



# Biboon 2012

## Fond du Lac Environmental Program

### Reduce Waste During the Holidays: Ways to Reuse Wrapping Paper, Bows, Ribbons and More!

This time of year, all the wrapping paper, bows, ribbons, boxes and packaging can add up to bags and bags of garbage. Here are some creative ways adults (and kids!) can reuse these items instead of throwing them away.

#### 1) Bring in the New Year with Your Old Christmas Wrap!

**New Years Hats** ~Cut the cardboard tube from a wrapping paper roll lengthwise and lay out flat; next, cut a section large enough to wrap into a cone shape and glue or tape the wrapping paper to the section. If you prefer something other than a cone shape for your hat, you can also wrap the cardboard into a cylinder and cut out your own design. Punch a hole on each side of the hat and tie a section of ribbon in each hole long enough to secure around your chin.

**Confetti**~Rip the wrapping paper into small pieces or shred it in a shredder. Cut small sections of cardboard tube and tape one end closed to hold the confetti.



#### 2) Make Decorations for Next Year

**Origami**~This is a great activity to do with kids! There are many books and internet sites available that give you step-by-step instructions on making various items. Use your wrapping paper to make origami holiday decorations. One excellent internet resource is: <http://www.origami-instructions.com/>

**Frame it!**~This may sound very simple, but it can turn out to be a beautiful addition to your holiday decorations. Cut the wrapping paper to fit your frames and hang on the wall. Instead of using one whole piece, you can also cut out pieces of several different kinds of wrapping paper and make a collage.

#### Additional Tips:

~Carefully unwrapped paper can be saved to reuse another time. Just put your iron on low heat, place a t-shirt over the paper, and iron to get out the wrinkles. Bows, ribbon, gift bags and tissue paper can also be saved to use again.

~Cardboard tubes can be composted—just tear into smaller pieces and add them to your compost bin.

#### INSIDE THIS ISSUE:

Improving Water Quality on Third Lake	2
Seed Selection and Seed Starting	3
Environmental Program Contacts	4

## Improving Water Quality on Third Lake

By Kari Hedin, Watershed Specialist

Many of us pass by Third Lake on our way to and from work on Big Lake Road near Trettel Lane, unaware of the water quality problems on this lake. The Fond du Lac Environmental Program, Office of Water Protection, has been monitoring water quality on Third Lake for over 10 years. Among the problems we have identified include algae blooms, fish kills, and reduced water clarity. Many of the problems are caused by the historical and current farming operations near this lake.

Algae blooms in lakes are caused by excess nutrients in the water, such as phosphorus and nitrogen. These nutrients enter the water from the surrounding landscape. They can be recycled every year, causing ongoing problems with algae blooms. Take a look at the photo of floating mats of algae on the surface of Third Lake. Algae blooms can lead to unsafe conditions for swimming. They also cause reduced water clarity and they also lower the amount of dissolved oxygen in the water. Low oxygen levels can lead to fish kills, where large numbers of dead fish wash up on shore.



As stewards of this lake, the Office of Water Protection secured a grant from the US Environmental Protection Agency under the Clean Water Act's Non-Point Source Pollution grants program. For the past two years, we have conducted increased monitoring on the lake (including sediment samples and cores), and worked with landowners around the lake to reduce the amount of nutrients washing into the lake. This included partnering with the Fond du Lac Ojibwe School garden – they provided the funds to remove horse manure from a horse farm on the lake, which they were able to use as garden compost – a win-win situation for everyone!



Our last big accomplishment with this grant was to hire Sweetwater Technology to conduct an alum treatment on the lake in fall 2012. Alum, or aluminum sulfate, is used to treat drinking water and wastewater nationwide, and is commonly used to treat lakes with nutrient-related problems. In lake restoration, it works by binding excess nutrients in the water, including phosphorus, to the bottom of the lake where it is unavailable to algae. Since Third Lake has had problematic algae blooms for many years, the alum treatment will help reduce algae blooms and improve water quality. This in turn may lead to more abundant submerged vegetation and an improved fishery.

We alerted the public to the alum treatment by publishing an article in the Fond du Lac newspaper and sending a letter to homeowners around Third Lake. We also discussed our work with the Reservation Business Committee and the Fond du Lac Conservation Committee. Here is a photo of the barge used to spray alum into the water. We noticed an immediate improvement in water clarity, and preliminary data taken after the alum treatment shows a marked reduction in nitrogen and phosphorus, especially in the deeper part of the lake. Though an alum treatment is not a permanent solution, we should see improved water quality for 7-10 years, and even longer if nutrient runoff from the surrounding watershed continues to be controlled.

## ***What is Winter Solstice?***

Winter solstice, December 21st this year, is the day that the sun is at its lowest in the southern sky and shines directly on the Tropic of Capricorn. From this day on, days get longer as the sun begins to rise in the sky and rise closer to direct east and set closer to exact west. Some years the winter solstice falls on December 22nd.

## **Recycle Your Holiday Lights!**



The Fond du Lac Transfer Station on University Road  
accepts  
holiday lights for recycling.  
Please do not throw them away!!  
You may also bring in telephone, appliance and any  
other electrical cords for recycling. Miigwech!

## **Seed Selection and Seed Starting**

**By The Fond du Lac Master Gardeners**

It may seem too early to think about gardening, but winter is a good time to sift through seed catalogs, plan your garden and even get some of your seeds started inside.

**Selecting Your Seeds:** In the search for seeds, gardeners are presented with a variety of different options that can sometimes be confusing: Hybrid, Heirloom, Open-pollinated, Organic. Below are definitions of each of these seed types.

**Hybrid~**Hybrid seeds are those created by people who cross-breed two different varieties of plants based on their ideal traits. For example, a plant that is drought tolerant may be bred with a plant that is disease tolerant to produce a plant that has both of these traits. If you plan on saving seeds, hybrids are not ideal plants to use because their seeds will most likely not produce the same plant the next year, but will be a different combination of the parent plants' traits.

**Heirloom~** Heirloom seeds are those that have been around for many years and passed down between generations of gardeners. There are varying viewpoints regarding how long the seeds need to have been around to be considered heirloom. If you are interested in heirloom seeds, two good resources are: [www.rareseeds.com](http://www.rareseeds.com) and [www.seedsavers.org](http://www.seedsavers.org).

**Open Pollinated~**These are seeds from plants that basically let nature do the work. Seeds used from these plants will produce new plants that are just like, or very close to, the parent plant. These are ideal for seed saving. Open pollinated can be considered heirloom if they have been around for several years.

**Organic~**These seeds come from plants that are grown certified organic. If you are looking to certify your produce as organic, you must start with organic seeds. Some debate whether there is much difference between organic and non-organic seeds. Many opt to buy whichever is less expensive and utilize other organic/chemical-free methods of gardening.

### **Starting Your Seeds:**

With the short growing season in this region, it is nice to get a jump start by planting seeds indoors. Due to the lack of day length in the winter, artificial light is often required to grow robust young plants. With too little light, the stems will become long and straggly. To avoid this, put the plants under fluorescent lights for a few hours before or after natural light is available. Adding a timer to your fluorescent lights will help make this process automatic, and therefore easier!

# Recycle

Plastic  
Newspaper  
Cardboard

Magazine Paper



Aluminum  
Mixed paper

**Waste Site Hours Will  
be Changing Sunday,  
November 4th!**

**Monday—Sunday:  
8:00am—5:30pm  
Closed Holidays**

**The Fond du Lac Waste  
Site is for band member  
household use only.**

*Do your part to conserve natural resources and protect the  
environment for future generations....Recycle.*

*Fond du Lac Waste Site: 878-8069*

## Who's Who?

### **Fond du Lac Reservation Environmental Program Staff- (218) 878-7101**

Wayne Dupuis - Environmental Program Manager.....	878-7106
Alex Jackson—Air Program Coordinator.....	878-7112
Nancy Schuldt - Water Projects Coordinator.....	878-7110
Shannon Judd - Environmental Education Outreach Coordinator.....	878-7123
Russell DuFault - Recycling Coordinator.....	878-8069
Rick Gitar - Water Regulatory Specialist.....	878-7122
Kari Hedin - Watershed Specialist.....	878-7109
Shannon Kesner - Wetlands Specialist.....	878-7157
Andrea Junker - Environmental Policy Specialist.....	878-7111
Cristina Bunch, Groundwater Protection Specialist.....	878-7150
Waynette Mahr, Waste Collection Site Supervisor.....	878-8069
Bruno Zagar - Environmental Specialist.....	878-7165
Joy Wiecks - Air Quality Technician.....	878-7108
Dave Smith - Land Records Researcher/Brownfields Coordinator.....	878-7119
Leroy Defoe—Tribal Historic Preservation Officer.....	878-7129