CCCD News

Autumn 2018 *(corrected)*

Directors: Dan Stutsman-chair; Karen Nelson-vice-chair;
Scott Wyman-treasurer; Kevin Hershberger & Jeff Peterson
Associate Directors: Annie File; Jeff Blyveis
Staff: Korie Blyveis-Administrator; Erez Brandvain-MAEAP Technician;
Grace Locke-SESC Assistant; Rachael Davidson-Temp Assistant

Annual Meeting

Our staff is pleased to report another exceptional year here at the Cass District. We would like to share the highlights with you and present our FY2019 plans for continued progress! This will also be a chance for you to weigh in on what projects you feel we should focus our efforts and suggest others if we currently don't have them on our list.

Please join the staff and Board of Directors at our Cass County Conservation District Annual Meeting/Election on Tuesday, December 4 from 5:30pm-8:00pm at the Pokagon Community Center, located at 27043 Potawatomi Trail, Dowagiac, MI 49047. The doors will open at 5:00 pm to start the election - see page 2 for candidate information (voting stops at 7pm), displays and appetizers, followed by the feature presentation at 5:30pm:

"Conservation Practices Working in Cass County"

A photographic compilation along with narrative from some of the proud individuals, farms, governmental agencies, organizations, and businesses who utilized conservation practices successfully right here in Cass County - including highlights of the ecologically designed & LEED certified event facility and some of the Pokagon Band DNR's projects. Followed by a special keynote address by Bruce Howe, Land Protection Specialist of Southwest Michigan Land Conservancy regarding the Jones Conservation Plan.

The Annual Meeting will also feature our annual awards ceremony followed by dinner catered from Wood Fire of Dowagiac. The event is free of charge however, donations will be accepted. Please contact Korie at korie.blyveis@macd.org if you would be willing to sponsor/advertise on our Annual Meeting placemat to help us offset expenses.

We are grateful for the support of our programming efforts from the USDA Natural Resource Conservation Service, the Michigan Department of Agriculture & Resource Development MAEAP & Cost Share grants, the SW x SW Cooperative Invasive Species Management Area Grant, the Cass County Board of Commissioners, the Cass County Farm Bureau, the Cass County Council on Aging (for use of the Orbit Building for the Annual Tree Sale), and to all who have donated money and/or time to our special events throughout the year. Special thanks to all the volunteers throughout the year - you rock!!!

Limited Space Please Send this slip to our office or call to RSVP by November 27

Cass County Conservation District December 4, 2018 Annual Meeting RSVP

Name: _____

Attending: _____ Phone #: _____

Mail or drop-off to: 1127 East State Street,Cassopolis, MI 49031
For more info call: (269) 445-8641 x 5

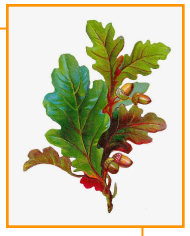
Vote: On Tuesday, December 4, 2018 the Cass County Conservation District will hold an election at the Annual Meeting to fill **two** (*corrected from originally misprinted three)* open Director Positions. Any Cass County resident of legal age is eligible to vote - please bring identification. We encourage you to participate in the election. Absentee ballots are available in our office for those who cannot attend December 4.

MEET THE CANDIDATES - *(the following are excerpts from brief interviews)*:

John Green - Has lived entire life in Cass County on the family farm which was settled in 1837 in Wayne Township. "I feel it is a privilege to serve our community and I have no preconceived agenda but, simply want to learn and get more involved in the Cass County Conservation District Board. I connected with the District in the past while reviewing farm programs with Alex of the NRCS. I currently farm hay and was dairy in the past. I plan to support the agriculture programming efforts of the District and look forward to assisting with demonstrations of best management practices."

Bernie Williamson - Has lived in Cass County for 30 years, resides in Jefferson Township. "As a Conservation District board member, I would, work to protect our environment and natural resources. However, I would ALSO work to increase public education, AND efforts to make conservation part of everyone's decision-making process. From including conservation efforts in public projects such as road and community enhancement, to bringing conservation to the hearts and minds of homeowners who want to beautify their properties – conservation can have a wonderful and beneficial role in all that we do!"

Scott Wyman - Has lived entire life in Cass County growing up in Marcellus, resides in Jefferson Township. "I've been passionate for the outdoors all my life. As a long serving Cass County Parks Director, an active member of MEANDERS, and having served the Cass County Conservation District Board for over 10 years I'm committed to continue building successful programs that protect our shared land and water. I believe we should be stewards of the land and will work toward ensuring our community gets access to specialists who can assist in conservation efforts in agriculture, water quality, and combating invasive species that threaten our beautiful landscape."



Upcoming Events **(check Facebook for more events & 2019 educational series at COA)**

- November 3 - Woodland Management w/local experts and Woodlot Tour, Jones (see page 6)
- November 8 - Meal for $ Fundraising Event 5-8pm at Happy Landing Restaurant, 59640 County Line Road, Three Rivers- Simply order, eat, and pay for your meal - 20% of your meal cost will be donated to CCCD natural resource conservation educational efforts!
- November 14 - CCCD Board Mtg 8:30am, Cassopolis - nominations for conservation awards due.
- December 4 - Annual Meeting & Election 5-8:00pm at the Pokagon Center, Dowagiac (see page 1)
- January 25, 2019 - Ag Action Day at KVCC mark your calendar and look for program details on Facebook
- April 17-19, 2019 - Annual Tree and Fruiting Plant Sale (the Tree Sale Catalog should be mailed out in early February - orders will be due early April)
- Hike w/a Naturalist and Monarch Waystation schedule to be announced this spring.

New product available at the District Office!

Backyard composting of food & yard waste saves resources!

Composting creates a rich soil amendment high in organic matter. Compost improves soil texture and water holding capacity, provides nutrient availability to plants, improves soil porosity, inhibits incidence of plant diseases, and can minimize erosion - Plus, it saves landfill space!

Available at the great price of $78 *tax included* ($99 or more online)

Tillage vs No Tillage: Examine your options

What is tillage? In its most basic sense, tillage is any form of ground preparations for an upcoming crop. Chances are if you have seen a tractor in a field with some dust behind it, you have seen some sort of tillage taking place. Several types of tillage systems exist and the equipment to perform tillage seems to always be growing. Tillage can be performed in multiple sequences or can be done in one single sequence. In multiple sequences, there is a primary and secondary set of field preparation that occurs. Primary tillage can feature equipment such as chisel plows, moldboard plows, disks, and subsoilers, amongst other, while secondary tillage systems feature equipment to make final preparations for planting, such as field cultivators with sweeps or harrows. Regardless of the systems, tilling has its pros, but it certainly has its cons as well. While there are several options and specific systems that work great for farmers, there is another option as well; not tilling at all.

Tillage systems are unique in that specific systems can be customized to unique soil conditions and crop needs. However, a no till system can be of great benefit to growers, both in the short and the long term. Soil is not a renewable resource, and excessive tillage can lead to soil erosion. Furthermore, the amount of living material and organic matter in one handful of soil itself is unfathomable; scientists have made tremendous progress in understanding soil life, but the amount of biological activity is endless. Organic matter in soil consists mostly of carbon based decaying plants and animal matter. That matter contains nutrients that growing plants need, and hosts biological activity that is beneficial to plant and soil health. Water retention is higher as soil maintains its form and storage systems.

When a tractor drives through a field pulling an implement of any sort, both erosion and the destruction of organic matter take place. There are tools in place to measure soil erosion and assure that it does not exceed the amount of soil a specific piece of land can tolerate losing. In addition, specific practices can be adapted to improve soil quality both when using a tillage system and when using a no till system. However, when examining your options for tillage, the benefits of no till are vast, both environmentally and financially.

But what are the cons of a no till system? Some challenges include retrofitting planting equipment or buying new equipment, since the ground is not adequately prepped for on hand planters. Since the ground is not properly fit, the planter needs to do more work to get the seed properly positioned in the soil, something that traditional planters are not equipped to do. In a no till planter however, more down pressure is applied and they have better equipment for cleaning the rows just in front of where the seed is dropped into the soil.

Another challenge that can present itself in a no till system is pests. In a no till system, previous crop residues like corn stalks or soybean stubble are not worked into the ground and have barely been altered, allowing for more pathogens and fungi to live on decomposing residues, leading to a need in additional spray applications. Furthermore, previously established weeds are not taken out since there was no tillage to clean the field, making more of a need to spray. In turn, additional spraying means that farmers typically use herbicide tolerant crops and apply before and after planting to assure weed conditions are not present.

There is no correct answer as to what type of tillage or no tillage system is better. Every field is specific in its ability to grow crops, and tillage systems are often customized. Initial investments can be heavy when transitioning to a no till system, however in time, the potential for higher yields grows, as organic matter and soil profiles become increasingly full of biological activity. The pros and cons of tillage and no tillage can be debated extensively. Regardless of what is chosen, the amount of soil erosion and biological activity must be kept in mind for the long-term performance of any cropping system.

Promoting Stewardship
MAEAP
Protecting the Environment

If you are interested in having a computer model of how much erosion may be occurring in your field from your tillage or no till system, feel free to stop by the Cass County Conservation District Office in Cassopolis, MI, and ask for Erez, the MAEAP guy!

Office: 269-228-7084 Cell: 248-752-0865 Email: Erez.Brandvain@macd.org.

Also - ask me about the Cost Share opportunities available this year.

We Michigander's love our woods,
and we can help protect them, too!
Always buy firewood
where you plan to burn it,
and keep an eye out for dying trees. Forest owners can make a big difference by having a forestry management plan, and actively managing their lands to keep their trees, and our state, healthy!
A message from the SW x SW CISMA

New Water Quality Task Force & Secchi Dip-In

Photo from NALMS website-Brian Ginn photographer

Cass County is blessed with an abundant amount of surface water. Since the District has been receiving input from residents interested in learning more about their lakes/streams, concerned about invasive species, or wanting to improve their lake/stream quality, the Board has requested we start a Water Quality Task Force. If you are interested in being a part of this group who will help prioritize what issues the District should address, gather volunteers, and help guide us toward grants to support future programing efforts and technicians please contact the office to sign-up for the Task Force. We will plan an initial meeting in Jan/Feb 2019 then let the group decide how to proceed. Help bring "water" into the focus - join the Water Quality Task Force

The "Secchi Dip-In" is a project by the North American Lake Management Society held each July for the last 21 years. We know many lake associations in Cass County are actively collecting data to help keep their lake healthy and thriving. One of the parameters in lake monitoring is Secchi Depth. Secchi depth measures transparency of the lake. With our Water Quality Task Force we would like to see more lakes participate and share their information with the District. Paul Steen of the Huron River Watershed Council as well as MiCorps Program Manager said "*Volunteers monitoring transparency and nutrients are able to detect increasing algae levels and then go to their neighbors to encourage better lawn care practices and reduce nutrient inputs. Other volunteers have become so invested in the monitoring they're willing to go to planning boards and use their lake monitoring data to make an argument that their high-quality lake should not have any more development on it,"* The Michigan Clean Water Corps Program (MiCorps) has been operating for over 40 years and in that time Steen has seen algae levels decrease. This goes to show that lake monitoring can help tremendously, even starting out with just Secchi Disk measurements. MiCorps offers volunteer training - check out https://micorps.net for more information. The Dip-In database has more than 40,000 sites on record! Let's add to the database in Cass County next July by getting involved and taking our own measurements to help protect our precious resources. The data we collect can help make a huge difference both at the local and regional level. For more information call the office or visit our Facebook page for instructional videos on how to collect Secchi depth measurements.

SESC - French Drains for Yard Drainage - A step by step article on how to make a French Drain.

A French Drain is an easy channel for water to flow through. It is a drainage system made of either landscape fabric and coarse gravel or perforated drainage tubes that carry water from a heavily saturated area to an acceptable drainage area/storm drain. It is often used to drain water a safe distance from a house and can also be utilized to assist drainage of stormwater across a yard. Here are simple and easy directions for how to create a French Drain for yard drainage. The first step before starting any excavation is to check with your municipality about zoning/building codes & contact our office to see if a soil erosion & sedimentation permit would be required. The second step will be picking out a leach field. A leach field is an area of land on which the yard drainage will be deposited. This area needs to be a lower elevation than the area to be drained. The next step is to create a trench leading to this leach field. The trench should be deep enough to the point where the drainage tube or tubes will be fully covered by soil and grass. The trench needs a slope of no less than 1%. That means from the highest point of the drain field all the way to the drain exit (leach field), the system should slope at least 1 inch for every 8 feet of length. The trench will need to be dug horizontally across the length of any slope, if there is one. The higher the moisture content of the soil, the wider the trench should be. Small trenches are often dug to a width of five to six inches. After the trench has been dug, landscape fabric should be placed, lining the inside of it. Coarse gravel should then be shoveled into the landscape fabric. Begin to wrap the ends of the landscape fabric over the top of the gravel layer, by doing this you will be creating a drainage tube of landscape fabric filled with gravel. To fill the rest of the trench, shovel in a layer of coarse sand and cover it with more landscaping fabric. After this step, add approximately four inches of topsoil and lay down sod over the top. A cheaper alternative to the gravel landscape tube would be to use a perforated drainage tube in the trench instead. After the perforated drainage tube is laid into the trench, fill the trench with coarse gravel. On top of the gravel will be a layer of landscaping fabric followed by four inches of topsoil and then sod. (Sometimes gravel walkways or rock landscaping will top the drainage system.) The french drain is complete!

Excerpted and modified from "How to Install French Drains" www.thespruce.com; Author; David Beaulieu

We love to play on the water in all seasons here in Michigan. Be it on the Big Lake, one of our many rivers, or a pristine inland lake, boating and fishing are a favorite way to spend a day. But when heading out, or heading home, it's important to remember a quick three step process to keep our lakes clean.

Invasive plants and animals, like Eurasian watermilfoil or zebra mussels, can hitch a ride from one lake to the next on boats, paddles, rods, and toys. These invaders can quickly grow in lakes, pushing out native species, hurting fish habitat, and sometimes even making the area unusable to people, lowering property values. Many of these invasive plants can reproduce from broken pieces of the leaves or stems, meaning even a broken piece on a boat propeller could create a new invasion. In order to keep them off your boat and out of our lakes remember: **Clean, Drain, Dry**.

Clean: Clean off any visible plant parts at the launch, and dispose of them in the trash or upland of the launch. It's illegal in Michigan to transport any plants on your boats! If available, use a boat wash at the area to power wash what you can off of your boat and other gear. This goes for kayaks, canoes, and waders, too! When you get home, it's best to either take a boat through a car wash, or wash it in the driveway before heading to your next destination.

Drain: Drain all live wells and bilges before heading out. Fish diseases and young mussels can both lurk in water undetected and be moved to a new body along with the boat. Again, this goes for small, motor-less watercraft too. Never transport water with your boat!

Dry: The best bet is to let a boat dry for 5 days before moving it to another lake. This is because the microscopic young of invasive mussels can live in a single drop of water as long as it stays wet. Always ensure boats and trailers, have been dried completely before launching, including hard to reach places.

All of these steps apply to anglers and their gear as well, but it also important to remember to correctly **dump** bait. Always dispose of bait in trash cans, or take it home for the next trip out. Dumping bait over the side of the boat or on the land can introduce new fish, crayfish, and worm species that aren't native and can do a number on food webs in Michigan. When picking waders, hard bottoms, rather than felt, are better to keep snails and other invaders from following you into the river.

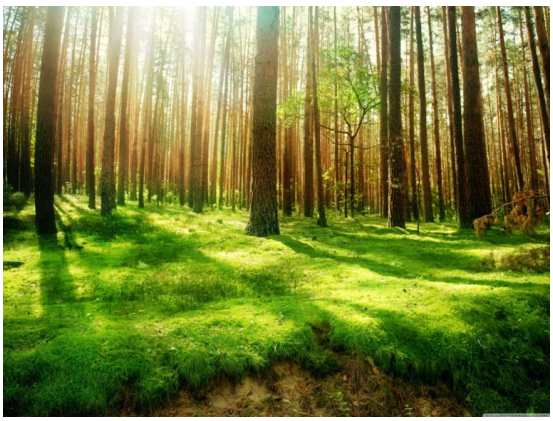
When playing in Michigan's waters, we need to be responsible stewards of the lands we love. Doing our best to stop the spread of invasive species can be easy by following the Clean, Drain, Dry procedure! Want to learn more? Follow the SWxSW Corner **C**ooperative **I**nvasive **S**pecies **M**anagement **A**rea (CISMA) on Facebook and watch for the announcement of the 2019 free Landing Blitz and Boat Wash events near you.

Have questions about protecting our lakes or have an invasive species issue? Contact the SWxSW Corner CISMA at your local conservation district! Call 269-445-8641x5 or email at eleanor.serocki@macd.org

Fairing well financially: Our budget is tight while we strive to grow. Yes, we are making ends meet, however we do not have a stable funding base to rely on since the District is mainly funded through grants and SESC permit fees. Your support is needed. Please volunteer in the office, at special events and especially during our Tree Sale. Upcoming chances to financially support the District include sponsorship/advertising on our Annual Meeting placemat, Tree Sale Catalog and Resource Guide. Plus, donations from individuals of over $25 will be listed in our spring newsletter as supporters of the District. Please share our Tree Sale catalog with friends and purchase trees, fruiting plants, and native plants this spring.

Thank you so much! - From Korie Blyveis, Administrator

The Conservation District is grateful to be co-located with NRCS - USDA is an equal opportunity provider, employer and lender.



Basic Woodland Management

w/local experts and woodlot tour

Saturday, November 3, 2018

9am-noon at the Heikema Farm -
10285 Bair Lake Street, Jones, MI -

Topics covered: Importance of a Forest Management Plan; invasive species identification, control and planning in FMP's; timber sales and timber sale contracts; overview/specification for FWH (Forest, Wetland and Habitat) MAEAP verification; and forest management within conservation easements.

Attendees will receive MAEAP Phase 1 credit.

The Heikema Farm location offers a look at results from tree plantings in 1998 - 11 acres; 2000 - 4 acres; 2003 - 7 acres; Timber sales in 1996, 2003, 2004, 2013, 2014; along with forest stand improvement and invasive species work. Plan on hiking back to woodlot - alternate transportation available upon request.

Presenters: Jeff Steinkraus - Consulting Forester, Eleanor Serocki - SW x SW CISMA Coordinator; Erez Brandvain-Cass CD MAEAP Technician, and Bruce Howe-SWMLC Land Protection Specialist

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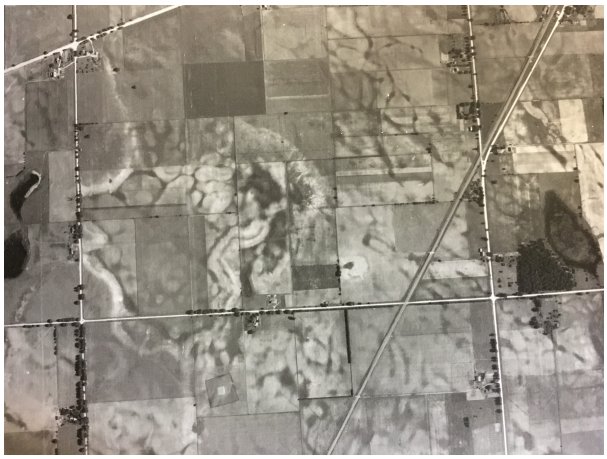
Erosion lessons learned?



Look carefully at these photos. On the left is an area of Cass County in July of 1938, 80 years ago, during the dust bowl era. The whitish areas are eroded slopes laced with gully erosion showing as dark undulating lines. Slope topsoil has been deposited at lower elevations or washed away into streams or adjoining properties.

At the right is a nearly 30 foot high sand dune in Wayne Township. At a depth of 28 feet under the dune is firmly cultivated land which was covered over with wind blown sand, again during the 1930's dust bowl era. Across the internal profile of the dune where occasional thin deposits of black soil laid down when topsoil was blown over Michigan from the Great Plains during the dustbowl. This scenario was determined by a USDA soil scientist and by aging oak trees growing on the dune.

Both photos illustrate the result of poor land stewardship and farming practices of the time which culminated in the creation of State Conservation Districts and the Federal Soil Conservation Service. This was the landscape my father faced as the first Soil Conservationist in Cass County in 1948. Over the next almost 30 years he worked with farmers to change destructive practices and fix the damage of the past. This included diversions, grass waterways, filter strips, fence row plantings, crop rotations, etc. and slowly changed the rural landscape to a more sustainably productive condition and appearance.

Many farmers and landowners today have not experienced the devastated agricultural landscapes of the past and some modern agricultural trends seem less mindful of the lesson. Too often I see fencerows, road edges and entire woodlots cleared, hilly ground farmed inappropriately, and a lack of large scale agricultural diversity resulting in ever increasing expanses of continuous monocultural biological deserts and subject to future erosion threats. Be mindful, don't let history repeat itself.

- By Bill Westrate of Volinia Township, 1999 Conservation Farmer of the Year and CCCD Volunteer

I want to take a moment to thank those volunteers who helped the CCCD have a great year. Without volunteers we wouldn't achieve our goals. We rely heavily on volunteerism and appreciate every single contribution. Volunteers help with the Annual Meeting as well as the labor intensive tree sale in the spring. We also have multiple educational programs and projects throughout the year that require assistance. So if you have interest in helping us please contact the office today. New and returning volunteers welcomed. We look forward to working with you in the near future -Thanks for your support.

Sincerely Associate Director/Volunteer Coordinator Jeff Blyveis