Zip		

Total Back	
Total Front	
<b>6% Tax</b>	
Handling Fee	\$2.00
Donation	
Total Due	
Enclosed	
Check No.	

*It is unlawful for these trees, shrubs and other plants to be resold with the roots attached in accordance with the Insect Pest and Plant Disease Act. PA 189 of 1931 as amended.*

Payments can be made in cash, check, or Visa/MasterCard

# Tree/Shrub Descriptions

 Native to Michigan

	Variety	Height	Light Tolerance	Soils	Notes
Conifers	Balsam Fir 	30-80' tall	Shade tolerant	Can grow in poorly drained swamps to well drained uplands	Long persistent, aromatic needles that do not shed readily
	Norway Spruce	75-100' tall	Shade tolerant	Prefers moist soils	Winter cover for wildlife; shallow root system in clay or poorly drained soils
	Red Cedar 	25-60' tall	Sun; shade intolerant	Well adapted for most soils; drought resistant	Excellent wildlife value
	Red Pine 	70-80' tall	Sun; shade intolerant	Prefers well drained, dry, acidic, sandy soils	Seeds used by songbirds & small mammals
	White Cedar 	40-70' tall	Shade tolerant	Prefers neutral to alkaline soils; poorly drained soils	Foliage & twigs eaten by deer; fruit eaten by birds
	White Pine 	60-100' tall	Moderately shade tolerant	Adapted to most soils in its range; prefers well drained sandy soils	Great for windbreaks; a preferred deer food
	White Spruce 	50-80' tall	Shade tolerant	Able to establish on wet sites	Found with balsam fir, red maple, trembling aspen
Deciduous	Butternut 	40-60' tall	Shade intolerant	Characteristic of moist, fertile soils of lower slopes, riverbanks & floodplains	Produces nuts in October
	Chinkapin Oak 	40-70' tall	Full sun; shade intolerant	Thrives in moist bottomlands with neutral or basic soils; tolerates dry sites with soils rich in lime	Acorns are sweet & palatable & are eaten by squirrels, mice, chipmunks, deer, turkey & other birds
	Manchurian Crabapple	Semi-dwarf 12-15'	A flowering crabapple used to pollinate other apple varieties; white flowers are very prolific pollen producers; blooms early & through midseason; small apples are eaten by birds & small mammals		
	Paper Birch 	50-70' tall	Full sun, shade intolerant	Adapted to variety of soils, does best on well drained acidic, sandy or silty loam	Bark is brown to bronze on young trees & older trees have chalk white bark that peels away
	Quaking Aspen 	40-70' tall	Full sun; very shade intolerant	Thrives on wet-mesic, fertile sites; grows slowly on dry, sandy soils	Major source of food for beaver & white-tailed deer
	Redbud 	20-30' tall	Full sun, moderately shade tolerant	Grows well on many soils	Purplish pink flowers that bloom in the spring
	Red Maple 	50-70' tall	Partial to full sun	Grows well on a wide range of soils	Fruit attracts birds, squirrels & other mammals
	Red Oak 	75-100' tall	Full sun; moderately shade tolerant	Prefers dry upland soils	Acorns eaten by turkey & blue jay; relatively free of insect & disease pests
	Shagbark Hickory 	60-80' tall	Full to partial sun	Adaptable to many soils; grows well in light, well drained soils	Good ornamental tree; yellow fall color; Relatively free of pest issues
	Sugar Maple 	50-75' tall	Full sun to shade	Prefers evenly moist & well drained soils; poor drought tolerance	Showy fall colors; principle source of maple syrup; wildlife value
	Sycamore 	59-98' tall	Full sun	Moist soils; tolerates flooding and soils with slow drainage	Can tolerate weeks of flooding; large, fast growing tree
	Shrubs	Tulip Poplar 	80-100' tall	Full sun	Prefers well drained, acidic soil
White Oak 		50-80' tall	Full sun; moderate shade tolerant	Best on coarse, deep, moist, well-drained & slightly acid soils	Acorns eaten by wildlife, poisonous to humans; good ornamental tree
Highbush Cranberry 		8-12' tall	Moderately shade tolerant	Frequent along streams, open or lightly shaded swamps & wet areas	Clusters of white flowers in May-June; scarlet fruit in September
Nannyberry 		15-18' tall 6-10' wide	Full sun to partial shade	Wide variety of soil conditions; poor drought tolerance	Creamy white flower; red/blue edible berry
Red Elderberry 		10-20' tall	Full sun; shade tolerant	Found on a large variety of soils	Small white flowers in spring; bright red berries in summer
	Red Osier Dogwood 	3-9' tall	Shade intolerant	Common in open, wet places, also on sand dunes.	Redness of stems is directly related to amount of sunlight, shade grown plants tend to have greenish stems

## Small Fruit Descriptions

	Variety	Description
Fruit	Heritage Red Raspberry	Sweet, tart, mild tasting, dark red, medium sized fruit; produces abundant crops of berries perfect for eating fresh, canning, freezing, jams & jellies; self pollinating; ripens Sept through frost; grows on well drained, loamy soil
	Arapaho Thornless Blackberry	Sweet tasting, black, medium sized firm fruit with exceptionally small seeds; self pollinating; ripens mid-June; grows on well drained, loamy soil
	Niagara Grape	Sweet, aromatic flavor; large yellow, seeded fruit; popular choice for wine & jam; can produce fruit for up to 20 years requiring yearly pruning
	Blue Concord Grape	Flavorful & juicy; purple or dark blue seedless fruit; eaten fresh, used in juice, jams, jellies & wine; vines are decorative & can serve as a privacy screen in the summer

## Fruit Tree Descriptions

Variety	Size	Description	Picking Date	Pollination
Gale Gala Apple	Semi-Dwarf	90-100% full red color with deep red stripping; mildly sweet flavor; crisp & firm, good eating apple	9/15-9/25	Requires cross pollination
Ginger Gold Apple	Semi-Dwarf	Resembles a Golden Delicious, but has more spicy favor; fruit is medium-large, firm & crisp.	9/1-9/15	Requires cross pollination
Honeycrisp Apple	Semi-Dwarf	Very crisp, juicy & sweet tasting apple; very hardy & productive	9/15-9/25	Requires cross pollination
Northern Spy Apple	Semi-Dwarf	Heirloom apple, good pie & eating apple; delicious tart flavor; crimson, striped skin; firm yellow-white flesh	10/5-10/15	Requires cross pollination
Red McIntosh Apple	Semi-Dwarf	Aromatic, flavorful, white, juicy flesh; steely-red skin; medium large in size, but sets abundant crops	9/1-9/15	Requires cross pollination
Montmorency Cherry	Standard	Tart cherry; medium sized, bright red fruit; good for cooking, baking, canning, freezing & juice	7/15-7/25	Self fertile
Santina Cherry	Standard	Sweet cherry; large, dark-blackish red fruit; high dessert quality; moderately rain tolerant & somewhat crack resistant	7/15-7/25	Self fertile
Potomac Pear	Semi-Standard	Moderate sized, light green fruit with a buttery, fine textured flesh; flavor is pleasingly sub acid with a mid aroma; trees are moderately vigorous with good fire blight resistance	9/10-9/20	Requires cross pollination
Sunrise Pear	Semi-Standard	Yellow skin with slight pink blush & little russeting; fruit is large, juicy, has sweet pleasant flavor & will store for a couple months	8/1-8/10	Requires cross pollination
Redhaven Peach	Standard	Large peaches with almost fuzzless skin over firm, creamy yellow flesh; fruit is great as a fresh snack or canning & freezing; tree is heavy bearing & cold tolerant	8/1-8/10	Self fertile
Stanley Plum	Standard	Excellent quality suited for fresh eating, canning, preserves & drying; fruit is large, dark blue skin, greenish-yellow fine grained flesh; tree is hardy, early bearing & a heavy annual bearer of fruit	9/10-9/20	Partially self-fruitful Cross pollination recommended for best results
Tilton Apricot	Standard	Medium to small, golden yellow freestone fruit with dark red blush; great for canning & drying; very productive	7/15-7/25	Self fertile, does not require a pollinator. Is a great pollinator for other varieties
Fantasia Nectarine	Standard	Large, egg-shaped, freestone fruit with very smooth skin; 70% bright red over brilliant yellow skin; smooth textured, yellow flesh with sweet & tangy flavor	9/-9/15	Self-fertile

Some varieties of fruit trees offered in this sale require cross pollination to produce fruit. To have cross pollination in an orchard there must be more than one variety of the same type of fruit in each planting. Another option for apple pollination is plant a crabapple tree, such as the Manchurian Crabapple. They take up less space and produce an abundance of attractive flowers.



## 2017 Spring Tree Sale Ordering Information & Guidelines

- Return the completed order form with full payment to:  
**Shiawassee Conservation District**  
**1900 S. Morrice Rd**  
**Owosso, MI 48867**  
**(989) 723-8263, ext 3**
- The final date to order is **April 7, 2017**.
- All returned checks will be subject to a \$35 fee.
- After orders are placed, there will be a \$25 service charge for any substitutions or cancellations. There will be no charge when only additions are made to an existing order.
- No refunds on orders canceled after April 7, 2017.
- We do not guarantee survival. Our liability ceases when seedlings are picked up. It is unlawful for these trees, shrubs and other plants to be resold with the roots attached in accordance with the Insect Pest and Plant Disease Act. PA 189 of 1931 as amended.
- All plant material has been found to be in compliance with the National Plant Board standards of pest freedom. MDARD Pesticide and Plant Pest Management Division, License/Certificate NCI000670.
- The Shiawassee Conservation District reserves the right to cancel orders and refund payments due to reasons beyond their control.
- Substitutions made by the nurseries are beyond the District's control.
- Add orders carefully. Any errors \$10 and under will be considered a donation to the District.
- All donations will be deposited into the Shiawassee Conservation District general fund.
- Pictures and descriptions of all plants are available in the District office.
- Orders not picked up will not be refunded.
- Order pick up dates and times are as follows:

**Shiawassee County Fairgrounds  
Draft Horse Barn  
2900 E. Hibbard Rd, Corunna  
Thursday April 20, 9 AM—7 PM  
Friday April 21, 9 AM—4 PM**

## Better Alternatives to Colorado Blue Spruce

Colorado blue spruce have been widely planted in the past, however they have been declining over the years in Michigan due to disease. The Shiawassee Conservation District is not offering it through the 2017 Spring Tree Sale, but is offering some great, and even better alternatives.

One of the most serious diseases affecting blue spruce in Michigan is a needle casting disease caused by the fungus *Rhizosphaera*. The disease causes the older needles on the tree to turn brown or purple, and drop from the tree. Over time, the tree

appears very thin because only the current year's needles are remaining. Eventually, the tree will die from lack of nutrients, disease, or insect infestation due to the tree's weakened state. It is very likely that any nearby trees will be infected because the fungus does spread easily.

Infected trees can be treated, however treatments must be well timed, and can be difficult and expensive to complete. Additionally, they only break the disease cycle for one year, meaning the nearby trees

that have the disease can easily pass it back the next year.

The Shiawassee Conservation District has been encouraging landowners to consider alternative options for Colorado blue spruce over the last few years.

Both White and Norway spruce are great alternatives to blue spruce. White spruce is very similar to blue spruce, native to Michigan, and is much more resistant to needle cast disease. Norway spruce is not native to Michigan, but has shown resistance to the disease.

## Plantskydd Repellent

Plantskydd Deer Repellent's main ingredient is bloodmeal which works by emitting an odor that animals associate with predator activity, repelling the animal before it nibbles on plants. It stimulates a fear-based response which will have deer, opossum, rabbits, and many other animals looking for somewhere else to dine.

The District offers Plantskydd in pre-mixed spray, granular or powder. See the tree sale order form for pricing details.





**Shiawassee Conservation District**  
 1900 S. Morrice Road  
 Owosso, MI 48867

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**PAID**  
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 Permit No. 87

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**2017 SPRING TREE SALE INFORMATION INSIDIE!**



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**SHIAWASSEE CONSERVATION DISTRICT**