



EVERY DAY IS EARTH DAY

SINCE 1970, AMERICANS HAVE CELEBRATED APRIL 22 AS EARTH DAY to recognize the importance of a clean and healthy environment. Senator Gaylord Nelson of Wisconsin suggested the first Earth Day as a national protest against pollution and other unchecked environmental problems that were impacting human health and natural ecosystems. The federal government passed several significant laws - including the Clean Air Act, a stronger Clean Water Act and the Endangered Species Act soon after. Today, people worldwide participate in Earth Day activities to help the environment.

In Minnetonka, the city prefers to think of every day as Earth Day. Staff work daily to preserve and protect the city's shared natural resources. Ongoing programs include:

Habitat restoration

- ☑ Active restoration of more than 300 acres of parkland
- Invasive species control, including 20 years of buckthorn removal
- ☑ Plant vegetation to catch stormwater and reduce shoreline erosion

Forestry

- ☑ Add approximately 100 young trees per year in parks
- Inject valuable ash trees to protect from emerald ash borer
- Reduced the rate of Dutch elm disease citywide since 2004

Water resource protection

- ☑ Maintain state permit for water conservation and water quality protection
- ☑ Maintain rain gardens to collect polluted runoff on city property
- ☑ Reduce excess use of road salt to protect water quality

Development and compliance

- ☑ Review development plans to ensure natural resource compliance
- ☑ Annually inspect more than 200 permitted sites for tree protection and erosion control
- ☑ Work with developers to incorporate habitat stewardship and funding

Education, outreach and volunteering

- Inform and engage residents through articles, events and workshops
- ☑ Offer diverse volunteer opportunities
- ☑ Educate thousands of elementary students on water resource protection

The U.S. Environmental Protection Agency defines stewardship as, "the responsibility for environmental quality shared by all those whose actions affect the environment." By that definition, individuals, communities, businesses and governments alike can all be stewards.

Check out the following pages for fun activities and information about Minnetonka's natural environment.

WATER RESOURCES

More than 70 percent of Earth is covered by water, but only a tiny fraction of that water is fresh and accessible at (or near) the surface. Minnetonka is fortunate to have more than 600 wetlands, 13 lakes and three creeks. These surface waters receive runoff from the surrounding landscape, and water flows downstream out of the community. Because water knows no boundaries, it's especially important to use this resource wisely and avoid actions that cause pollution.



Surface Water QUIZ

How much do you know about Minnetonka's unique surface waters? (Answers on page 4)

1. Lakes are often the largest and most obvious bodies of water in the landscape. Minnetonka has 13 lakes. How many can you name?
2. Wetlands can store floodwaters from adjacent streams. They also filter pollutants and sediments from the water. Do you know the location of Minnetonka's largest wetland?
3. A *headwaters* is the source of a creek or river. Grays Bay Dam is the headwaters of Minnehaha Creek. What's at the end of this creek?
4. Two other headwaters are located in Minnetonka. Can you name those creeks?
5. What is the leading cause of water pollution in the Twin Cities and other urban areas?

FORESTRY

All trees in Minnetonka, on both private and public land, form a community forest that provides many benefits to people and the local environment — from privacy and aesthetics to wildlife habitat. Trees are also the city's green infrastructure, offering wind control, improved air quality, stormwater collection and energy savings. But the benefits of trees and forests extend far beyond where they grow. Trees and other plants act as living factories that collect carbon dioxide from the air and release oxygen. That's why forests are sometimes called the planet's living lungs.

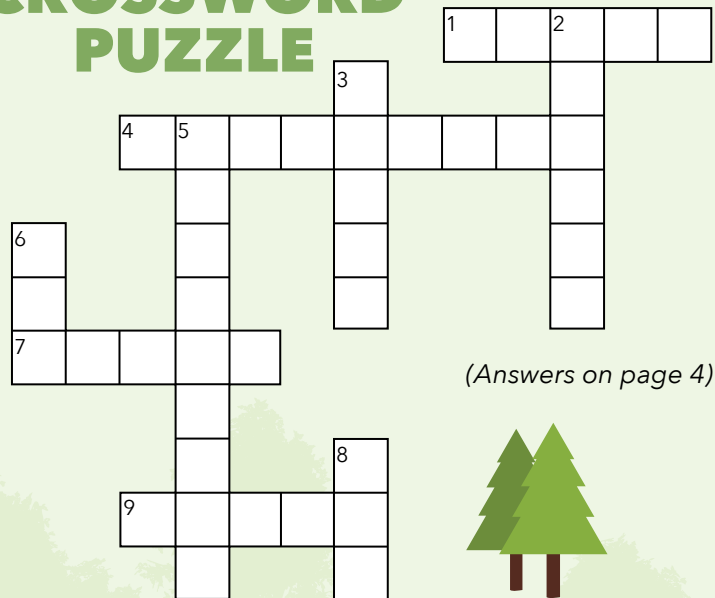
Across

1. The leafy part of a tree
4. The variety of things (as in, "A yard with six tree species has greater _____ than one with three species.")
7. Organic material placed on the soil to add nutrients, hold in water, or improve insulation
9. Underground parts that anchor a plant, absorb nutrients and water, and hold soil in place to prevent erosion

Down

2. A gas released by plants that is essential to many other living things
3. To cut off branches or twigs
5. A recommended method of treating or preventing some tree diseases and pests
6. This common tree species was historically planted along streets.
8. Emerald ___ borer (EAB) is an insect that infests and eventually kills ash trees

Forestry CROSSWORD PUZZLE



(Answers on page 4)



HABITAT RESTORATION



A habitat is the natural home of a living thing. Around the world, many different kinds of habitats exist — some huge in scale like the rainforest, others as small as the square footage around a fallen tree. Minnetonka is a patchwork of habitats, with woodlands, surface waters and landscaped areas growing alongside buildings and paved areas. These edges act as a transitional habitat. Edges can offer different food sources, shelter and pathways for wildlife.

Use this checklist to help identify the existing or potential habitat edges around your property.

Habitat type	Natural benefits						Occurs on my property	Occurs in my neighborhood	Could be added to my property	Could be improved on my property
	Breeding or nesting habitat	Shelter	Food for wildlife	Food for pollinators	Perches for raptors	Sources of water				
Woodland Edge	✓	✓	✓	✓	✓					
Wetland	✓	✓	✓	✓		✓				
Shrub Rows or Groupings	✓	✓	✓							
Snag (Standing Dead) or Fallen Tree	✓	✓	✓		✓					
Vegetable or Flower Garden	✓		✓	✓						

WASTE MANAGEMENT

In nature, waste is consumed by scavengers and broken down by decomposers. The elements of life — carbon, nitrogen, phosphorus and others — are broken down and returned to the environment for reuse.

Previous generations could live within this balance due to smaller population. Today — large human population requires a different approach to waste management. In the United States, each person produces approximately 4.4 pounds of trash per day. Thanks to improved recycling and composting programs, about one-third of that material is recycled or composted.

How can that ratio improve? A logical step is to produce less waste: buy only what is needed and choose items with less packaging.

WASTE SORTING Activity

Do you know how to properly dispose of common waste items? Draw a line between each item and the bin where it should be deposited. (Answers on page 4)



MAKE EVERY DAY EARTH DAY

Sign up for organic waste pick-up

Contact Minnetonka's designated hauler (Randy Environmental Services at 763-972-3335) for information or to begin service.

Capture runoff

Minnetonka residents can order rain barrels online through the Recycling Association of Minnesota (recycleminnesota.org). The pick-up event takes place in St. Louis Park in early May.

Know your watershed

Watershed districts offer cost-share grants, events and learning opportunities. To access a map and web links visit eminnetonka.com/watersheds.

Learn your landscape

Use these resources to identify common regional native plants and trees:

- Minnesota Native Plant Society
mnnp.org
- Minnesota Wildflowers
minnesotawildflowers.info
- Minnesota Native Trees
dnr.state.mn.us (search native trees)
- Trees and Shrubs of Minnesota* by Welby Smith, University of Minnesota Press

Become a volunteer or citizen scientist

Wetland Health Evaluation Program (WHEP)

Each year, a team of adult volunteers in Minnetonka is trained to identify wetland species and assess wetland health. Contact Aaron Schwartz at aschwartz@eminnetonka.com or search WHEP on the Hennepin County website at hennepin.us for more information.

Minnetonka Natural Resources

The city's Natural Resources volunteers work on invasive species control and native plant protection. Contact Janet Van Sloun at 952-988-8423 to learn more.

Learn to identify and control invasive species

Attend the following workshop to become familiar with one of the most common invasive species in the area.

Garlic mustard workshop

Wednesday, April 18, 6:30 - 8 p.m.

Minnetonka Community Center, Community Room (14600 Minnetonka Blvd.)

Learn the best methods and timing to control this very invasive species before growth explodes. Stages of growth, life cycle and several control methods will be covered. RSVP is required. Call 952-988-8400 or register online at eminnetonka.com/NRevents.

Answers to Surface Water Quiz

- Crane, Gleason, Glen, Holiday, Libbs, Lone, Minnetoga, Minnetonka, Rose, Shady Oak, Shavers, Windsor and Wing
- The city's largest wetland surrounds Minnehaha Creek where it flows east from Grays Bay Dam to Interstate 494. This wetland is up to one mile wide and more than 1.5 miles long, covering at least 350 acres.
- Mississippi River
- Purgatory Creek and the south branch of Nine Mile Creek
- Stormwater runoff that carries pollutants from land into local surface waters

Answers to Forestry Crossword Puzzle

ACROSS

- crown
- diversity
- mulch
- roots

DOWN

- oxygen
- prune
- injection
- elm
- ash

Answers to Waste Sorting Activity

Organic waste: bread, egg carton, bones

Recycling: metal can, cereal box

Household hazardous waste: fluorescent bulb, latex paint

Waste (landfill/incinerator): gift wrap, juice box

