Spring 2015

Conservation Quarterly

CLARK COUNTY SOIL AND WATER CONSERVATION DISTRICT

Dates to Note

- ***4/2/15—Monthly Board Meeting, 7:30 p.m.***
- ***4/3/15—Good Friday Observed, SWCD office closed***
- ***4/22/15—Earth Day***
- ***4/24/15—Arbor Day***
- ***4/26-5/3/15—Stewardship Week***
- ***5/7/15—Monthly Board Meeting, 7:30 p.m.***
- ***5/25/15—Memorial Day Holiday, SWCD office closed***
- ***6/4/15—Monthly Board meeting, 7:30 p.m.***

Inside this issue:

Get Your Rain Barrel Now!

Rain barrel kits are now available! Kits include one 55 gallon plastic barrel, 2—3/4 inch faucets, and instructions for assembly. *(Additional materials are required to complete the barrel.)*

Contact the SWCD office at 256-2330, ext. 3, to place your order. Kits are $40 each and are available for pickup Monday-Friday, 8 a.m.-4 p.m. Order forms are also available on the District home page, www.clarkswcd.org.

IU study: Agriculture contributes $44.1 billion to Indiana's economy

Agricultural industries in Indiana account for more than $31 billion in direct sales and nearly $13 billion more in ripple effects such as related supply-chain purchases and spending by workers, according to a new report from Indiana University's Kelley School of Business.

The report also said that the state's agricultural output supports nearly 190,000 Hoosier jobs. Of those jobs, 107,500 are directly involved in agricultural production and processing. Researchers found that agriculture creates $14.9 billion in value added -- an amount equal to nearly 5% of Indiana's gross domestic product.

These impressive numbers were generated during a tough year plagued by severe drought; these impacts would likely be higher in a more typical year. The findings in this report demonstrate that efforts to support, or expand, Indiana's agricultural production and processing can have positive ripple effects throughout the state's economy. The degree to which agriculture is able to contribute to Indiana's economic growth going forward will be an important economic indicator for the state.

The study, funded by the Indiana Soybean Alliance, helps show that agriculture is a major driver of economic development in the state. It also highlights the stability of agriculture.

In addition to providing an overview of agricultural activity for Indiana, the report also highlights its impact in different regions of the state. Central, north central and northeast regions of Indiana generate the greatest contributions to the Indiana economy. Southwest Indiana also is a strong contributor, particularly in agricultural processing and manufacturing industries. South central and southeast areas of the state are the least agriculturally productive, due to a lack of high-quality farmland.
Other highlights:

- Corn and soybeans account for 63% of the state's total agricultural production.
- The Hoosier state also was a national leader in hog and pig production, generating nearly $1.3 billion in sales -- the fifth-highest total in the United States.
- Poultry and egg production exceeded $1 billion in sales in 2012 -- totaling $1.3 billion and ranking 13th-best among all states.
- Corn production declined 40% in volume produced for grain from 2007 to 2012-attributed to the historic drought in 2012. Other Midwestern states saw even sharper declines in grain corn production over this period. Indiana rebounded to tally two consecutive record years for grain corn production in 2013 and 2014.

The report also highlights how the state's agriculture and forestry industries provide revenue for federal, state and local governments in the form of corporate profits, indirect business taxes, personal taxes and contributions to social insurance.

Stewardship Week Celebrated

The National Association of Conservation Districts (NACD) is celebrating the 60th year of Stewardship week April 26 – May 3, 2015. This year's theme is "Local Heroes – Your Hardworking Pollinators".

Pollinators play a critical role in our everyday lives, and it's important that we work to protect their habitat. While many pollinators may seem like just annoying insects, they are actually a very important part of the web of life upon which we all depend. Pollinators form the underpinning of a healthy and sustainable future for food and the environment, but they have shown disturbing signs of decline in recent years. When pollinators shrink in number, many plants either produce less seed or no seed at all. The bottom line is, when pollinators start disappearing, plants start disappearing. While animals can travel and move around to find mates and reproduce, plants are rooted to one spot. Therefore, plants depend on pollinators to move pollen from their anthers to their stigma.

On planet Earth there are more than 100,000 species of insects, including bees, flies, moths, butterflies and beetles that work hard as pollinators. There are also over 1,000 species of other animals such as birds, reptiles and mammals, including bats that pollinate plants.

The Clark County SWCD is a member of NACD which oversees the Stewardship Week program. Stewardship Week is one of the largest national annual programs to promote conservation. NACD represents the nation's 3,000 conservation districts, which were established to encourage resource conservation across the country.

Rent our Equipment

No-Till Drill **- $8 per acre**

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

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

Soil Testing Service Offered

The Clark County SWCD is now offering soil testing services for homeowners seeking fertilizer recommendations for their lawn and gardens.

Soil samples may be brought to the SWCD office at 9608 Highway 62, Charlestown. Soil sample bags are available from the SWCD. 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).

Samples delivered to the SWCD by the close of business on Thursday of each week will be analyzed and recommendations returned by the end of the following week.

Since 1999, key conservation and agricultural organizations have sponsored the River Friendly Farmer (RFF) Program. The statewide initiative recognizes farmers, who through good production management practices helps keep Indiana's rivers, lakes and streams clean.

River Friendly Farmer nominations are being accepted through June 3, 2015. Farmers chosen will receive special recognition during Farmers Day, August 19th at the 2015 Indiana State Fair.

They will also receive a River Friendly Farmer sign for display on their farmstead and recognition through news articles highlighting them for their stewardship efforts.

Contact the SWCD office for nomination forms.

Spring is in the air, and so are the fumes from lawn mowers, weed eaters, and other lawn care equipment. Gasoline-powered lawn mowers and string trimmers are major producers of carbon dioxide. Cutting down on their use is one way we can help improve our environment.

The Clark County SWCD encourages you to reduce harmful emissions, and "Mo' Less—Mo' Green" by using environmentally friendly electric mowers and trimmers, and by planting landscape projects with low maintenance, native plants.

What's That Soil Test Say?

A soil test report may contain terminology which you may not be familiar with. A brief explanation of terms you may see on one are given below.

ANALYTICAL RESULTS

Organic Matter measures the amount of plant and animal residues remaining in the soil after initial decomposition. Light colored soils generally range from 1.0 to 3.5% organic matter; dark-colored soils generally range from 3.5 to 7.0% organic matter.

Phosphorus (P_1), Potassium (K), Magnesium (Mg), Calcium (Ca) values are also shown in the indicated columns. The letters beside each of the numbers are ratings to help you determine whether the fertility is very low (VL), low (L), medium (M), high (H), or very high (VH). Generally, it's best to have all of these nutrients in the high and very high range for optimum plant growth.

Phosphorus (P_2) measures available phosphorus (P_1) and, to a certain degree, some reserve phosphorus. Reserve phosphorus is temporarily unavailable to plants but can become available as physical and chemical reactions take place in the soil.

Soil pH determines the level of active soil acidity or alkalinity. A pH of 7.0 is neutral. Above 7.0 is alkaline (sweet); below 7.0 is acid (sour). A pH between 6.0 and 6.5 is best for most plants.

Buffer pH is an index value used for determining the amount of lime to apply on acid soils with a pH of less than 7.0. A value is not given for high pH soils.

CEC measures the capacity of a soil to hold nutrients. The higher the CEC reading, the greater the capacity. Heavy clay type soils have CEC's of about 12 to 20; loamy soils, 6 to 12; and sandy soils, 2 to 6. Although high CEC soils can hold more nutrients, it doesn't necessarily imply they are more productive. Much depends on good soil management.

Percent Base Saturation provides information on the nutrient balance of potassium, magnesium, and calcium in the soil. Too much of any one nutrient can be just as harmful to plant growth as not enough.

SOIL FERTILITY RECOMMENDATIONS

Soil fertility recommendations are given in this section of the report. Lime is recommended in units of tons per acre and all other nutrients in pounds per acre. If the area you are treating is less than an acre in size, you will need to make some calculations to determine how much fertilizer and/or lime you need to apply.

Lime Recommendations For most garden crops the soil pH should be between 6.0 and 6.5. If the pH is below 6.0 and lime is needed, it should be spread like fertilizer and mixed thoroughly with the soil. To calculate the pounds of lime needed for 1,000 ft^2 multiply the tons of lime that's shown on the recommendation report by 46. To calculate the pounds of lime needed for 100 ft^2 multiply the tons of lime shown by 4.6.

For example; a recommendation is for 2 tons of lime. To determine the amount of lime needed for 1000 ft^2, multiply 2 tons X 46. The result is 92 pounds of lime. Be careful not to over lime, too much can be just as harmful as too little.

SELECTING FERTILIZER MATERIALS

Nutrient Recommendations Meeting nutrient recommendations requires selecting the proper fertilizer materials. Lawns and gardens less than an acre in size require relatively small amounts of fertilizer and it's usually more convenient to apply all nutrients in a single mixed fertilizer. It may be more economical to use a combination of fertilizer materials for very large lawns and gardens.

A fertilizer bag is labeled with three numbers which indicate the nutrient content. The first number indicates the percent nitrogen (N), the second, the percent phosphate (P_2O_5), and third, the percent potash (K_2O) in the fertilizer.

Description	Grade N-P205-K20 - % -	Approximate Ratio
Ammonium Nitrate	34-0-0	1-0-0
Urea	46-0-0	1-0-0
Dried Blood	12-1-1	1-0-0
Bone Meal	4-21-1	1-5-0
Seaweed	1-1-5	0-1-5
Wood ashes	0-1-5	0-1-5
Milorganite	5-3-2	2-1-1

For example, a 20-10-5 grade indicates that each 100 pounds of fertilizer contains 20 lbs. of N, 10 lbs. P_2O_5, and 5 lbs. K_2O, or a 20 lb. bag contains 4 lbs. N, 2 lbs. P_2O_5 and 1 lb. K_2O. Some common fertilizers available are shown in the tables here. When choosing a fertilizer for use, select one that has the N, P_2O_5 and K_2O present in a ratio similar to the amounts of N, P_2O_5, and K_2O recommended on the report form.

Description	Grade N-P205-K20 - % -	Approximate Ratio
Starter Fertilizers	18-24-6	3-4-1
	5-12-5	1-2-1
Equal N, P, K Fertilizers	12-12-12	1-1-1
	15-15-15	1-1-1
High N, Low P & K Fertilizer	20-3-3	7-1-1
	28-2-3	9-1-1
High N, Low P & Medium K Fertilizers	25-5-15	5-1-3
	28-3-10	9-1-3

MICRONUTRIENTS

Micronutrients are used by plants in very small amounts. Most mineral soils are adequately supplied with them, especially if large amounts of organic materials are worked into the soil. If they are needed, purchase a soluble micronutrient fertilizer material at a lawn and garden store and follow the manufacturer's directions for application.

ORGANIC AMENDMENTS

Manure or compost may be substituted for commercial fertilizer. One bushel of cattle manure is equal to approximately 1.5 lbs. of 16-8-8 fertilizer or the equivalent. One bushel of poultry or sheep manure would be equivalent to approximately 4.5 lbs. of 16-8-8. One bushel of manure weighs about 50 pounds.

Adapted from A & L Great Lakes Laboratories, Inc., Fact Sheet No. 21

9608 Highway 62
Charlestown, IN 47111
812-256-2330, ext. 3
Fax: 855-391-1921 (toll free)

CLARK COUNTY SOIL AND WATER CONSERVATION DISTRICT

Bulk Rate
U.S. Postage PAID
Charlestown, IN
Permit No. 6

SWCD Supporters….we thank you!

Clark County Farm Bureau
Dan Cristiani Excavating
Farm Credit Mid-America
Huber Orchard & Winery
TGJE II
Kruer Grading-Seeding, Inc.
Jim O'Neal Ford
Memphis Meat Processing
New Washington State Bank
Wright Brothers Implement Sales
Sanders Farm Service—Pioneer Seed

Tree Seedling Orders Still Accepted

Tree seedlings are still available to Indiana landowners through the IDNR Division of Forestry nursery in Vallonia, IN. These trees may be used for reforestation, erosion control, wildlife habitat development, watershed improvement, wetlands enhancement, windbreak, or other conservation purposes. Plant materials cannot be redistributed or resold for profit.

Order forms are available in the Clark County SWCD office or from the IDNR web site, www.dnr.IN.gov/forestry. Orders are accepted through May 1, 2015.

For assistance in deciding what species to plant, contact Clark County's District Forester, Allie Cline at (812) 294-4306, or ACline1@dnr.IN.gov.

Scholarship Information

Applications will soon be available for the Marvin Wright Conservation Scholarship sponsored by the Clark County SWCD and funded through the Southern Indiana Community Foundation. The $1000 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 Kruer, SWCD Education Coordinator, at (812) 256-2330, ext. 107, or by visiting our website at *www.clarkswcd.org*.