

FACETS of Freshwater

APRIL 24
Ice OUT/Loon IN
FUNRAISER
see page 3

Bluebell Carpet
By Tom Samuelson

April 2014

Weather Facts and Photo from *MN Weatherguide Environment Calendar*

Monthly Normals: Temp. Max: 57.8 F Min: 37.2 F Precip: 2.5 in. rain / 2.6 in. snow

 **FRESHWATER SOCIETY**

UPCOMING EVENTS

April 12 - **Shallow Lakes Conference**
U of M Landscape Arboretum, Chaska

April 24 - **Ice OUT/Loon IN**
Lafayette Club, Minnetonka Beach

May 1-2 - **State of Water Conference**
Craguns, Brainerd

May 16-18 - **MN Phenology Network**
Gathering, Sandstone

Sept. 18 - Moos Speaker Series
Measuring Groundwater Declines by
Satellite, St. Paul Student Center, U of M

In this issue

From the Director.....	2
Welcome Spring by Partying with Us!	3
Freshwater Society's Partners with Hennepin County to Call Ice-Out on Tonka	3
A Water Conference for You.....	4
Shallow Lakes Conference.....	4
MPR finds many irrigation wells out of compliance	4

Dick Gray: A life devoted to water and science

Dick Gray, a passionate and powerful advocate for protecting water who led the formation of the Freshwater Society, died Wednesday, March 5. He was 95 years old and remained active in the Society as a board member until his death.

He earned a bachelor's degree in petroleum geology and engineering from the University of Minnesota, served as a Naval officer in World War II, and founded a manufacturing company, Zero-Max Industries. He later was a board member and president of the IDS Mutual Fund Group.

Mr. Gray lived on Lake Minnetonka and Minnehaha Creek. His fascination with water and his commitment to preserving it led him to regularly conduct water quality tests in a laboratory he had set up in his home.



Dick Gray

One winter, while drilling a hole in the lake's ice, he discovered a red algal bloom. Unable to find a resource to accurately identify the algae, he and others – notably Richard Caldecott and the late Hilbert Hill – set out to raise private funding for research on fresh water.

With the encouragement of former University of Minnesota President Malcolm Moos, they established a non-profit foundation in 1968 and

eventually raised \$4 million, the equivalent of nearly \$27 million in today's dollars. They built a state-of-the-art research lab at Navarre on the shore of Lake Minnetonka and then donated the lab to the University.

For 20 years, the Gray Freshwater Biological Institute conducted research, published reports for water managers and environmental policy makers, and

(*Dick Gray* continues on page 2)

FRESHWATER SOCIETY

The Freshwater Society is a non-profit organization dedicated to educating and inspiring people to value, conserve and protect water resources.

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Facets of Freshwater is published by the Freshwater Society.

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Visit the Freshwater Society web site at www.freshwater.org.

From the Director



Steve Woods

I felt like a 16-year old kid about to drive the prized sports car of somebody 45 years older than me. It was January 19 and I was about to have brunch with Dick Gray, founder of the Freshwater Society – and I was feeling it. Would he reluctantly surrender the keys while telling me, “be careful and don’t dent it”?

Nope. If anything, he tossed the keys through the air and encouraged me to “take ’er out for a spin and see what she can do.” Wow. Didn’t see that coming.

Dick died March 5. I am fortunate a number of people encouraged me to meet the man as soon as possible. Our website has a number of items related to Dick and to what he and his partners accomplished four decades ago when they opened

what is now called the Gray Freshwater Center. It’s an amazing, inspiring story of people making a difference – of influencing a world bigger than themselves.

On April 19th, the Gray Freshwater Center will be the site of a memorial service celebrating Dick’s life and work. I wouldn’t miss it for the world.

Regards,

STEVE WOODS

Dick Gray (con’t from page 1)

trained more than 45 doctoral students. In the mid-1990s, the University consolidated its operations, moved its water research activities to its Minneapolis and St. Paul campuses, and returned the laboratory to the nonprofit Freshwater Society.

Through the years, Mr. Gray continued to devote much of his time to writing about water and science. He liked nothing better than to commit himself to understanding a complex scientific concept and then explaining it to non-scientists in regular columns he wrote for the Sun Newspapers and later for the Facets of Freshwater.

Those columns are collected in two books: *Passwords for All Seasons*, published in 1973, and *Open Season*, published in 1985.

In a forward to the first book, Sigurd Olson wrote: “In Passwords, Dick Gray explains things you may have forgotten you wondered about – like rainbows, thunderstorms, fireflies, and barometric pressure.”

In the late 1970s, Mr. Gray collaborated with meteorologist Bruce Watson and naturalist Jim Gilbert to produce the *Minnesota Weatherguide Environment Calendar*, which continues to be a statewide favorite.

Mr. Gray received the University of Minnesota’s



Dick Gray and Richard Caldecott Plan the Building of Gray Freshwater Center

Outstanding Achievement Award for Meritorious Service to the University and the Community, he was recognized by the Minnesota Academy of Sciences for his contributions to science, and he was awarded an honorary Doctor of Science degree by Montana State University.

In 2006, former Gov. Tim Pawlenty declared April 24 as Dick Gray Day in Minnesota in recognition of his work on behalf of clean water.

Steve Woods, the Freshwater Society’s new executive director, sat down with Mr. Gray in January to talk about the Society, past and present.

“I had a chance to just soak up history as Dick Gray and Dick Caldecott told me about how things unfolded at the start,” Woods said. “What was striking to me was that both seemed far more interested in the present than the past. Ninety percent of the discussion was about the future and Mr. Gray’s interest in the phenomenon of fracking. His was truly a lively mind, always looking for answers and linkages.”

Mr. Gray’s family invited friends to make **memorials** in his name to the Freshwater Society.

Read more about Mr. Gray, including historical accounts of the founding of the Gray Freshwater Biological Institute and tributes written by two friends: Robert Elde, dean of the University of Minnesota College of Biological Sciences, and Jack Pichotta, founder of Wolf Ridge Environmental Learning Center.

Welcome Spring by Partying with Us!



4th Annual Fundraiser

Ice OUT/Loon IN

Thursday, April 24, 5:30 – 9:00 p.m.

5:30 – 7:00 p.m. **Silent Auction**

7:00 – 9:00 p.m. **Dinner, Awards, Live Auction, Loon Calling Contest & Raffles**

We think we can safely say that spring has arrived and the ice IS going out! Soon, we will be seeing those iconic common loons bobbing and diving on Lake Minnetonka! What better way to celebrate these arrivals than by joining us for our 4th Annual Ice OUT/Loon IN?

For just \$75/ reserved ticket (\$60 for members), you and your friends will:

- Bid on our enticing silent auction items such as golf outings, dinner cruises and summer camps,
- Take your chances on great raffles,

- Sit down to a delicious dinner at the Lafayette Club,
- Celebrate our new Clean Water Champions,
- Join in the fun in our Loon Calling Contest, and
- Raise your paddle to bid on several fantastic live auction items.

Get your tickets or reserved table today (tables are discounted for members) to be sure you don't miss out on all of the fun! **Order** tickets or a table....

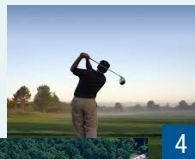
Location: Lafayette Club

2800 Northview Road
Minnetonka Beach, MN 55361

Take a look at these spectacular Ice OUT/Loon IN Auction items?

This year's Ice OUT/Loon IN fundraiser will be better than ever and will feature a Live Auction with great items, such as:

1. Dinner for 10 with chef and author Beth Dooley
2. A week of skiing near Steamboat Springs, CO
3. Towboat Ride for 4 on the Mississippi River
4. Golf outings at several golf courses
5. A week's stay at a luxury vacation home on Chesapeake Bay!



Freshwater Society Partners with Hennepin County to Call Ice-Out on Tonka

Ice-out on Lake Minnetonka and other lakes across Minnesota is coming. We don't know when, but we know there eventually will be open water.

The Freshwater Society and the Hennepin County Sheriff's Water Patrol have agreed to make a joint call on when ice-out occurs on Lake Minnetonka.

In the past, the Freshwater Society and the Water Patrol used different definitions of when the lake is ice-free. In most years, but not always, the two calls came on the same day.

Under the new procedure, a representative of the Freshwater Society and a deputy sheriff will travel in a sheriff's patrol boat to check lake conditions.

The boat will take a broad route around the Upper Lake and Lower Lake. The decision to

declare ice-out will be made when the patrol boat can navigate through the lake's bays and channels without impediment from ice floes. The announcement of ice-out will be made jointly by the Freshwater Society and the Sheriff's Water Patrol.

Check out ice-out dates for Lake Minnetonka, stretching back to the 1850s, in two ways: a **year-by-year** listing, or a **March-through-May** calendar showing how many times ice-out has occurred on each date.

The median ice-out date – half are earlier and half are later – is April 14.

Check out lists of ice-outs, updated through 2013, for **other Minnesota lakes** from the Minnesota Climatology Working Group.

Next Lecture on Declining Groundwater September 18

You can't see groundwater when it is in the ground, but you can measure it. It turns out you can even measure it from outer space.



Dr. Jay Famiglietti

Don't miss a fascinating lecture Sept. 18 by Dr. Jay Famiglietti, who has led research exploring declines in Earth's stores of groundwater measured over the last decade by an orbiting NASA satellite.

The satellite sensing, known as the Gravity Recovery and Climate Experiment or GRACE, detects changes in the mass of water entering or leaving a region on the Earth's surface. And the news is not good.

"Results point to the harsh reality that groundwater in most of the world's major aquifers – in India, the Middle East, China, and even in the High Plains and Central Valley aquifers in the United States – is being rapidly depleted, likely never to be replaced" Dr. Famiglietti says. "The global pattern of groundwater depletion also raises important concerns about the potential for heightened conflict, and about climate, water, food and economic security."

The lecture, sponsored by the Freshwater Society and the University of Minnesota College of Biological Sciences, is free and open to the public. It will be delivered at 7 p.m. Thursday, Sept. 18, in the Student Center of the University of Minnesota's St. Paul campus.

Dr. Famiglietti is a hydrologist and professor of Earth System Sciences and Civil and Environmental Engineering at the University of California, Irvine. [Learn more](#) about the lecture and Dr. Famiglietti.

A Water Conference for You! May 1–2, Brainerd, MN



Minnesota has long been renowned for its lakes and rivers. Our “state of water” provides recreation, forms an important part of regional economies, and serves us all with the many amenities that plentiful and clean water resources provide.

Keeping these important resources clean and healthy is possible in no small part due to the efforts of all kinds of volunteers. From lake association activities, to water monitoring to participating in local government (and sometime all of the above!) citizens are an essential part of water protection.

The 2014 State of Water Conference is for just those people. It is a unique opportunity that provides a venue for citizens interested in improving and protecting

water resources to network, connect with resource professionals from around the state, gain technical insights, and find opportunities to engage in water resource protection. It will be held at Cragun’s Resort in Brainerd, MN on May 1–2.

There will be over 30 presentations in five concurrent tracks, covering topics about aquatic invasive species, aquatic habitat restoration, watersheds, having an impact locally, and runoff and groundwater. There will also be exhibits and vendors to visit and attendees will be able to learn about water-related products and services. An exhibitor reception will be held Thursday night complete with heavy hors d’oeuvres.

In addition there will be a number of plenary speakers including:

- Darby Nelson; aquatic ecologist and author of “For Love of Lakes.”
- John Linc Stine: Minnesota Pollution Control Agency Commissioner

- John Jashke: Board of Water and Soil Resources Executive Director

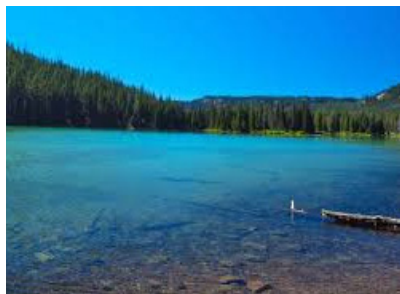
- Barb Naramore: MN DNR Assistant Commissioner

Conference registration is \$155/person and includes meals, breaks, and all conference events.

For more information about the conference program and registration, visit The State of Water website at www.conservationminnesota.org/state-of-water-conference/ or call Alex Gehrig at 651-357-7486. To keep up-to-date regarding the conference, “like” the conference on Facebook: www.facebook.com/stateofwaterconferencemn

Previously organized by the statewide nonprofit, Minnesota Waters, this highly anticipated biannual event has been reorganized through a partnership between the University of Minnesota Extension, Conservation Minnesota, Freshwater Society, Minnesota Department of Natural Resources, Minnesota Pollution Control Agency and the Board of Water and Soil Resources.

Shallow Lakes Conference - Saturday, April 12



Join us Saturday, April 12, for a forum on preserving, protecting – and enjoying – shallow lakes. Shallow lakes, defined as averaging less than 15 feet in depth, offer a wealth of fishing, recreation and habitat benefits. They also face unique challenges.

The 8 to 11:30 a.m. forum will feature panels of experts and plenty of opportunities for networking. The event is sponsored by the Minnehaha Creek Watershed District and the Freshwater Society. [Learn more](#) and register to attend.

Environmental Timeline Update/Correction

In the March issues of *Facet of Freshwater* we included a nifty little [timeline](#) of environmental and conservation laws we thought had some relevance to the work we do. It also included some cultural milestones to help with chronological context. We’ve received a surprising amount of feedback on it. Most notably, we had each of Viking Super Bowl losses off by one year. As they say in the journalism biz: We regret the error. It’s been updated and additional events have been added – so check it out.

MPR finds many irrigation wells out of compliance

Minnesota Public Radio this month aired the results of a year-long investigation of permitting for irrigation wells. The report, which found about 200 irrigation installations across the state that appeared to lack required permits from the Department of Natural Resources, confirms and expands on a Freshwater Society report last year. Read the [MPR report](#) and view a map of irrigation systems. Read the [Freshwater Society report](#).

Join the Society – Get the Weatherguide!

Become a new member of the Freshwater Society and you’ll receive the new, *2014 Minnesota Weatherguide Environment Calendar*. It’s a win-win!

Help us protect freshwater resources and you’ll enjoy a plethora of amazing regional photography, Nature Notes, weather history and meteorological information, gardening tips and much more.

Become a member!

