

CAPE GIRARDEAU COUNTY

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Missouri Department of Conservation

*Lend a Helping Hand to
Conservation of Land*

SOIL AND WATER CONSERVATION DISTRICT

NEWSLETTER

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Order Seedlings Starting In November

Brad Pobst, Private Land Conservationist

The Missouri Department of Conservation's George O. White Nursery will start taking orders for tree seedlings from November 15 through the end of April 2012. The Department of Conservation grows and provides low cost seedlings to Missouri residents for use in conservation projects which require the establishment of trees or shrubs. Tree and shrubs will be delivered in late winter and/or early spring.

Seedling order forms can be found at local Department Offices, Soil and Water District Offices and on the internet at www.mdc.mo.gov. The website is the best place to order because out of stock species are listed.

Seedlings are bare rooted and are available in single species bundles of 25 seedlings that cost from \$4-8 per bundle. For areas where a variety of seedlings are needed, in smaller quantities, seven special bundles are available that cost from \$15-30 per bundle.

- **The 75th Anniversary Bundle** – A collection of 10 great trees from the first 75 years to carry you into the next 75 years.
- **The Conservation Bundle** – Is recommended for people who want to add a mix of trees and shrubs to their property.
- **The Wildlife Cover Bundle** – Will improve habitat and food sources for a number of Missouri wildlife species.
- **The Wild Edibles Bundle** – Will improve habitat and food sources for Missouri wildlife species.
- **The Nut Tree Bundle** – Offers landowners five nut-producing trees and shrubs.
- **The Extra Large Nut tree Bundle** – Offers landowners 3 nut producing trees that are all over 30 inches tall.
- **The Quail Cover Bundle** – Provides plants for quail food and cover.



Farming Smart for a Sustainable Future

Increasing profits by improving soil conditions

Part II of 4-part Series

In Part I, you learned a little about the main thoughts and ideas behind changing the way we think about farming from using conventional methods to turning our attention toward soil health. Let's build a little on that thought process and dive a little deeper into the mechanics of *biological farming* for improved soil health.

There are more individual organisms in a teaspoon of soil than there are people on earth.

Skilled biological farmers learn how to take care of soil life – they nurture it, feed it a balanced diet, and use tillage tools and methods to enhance soil life. Farmers must understand proper use of livestock manure, compost and green manure crops. Learn how to evaluate soil for its health, tillth and soil life. Develop an understanding of fertilizers and soil fertility, the steps and methods to get soils in balance, and the proper use of fertilizers. Learn the “when” and “how” of fertilizer use for soil correction, feeding soil life, balancing nutrients, and feeding the crop with the proper balance between soluble and slow-release materials.

Three important parts of your soil are (1) the organic particles that serve as a reservoir of plant foods, (2) the soil minerals, and (3) the living portion, consisting of bacteria, fungi, algae and larger organisms such as earthworms. These organisms are alive and need air, water and organic matter (food) and a safe place to live. Work with them, because the productivity of your farm is in direct proportion to the number, activity and balance of soil organisms. In many soils, a good measure is a minimum of 10-25 earthworms per cubic foot of soil. Some insecticides that are harmful to earthworms include, but are not limited to: Temik, Sevin, Furadan, Dursban, Mocap, Mesuroil, Lannate, Baygon, Thimet.

Sustainability is the key factor to becoming a biological farmer. Balance is the key, not only for economic, but ecological reasons as well. It is essential to provide all elements to your crops and to soil organisms in the proper balance. An excess of some nutrients can be as limiting as deficiencies of others. Agronomists and soil scientist have written that at least 16 elements are (essential) needed to grow plants. *The productivity of a soil can never be greater than the plant food elements in least supply.* You need to make these nutrients “exchangeable” or available to the roots of the plant. Because nutrients can interact, an excess of some elements can cause a shortage of others, even though it appears there is enough on a soil test. Managing your crops to produce large root systems that will recover the nutrients, plus working with soil organisms so they make nutrients available and exchangeable, can make farming fun and profitable.

Rules for biological farming:

1. Test and Balance Your Soil – plants need more than N, P and K. Test for the following 10 nutrients: phosphorus, potassium, calcium, magnesium, sulfur, zinc, manganese, iron, copper and boron. Adjust calcium first.
2. Use Fertilizers Which Are Life-Promoting and Non-Harmful – use natural, mined fertilizers and small amounts of the highest quality manufactured fertilizers (see part III for suggested products)
3. Use Pesticides and Herbicides in Minimum Amounts and Only when Absolutely Necessary – try non-toxic methods first, if they fail and if crop damage is above the economic threshold, toxic chemicals might be considered. Try reducing the concentration, banding or spot-spraying and adding humic acid to the tank to balance the pH of the tank mix
4. Use a Balanced Crop Rotation – rotate crops regularly and incorporate diverse species of cover crops
5. Use Tillage to Control Decay of Organic Materials and to Control Soil, Air and Water – till raw organic matter (plant residues and animal manures) into the upper layers of the soil. Avoid inverting (turning over) the soil, but rather use equipment that slices and uplifts it. Never till soil that is wet. Consider tillage radishes to break up a hardpan.
6. Feed Soil Life – adding rock phosphate or a little lime to compost piles will produce a more balanced fertilizer. Incorporate green manure crops, like rye, red clover, Australian field peas, alfalfa or buckwheat. Do not apply heavy applications of manure or other raw organic matter (it is better to apply a lighter coat over more acres). Consider biological stimulants like kelp (seaweed), humic acids, enzymes, vitamins and hormones.

DID YOU KNOW?

Cornell University offers a Soil Health Test - which tests not only the traditional Chemical factors, but also Physical and Biological.

The weight of all the bacteria in 1 acre of soil can equal the weight of one or two cows!

Follow the four-part series for more tips and techniques for managing for improved soil health. NRCS will soon be offering financial assistance directed toward improving soil health. For more information, please contact your local NRCS office at 480 West Jackson Trail, Jackson, MO 63755, or by phone 573-243-1467 ext 3 or visit us online www.mo.usda.gov.

Programs

There are four federal programs that provide financial and technical assistance to landowners for Conservation.

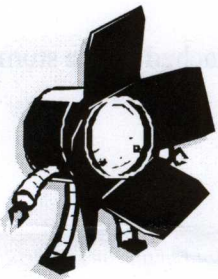
Grassland Reserve Program (GRP) – Applicants must own at least 40 contiguous acres of grassland and have a grazing management plan. Landowners that are accepted will receive annual, per-acre payment in exchange for their agreements to keep the land as grasslands for 10, 15, 20 years. You may continue to graze or hay in GRP, with a few exceptions during the primary nesting season.

Wetland Reserve Program (WRP) - WRP is the federal government's largest wetlands restoration program. It provides technical and financial assistance to private landowners and Indian Tribes to restore protect and enhance wetlands that have been degraded or converted for agricultural uses. Through WRP, Missouri NRCS has purchased 954 easements in 19 years. In exchange for the easements, landowners receive cash payments for converting marginal-use land to shallow wetland acres and maintaining them. Currently the per acre payment for WRP in Cape Girardeau Co. could be up to \$2850/ac.

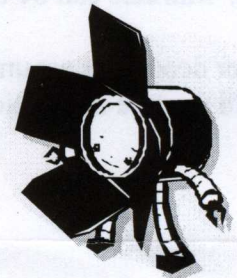
Environmental Quality Incentives Program (EQIP) – A catch all program that provide financial assistance for wide variety of conservation practices for example...Erosion control, nutrient management, irrigation practices, cover cropping, forestry practices, animal manure practices, grazing practices and wildlife.

Wildlife Habitat Incentive Program (WHIP) – Similar to the EQIP program but with an emphasis on wildlife practices, but provides financial assistance to landowners who want to more actively manage for wildlife.

All of these programs are available with a continuous sign up period. But to be considered for GRP or WRP funding this year (through Sept 2012) applications must be received by November 30th. Not deadline has been set for EQIP or WHIP but will probably be December or January.



CONSERVATION PRACTICE SPOTLIGHT



DFR-05 Woodland Protection through Livestock Exclusion

The purpose of the Woodland Protection through Livestock Exclusion practice is to protect soil and plant resources from grazing by livestock. This practice applies to existing woodland areas susceptible to excessive erosion due to livestock grazing. The Cape Girardeau County SWCD offers cost-share assistance to help landowners fence livestock out of their woodlands. The program assists landowners with the cost of exclusion fence that lies within an existing functional interior or property line fence. If you have a wooded site on your farm that you are currently grazing and would like livestock excluded from the site, please contact the office at 573-243-1467 ext. 3.

It's Time to Think about Fishing

Brad Pobst, Private Land Conservationist

In November most people are not thinking about fishing but hunting. Deer, quail, duck, rabbit, and trapping seasons are all going on at this time of the year. This means that fishing usually takes a back seat while people are out hunting. But why not think about how to improve your fishing chances next spring now by installing fish attractors in your pond this winter.

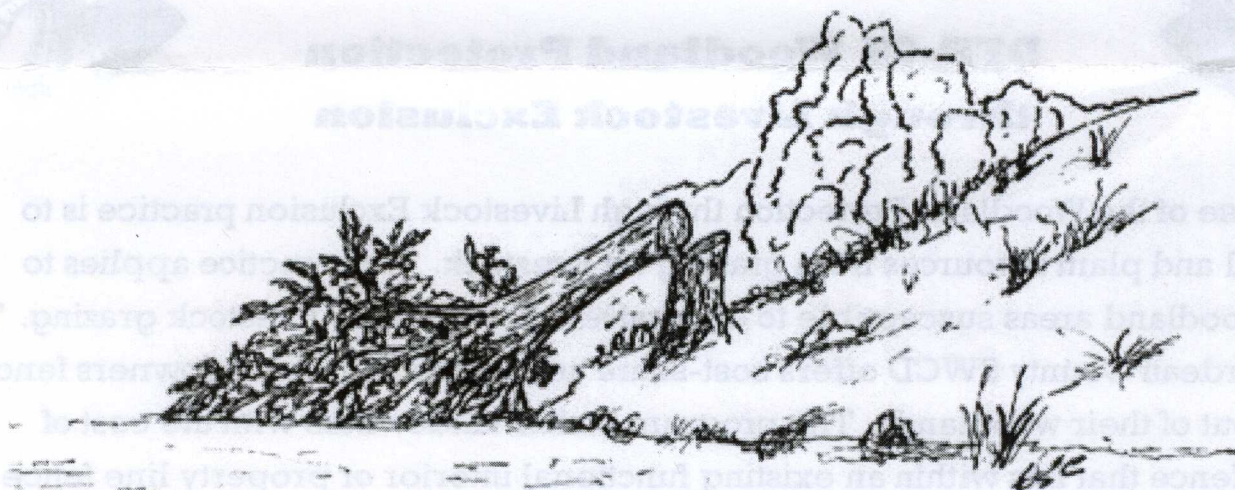
Fish attractors are simply elements in or near the water that provide valuable fish habitat. These can be manmade structures, brush piles, crappie beds and/or aquatic plants. These elements attract fish by providing them with shade, spawning areas or places to rest or escape from predators. The best attractors also provide food for fish by creating a home for larval aquatic insects. Small fish come to the cover to eat the insects and bigger fish station themselves nearby to feed on the smaller fish.

Aquatic vegetation is often considered a nuisance and removed by many pond owners. Plants, however, provide cover, food and nesting sites for fish and other aquatic organisms and oxygenate the water and help prevent shoreline erosion. A healthy pond should have at least 10-15 percent of the surface area covered with vegetation. If the pond lacks aquatic plants then it is recommended that fish attractors be installed.

Add fish attractors while keeping in mind the following advice. Although fish attractors can be constructed from a variety of materials, experiments have shown that natural materials are the most effective. Cedar trees or Christmas trees with the butts weighted down and weighted bundles of tree limbs are very effective. Place the cover bundles or cedar trees so that it achieves the highest vertical height possible. In other words, stand the cover up rather than lay them down. Placing three or more structures within a few yards of each other will attract more fish than the same number of structures spread out.

Depth of placement is important. Structures should not be placed in the deepest part of the pond. Dissolved oxygen levels, in deep water, can be too low to support fish life in the summer. Don't place the structures in water deeper than 12 feet; 4 to 6 feet is ideal. If the top of the structure is near the water surface, it has been placed at the proper depth. Markers can be tied to structures to help anglers locate them for fishing.

Live or dead trees around the shoreline can be felled into the water with the base of the tree left attached to the stump to hold the tree in position. This provides excellent overhead cover.



For more information on improving your fish habitat in your pond you can contact me at the 573-243-1467, ext. 123

SEEKING NOMINATIONS

Cape Girardeau County SWCD Board of Supervisors

Let it be known that the Cape Girardeau County Soil and Water Conservation District will hold an election for one supervisor in each of two different territories in the county on March 21, 2012. If you or someone you know owns a farm in Territory I (Apple Creek and Shawnee Townships) or Territory III (Randol and Cape Girardeau Townships), and meets the qualifications listed below may be considered as a candidate in the election. You may submit names for consideration to the nominating committees by contacting the Cape Girardeau County SWCD at the contact information listed below.

Supervisors of the district administer district policies and programs, district personnel, and cost share funding made available by the one-tenth-of-one-percent parks, soils and water sales tax. During fiscal year 2011, the district provided \$337,370.40 of cost-share funds to landowners to assist with installing agricultural erosion control and water quality practices.

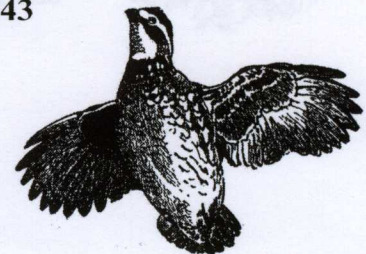
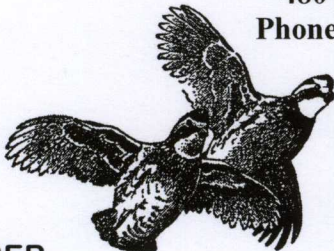
To be a candidate for the Soil and Water Conservation District election, a person shall be:

1. A land representative, and
2. A resident, tax-paying citizen within the SWCD for a minimum of two years preceding the election date, and
3. A cooperator of the district, defined as, "a person who is actively engaged in farming and practices conservation activities related to agriculture", and
4. Reside in or own a farm in the same territory where the nominating committee has responsibility

Cape Girardeau County Soil and Water Conservation District

480 West Jackson Trail, Jackson, MO 63755

Phone: 573.243.1467 ext. 3 Fax: 573.243.8843



QUAIL CALENDAR

NOVEMBER

Quail and pheasant season opens in Missouri

Basal spray undesirable trees according to herbicide label now through March

Order your covey headquarter shrubs from the MDC nursery through April (roughleaf and grey dogwood, wild plum and blackberry are good for quail)

Conduct edge feathering, woody draw and fence row renovations now through March

DECEMBER

Burn native warm-season grass fields to set back the grass and encourage annual weeds

Disk your CRP acres this month to promote ragweed

Don't delay – order your covey headquarter shrubs (roughleaf and grey dogwood, wild plum, blackberry) this month

Drop honey locust and hedge trees in fence lines for quail covey headquarters. Don't forget to spray the stumps

JANUARY

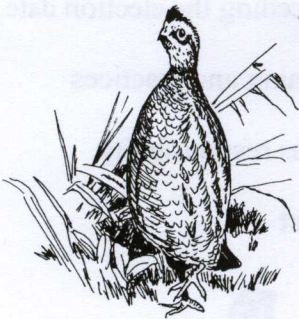
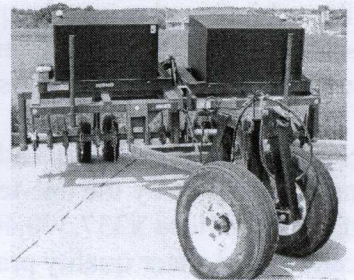
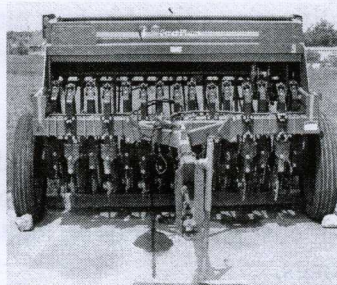
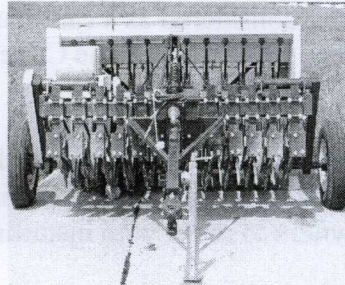
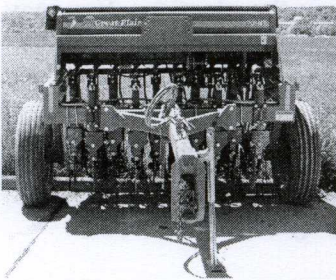
Stop wasting money on inputs on low-yield cropland edges. Visit your local FSA office and enroll these areas in CP33

Burn your CRP areas this month to reduce grass competition and increase wildflower abundance

Dormant seed CRP wildflower pollinator habitat

FOR RENT NO TILL DRILLS & PASTURE RENOVATOR

The SWCD would like to remind everyone the District has a 10' Great Plains Drill and a 7' Great Plains Drill for rent along with a 8' Truax Drill (warm season grasses). The District also has a Rhino Pasture Renovator also available for rent. The 10' drill rents for \$9/AC, the 7' drill rents for \$8/AC, the 8' drill rents for \$10/AC, and the renovator rents for \$6/AC. If you would like to schedule either the drills or the renovator, please call 573-243-1467 ext 3.



WILDLIFE WAYS DID YOU KNOW.....

Bass tend to school in groups of similar size fish. If you catch one bass, you're likely to catch more nearby. Bass lie in wait behind cover and ambush their intended prey; find them near rocks, wood, weeds, submerged cover, deep water, etc.

Non Profit Rate
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63755
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Soil and Water Conservation District
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