



Lake Superior Binational Forum Public Meeting

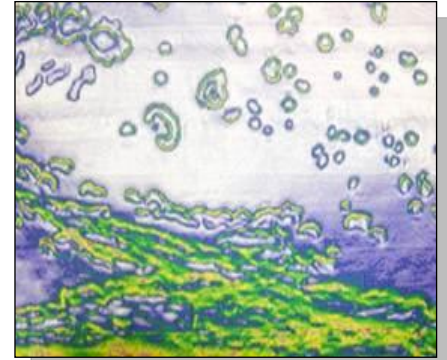
“The Mysteries of Lake Superior, from Top to Bottom”

Friday, March 28, 2014

Ballroom at the Barkers Island Inn, Superior, Wisconsin

8:30 AM to 5:00 PM

Morning Agenda



Time	Superior Room		
8:30 am	Superior Room - Welcome from the Lake Superior Binational Forum <i>Binational Forum U.S. Vice-Chair Christine Ostern and Acting Canadian Co-Chair Jay Eingold</i>		Welcome
8:45	Superior Room - The Superior Sea: Why the World’s Largest Freshwater Lake Is So Special <i>Dr. Steve Colman - Director, Large Lakes Observatory at the University of Minnesota, Duluth</i>		
Time	Superior Room	Michigan-Ontario Room	
9:10	Phenomena in the Sky <i>“Astro” Bob King, Photographer, Videographer, Skywatcher, Duluth News Tribune. What causes the northern lights? What constellations can we look for? Can we see the U.S. Space Station from here?</i>	Climate Changes in the Basin <i>Carol Christenson, Warning Coordination Meteorologist, National Oceanic Atmospheric Administration (NOAA), Duluth. Is climate change affecting the water and land around the lake? How does climate change affect water levels and other environmental indicators?</i>	Above the Lake
9:35	Maritime Mysteries: Loads, Locks & Lakers <i>Adele Yorde, Public Relations Manager, Duluth Seaway Port Authority, Duluth. What happens when a ship comes to a Lake Superior port? What products are shipped in and out, and where in the world are they coming from and going?</i>	Full Circle Superior: A 1,500-Mile Walk Around the Lake <i>Kate Crowley and Mike Link, adventurers, educators, and writers, Duluth. What did Mike and Kate learn about the lake, the land, and the people they met as they walked for five months along the lake’s entire shoreline in 2010?</i>	On the Lake
10:00 to 10:15	BREAK		

Morning Agenda continued...

Time	Superior Room	Michigan-Ontario Room	
10:15 am	<p>Ecological Mysteries of the St. Louis River Estuary</p> <p><i>Shon Schooler, Research Coordinator, Lake Superior National Estuarine Research Reserve (LS NERR), UW-Superior. Crayfish are disappearing and levels of oxygen in the river are fluctuating. What's going on to cause these abnormalities?</i></p>	<p>Should We Be Concerned about the Areas of Concern?</p> <p><i>Matt Steiger, Coordinator, St. Louis River Area of Concern, Wisconsin Dept. of Natural Resources, Superior. What is an Area of Concern, how many are on Lake Superior, and what is happening at the St. Louis River site?</i></p>	On the Lake
10:40	<p>Waves, Rip Currents, and Seiches</p> <p><i>Gene Clark, Coastal Engineering Specialist, UW Sea Grant Institute, Superior. The Big Lake gets temperamental and dangerous at times. How can we stay safe during extreme wave events?</i></p>	<p>Surviving the Flood of 2012: Where Do We Go From Here?</p> <p><i>Chris Kleist, City of Duluth, MN Stormwater Coordinator. Numerous communities were severely damaged during floods in 2012. Can we be ready for the next floods and prevent future damages?</i></p>	
11:05	<p>Extreme Recreational Activities</p> <p><i>Randy Carlson, Coordinator of Kayak Canoe and Kiting Program, Recreational Sports Outdoor Program, U. of Minnesota-Duluth. Are people really surfing, kite sailing, and ice kiting on Lake Superior? Hear about the excitement of playing hard on the world's largest lake!</i></p>	<p>National Marine Conservation Area, Ontario</p> <p><i>Jody Davis, Mayor of Terrace Bay, Ontario, and Chairman of the National Marine Conservation Area Planning Group. Canada has a unique way of conserving large tracts of land and water, and there's an unforgettable conservation area just north of the border that deserves special designations.</i></p>	
11:30	<p>Open Discussion: Facilitated by Nancy Langston Lake Superior Binational Forum member, Houghton, Michigan</p> <ul style="list-style-type: none"> • What did you learn? • Do you have any recommendations you'd like the Forum to know about? • Do you need more information? • What else should the Forum study? How can the public get involved in something you learned about today? • How do we engage diverse audiences in a topic you learned about today? <p style="text-align: center;"><i>Your comments and feedback are important!</i></p>		Summary and Recommendations
NOON	<p>LUNCH - All guests are welcome to eat in Captain Barkers Restaurant with the Forum on the Galley Deck, or on your own.</p>		

Photo Captions and Credits

1. Northern lights over Pictured Rocks National Lakeshore by [Shawn Malone](#), Marquette, Michigan Photo Credit: John Flesher / AP
2. John Hubbard, of Burt Township, Mich., checks the water levels at the Lake Superior boat ramp in Grand Marais, Mich., in 2010, after a long summer of drought in the Upper Peninsula.
3. Mysterious rings of "donuts" on this sonar image grace the floor of Lake Superior. Image courtesy of Nigel Watrus, Large Lakes Observatory, University of Minnesota-Duluth.



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 Ballroom at the Barkers Island Inn, Superior, Wisconsin
 8:30 AM to 5:00 PM
Afternoon Agenda

Time	Superior Room	Michigan-Ontario Room	
1:00 pm	Superior Room - Welcome from the Lake Superior Binational Forum <i>Binational Forum U.S. Vice-Chair Christine Ostern and Acting Canadian Co-Chair Jay Eingold</i> Presentation of Environmental Stewardship Award to WTIP Community Radio, Grand Marais, Minnesota		
1:20	Commercial Fishing: Where and How Do We Get Our Fish? <i>Steve Dahl, Commercial Fisherman, Knife River, Minnesota. Who is fishing for the herring, whitefish, and trout we love to eat, where are the fish coming from, and are they sustainable and safe to eat?</i>	What the Fish Are Telling Us About Contaminants of Emerging Concern (CEC) in the Great Lakes <i>Anthony Schroeder, Post-doctoral Fellow, U.S. Environmental protection Agency Mid Continent Ecology Lab (Duluth). What are contaminants of emerging concern, how are they being detected, what CECs have been detected in Great Lakes, and what impacts do they have on the environment and us?</i>	In the Lake
1:45	Plastic Microbeads In Fish and Water <i>Dr. Lorena Rios-Mendoza, Assistant Professor of Chemistry, Natural Sciences Department, U. of Wisconsin-Superior. Tiny beads of plastic were recently found in Lake Superior and in fish stomachs. Are these beads dangerous to aquatic life, or to us?</i>	The Kiyi Research Vessel and Fish Populations <i>Owen Gorman, Research Fishery Biologist, Lake Superior Biological Station, US Geological Society, Ashland. The USGS sends a research vessel and crew all over Lake Superior—What happens on a research vessel? What are scientists looking for, and what are they learning about fish populations, water quality, and aquatic life?</i>	
2:10	What is Responsible for Beach Advisories and Closures? <i>Randall Hicks, Professor, Department of Biology, U. of Minnesota Duluth. What causes a beach closure, how accurate are they, and can we prevent them?</i>	Water Withdrawals and Diversions <i>John Jackson, Lake Superior Binational Forum member, Kitchener, Ontario. Is Lake Superior water secretly being shipped out of the basin or sold to foreign countries? Will a binational agreement stop diversions and withdrawals?</i>	Waters of the Lake
2:35	Using “Robots” to Collect Data <i>Jay Austin, Associate Professor of Physics, Large Lakes Observatory, U. of Minnesota Duluth. Scientists at UMD are using innovative technologies to give new insights into Lake Superior.</i>	Sunken Treasure: Shipwrecks <i>Mayor Richard Harvey, Nipigon, Ontario, and Vice President of the Superior Underwater Exploration Society. Amateur deep sea divers are uncovering shipwrecks believed to have been lost forever. Where are these sunken historical relics, and what can they tell us about our maritime past?</i>	Under the Water
3:10	BREAK		

Time	Superior Room	Michigan-Ontario Room	
3:20 pm	<p>Microscopic Stories in the Mud</p> <p><i>Euan Reavie, Senior Research Associate, Natural Resources Research Institute, U. of Minnesota Duluth. The sediments in the bottom of the lake contain a detailed archive of lake conditions over time, which can be used to help manage the lake for the future.</i></p>	<p>Waterwalkers: Anishinaabe Women as Waterkeepers</p> <p><i>Sharon Day, enrolled member of the Bois Forte Band of Chippewa in the Marten Clan, holds a 2nd degree designation as a M'dewiwin water keeper for her tribe. Ms. Day joined hundreds of Native American grandmothers in the Mother Earth Water Walk in 2011 to "raise people's awareness of the current state of our waters and our need for sources of clean water for us and for the future generations."</i></p>	Bottom of the Lake
3:45	<p>Sediment Bathymetry</p> <p><i>Nigel Watrus, Associate Professor of Geological Sciences and Large Lakes Observatory, U. of Minnesota Duluth. Scientists are puzzled by large donut shapes on the lake bottom. What do they tell us about life in the lake?</i></p>	<p>Mystery Barrels on the Lake Bottom</p> <p><i>Frank Koehne, Spokesperson for the Red Cliff Band, Red Cliff, Wisc. In the late 1950s, about 1,400 barrels full of unknown contents were trucked from a weapons plant in the Twin Cities to Duluth and secretly tossed off barges into Lake Superior under the shroud of Cold War secrecy. What's in the barrels, and is it dangerous?</i></p>	
4:10	<p>The Case of the Disappearing Moose</p> <p><i>Amanda McGraw, PhD Candidate, Integrated Biosciences Graduate Program and Natural Resources Research Institute, U. of Minnesota Duluth. Moose populations in Minnesota have crashed in recent years. Hear the latest information about what's causing the significant decline of this Northwoods icon.</i></p>	<p>The Mystery of Bird Migration Along the North Shore of Lake Superior</p> <p><i>Annie Bracey, Research Fellow, Natural Resources Research Institute, U. of Minnesota Duluth. Each fall, hundreds of thousands or perhaps millions of birds migrate along the North Shore of Lake Superior on their journey to warmer climates and more food to the south. Many are counted at famous Hawk Ridge in Duluth, but many are not. Where do they all go?</i></p>	Onshore Issues
4:30	<p>Superior Room - Open Discussion: Facilitated by Nancy Langston, Lake Superior Binational Forum member, Houghton, Michigan</p> <ul style="list-style-type: none"> • What did you learn? Do you need more information? • Do you have any recommendations you'd like the Forum to know about? • What else should the Forum study? How can the public get involved in something you learned about today? • How do we engage diverse audiences in a topic you learned about today? <p><i>Your comments and feedback are important!</i></p>		Summary and Recommendations
5:00	Adjourn -- Thank You for Joining Us!		

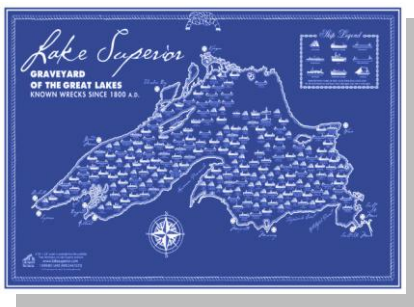


Photo Captions and Credits

1. Moose in Minnesota: What is causing their extreme population decline? Photo by U.S. Fish and Wildlife Service
2. Great Lakes Shipwreck placemat and poster (for sale on the [Lake Superior](#) magazine web site)
3. What is in the thousands of barrels sitting on the bottom of the lake near Duluth? Photo Credit: The Daily Planet