Conservation Currents

Northern Virginia Soil & Water Conservation District

Volume 37, Issue 1-2 Fall 2009-Winter 2010

ReBuild Promotes Green Building and Green Jobs

For the homeowner with a renovation project, discovering the ReBuild Warehouse in Springfield can be like uncovering a treasure trove! Gently-used kitchen cabinets, unopened rolls of insulation, salvaged toilet bowls, donated appliances, second-hand windows and reclaimed oak flooring are just a few of the used building materials in the inventory at the 12,000 sq. ft. warehouse. And everything is 25 to 50 percent of the price of new building supplies, a considerable financial savings!

Clean, salvaged bath fixtures on display at ReBuild.

Located in the Edsall Road Industrial Park, ReBuild opened to the public on St. Patrick's Day 2009. The non-profit has since picked up an impressive clientele of homeowners and contractors attracted by both the low prices and the organization's commitment to sustainability.

Rebuild is one of three partner ventures founded by Fairfax County entrepreneur, Paul Hughes. After many years as a green venture consultant to government, Hughes decided to found his own green enterprise with the dual goals of keeping used building supplies out of the landfill and training hard to place workers in green jobs. Nationally, according to the U.S. EPA, nearly 40 percent of the waste entering municipal landfills can be attributed to building materials, the equivalent of 136 million tons of refuse annually.

> **"Eight thousand lbs. of waste are typically thrown into the landfill during the construction of a 2,000 square foot home.**

DeConstruction Services, LLC, a for-profit demolition and salvage firm and Sustainable Occupation Services (SOS), a for-profit green services provider are the two additional businesses in partnership with non-profit ReBuild. Hughes' experience running DeConstruction Services inspired him to found the

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Family Tree by Signe Wilkinson

Signe Wilkinson, United Features Syndicate. Used with permission of artist.

Drinking Smart: Bottled Water or Tap?

Not surprisingly, the largest market for bottled water is here in the United States. In 2007, Americans purchased 8.8 billion gallons of water and bottled water sales netted a hefty $11.7 billion. According to the Natural Resources Defense Council, bottled water costs 240 to over 10,000 times more per gallon than tap water. Why are American consumers willing to pay up to $2 a bottle for a substance that comes from the tap comparatively free?

The answer apparently is two-fold: safety and convenience. Americans want a convenient and healthy alternative to other bottled drinks. We are also worried about the quality of our tap water. Considerations for those of us on public water include the water's source, how that water is treated and the conveyance system used to bring water to the tap. The public holds very real public health concerns about the quality of tap water.

However, according to the U.S. EPA, bottled water is not necessarily safer than tap water! A 1997-1999 study by the Natural Resources Defense Council found one third of bottles tested violated either state or industry water quality standards. In comparison, on average each year 90 percent of municipal water supplies meet or exceed drinking water quality benchmarks.

Tap water and bottled water both originate as surface water in our lakes and rivers or start out as groundwater, for example in an underground aquifer. The quality of tap and bottled water is regulated, the former by the U.S. EPA and the latter by the U.S. Food and Drug Administration, but standards overall are similar. Individuals with special health concerns should buy a home filtration system or read bottle labels and consult with bottlers to in-

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Conservation Currents is published four times a year. Circulation: 2,500

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Don't Tidy Up Your Winter Landscape

As the growing season comes to an end, it's time for you to relax. Don't feel compelled to "tidy up" for the winter. All those standing stems, leaves and seedheads provide food, shelter and nesting materials for wildlife. "Cleaning" the flower beds removes important food and cover sources for migrating birds and over-wintering wildlife.

Here are just a few benefits that leftover plant debris can provide and ideas for creating a beautiful, wildlife-friendly winter garden.

Stands of dead perennials and grasses help the soil retain moisture and stabilize ground temperature. During the growing season, the roots aerated the soil; now the stems, leaves and spent flower heads break the force of rain helping prevent the soil from compacting. Small birds scratch on the soft, open soil feeding on worms, grubs and insect egg cases. Debris from these plants also provides cover and seeds for a variety of wildlife. Native wildflowers and grasses are particularly important sources of habitat and food for birds and small mammals, as are winter cover crops like clover, rye or timothy.

Frost and snow on standing plants is beautiful – one of the most important things to cultivate in your garden is your eye. Perennials like sedum remain upright over the winter and offer visual dimension to the winter garden. Nature has no off-season! Early-blooming witchhazel and highbush blueberry shrubs will raise dull winter spirits.

Fruit and nut-bearing trees like oaks, walnut, sourwood and beech provide important winter food for resident birds and their natural cavities are used for nesting and shelter. Trees and shrubs like holly, winterberry and cedar, with fruits that persist into winter, are especially valuable to wildlife. Shrubs like beautyberry, bayberry and hearts a-bustin' also remain attractive to wintering wildlife all season. Tree and shrub fruit that lingers into winter becomes sweeter during freeze and thaw and is available during the lean times of winter and early spring to provide resident wildlife species and returning migratory birds with food.

If space is a limitation in your yard, consider winter food plants first. They are the most important because natural foods are scarce during this season. If you can, place wildlife food sources next to cover to minimize the exposure of feeding wildlife to harsh weather conditions and predation. These two factors account for more than 90 percent of winter mortality.

Vines like poison ivy and greenbrier may be unfriendly to humans, but birds and small mammals love the berries – they are not allergic to the oils or bothered by the thorns! Virginia creeper, another native fruit bearing vine, is an important food source to over 35 species of birds.

Evergreens should occupy a significant portion of a wildlife habitat garden; dense evergreen tree and shrub plantings provide valuable escape and roosting areas and shelter in rain, heat and harsh winter weather. The sap, needles, twigs, buds and seeds of these plants, and the insects that make their homes in evergreens, are food for wildlife. In summer, cavities in evergreen trees are often used for nesting.

*Shrubs like red chokeberry (*Photinia pyrifolia*) bear fruit that lasts into winter and feed overwintering wildlife.*

Birds can play an important part in planting a natural habitat if you choose to let the plants grow! During digestion, deterioration of the outer coat of seeds or scarification, occurs. When birds pass the

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Try Frost Seeding to Renovate Your Horse Pasture

Willie Woode, Senior Conservation/Agricultural Water Quality Specialist

If you think you've missed the opportunity to renovate your pasture this fall, don't give up, there is another golden opportunity coming soon! You can try frost seeding in late winter and early spring.

Frost seeding involves broadcasting certain legume and cool-season grass seeds about the month of March. At this time of year, the soil surface is honey-combed with openings created by daily temperature fluctuations. During nightly freezing and daily thawing, seeds are pulled deep into the soil through these openings.

Though conventional seeding practices usually have higher rates of success, frost seeding is still worth considering, especially if your pasture is badly damaged or terribly over-grazed from the last growing season. Over-grazed or damaged pastures already have areas of bare soil which means better seed-soil contact for the broadcast seeds and a greater opportunity for success. Frost seeding is also less expensive than conventional practices and, if timed right and properly managed, can be an effective way to meet your pasture renovation goals.

Pastures with loam or clay soils and vegetated with bunch-type grasses such as orchard grass are good candidates for frost seeding. Pastures with sandy soils or sod-forming grass such as bluegrass are not as successfully renovated with this technique.

If you do decide to try frost seeding, here are a few tips to improve your success.

- Before frost seeding, prepare your pasture. Graze or mow the existing vegetation closely to reduce the existing layer of grass debris (thatch) and improve soil-seed contact.
- Select your seed carefully. Use improved (inoculated) clover and cool-season grass seed; the plants will be more vigorous, hardier and have longer life spans. Cool-season grasses vary in their ability to compete with frost-seeded legumes like clovers. Of the cool-season grasses, perennial ryegrass and orchard grass demonstrate the highest success rates using this technique.
- If you use a broadcast seeder, make sure to broadcast legume and grass seeds separately. Attempts to broadcast both seeds types together will result in poor seed dispersal due to differences in the sizes and densities of the seed. If possible, broadcast on shallow snow. The white background makes it easier to see the seed! A thick snow layer may displace seeds when it melts causing poor seed success.

A Fairfax Station horse pasture in need of renovation.

The same pasture 9 months after seeding. The renovated pasture is ready to support routine grazing.

♦ Carefully manage the renovated pasture during the first year. If you have obtained a soil test and didn't apply the recommended plant nutrients in the fall, apply those nutrients in late April or early May. Omit the nitrogen component because the newly introduced legumes will provide a significant amount of nitrogen. If you don't have information from a soil test and your pasture is not within a Chesapeake Bay Resource Protection Area (RPA), you can apply 40 lbs/acre of actual phosphorus (the equivalent of 90 lbs/acre of 0-46-0) to boost growth of the new vegetation.

Additionally, reduce competition for sunlight between your new seedlings and older plants; selectively mow the older plants or use controlled grazing. A closely managed rotational grazing system will contribute to the overall success of your renovated pasture.

With proper attention to site preparation, seed selection, seed application and maintenance, frost seeding can be a simple and successful technique for renovating your horse pasture!♦

Healthy Horses, Healthy Chesapeake Bay Seminar

DATE: Thursday, January 28, 2010
TIME: 9:00 a.m.—3:30 p.m.
LOCATION: MARE Center, 5527 Sullivans Mill Road, Middleburg, VA 20117
FEES: $15, registration required by January 21

Horse owners and interested citizens are invited to participate in a 1-day seminar focused on helping horse keepers protect the quality of our local streams and the Chesapeake Bay. Inspirational speakers and fellow horse owners will provide tips on how to limit mud and manure runoff from your farm and manage your horse's hay consumption. The Prince William Soil & Water Conservation District (SWCD) also will describe the grant-funded "Chesapeake Bay-Friendly Horse Farm Project," which includes conversion of the Kennedy Farm in Gainesville to a Bay-friendly operation.

A registration form is available on the Prince William SWCD horse owner's web page (http://www.pwswcd.org/Horse%20Owners/Horse%20Owners.htm). For more information, contact Nicole Ethier, Prince William SWCD, nicoleethier@pwswcd.org or call **703-594-3621, TTY 711**.

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seeds, they grow where they land to produce the next generation of fruit and nectar plants. American holly trees with evergreen leaves are particularly attractive to winter birds who may plant a varied garden beneath its branches.

A "snag" is a dead or dying tree. Snags are like gold in the wildlife world, used as nesting and perching sites, as food sources and to establish territory. Brush piles provide nesting and den sites, and are a place to hide for many species of wildlife including small mammals, bird, amphibians and reptiles.

And where are the butterflies and moths during the winter? Most have formed their cocoons high in native trees – the oaks, willows, hackberry and maples. When pruning these woody species in February, put the branches in a brush pile in a secluded corner so butterflies and moths can develop into their adult forms. Burning or hauling dead woody plant material is a loss to native wildlife. Don't burn brush piles! It's likely that praying mantis egg cases are overwintering there.

Our natural tendency is to "tidy" our gardens and settle everything for the winter, but nature prefers a little more "wildness" if we can stand it. When new growth begins and old plant debris begins to seem passé, that's the time to harvest the old stems, flower heads and seed pods and look ahead to a new growing season. ♦

Adapted from the original article in the Bulletin *(Fall 2008). Reprinted with permission of the Virginia Native Plant Society.*

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used building supply operation.

For several years, Hughes struggled to balance the needs of his sustainable salvage company with the strict criteria for donated materials and unpredictable pick-up schedules of existing area non-profits. Ultimately, Hughes decided he "could create a better opportunity to price, market and display used building materials" in Northern Virginia and founded ReBuild.

Currently, ninety-five percent of the materials from DeConstruction Services' demolition and salvage operations end up in the non-profit's warehouse along with donations from contractors, homeowners and out-of-business building and renovation supply companies. Material donations to ReBuild are tax-deductible, also allowing contracting companies and homeowners alike to benefit financially from their efforts to reuse and recycle.

Donated lumber and unopened rolls of insulation are just two of the discounted building supplies available.

Perhaps the most inspiring aspect of Hughes' green venture, however, is his green jobs training program. Currently, employees of both ReBuild and DeConstruction Services are being cross-trained in environmental jobs like asbestos abatement and invasive plant control. Eventually, the proceeds from ReBuild will be used to train and license 50-75 hard-to-place workers, such as parolees, recovering drug or alcohol addicts and temporary homeless, each year in "green collar" jobs including sustainable landscaping, green roof installation, home weatherization and solar and geothermal energy systems installation.

ReBuild employee Francisco Torres shows off salvaged kitchen cabinets.

A percentage of the trainees will end up on Hughes' staff to work on ongoing environmental service contracts. The remainder will leave with what Hughes refers to as a "transferable skill." Hughes knows job training will not be sufficient to fully address the problems facing hard to place workers. "Workers like these need government to create long-term employment opportunities, but our training will provide them with a leg up to make them more competitive in the job market."

If business at ReBuild continues to grow, Hughes forecasts that the green jobs program may be up and running as soon as 2010. In the meantime, Springfield's ReBuild is becoming a community resource. In addition to receiving and selling used building materials, ReBuild offers workshops on topics like green building, home weatherization and local architectural history and co-sponsors local community events. The non-profit also provides attentive customer service to its shoppers along with specific renovation services such as wood floor installation and refinishing.

Hughes is very pleased with the community response to ReBuild. "We keep seeing our business at the warehouse grow each month and know we are offering a service that Northern Virginia homeowners and contractors need." ♦

ReBuild
6636-B Iron Place
Springfield, VA 22151
703-658-8840, TTY 711
www.rebuildwarehouse.org

2010 Native Tree & Shrub Seedling Sale

Trees and shrubs add color, habitat and structure to your landscape from winter through summer. The species in this year's packages offer bright berries in winter, colorful spring and summer blooms and brilliant fall foliage!

NEW! Separate Tree and Shrub Packages! Order now!

6 Bare-root Trees for $10.95

2 Northern Red Oak (*Quercus rubra*). A hardy, long-lived and stately tree. Grows to 90 feet; late season red or yellow fall color. Prefers sunny and dry to moist sites. Like all oaks, this tree is highly valued by wildlife.

2 Black gum (*Nyssa sylvatica*). Outstanding scarlet fall color! Slow-growing to 50 feet with a tall, narrow shape. Flourishes in part shade or sun and dry to wet sites. Used by many species of wildlife.

2 Yellow poplar (*Liriodendron tulipifera).* A moisture-loving tree, with distinctive tulip-shaped leaves. Grows quickly, up to 150 feet with a narrow profile. Clear yellow fall color and striking yellow-green and orange flowers in May to June. Sunny sites.

To see images of this year's plants, visit www.fairfaxcounty.gov/nvswcd/seedlingsale.htm.

A full, nonrefundable payment must accompany your order by ***Monday, April 12, 2010,*** *or until supplies run out. You will receive a confirmation receipt and a map to the pickup site (in Fairfax County, off of Braddock Road, two miles outside the Beltway). Orders may be picked up on* ***Friday, April 16, 9:00 a.m.-4:00 p.m., or Saturday, April 17, 9:00 a.m.-noon.***

10 Bare-root Shrubs for $15.95

2 Arrowood viburnum (*Viburnum dentatum*). Five to 8 foot shrub grows vigorously in sun to partial shade. Flat clusters of creamy-white flowers in June. Bluish-black berries against glossy red foliage in fall. Birds love the fruits and seeds. Excellent as a hedge.

2 Gray dogwood (*Cornus racemosa*). A hardy deciduous shrub that will thrive anywhere you plant it! White berries on red stems attract songbirds to the late summer garden. Purple fall color. Grows 5-8 feet.

2 Red chokeberry (*Photinia pyrifolia).* Delicate white blossoms in spring, brilliant red fall foliage and rich scarlet berry clusters in winter make this deciduous shrub an all-season favorite. Will sucker and spread, grows to 10 feet. Prefers sun to part shade.

2 Eastern redbud (*Cercis canadensis*). Large, multi-stemmed shrub grows to 20 feet. Blue-green heart-shaped leaves. Clusters of pink, pea-like blooms appear in earliest spring. Sun to part shade.

2 Smooth sumac (*Rhus glabra*). Fast growing, multi-stemmed shrub grows 10-15 feet. Prefers sunny, dry locations; great for erosion control on slopes or as a screen. Scarlet foliage in fall. Red fruits persist into winter and feed resident songbirds.

2010 Seedling Order Form

Name: _____

Address: _____

City/State/Zip: _____

Daytime Phone: _____ Fax (if available): _____

E-mail: _____

Make your check payable to NVSWCD and mail to:
NVSWCD Seedling Sale
12055 Government Center Pkwy, Suite 905
Fairfax, VA 22035

Where did you hear/read about our seedling sale? _____

_____ **Tree Package(s) @ $10.95** (sales tax included) **each** _____ **Shrub Package(s) @ $15.95** (sales tax included) **each**

Total $ _____

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vestigate potential contaminants.

If you are concerned about the quality of your public tap water, consult with your local public water utility. In Fairfax County, our local supplier, Fairfax Water, publishes an annual water quality report. The 2009 report is currently available on the utility's web site (http://www.fcwa.org/water/ccr/FFXWaterReport2009web.pdf). For 2009, Fairfax Water's supply meets or exceeds all 120 U.S. EPA standards for drinking water. If safety is your primary concern, in Fairfax County at least, don't go for the bottle, turn on the tap! ♦

Why Bring Your Water With You?

♦ Up to 40% of bottled water in the U.S. and Canada is sourced from municipal tap water!

♦ Over 17 billion barrels of oil or enough to fuel 100,000 cars are used each year to produce plastic water bottles.

♦ Water bottle production creates over 2.5 million tons of carbon dioxide each year - the equivalent generated by 400,000 cars (Center for a New American Dream).

♦ Each gallon of bottled water takes two gallons of water to produce. By using a refillable container, you can save almost 200 gallons of water in a year!

♦ Plastic beverage containers end up in our waterways! In Virginia last fall, plastic beverage containers were among the top three items collected by stream cleanup volunteers. During the spring 2009 cleanup, volunteers collected over 180,000 beverage containers in the Potomac River watershed alone.

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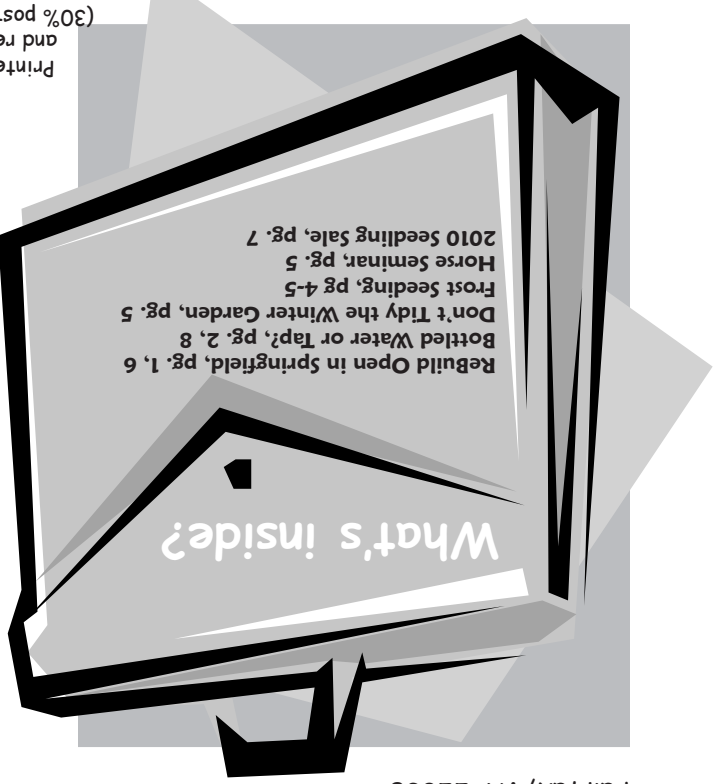

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