

PLYMOUTH ENVIRONMENTAL EXTRA

Get your garden ready for fall with Plant Swap finds

The Stewards for Greening Plymouth will host its fall plant swap Mon., Sept. 10, 4:30 - 6:30 p.m., at the Plymouth Maintenance Facility parking lot, 14900 23rd Ave. N. (note new location). Bring perennials that you'd like to share and pick up free plants being shared by others.

Participation requirements are simple. Place extra plants in pots, and label them with their common names. Seeds and plantwares (pots, tools and the like) are also acceptable swap items.

Questions? Call Forester Paul Buck at 763-509-5944.



Plymouth's Plant Swap offers a fun, free opportunity to diversify your landscape with plant swap finds.



Choose to Reuse

Hennepin County will partner with reuse retailers again this year to offer Choose to Reuse Today coupons. The coupons can be redeemed for discounts at a wide variety of businesses from Oct. 1 through Nov. 30.

Reuse retailers include businesses and organizations that rent, repair, resell, consign, trade and exchange used goods.

The free coupon book will be available for pickup beginning in late September at participating retail locations, Hennepin County Service Centers, Hennepin County libraries, Plymouth City Hall, Plymouth Creek Center and all Three Rivers Park District locations. Copies can also be downloaded at hennepin.us/choosetoreuse.

You can also find additional information on Facebook at [Facebook.com/HennepinEnvironment](https://www.facebook.com/HennepinEnvironment).

Passion, ingenuity and savings distinguish Environmental Champions

One by one, citizens, churches and businesses are taking action to protect the environment. This year nine of them were recognized as Plymouth's 2012 Environmental Champions.

From Passion to Action

Kathleen Hartman didn't know what would hit her when she signed up for an environmental ethics class several years ago. The experience awakened a passion for the environment that has engaged all parts of her life ever since. Through volunteer work, zero-waste parties and neighbor-to-neighbor coaching (see article on page 4E), Hartman never stops looking for ways to share her environmental message.

One of the first to complete Hennepin County's Master Composter/Recycler course, Hartman wasted no time in lining up ways to support recycling in Plymouth. She's tossed bean bags, along with recycling information to hundreds of middle school students to help them learn how to "empty" the landfill. She put her experience as a model to work for a public service announcement and posed for photos announcing Plymouth's new recycling program.

From Environmental Quality Fairs to classroom presentations and the Plymouth Yard & Garden Expo,



When Kathleen Hartman throws a zero-waste party her guests learn how to reduce waste while they enjoy themselves.

Hartman is always eager to share her passion for the environment with her community.

Childhood Lessons Lead to Valued Service

The flowers, patios and even garage floor look better than ever at Summerwood apartments since Ken Urke took up residence there. Urke's son and grandchildren begged him to move back to Minnesota after several years in California. Two years ago he moved to Plymouth to be close to them.

The son of a farmer, who raised his own children on the same farm, Urke grew up living out the principles of working hard and helping others. He follows those principles every day in his new home.

It's rare to find Urke in his apartment. Throughout the day he cleans up the recycling area, sweeps the garage floor, patrols for litter and lends a hand wherever he is needed. "Ken makes himself available to all residents in whatever jobs need to be done," said fellow resident Burt Gesink.

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From the basement garage to the patio flowers, Ken Urke is always on the move to help his neighbors and the environment.

Take steps to stop the buckthorn invader

There's an invader in our parks, woodlands and back yards – and it is going to take a community effort to defeat it.

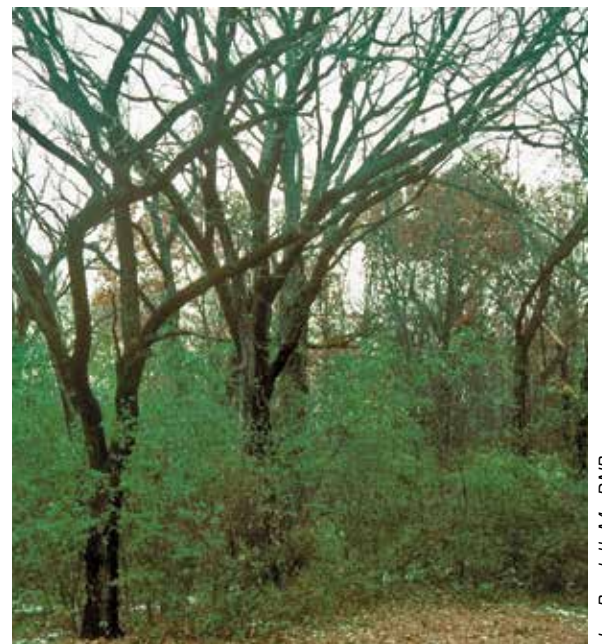
Buckthorn, both European and glossy, is a non-native invasive shrub. The Minnesota Department of Agriculture has declared both types as restricted noxious weeds. This means that the sale, transport, or movement of these plants is prohibited statewide.

Buckthorn is a nuisance plant, forming dense thickets in forests, yards, parks and roadsides. It crowds out native plants and displaces the native shrubs and small trees where many species of birds nest. Today, common buckthorn is found throughout Minnesota.

Understand the Threat

Buckthorn leafs out early and retains its leaves late into the fall, creating dense shade that helps it to out-compete many native plants. It's easy to spot buckthorn in late fall when native shrubs and trees have lost their leaves. Buckthorn will often have green leaves into the month of December. It is hard to miss.

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Jay Rendall, Mn DNR

Buckthorn leafs out early and stays green late into the fall, creating dense shade to help it out-compete many native plants.

Environmental Champions...from page 1



Christine Lantinen got creative when her candy company was challenged to come up with environmentally-friendly Easter eggs.

Holiday Waste Challenge

Trash cans and recycling bins usually bulge after major holidays. Wrappings, decorations and other holiday merchandise get tossed when the festivities are over. Plymouth resident Christine Lantinen, who bought the venerable Maude Borup candy company two years ago, accepted a challenge to change some of that.

One of Lantinen's buyers urged her to find a way to produce locally-sourced, biodegradable and reusable plastic Easter eggs. Lantinen accepted the challenge, and that was the genesis of Eco Eggs. They combine all of the above in bright, spring colors, ready to be filled (and re-filled) with candy for annual Easter egg hunts.

Lantinen will add candy-colored, shredded recycled paper "grass" to next spring's offerings. She sees a myriad of opportunities to introduce local, low-waste items for holiday celebrations. Her resourcefulness just may help trim back some of that post-holiday trash.



Researchers at BioAmber's facility in Plymouth are looking for ways to use renewable agricultural feedstock to produce their chemical products.

Petro-free Chemicals

Plymouth is home to a research and development lab for BioAmber, a next-generation chemical company with locations in Europe and North America. Through its innovative processes, the company converts renewable agricultural feedstock into chemicals that are cost-competitive replacements for petroleum-derived chemicals.

One of the company's primary products is succinic acid. It is a widely used chemical found in products ranging from cosmetics to paints to the cushy soles on shoes. The company's process uses 56 percent less energy and produces 99 percent less greenhouse gas than its petrochemical counterparts.

Researchers at the Plymouth facility are exploring new ways to use alternative agricultural feedstock in their process. The company's work to build an economically sustainable model for environmentally preferable products has earned it a number of environmental awards, including the 2011 US Environmental Protection Agency Presidential Green Chemistry Challenge Award.



Members of Honeywell's Facility Services staff are directly involved in implementing the company's environmental projects.

Environmental Steps Save Money

Honeywell Aerospace Plymouth continues to build on its practice of environmental stewardship. Each year the company sets quantifiable goals and measures to track progress. One star in this year's constellation of achievements is the company's compressed air efficiency capital project.

In a collaborative effort with Xcel Energy, Honeywell purchased a variable speed drive air compressor. The new compressor speeds up or slows down, depending on demand, to provide clean, dry air for the company's semiconductor manufacturing process. It replaces a number of older compressors that always ran at full speed.

The change has yielded annual energy savings of nearly 700,000 kilowatt hours, cost savings of more than \$48,000 and a reduction of 348 tons in carbon dioxide.



Pre-school classes learn about reducing waste and composting at the Children's Learning Center at Mount Olivet Lutheran Church.

Stewardship Inside and Out

The congregation and staff of Mount Olivet Lutheran Church show their commitment to protecting the environment in many ways. From recycling nearly 8,000 gallons of material to reducing energy use by 4,000 watts each year, the church has taken steps to reduce its environmental footprint.

Their stewardship goes beyond the walls of the building. Students and teachers from the church's Children's Learning Center compost organics to enhance their community gardens. A rain garden is maintained to filter and infiltrate runoff from the parking lot.



A well-maintained rain garden at Vision of Glory Lutheran Church captures and cleans storm water runoff.

A Stunning Example

Several years ago Vision of Glory Lutheran Church installed a rain garden with grant funding from the Metropolitan Council. Throughout that time the rain garden has flourished. The congregation demonstrates its care for the environment by maintaining this beautiful landscape feature to reduce and clean storm water and to educate the community on the beauty and value of rain gardens.



Dave Turbenson is on a mission to wipe out buckthorn – and he's not too shy to ask for help.

Busting Buckthorn

The invasive buckthorn shrub has gained many human enemies, but few are more determined than Plymouth resident Dave Turbenson. When the plant started taking over the woods near his home, Turbenson got busy.

As a boy, Turbenson enjoyed the woods where he grew up in Golden Valley. When he moved to Plymouth nine years ago, it was the neighborhood woods near Oakwood Elementary School that drew him to his current home. But the buckthorn started taking over, turning the woods into a bramble of thorny underbrush that choked out both plants and play.

Last year Turbenson got busy and organized three "buckthorn busts" in the woods. He recruited 56 volunteers to cut, treat and remove piles of buckthorn. He isn't finished yet. He plans future "busts" and his comprehensive website, removebadplants.com, has a wealth of information on how to remove buckthorn and other invasive plants.



General Manager Donna Becker and Lead Engineer Bob Eggers lead the Cushman & Wakefield/NorthMarq team that earns high environmental ratings and praise from their tenants.

Please All, Please Everyone

The old saying, "Please all, please none" doesn't apply to Cushman & Wakefield/NorthMarq. As managers of the ATRIA Corporate Center, the company has set high standards of environmental stewardship for the building and its tenants.

Setting the bar high in managing the 400,000 square foot building has helped the company achieve both the Energy Star and Leadership in Energy and Environmental Design ratings. It has also helped keep operating costs down, and that pleases tenants and owners alike.

Tenants like Mosaic Company, General Mills and Travel Leaders Group give kudos to the building managers for their environmental efforts. "We and our employees are proud to be headquartered in a building whose management has developed award-winning, sustainable strategies," said Chris Torgerson of Travel Leaders Group.

Help put lakes on a low-salt diet

It's Minnesota. Before we know it, the bright fall leaves will make way for winter's ice and snow. How we deal with these events can have a significant impact on the health of our water resources.

Just as excessive salt can play havoc with the human body, too much salt can also harm the environment. Salt from winter ice removal travels into our lakes, streams and wetlands with melting snow. Deicing chlorides harm plants and animals; contaminate drinking water; damage buildings; and corrode vehicles, roads and bridges.

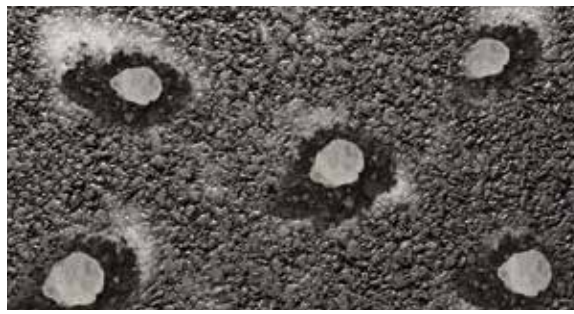
Here are the steps to take to keep your family safe from slips and falls while protecting our environment.

Before the Storm

Make shoveling more effective by applying a liquid deicer before snow storms to prevent snow and ice build-up.

Shovel That Snow

Shovel, blow, plow or sweep to remove snow as soon as possible after a storm to minimize ice build-up.



Apply salt sparingly, scattering crystals two to three inches apart.

Less Is Better

Apply salt sparingly. Crystals should be scattered two to three inches apart. Sweep up any leftover salt and save it for the next snow or dispose of it in the trash.

Temperature Matters

Salt begins to lose its effectiveness at low temperatures. Read the product label to be sure you aren't throwing money down the drain, along with excess salt.

Keep a healthy lawn for healthy lakes

Healthy lawns can play a role in the health of lakes. That is the take-away message from research conducted at the University of Minnesota Department of Horticultural Science. This conclusion was based on a five-year study that measured the amount of phosphorus carried by storm water runoff from the university's test plots that were maintained with varying levels of fertilization.

Phosphorus in storm water runoff is a key contributor to excess nutrients in Minnesota's lakes, streams and wetlands. Excess nutrients feed algae, starting a cycle that degrades water bodies and reduces their ecological, recreational and aesthetic value.

Although most lawn fertilizers today do not contain phosphorus, the nutrient is also present in soil and plant matter. Runoff carries these substances to water resources through the storm sewer system. Both the volume of runoff and the amount of phosphorus it carries have consequences for water quality.

That's where a healthy lawn comes in, according to Dr. Brian Horgan, associate professor at the university's Department of Horticultural Science. Storm water finds its way more slowly through a lawn with a dense growth of grass than one with sparse grass and patches of bare soil. A well maintained lawn is one more tool in the collection of clean water practices.

Steps to a Lake-Friendly Lawn

Fertilize right. No matter what some may claim, there is no one-size-fits-all fertilizer program for lawns. Turf that withstands children's games, pets and lots of foot traffic has a very different nutritional need than turf maintained primarily for aesthetics.

You don't have to guess about your lawn's fertilization needs. Send in a soil sample to receive helpful recommendations from the University of Minnesota



Games, pets and foot traffic all affect the maintenance needs of grass for a healthy lawn.

Soil Testing Laboratory. Find a link to its website at plymouthmn.gov/greenup.

Finish up with fertilizing by the middle of September. After that, the effectiveness drops quickly. According to Horgan, studies show that late fall fertilizing – sometimes known as “winterizing” – is pretty much a waste of money and not environmentally responsible.

Choose the right plant for the right place. Take sunlight, soil conditions and wear all into consideration when selecting grass for a lawn. For example, no matter what you do, Kentucky bluegrass won't work in a shady location. Go to plymouthmn.gov/greenup for a link to University of Minnesota turf recommendations.

Let your lawn breathe. Fall is a good time to aerate your lawn. This practice removes small plugs of soil to help the lawn hold water and absorb nutrients.

Girl Scouts celebrate centennial with Cleanup for Lakes

Thin Mints®, Tagalongs® and Caramel deLites® will make way for rakes, leaf bags and storm drain markers when area Girl Scouts celebrate their Centennial Day of Service on Oct. 13. That's the day when thousands of girls will take to their parks, neighborhoods and streets throughout 49 counties in Minnesota and Wisconsin to clean up leaves, grass and other organic debris.

The goal of the day of service goes far beyond picking up leaves. In fact, the goal is to protect the health of lakes, streams and wetlands that could be miles from the cleanup sites. Working together and with their families, the plan calls for the Girl Scouts to clean up enough organic debris to prevent 20,000 pounds of phosphorus from entering those waterways.

Phosphorus is the nutrient that feeds algae in our lakes and ponds. If the scouts reach their goal, their efforts will prevent the growth of ten million pounds of algae. From Daisies in kindergarten to Brownies to Girl Scouts in high school, the scouts will take action to meet this goal.

Hundreds of girls will clean up Plymouth's Hilde Performance Center on Oct. 13. Meanwhile, others will go into neighborhoods to share their clean water message with the community in a more direct way. They will put markers on storm drains to remind everyone that whatever goes down the drain ends up in our lakes, wetlands and streams. They will leave door hangers in neighborhoods to encourage residents to rake up and clean up for clean water.

Measuring the Impact

From the early planning stages the Girl Scouts have collaborated with the Freshwater Society to coordinate a project of the magnitude of the Centennial Day of Service. They got help adapting the Freshwater Society's Community Cleanup campaign into one that would work for the one-day event.

With the help of a website database, the Girl Scouts will be able to measure the impact of their work. The Freshwater Society worked with the University of Minnesota to develop the website. Its formula translates the number of bags of grass clippings, leaves and trash collected into pounds of phosphorus, nitrogen and other elements that can spell trouble for lakes.

Make an Impact

Everyone is encouraged to join the Girl Scout effort to protect our lakes. And everyone is invited to report their efforts on the Freshwater Society's database. So, join the Girl Scouts on Oct. 13 by cleaning up leaves, litter and other debris. Count the number of bags you fill, then go to freshwater.org/report to ensure your efforts are counted.



Girl Scouts will celebrate 100 years of scouting with a region-wide cleanup for clean water effort.



Take the Great Hennepin County Recycle Half Challenge

Could you recycle half of all your waste? Hennepin County residents, businesses and organizations create enough waste each year to fill Target Field 11 times, but only 38 percent of that waste is recycled. The county is asking everyone to pitch in to help reach its goal of recycling half of all the waste produced in Hennepin County by 2015.

Changes throughout the county, like Plymouth's new recycling program, make recycling easier than ever. You can now recycle more of what you buy – including plastic cups and containers (like cottage cheese containers, yogurt cups and party cups), milk and broth cartons, and juice boxes.

Ready to take the challenge? Visit recyclehalf.com to sign up for the Great Hennepin County Recycle Half Challenge. You can also watch a “recycling intervention,” test your recycling knowledge, challenge your friends and learn how to reduce, reuse and recycle more at home, work and play.

Fall hours set for Plymouth Yard Waste Site

The city-operated yard waste site is located next to the Maintenance Facility, 14900 - 23rd Ave. N.



Hours

September – November:
Wednesday – Friday, 3 to 6 p.m.;
and weekends, 9 a.m. to 5 p.m.

Closed Mondays, Tuesdays and holidays, including Labor Day, Veterans Day and Thanksgiving (both Thursday and Friday).

Please observe the following guidelines when dropping materials at the site.

- Plymouth residents only. Bring identification. No commercial haulers or landscapers.
- Materials must be separated, debagged and unloaded at the yard waste site by the resident.

Materials Accepted

- Fall lawn rakings and thatch
- Leaves
- Soft, vegetative garden waste
- Bushes and tree waste (brush, logs and clean stumps)

Unacceptable Materials

- Grass clippings, lumber, sod, soil, and other items not listed above are not accepted

Compost, Mulch & Woodchips

Free compost, mulch and woodchips are often available during regular site hours. Visit the yard waste page under Facilities on the city website, or call 763-509-5950 to check on availability.



Need more space to store all your recyclables? Call Allied Services at 952-941-5174 for free delivery of an additional or larger cart.

Feed the animals – not the landfill



Turn your autumn decorations into food for animals at Plymouth's Pumpkin Drop. The city will accept discarded pumpkins, gourds and apples from Nov. 1 through 12. Look for the container on the west side of the Public Works Maintenance Facility, 14900 23rd Ave. N.

Please remove candles from inside pumpkins to protect animals from ingestion.

Explore mysteries from the underground

Get the real dirt on the surprising world beneath your feet during the "Dirt-O-Rama: Intriguing Tales from the Underground" exhibition at the Minnesota Landscape Arboretum through Oct. 14.

Out of sight, and often out of mind, a fertile soil is filled with life. "Scientists report we literally stand on the rooftop of another world, and there's more life below ground than above," said Sandy Tanck, exhibit curator. "Soil is more than bits of rock and decay. It also teems with life, from microbes to insects and larger animals. Knowing how it all works is the secret to successful gardening."

Yet soil is a gift we take for granted. Rising human population and its increasing needs place growing demands on the land to produce food and feedstock, fiber, bioenergy and other crops.

"This exhibit will focus on ways we can all be wise stewards of our soil, to preserve its fertility now and for the future," said Dr. Ed Schneider, Arboretum director. "This is an important and timely topic. Visitors will discover sustainable steps they can take at home. Between the whimsical art and the Clayhouse Project, youngsters will have a great time too."

Discover the world beneath our feet at Dirt-O-Rama, presented by the University of Minnesota Landscape Arboretum.

Weekend Family Fun

Get the whole family involved with Weekend Family Fun activities from noon to 4 p.m. each Saturday and Sunday through the exhibit.

Visiting the Minnesota Landscape Arboretum

The Minnesota Landscape Arboretum is located nine miles west of I-494 on Highway 5 in Chanhassen. Admission is \$12 for adults and ages 13 and older, and free for ages 12 and younger. Admission is free after 4:30 p.m. on the third Thursday of the month through October.



Neighbor's advocacy leads to action



When Kate Karezeris runs next door, sometimes it's to play with her friend Quintin Hartman. At other times she hurries over with an offering of watermelon rinds for the red worms that turn food waste into compost in the Hartman garage.

Kathleen Hartman (see Environmental Champions, page 1E) got excited about using red worms to compost her family's fruit and vegetable scraps two years ago when she went through Hennepin County's Master Composter/Recycler training. Now her passion for reducing waste is rubbing off on her neighbors.

Kate's mom, Ann Karezeris, is not ready to make room for red worms in her garage, but Hartman's advocacy has had a huge impact on many

of her daily choices. She started with what she considers "baby steps," like recycling batteries and increasing her household recycling. Now Karezeris is moving on to aim for "zero waste." When she forgets her reusable bag in the car on a shopping trip, she strolls back out to get it rather than taking a plastic one from the store.

Karezeris has picked up tips for no-waste entertaining at several events hosted by Hartman. She has discovered that she enjoys playing the role model to help other guests sort their discards into the right place.

"Awareness leads to action," Karezeris insists. And she credits Hartman with raising her waste reduction awareness to a whole new level.

Buckthorn...from page 1

When buckthorn is left unchecked, it forms an impenetrable, messy thicket that:

- Out-competes native plants for nutrients, light and moisture
- Degrades wildlife habitat
- Threatens the future of forests, wetlands, prairies and other natural habitats
- Creates messy fruits that stain sidewalks and driveways

Controlling Buckthorn

Seedlings or Small Plants. Remove small plants by hand. Small seedlings can be pulled and will not re-sprout. For larger plants, use a hand tool that pulls the shrub out, such as a Weed Wrench or Root Talon. To borrow tools from the city, call 763-509-5950 Please note that these tools can cause soil disturbance, so extra care is needed on sensitive sites or steep slopes.

Before you pull or dig buckthorn, contact Gopher State One Call at (651) 454-0002 or (800) 252-1166 to make sure there are no buried utilities in the area.

Large Plants. Buckthorn plants that are two inches in diameter or larger, are best controlled by cutting the stem at the soil surface and then covering or treating the stump to prevent re-sprouting.



Choose a pruner or lopper sized to cut the trunk of the buckthorn plant near the ground. A saw may be required for larger plants.



Apply an herbicide to the buckthorn stump within two hours of cutting to prevent re-sprouting. A dye mixed into the herbicide will help you make sure that the entire surface is treated.

Go to plymouthmn.gov/greenup for links to detailed information on controlling buckthorn and suggestions for replacement plants. Dave Turbenson (see Environmental Champions on page 2E) has also put together a very informative website, removebadplants.com.



Your source for environmental information and resources:
plymouthmn.gov/greenup

