

## St John's Earth Matters for Individuals and Families

It is sometimes difficult to see how St John's can make a difference for the natural world. While we can promote alternate energy sources or modes of travel, or object to pipelines, is there something more obtainable that an individual can do that will have an impact? Your own health and mental well-being may be at stake.

The natural world is complicated and interconnected in many ways that we are just beginning to understand. The effects of climate change can be subtle but they are there. The effects of climate change are like puzzle pieces that must be put together to see the full picture. It can be hard to see the impact that we can have in our everyday lives and the world around us. This collection of materials will provide some suggestions for how you can have a positive impact on the natural world.

### Clean water

Last summer, there were reports of algae blooms on many of our lakes. These algae blooms can make the water toxic to animals and people in very short periods of time. Dogs can die within hours of drinking water with blue green algae. The algae blooms are common on our city lakes but they are found in many of far northern lakes too. Part of the cause is the gradual warming of the lakes and the later season freeze cycles which make beneficial conditions for algae growth. Another major cause is the excess nutrient load due to runoff of fertilizers from our lawns and gardens.

Even though you may not live on lakeside property, you can impact the nutrient load going into Minnehaha creek or Lake Harriet. Any fertilizer or pesticide you put on your lawn or garden can end up down the street into the storm sewers and into the water. To prevent this there are a few steps we can all take.

- Minimize the use of any chemicals – natural or synthetic. Are they really needed or are you using them just because it “time for them”? Get a soil test done before adding any fertilizer. There is often enough residual material in the ground so you may not need anything.
- If pesky insects or weeds are a problem, learn a bit about the pest and find out alternative ways to handle them before pulling out the spray bottle of Kill-it-quick. Is it really a pest? Some things may be beneficial. Is it something that can be handled manually or with a modification to the habitat?
- Consider installing a rain garden. This will capture the rain that runs off your roof and direct it into the soil where it can percolate down into the ground water. This prevents the water from running across your driveway, across your lawn and carrying any contaminants into the storm sewers.
- Consider changing all or part of your lawn into a bee lawn. This will not only help our native bee population to survive but it can also establish some deeper root systems to help minimize erosion and soil compaction.
- Resources include:
  - Turf Grass:
    - [Turfgrass Manual \(state.mn.us\)](http://state.mn.us)
  - Bee Lawns:

- [Growing landscapes to help bees and other pollinators | UMN Extension](#)
- [floweringlawninfoenrtflogo.pdf \(umn.edu\)](#)
- Lawns to Legumes: <https://bwsr.state.mn.us/l2/>
- Rain Gardens:
  - [How and why to build a rain garden | UMN Extension](#)
- Soil Testing:
  - [Soil Testing Laboratory | Department of Soil, Water, and Climate \(umn.edu\)](#)
- Integrated Pest management
  - [Integrated Pest Management \(IPM\) Principles | Pest Control and Pesticide Safety for Consumers | US EPA](#)

### **Pollinators and other wildlife**

Many of our pollinators, birds, and other species are struggling to survive and many species have disappeared altogether. We need them. Pollinators help us to grow our food as well as providing food for wildlife. While pesticide use is one factor in their decline, the biggest factor is loss of habitat. Habitat can take many forms and can be as small as a simple garden. Planting native species can provide both food and shelter for many creatures. Why native plants? Native plants are good sources of nectar, pollen and seeds for our local wildlife. They are adapted to our area and can be easy to maintain once established. The longer root systems of many native plants help to prevent erosion and soil compaction. While we can integrate them with other plants, they provide the best nutrient load for wildlife and ultimately serve as long term components of the gardens.

-Plant a pollinator garden with native species. Many designs and plant lists are available. The pollinator garden can be included with the raingarden or it can be in its own area in your yard. Even a small container garden will help. Resources include:

Pollinator gardens:

[Butterfly, bee & moth garden designs | Minnesota DNR \(state.mn.us\)](#)

[Native Plants for Landscaping and Restoration in Minnesota \(state.mn.us\)](#)

[Growing landscapes to help bees and other pollinators | UMN Extension](#)

[Plants for Minnesota Bees | Bee Lab \(umn.edu\)](#)

[Wild bee nests | Bee Lab \(umn.edu\)](#)

**BEFORE YOU START:**

Many pollinators emerge from nests in the first few warm weeks of spring. They nest underground and in leaf debris from last fall. So... don't rush out to clean up the gardens until later in April. Use the time to collect soil samples and send them in for testing.

**Other resources of interest:**

**Physical and mental well-being:**

[The Scientific Benefit of Trees: A literature review \(chicagorti.org\)](http://chicagorti.org)

[The Benefits of Trees at arborday.org](http://arborday.org)

[How Does Nature Impact Our Wellbeing? | Taking Charge of Your Health & Wellbeing \(umn.edu\)](http://umn.edu)

**The Interconnected world:**

[How trees talk to each other | Suzanne Simard - YouTube](https://www.youtube.com/watch?v=...)

**Effects of Climate change:**

[Don't go near the water: Some algae blooms are toxic to people, pets - StarTribune.com](http://startribune.com)

[Plankton Algae \(Anabaena, Aphanizomenon, and many other varieties\) | Minnesota DNR \(state.mn.us\)](http://state.mn.us)

**Diagnostic tools for common garden problems:**

[Extension Resources – Hennepin County Master Gardeners \(hennepinmastergardeners.org\)](http://hennepinmastergardeners.org)