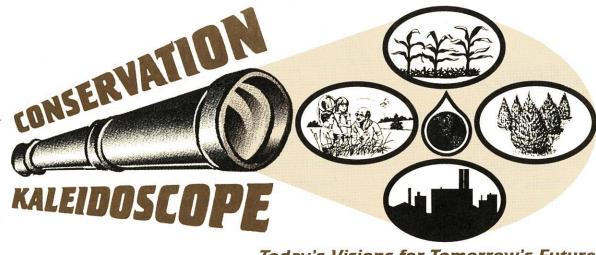


St. Joseph
County
Soil & Water
Conservation
District



Today's Visions for Tomorrow's Future

Oct/Nov/Dec 1998 Volume 2, Issue 4 60455 U.S. 31 South, Suite 4 * South Bend, Indiana * Telephone (219) 291-2300 Ext. 3 Fax (219) 291-0284 Editor: Chris Forsyth Beth Gushwa

Calendar of Events!

October 12

Columbus Day - Office Closed

October 19

SWCD Monthly Board Meeting 7:30 p.m. - Farm Bureau Mtg Room

October 21

Hoosier Farmland Pres. Task Force Meeting

5-7:00 p.m. - Business Science Adm. Bldg. - Ivy Tech State College, Gary

November 11

Veterans Day - Office Closed

November 16

SWCD Monthly Board Meeting 7:30 p.m. - Farm Bureau Mtg Room

November 26

Thanksgiving Day - Office Closed

December 5

Composting Meeting

9-10:30 a.m.-Farm Bureau Mtg Rm

December 21

SWCD Monthly Board Meeting

7:30 p.m. - Farm Bureau Mtg Room

December 25, 1998 & January 1, 1999

Christmas/New Yrs -Office Closed

January 29, 1999

SWCD Annual Meeting

St. Adalbert's

(Watch for details in our January Newsletter)



Saturday,
December 5, 1998
Farm Bureau Mtg Rm
60455 U.S. 31 South
9:00 - 10:30 a.m.







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THE NATURAL EDUCATOR

IT'S HARVEST TIME

No, I'm not talking about corn and soybeans but native, natural foods. It is amazing how many delicious foods are growing wild around our state.

WARNING!!!! Before eating anything from the forest and fields, be absolutely positive about the identification. While there are many edible wild foods, there are also many deadly wild foods. We don't want a wild meal to be your last meal! This is definitely a case where you should be overly cautious.

Listed are some common and easy to recognize native plants, that are also tasty.

Teas

Sassafras -- is easy to recognize and easy to collect. For sassafras tea, small roots are best. You will only need about 3 - 4 roots six inches long. Rinse roots in cold water, then simmer roots in a pan of water to desired taste. It is best to pour tea through cheese cloth before drinking.

Common Spicebush -- can be



found in damp woods and streamsides. A pleasantly aromatic tea can be made by steeping the young leaves, twigs and bark for about 15 minutes. Dried and

powdered, the oily berries can be used as a substitute for allspice.

Sumacs -- The dense cluster of red berries can be used to make a pink lemonade. Pick the fruit cluster, gently rub the cluster to bruise the fruit and soak in cold water for about 15 minutes. Pour through a cheese cloth and chill. Sweeten to taste. Note, we do have Poison Sumac in Indiana. It is found in very wet swampy areas and has a white berry. Do not touch for it is worse than Poison-ivy.

<u>Jellies</u>

Black Cherry (Be careful! The wilted leaves and fresh seeds contain cyanide and should not be eaten. Cooking destroys the cyanide). Choke Cherry, Wild Plums, Blueberries, Huckleberries, Wild Grapes, Elderberries, High-bush Cranberry, Hawthorns, Mountain Ash and many more can be made into jellies.

Fritters

Several plants produce flowers

that can be made delicious into tasting fritters. Dip flowers into a batter of eggs and flour and then deep fry. Peanut oil is best. Rinse these flowers in cold water before dipping. **Black** Locust, Common Elderberry, Day-lily and Dandelions.



salad - leaves and flowers; wine flowers; coffee - slowly bake the roots until brown and brittle; grind and perk like commercial coffee. Note that young flowers and leaves are the best tasting.

Dandelions can also be used as a

General good eating!

Acorns -- contain tannin, which is easy to remove by boiling. Boil acorn meats in water until they turn brown; pour out water, rinse, repeat until



water no longer turns brown (about 4 to 5 times). Roasted acorns can be eaten as nuts or dipped in sugar syrup and eaten as a candy. Acorns can be



ground into a meal and used to make excellent muffins and breads. Note that acorn meal is rich in protein and fat.

Cattails – Can be used in salads, cooked as a vegetable, made into flour, pickled or served as a potato.

Want to know more??

The *Peterson Field Guide*, *Edible Wild Plants* provided a great deal of the listed species information.

It was not that long ago that we survived on what we could find in the forest. Today, it is just a great way to enjoy Nature's Bounty.



WOODLAND TIMES

Forestry News Updates for St. Joseph County

ARBOR EDIBLES

Trees serve many purposes: they add character to our cities and towns, screen harsh scenery, reduce pollution, save energy, and provide us with colors, flowers and beautiful shapes, forms and textures. But their usefulness does not stop there. They also serve as food for wildlife and humans!

Famous French Apples Pie

(smother with caramel ice cream topping and chopped pecans and you have Taffy Apple Pie!)

5 c peeled, sliced, tart apples (Cortland or Rome Beauty are excellent for pies)

1 c sugar3 Tbsp corn starch1 tsp cinnamonpastry for 9-inch pie

Crumb Topping
1 c flour
1/2 c firm margarine
1/2 c brown sugar packed

Stir together the sugar, corn starch, and cinnamon; mix with apples. Turn into unbaked pie shell. To make crumb topping, mix the flour, brown sugar and firm margarine until crumbly; the pieces should be the size of small peas. Evenly distribute over the apples in pie shell. Place pie on a baking sheet and bake in a 375 degree oven until the internal temperature (use a meat thermometer inserted in the middle of pie) reaches 180 degrees, or until the filling bubbles up like cooking jam (about 1 hour).

"WHOO KNOWS BEST"

The Owl has noted that Fall is in the air. Careful observation of the woods and fields reveals this fact, as does the later rising and earlier setting of the sun each day. Occasional cool days and cooler nights also add to the end of summer feeling I get each year at this time.

You may have noted that a few trees, shrubs, and other plants have begun to change leaf color. This is a process that can be seen from mid-August through November with the peak occurring in October. The exact peak of color and the overall amount depend on more variables than it is possible to track. Some factors that influence leaf color change include: Weather (hot, cold, dry, wet), health of the tree or shrub, species of tree or shrub, local topography, soil types, and length of day. All of these factors, as well as others not mentioned, affect the timing and color that leaves change. The reason for the loss of leaves is that during the winter the water will be frozen and unavailable to the tree. The broad leaves of the native hardwoods would not be able to survive the drought caused by most water being frozen. They would also be damaged by the formation of ice crystals in the cells. Evergreens are able to get through these periods as their leaves are thick, waxy and narrow, and ideal for surviving dry spells, but not as food for collecting the energy from the sun.

Most folks are already aware of the fact that leaves have most of their brilliant color all year, but that it is masked by the chlorophyll found in the leaves. Chlorophyll enables leaves to convert sunlight, carbon dioxide and water into sugar. As the days shorten, chemical changes in the tree cause an abscission layer at the base of the leaf to form a callus. As this layer forms, the leaf gets less

nutrients and chlorophyll production stops and the other colors of the leaf are revealed. Finally, the callus layer is complete and a breeze breaks the leaf free of the tree to float to the ground.

In the woods, the fallen leaves form a protective layer for the soil, which slows the fall of rain drops, preventing them from loosening soil particles. As insects and microbes work on the fallen leaf material, it is gradually incorporated back in the ground. The organic matter formed by the decayed leaves provides nutrients for the trees, and acts as a sponge, soaking up water and holding it for a time, regulating the runoff from wooded watersheds.

Trees have already provided for next year's growth. Buds have formed at the ends of branches and along the These buds contain the embryonic tissue that will become next year's leaves and twigs. At the base of each bud, the tree stores a supply of food to get the bud off to an early start next spring. This food is the sugar that the leaves have been producing, stored in the form of starch at the base of each growing point. The growing points that had the most sun also have the most food stored, and will be the first buds to break and will break, earlier and grow faster than their neighbors.

Enjoy the fall weather and the display of fall colors put on by our native hardwood trees.





WOODLAND TIMES

Forestry News Updates for St. Joseph County

MIGRATION

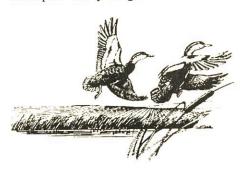
by: Rick Ward IDNR, Wildlife Biologist

As the days get shorter and cooler, and the leaves change color and fall from the trees, a spectacular natural annual phenomenon takes place in Indiana. No, it's not Notre Dame football; it is the migration of birds.

Most of the nearly 800 species of birds in North America migrate, but when people think of fall migration, ducks and geese come to mind.

Many of the ducks and geese that migrate through Indiana nest in Canada or the upper midwest. Many will winter on or near the gulf coast. Why do the birds undertake such a long journey every year? The main reason is simply survival. As waters freeze and snow covers the ground, the birds have to travel south to find open water and food. Some species travel only as far south as they absolutely must to find food and water. Some species travel great distances to traditional wintering areas, overflying places that might be suitable.

The most amazing feat of migration is how the birds navigate. The most common navigational technique is visual landscape cues. The birds might follow a river for example. The young birds learn these



routes from the older birds. Waterfowl even have the ability to use the sun and stars for directional guidance! (Most people can't do that!) Birds can also use wind direction and the earth's magnetic field as cues. Birds have been tracked on radar flying between two cloud layers with no visual clues such as landmarks or stars. The birds still stayed on course!

Some species of ducks do nest in Indiana and our local giant Canada geese are common nesters. However, Indiana is not a major player in regards to hosting large numbers of migrating waterfowl. We still have an important role to fill. Many ponds and marshes, lakes and streams provide a resting stop for migrating birds. Without a place to stop, rest and feed, the birds chance for a successful migration diminishes. If you have ever witnessed the stopover of Sandhill Cranes at Jasper-Pulaski Fish & Wildlife Area, you know exactly what I mean! These birds nest in Canada and the upper midwest and spend the winter in Georgia and Florida. As they funnel around Lake Michigan on the way south, they stop at Jasper-Pulaski to rest and feed - sometimes for many days - before continuing the migration.

If you are lucky enough to be around a wetland this fall, take some time to witness the miracle of migration. Imagine where the birds started the trip. Imagine how they found this particular spot. Imagine them continuing on and finding the route all the way to the wintering grounds. Imagine what could happen if that wetland disappears.

By the time you read this, the printing presses have already been hard at work, cranking out over 7,000 new 1998-1999 Tree Sales order blanks, just for you. It is hard to imagine that it is that time of the year again, but whenever fall is nipping at our heels, so is the season for the new St. Joseph County SWCD's Tree Sales Program. Some of the new varieties planned for this coming year include: White Spruce, Bur Oak, Ginkgo, Honey Locust, Nannyberry, Norway Maple and Pink Lady Winterberry.

Order blanks will be available the last week of October. If you do not receive one in the mail, please feel free to contact our office at (219) 291-2300 Ext. 3, and we will mail one out to you or you can also stop by the office to pick one up. Keep your eyes open and be on the lookout for the bright, yellow 1998-1999 St. Joseph County SWCD's Tree Sales order blank.





FIELD NOTES



FILTER STRIPS BENEFITS AND INCOME

Filter strips are 20' to 99' strips of vegetation which help remove sediment, organic matter and other pollutants from runoff and waste thereby protecting environment and providing wildlife habitat. Examples of conservation practices that act as buffer strips are: filter strips, riparian (streamside) forest buffers, contour buffer strips, field borders. windbreaks and herbaceous shelterbelts, wind barriers, cross wind trap strips and alley cropping systems.

Recent studies have shown that a 30 foot filterstrip can remove up to 88% of the sediment, 73% of the nitrogen and 79% of the phosphorus going into ditches, creeks and rivers. Less sediment entering the waterways will also help keep down the cost of cleaning and dredging.

Filter/buffer strips can be beneficial to farmers in numerous ways. A few of them include slowing

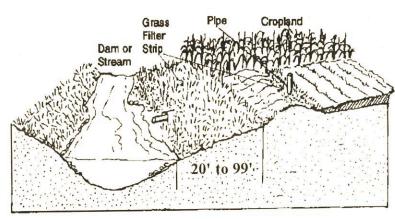
water runoff, trapping fertilizer, pesticides, pathogens and heavy metals. They can trap snow, cut down on blowing soil, protect livestock and wildlife from harsh weather and protect buildings from wind damage. Filter strips can help stabilize a streambank, serve as a turn row, be used as a lane for parking wagons during planting and harvesting, as well as, and give year round access to open drain and tile outlets. They also increase the beauty of the farmstead and improve wildlife habitat.

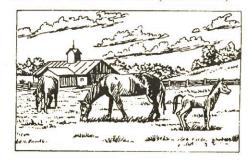
Several of the producers in the area have said that they have filter strips on their farms for some of those reasons listed above. The producers say in some cases, the soil along the ditches is less productive and that wildlife such as beavers, deer and raccoons eat the crops in the first few rows. Farmers hope that there will be less damage to the crops from wildlife and the filterstrips will provide wildlife habitat. They also say that having filter strips helps keep sediment out of the ditches, and that keeping sediment out of the ditches will help cut the cost of cleaning the ditches. Producers also say having filter strips along ditches makes it easier to prevent trees from coming up along the banks.

The Conservation Reserve Program and the St. Joseph County SWCD's filter strip program can provide you with a wonderful opportunity to establish filter strips or buffers at a reasonable cost. Producers receive 50% cost-share on the establishment and a rental payment based on the soil type in CRP. If you do not qualify for CRP, District's program reimburse the cost of the seed and fertilizer for any strip planted along a ditch or water body.

GRAZING LAND INITIATIVE

The Grassland or Grazing Land Initiative is a fancy term for returning to the economically profitable, environmentally safe, and ecological sound practice of allowing the animals to both harvest the crop and simultaneously recycle the animal waste where needed. With new and innovative grazing management techniques, we can approach the 85 + % efficiency of machine harvesting of hay and haylage. This can be done with any size herd and any grazing animal from horses to dairy cows and everything in between. If you would like more information about the practice, call our office at (219) 291-2300 Ext. 3 or Jerry Perkins at 1-800-440-7536 Ext. 838 (voice mail).







FIELD NOTES

CRP SIGN-UP SLATED FOR FALL

Another Conservation Reserve Program (CRP) sign-up has been scheduled for this fall. Sign-up will be October 26th - December 11th. You may be wondering what CRP can do for you. Should you even consider looking into this program?

The Conservation Reserve Program (CRP) has been around for a number of years. There are actually two ways to enter CRP:

- 1) During a continuous sign-up period which allows landowners to sign-up at any time as long as the land is eligible and will be placed in filterstrips, riparian buffers, grassed waterways, field windbreaks or shallow water areas for wildlife.
- 2) A CRP program similar to the original CRP which can only be entered during limited sign-up periods.

CRP does Continuous undergo a competitive bid process like the sign-up CRP. This option consideration merits definitely because it allows you to receive an income on marginal lands. Instead of waiting until the next general sign-up period, producers are now able to enroll qualifying acres at any time. This will give farmers more options for better land management as they plan their activities for the coming year at any time and do not have to wait for sign-up periods to be announced.

If you are interested in the CRP,

but the practices you wish to implement are not offered by the continuous sign-up, you need to apply for eligible practices during the signup period. Eligible practices include grasses (introduced grasses or native grasses), tree plantings, wildlife habitats, and wetland restorations. To increase the chances of acceptance into the CRP, choose native grasses for cover plantings and/or select practices and planting designs which enhance wildlife habitat. These practices are assigned higher point values which are used to calculate your Environmental Benefits Index (the rating score used to select the offers with the highest environmental return).

To be considered eligible cropland, land must have been planted to an agricultural commodity two of the five most recent crop years and must be capable of being planted to an agricultural commodity. If you have crop ground that you would like to put into the CRP, please contact our office for more information. We will be happy to assist you with your conservation needs and objectives.*

*Brian K. Miller and Clark D. McCreedy, Hoosier Farmland Wildlife Notes, Fostering Wildlife in Agriculture (Vol. 3, No.1), Forestry and Natural Resources Cooperative Extension Service Purdue University.

THE INVADERS-DON'T AID THE ENEMY

As we make efforts to improve the waterway corridors, special caution must be taken not to increase the

opportunities for plant species that out grow and out-number the native species. The Indiana Department of Natural Resources has developed a listing of those plant species, that due to prolific growth and the ability to adjust to various circumstances, "invade" our lands and shorelines, and stifle existing native plant species. Attracted by their beauty, and ease in care, many property owners "aid the enemy" by planting these non-native species to enhance their gardens.

A notorious "invader" is the **Purple Loosestrife** (*Lythrum Salicaria*). Purple Loosestrife makes its greatest mark on wetlands, where it reduces the capability of wetlands to trap sediments. So aggressive is it's growth, that the Indiana Department of Natural Resources has banned the sale of Purple Loosestrife in Indiana. Yet this plant continues to find it's way to nursery shelves, and ultimately to the

consumer. Once established, it becomes difficult to control.

If you want a list of other "invaders", contact the St. Joseph River Basin Commission Office at (219) 287-1829 and a copy can be mailed or faxed to you.*



^{*} Taken from *Basin Bites and Technical Tidbits*, a publication of the St. Joseph River Basin Commission.



URBAN MEANDERINGS

THE COFFEE FILTER OF EROSION CONTROL

by Larry Osterholz, Stormwater Specialist IDNR, Division of Soil Conservation

In my daily travels, I often wonder if the building trades industry understands the purpose of silt fence. It's purpose is not to see how many times contractors, subcontractors, and materials vendors can drive over it; nor is it for reducing wind and catching construction debris. Rather, it's purpose is for the removal of sediment from storm water runoff.

Another misconception the public has in regard to silt fence is that it will remove 100% of the soil particles suspended in stormwater runoff. A good analogy is a coffee filter. The filter retains or traps the larger particles and allows the finer particles to pass through. Silt fence traps or filters out sand, silt and some of the coarser clays, but it is too porous to

trap the very fine clay particles. Trapping efficiency is also dependent on whether the fence is a woven geotextile or needle munched (nonwoven) geotextile.

Location is an important consideration in the siting of a silt fence. The fence should be placed on the contour and about 10 feet away from the toe of the slope. This will provide for maximum stormwater storage. To prevent bypass flow around the ends of a silt fence, the ends of the fence should be turned upslope. It is important

to note that it is not necessary to surround a construction site with silt fence. Because silt fence is designed to pond and filter water, it is only needed on the downslope side of construction areas. The only time silt fence would be used on the upslope side of a site is when sediment laden water is flowing downslope from an adjoining construction site.

It also needs to be noted that silt fence should not be used in concentrated flows, such as ditches and streams. In these situations the fence generally collapses and fails because of water velocities and the pressures created by excess water accumulation.

The most common problems associated with silt fence are improper installation and lack of maintenance. Key points to remember when installing silt fence include:

burying the bottom of the fence
 4 to 6 inches into the soil (many manufacturers place a horizontal line along the bottom of the fence)

SF Extend end of fence upstope so bottom of fence ends at tap of fence elevation tour at level grade

Typical Layout for Silt Fence

Post Filter fabric fastened to post

Backfill Flow

Cross-Section of Silt Fence

Filter fabric estended upstope in trench

4" 18" trench

- 2.) placing stakes on the downslope side of storm water flow
- and overlapping or wrapping fences when they are joined. In regard to maintenance, the fence should be inspected weekly and after each storm event.

Accumulated sediment should be removed when it reaches 1/2 the height of the fence.

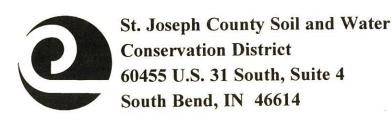
If installed properly, silt fence can be a very useful tool in our arsenal for fighting erosion and sediment damage. For more information, contact the St. Joseph County Soil & Water Conservation District Office.

CURBSIDE RECYCLING IS COMING

The Solid Waste District Board has set January 1, 1999 as the kick off date for the county wide mandatory curbside recycling program to begin

Superior Waste Systems will be distributing the bins during the month of December to approximately 65,000 residences. Instructions and pick up dates will be contained within the bin.

The pick up will be every other week and will include: mixed paper, cardboard, glass, tin cans, aluminum cans, #1 and #2 plastic, magazines and newspaper. It is anticipated that this collection will double the amount of residentially generated material now being recycled.



BULK RATE U.S. POSTAGE

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PERMIT No. 225 South Bend, IN

St. Joseph County Soil And Water Conservation District

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MISSION

To provide guidance and education to the youth and adults of St. Joseph County and to administer programs to preserve, protect and improve soil, water, air, plant, and animal resources for future generations.

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