



Conservation Quarterly

Spring 2022

CLARK COUNTY SOIL AND WATER
CONSERVATION DISTRICT

Dates to Note

- 3/3/22—SWCD monthly board meeting
- 3/7/22—CCHIRP monthly meeting
- 4/4/22—CCHIRP monthly meeting
- 4/7/22 — SWCD monthly board meeting
- 4/15/22—Good Friday, SWCD office closed
- 4/22/22—Tree order deadline
- 4/22/22—Earth Day
- 4/29/22—Arbor Day
- 4/24-5/1/22—Stewardship Week
- 5/4/22—SWCD Monthly Board Meeting
- 5/30/22—Memorial Day, SWCD office closed

District Awarded National Grant for Invasives Project

The National Association of Conservation Districts (NACD) announced the 2022 recipients of the Friends of NACD District Grants Program during its recent Annual Meeting in Orlando, FL. The Clark County SWCD is happy to announce that they were one of eight districts across the nation to be awarded a grant!

The Friends of NACD Program was established in 2009 as an initiative of the NACD District Operations and Member Services (DOMS) Committee to support the nation’s nearly 3,000 conservation districts through cash donations to NACD. Now in its third round of funding, the Friends of NACD District Grants Program enables a portion of funds raised through individual donations in support of locally led conservation to be awarded to eight conservation district projects of up to \$2,500 each.

Clark County’s project is the result of an inquiry from the disc golf community at Lapping Park (Clarksville) on how to eradicate invasive species on their course. Entitled “Fore! Invasive Species Awareness”, the project will establish five native plant gardens along the perimeter of Lapping Park’s disc golf course in locations where invasives are prevalent. Invasives will be removed prior to planting; signs will be erected to identify the gardens and explain the purpose of planting natives.

Educational workshops will be hosted at Lapping Park and Garry Cavan Park (Floyd County). One workshop will be offered in the spring and will focus on invasive plant species. It will consist of an indoor class presentation on invasives common to our area, and how to identify and control them. An outdoors hike around the disc golf course will follow the presentation to practice ID, and control methods. The second workshop will be offered in late summer and will focus on native plants, their benefits, and how to incorporate them into landscaping. After a classroom presentation, participants will move outdoors to hike and view examples of native plants.

Workshop dates and more information will be forthcoming. Visit www.clarkswcd.org or find us on Facebook (Clark County Soil & Water Conservation District) for updates.

Rent our Equipment

No-Till Drill - \$8 per acre

**Outback S2 Guidance Systems -
\$10 per day**

**Call 812-256-2330, ext. 3 for
scheduling**

**Stop by to sign a rental
agreement**

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Get ready to “Wrangle”! Clark County Harmful Invasives Project (CCHIRP) is planning for two dates in 2022, at locations near you, to remove invasive plants. We’d love to have you volunteer to help! Contact us at 812-256-2330, ext. 3 for details.

Stewardship Week Celebrated



The National Association of Conservation Districts (NACD) Stewardship Week is one of the largest conservation-related observances. Since 1955, NACD has sponsored the national Stewardship Week program by selecting a theme and developing materials for schools, communities and churches of all denominations. Stewardship Week, celebrated annually between the last Sunday in April and the first Sunday in May (April 24 - May 1, 2022), reminds us of our personal responsibility to care for the natural resources which we all depend upon.

This year's theme is "Healthy Soil, Healthy Life." Soil is an amazing substance. A complex mix of minerals, air, and water, soil also teems with countless microorganisms, and the decaying remains of once-living things. Soil is made of life and soil makes life. Soil is where crops grow, soil is a foundation upon which to build, soil supports communities of living things, soil holds clues to past cultures, soil nurtures grass and gardens. Soil has been called "the skin of the earth" because it is the thin outermost layer of the Earth's crust. Like our own skin, we can't live without soil.

For more information about Stewardship Week visit the NACD website at <http://www.nacdnet.org/general-resources/stewardship-program>.

Marvin Wright Conservation Scholarship

Marvin Wright was a longtime farmer and implement dealer in the Borden, IN area. He served on the Clark County Soil & Water Conservation District Board of Supervisors from 1963-1988. Marvin was dedicated to farming, the farm community and the protection of our natural resources.



An endowment fund with the Community Foundation of Southern Indiana was established through the generous donations of the Marvin Wright, Harold Armstrong, and John Woehrle families to provide an annual scholarship to a student pursuing a natural resources conservation course of study in honor of Mr. Wright.

Applications are now available for the Marvin Wright Conservation Scholarship. The \$3000 scholarship is awarded each year to a current high school senior or current college student from Clark County, pursuing a career in a natural resources related field. Forms will be sent to all area high schools, but may also be obtained by contacting Tami Krueer, SWCD Education Coordinator, at (812) 256-2330, ext. 3462.

"If You Don't Soil Test, You'll Be Forced to Guess"

-Jennifer Johnson

Many experiments have been conducted to determine the levels of plant nutrients needed to maintain a competitive, productive, and economically advantageous forage stand. Of the seventeen elements essential for plant growth, the macronutrients nitrogen, phosphorus and potassium are most likely to be needed in substantial quantities. However, other nutrients, especially the secondary nutrients calcium, sulfur and magnesium, and occasionally trace minerals (need assessed by plant tissue testing) may need to be added as well. The only way to know what amounts of various nutrients should be added is to take soil samples, and have them analyzed by a reputable soil testing laboratory. Applying less fertilizer than is needed will hurt plant performance. Applying more fertilizer than needed is costly, wasteful, and may negatively affect plant growth and the environment. The above quote reinforces the idea that application of fertilizer without a soil test is guesswork.



The Clark County SWCD offers soil testing for **homeowners** seeking fertilizer recommendations for their lawn and gardens. Bring your samples to the SWCD office at 9608 Highway 62, Charlestown. Cost of a basic test is \$22; a more extensive test is \$32. Both tests provide suggested fertilizer recommendations for up to three crops (i.e. lawn, flowers, trees). Recommendations are normally returned within 5 working days. We currently do not offer testing services for **agricultural fields**. You may contact Nutrien Ag Solutions, Lexington, IN, 812-866-5513, for that service.

Compaction in Agriculture

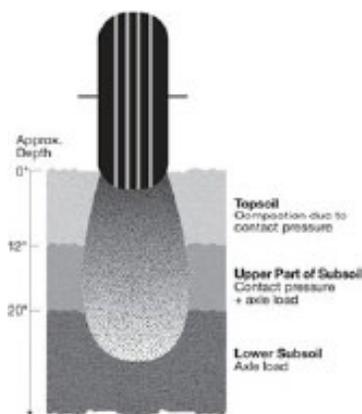
It is no secret as acres per farm scale up, the size and weight of the equipment that producers drive across those acres is also increasing in size. There are several benefits that come with having larger equipment, but one disadvantage associated with the increased size of equipment is the effect that the added weight has on the foundation of farming, the soil. Larger equipment leads to more downward pressure on the soil leading to compaction layers which in turn reduce the ability of that soil to perform at maximum capacity.

What is compaction?

Compaction in agriculture is defined as “The reduction of space between soil aggregates as a result of downward pressure.” How does compaction occur in Agriculture?

- Driving heavy equipment on wet/damp soils.
- Stiff tires compact more than flexible tires; truck type tires compact a lot more than radial tractor or equipment tires.
- A higher tire pressure leads to more compaction potential. Soil compaction can be reduced considerably by matching tire pressure to machinery load and purpose.
- Undersized tracks can cause as much or more compaction than tires.
- 80% of the compaction occurs in the first tire pass, therefore, multiple tire passes in different areas causes more compaction than multiple passes following the exact same tracks.

Compaction can occur in different ways. Weight alone doesn't affect the severity and depth of compaction. Depending on where in the soil profile the compaction layer is found will help producers find solutions to their in-field compaction issues.



The 3 layers of compaction:

- Topsoil Compaction is due to ground contact pressure alone (weight of machine on the ground)
- Upper Sub Soil Compaction is due to both ground pressure and axle load
- Lower Sub Soil Compaction is due to axel load only (weight of load on each axel)

Is compaction really that bad?

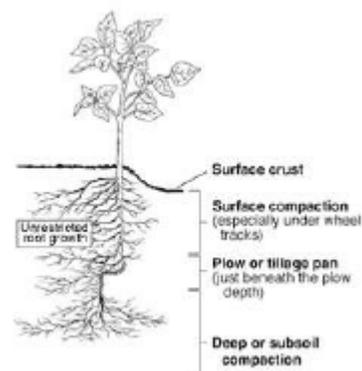
- As reported by Penn State University a study found that compaction due to axel loads of 10-15 tons can reduce yields up to 15% in the first year decreasing to 3-5% 10 years after the compaction. This lower percentage of yield loss in year one compared to the following 10 years is due to the topsoil compaction being able to correct itself after the one-time compaction vs the sub soil compaction which takes much longer to improve and can continue to limit yield.

- A compacted topsoil leads to less water infiltration which can negatively impact the cash crop during dry parts of the growing season.

- Compaction can lead to poor root growth, lower abilities for nutrient uptake (potassium uptake is a major issue) and stunted plant growth.
- Compaction results in the off balance of aerobic and anaerobic soil conditions which leads to an unbalanced soil microbe community that will not interact properly with the plant during the growing season.

How to Fix the Compaction on Your Farm

- Roots, Roots, Roots! Use covers crops as a natural compaction buster such as tillage radish or annual ryegrass.
- Minimize tillage passes and timing of tillage to let roots from cash and cover crops break up compaction layers.
- Lower weight in grain carts and combines per load.
- Try to time tillage passes with the driest of soil conditions.
- Be cognizant of the job at hand and try to match the appropriate tire and inflation with the appropriate load and machine.
- Start to implement controlled traffic so that less area in the field will be compacted yearly allowing surface compaction to start correcting itself.
- Stay out of fields when it is wet with equipment.
- In Row subsoilers may be able to alleviate compaction if used correctly and in combination with cover crops. Although these tools can also make compact worse if used at the wrong soil moisture or if heavy equipment is allowed to pack to the soil back down.



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Charlestown, IN 47111
812-256-2330, ext. 3
Fax: 855-391-1921 (toll free)

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**CLARK COUNTY
SOIL AND WATER
CONSERVATION
DISTRICT**

Return Service Requested

SWCD Supporters....we thank you!

*Clark County Farm Bureau
Dan Cristiani Excavating
Sanders Farm Service LLC
Jim O'Neal Ford*

*Indiana Land Company
Farm Credit Mid-America
Wright Brothers Implement Sales, Hardware & General Store*

SWCD Spring Tree Sale Underway

The Clark County Soil and Water Conservation District (SWCD) is hosting a spring tree sale. Trees offered in this sale are supplied by Woody Warehouse, Lizton, IN. These trees are 3-gallon, Grade 1 (nursery stock) container trees. Trees can be easily removed from their containers and directly planted.

Species offered are: Allegheny Serviceberry, American Hornbeam, American Basswood, Arrowwood Viburnum, Bald Cypress, Black Walnut, Buttonbush, Common Witchhazel, Elderberry, Fragrant Sumac, New Jersey Tea, Pawpaw, Red Chokeberry, River Birch, Roughleaf Dogwood, Scarlet Oak, and Smooth Hydrangea. Trees are \$25.00, shrubs are \$20 each, plus tax.



Buttonbush



Pink Muhly Grass

Native perennial plants are also offered in the sale. Species available are: Anise Hyssop, Black-eyed Susan, Butterfly Milkweed, Cardinal Flower, Columbine, Lance-leaf Coreopsis, Little Bluestem, New England Aster, Pink Muhly Grass, and Purple Coneflower. Plants are sold in small pots, and are \$5 each, plus tax.

Deadline for orders is 4 p.m., Friday, April 22, 2022. Orders will be available for pick-up on May 17-19, 2022, from 8 a.m. to 4 p.m., at the SWCD office. For order forms or more information, contact the Clark County SWCD office at 256-2330, ext. 3, or visit us at www.clarkswcd.org, and on Facebook (Clark County Soil & Water Conservation District).

District activities and programs will be made available to all citizens, regardless of race, color, religion, gender, national origin, marital status or disability.