

# Nature Notes

For the  
week of  
February  
23 -

From your friends at Saint John's Arboretum! **March 1**

## The Slick Truth About Sledding



Photo courtesy of Erica Manterbach

### The science and history of sledding...

- Used by native tribes such as the Chippewa in Minnesota, wooden toboggans are known as one of the earliest sled prototypes!
- Unlike our modern hard-plastic sleds, toboggans were typically made of two or three thin, hardwood boards and were mainly used for transporting goods.
- Selecting the fastest sled involves close attention to different factors, including the type of material the sled is made of and your body weight. Both of these factors relate to the pressure and positive friction needed to travel down the hill.
- The science behind (or in this case, beneath) using sleds is fairly simple: in an ice crystal, variations in the speeds of atom vibration between surface atoms and inner atoms creates an outer layer that acts like a liquid, even though the crystal itself is solid.
- This process makes the snow slippery and allows your sled to fly down the hill as though "swimming" in the outer liquid layer!
- Want to test the science of sledding? Rent sleds from the [OLC](#) and enjoy the latest addition of snow on the SJU Sledding Hill!

Sources:

- <http://www.livestrong.com/article/348844-the-history-of-downhill-sledding/>
- <http://magazine.nd.edu/news/10474-the-slippery-meaning-of-ice/#>
- <http://lptms.u-psud.fr/membres/trizac/Ens/L3FIP/Ice.pdf>
- <http://www.sleds.com/snow-sleds/historyofsledsandtoboggansarticle.cfm>

## Upcoming Arboretum Events

### MN Natural History Lecture:

#### *Capturing the Essence of Place*

*Presented by Joel Truckenbrod, Nature Photographer*

**POSTPONED DUE TO SNOW**—later date to be determined

New Science Center, SJU

Join us for part one of this season's lecture series featuring three local nature photographers! Using a large format camera and sheet film, Joel takes an experiential approach to representing the essence of place. His presentation explores the methods behind his photographs while providing helpful tips in taking your own photos.

### Maple Syrup Season!

Community Tapping Day—Saturday, March 5

9:00 a.m.—12:00 p.m. (keep in mind we may finish early)

Join us on the inaugural tapping day for 2011! We will start the day off with blessings and songs, then the tapping will begin. We want as many people as possible to be involved that day—we need to tap 1000 trees in 3 hours! A shuttle from Gorecki will be provided at 8:30 a.m. for CSB students. Email [Sarah Gainey](#) to reserve a space on the shuttle!

Maple Syrup Festivals—Saturdays, March 26 & April 2

1:00—4:00 p.m.

Mark your calendars for our annual maple syrup festivals! Sap collecting, syrup cooking, horse-drawn rides, demonstrations, and hot maple syrup make this a fun-filled event! Stay-tuned for more maple syrup events.

### Maple Syrup Volunteers

Volunteers are an integral part of the syruping process at Saint John's. We need help with everything from tapping trees and sap collection, to cooking syrup and working at the Festivals. [Learn more](#) about how you can get involved and sign up on our [volunteer list!](#)

### Forest Firefighter Training

April 21, 2011

Want to add certified forest firefighter to your resume? Just take a course this spring offered by The Nature Conservancy with assistance from MN DNR, and Saint John's Arboretum! Details for training location and [registration form](#) are online.

If you would like to be on the volunteer e-mail list for the Arboretum, please e-mail your name and graduation year to: [arboretum@csbsju.edu](mailto:arboretum@csbsju.edu).

We'll be in touch...

Your friends at the Arboretum

### **It's your backyard, so get out and play!**

\*\*\*Nature Notes is a weekly publication designed to keep you informed about exciting events offered by the Arboretum!

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