The Jib Sheet
A NEWSLETTER OF THE ROCHESTER CANOE CLUB

APRIL 2015
Greetings RCC! As you can see, it’s been a long hibernation and Layla the puppy has grown. She can’t wait to earn her keep chasing geese away from the club.

John Gorton, our new Jib Sheet Editor, asked the board to consider sharing what preparations we make to get physically and mentally ready for the sailing season. This winter, I believe my best preparation was to develop my anticipation skills and lightning-fast reflexes that so far have been used to prevent Layla from eating whatever she can get her mouth on. If only I can transfer that skill to the boat...

I would like to take this opportunity to thank the members of the Board of Governors for the work they have already put in this year. The Board has already established an operating budget for the club, maintained our dues structure with no increase in fees to the members, and created the schedule for the season. Our agreement with the University of Rochester Sailing Team has been renewed; please introduce yourself to the new members of the team when you see them at the club and wish them luck in their sailing season already underway! Discussions for club improvements have been made and continue to develop; further dock improvements are already planned.

One of our goals is to increase participation in fleet racing. You should have noticed in the RCC Schedule a “Bridge to Racing” event listed on Saturdays in May. Paul Owens, our Thistle Fleet Captain, is piloting this program to encourage sailors to take that next step to join us on the race course. Paul will be sharing more details of these low-key events as the dates approach, but please communicate with Paul if you are interested in participating. (I hear he’s on Facebook a lot so it should be easy to get a hold of him). The board also purchased copies of the U.S. Sailing mini “Sailor’s Guide to the Racing Rules” to distribute to new members. Current members who would like a copy (one per membership) should let me know.

Allow me to include a few key reminders:

**Mark Set Boat Duty:** Check the schedule now for your assigned date and put it on your calendar if you haven’t already done so. Remember to respond to the email reminder you will receive the week of your assignment. Bring your club key with you.

You will need it to access the marks and other equipment in the sheds.

**Remember that your Mark Set Boat Duty must be completed by an able-bodied adult:** NYS law says that an individual born on or after May 1, 1996 must have a boating safety certificate in order to operate a mechanically propelled vessel; operators who are younger than 18 years of age must be accompanied by a person who is at least 18 years of age and is the holder of a boating safety certificate or not required by law to hold a certificate. Approved courses in boater education include those offered by NYS Parks, the U.S. Coast Guard Auxiliary or the U.S. Power Squadron. (Individuals less than 10 years of age may not take the boater education course.) See the Power
Squadron link on our website for more information.

**Pay your dues:** Submit your information through the online form Secretary John Powers sent you. Payment should be sent to Purser Rose Muir. Avoid additional fees by submitting payment by May 1.

**Identify your boat:** 2015 stickers for yard fees paid will be distributed by the Fleet Captain for your primary boat. In the meantime, please make sure your name is clearly marked on your trailer, boat cover, boat, spars, and sail bags. Give that Sharpie a workout this spring.

**Hang out:** Please join us every Sunday after racing for Happy Hour. Bring your drinks and an hors d’oeuvres to share. Remember to clean up your dish before you leave. Better yet, stay for potluck supper and delay leaving for as long as possible!

**Play nice:** If you have a complaint against another member or guest at the club that you are incapable of resolving to report the complaint to the Board of Governors in writing (email format is encouraged to keep things timely.) Courtesy and respect are expectations of conduct at the club.

**Do your part:** We are a volunteer operated club. RCC can only thrive with the participation of its members, so reply to some of those email pleas for assistance! If you are unsure of how to help, please contact a member of the Board of Governors.

I hope that Spring has sprung by the time this Jib Sheet hits your inbox. I know I’m ready to be outside enjoying the club. See you there!

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**Social Notes**

_by Judy Gesner, Vice Commodore_

Welcome to the 2015 Sailing Season! The board has been busy these winter months, working on, among other things, the club racing/social schedule and the mark set duty assignments. I’d like to take this opportunity to describe the scheduled social events for the first half of the season (more information can be found in the club Handbook: rochestercc.org/files/handbook.pdf).

**Winter Social** – This year, this fun, free, casual event was held at Dan and Aimee Fien’s house. About 50 people enjoyed each other’s company and good drink and even some green food!

**Spring Banquet** – This event is an informal dinner, often held at an area park lodge, to kick off the sailing season, and always held the night before Boats Out Day. This year it will be Friday, April 10th at the Curry Building at the Webster Arboretum (same place as last year). I am looking for volunteers again, to help with some of the food prep, to keep the cost down.

**Tune-Up Day/Ice Breaker Party** – This is a practice day (April 26th) on the race course and the first party of the season held in the clubhouse. Bring your favorite appetizers to share and enjoy some punch on the club.

**Mother’s Day Pasta Dinner** – Held on Mother’s Day (May 10th this year), this is traditionally a pasta/meatball/bread/salad dinner, prepared by the NON-mothers in the group.

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RCC Open House – Saturday, June 6th. This is an extremely important event for the club. We all need to do our part to invite people down and then show our guests all we can about sailing and how great RCC is!

July 4th Family Fun Day – Saturday, July 4. Basically, just a day to enjoy the holiday and the club. The food is all potluck, except for beverages and ice cream, which are supplied by the club. Depending on the ages and interests of the people involved, games might range from balloon toss to fun sailboat races.

Weekly Happy Hour and Potluck Dinner – EVERY Sunday throughout the sailing season! After racing on Sunday, hang around for Happy Hour (BYOB and a snack to share), followed by a Potluck Dinner. Look for information about various themed dinners (Cinco de Mayo, Asian, Grill Night, etc.) again this year.

You should be receiving soon (or have already received) your “pre-season” reminder email regarding your Mark Set Boat Duty. When you receive your email please take a moment to mark your calendar. You will receive another email the week prior to your assignment. It is very important for all of us to do our assigned duties to keep sailboat racing feasible and fun for all.

A reminder about goose control:

We now have a year-round population of resident (non-migratory) Canada geese at our doorstep! Thanks to the bubbler system around the permanent docks to our immediate North, the geese have open water adjacent to the Canoe Club all winter long. I counted 88 geese in March.

We hope that the DEC will continue to oil eggs; it does tend to slow down reproduction.

We will be setting up the goose fencing after “boats out” and will add some additional fencing for the hoist pad. Please help by re-setting fencing if you move it or notice that it has been moved. Yes, they can fly over, but they prefer to walk. If you want to be extra-helpful, please visit the club anytime during daylight hours and chase the geese. They do not like to be chased, and this will tend to discourage them.

We have to co-exist with the geese, but we will have fewer problems - fewer geese and less goose poop - if we invest some time and effort. Thanks for your help with this matter!

The RCC Goose Committee
New Sunfish Fleet Captain

by Lynne Orr

Greetings from your new Sunfish fleet captain! I'd like to thank Steve Powers (and John and Steve before that) for many years of faithful service! I'm not sure how many it has been, but they were fleet captains when I first took adult beginner lessons 10 years ago this summer. Hope I can keep up their good work!

I'm looking forward to a great year of racing and sailing just for fun. Please join us for the annual Sunfish regatta on Saturday June 27. See you on the bay!

Don't Miss Out on the JY-15 Racing

by Tom Lee

Yayy!! Welcome the the 2015 sailing season! Thank you all for the confidence expressed in me by electing me fleet captain. I still think of myself as a newbie, entering my third season as a RCC member. So, grant me some slack as I continue struggling with names and such. I'll be appreciative for receiving advice and help getting through the expectations and responsibilities of the office. Please, don't be reluctant to share your views.

A priority for us all is creating and maintaining a fun and active fleet. To grow the fleet and attract new members to the club requires an observable participation. No one signs up for a group that appears to be fading out. We have quite a few boats suited up in the yard, and we need more in the water. Don't put off coming down whether you have crew or not, or whether you have a skipper or not. Many of us show for sailing without crew or a skipper we align pairings for safety, compatibility and experience. Many of us switch off places skippering and crewing. I find it interesting and a lot of fun. Don't feel you will be pressured to go out, if the weather is not to your liking. We don't do that, we want you comfortable and enjoying your time on the water. We haven't yet left anyone on shore that came down and wanted to be on the water.

We could consider altering our qualifications for this activity. Crewing for one another could count as a race sailed, so that one does not feel any detriment, only encouragement. That could even be expanded for recognition in exemplary crewing. Any other ideas? Other activities? Require Ralph to use a sea anchor?

Hope to see you all at the Spring Banquet. Please introduce yourself if I'm new to you. The rest of you can get in my face, too.

RCC History

by John Gorton

"Two or three others of the earlier builders stand out above all the rest. George W. Ruggles, a member of the Rochester (N. Y.) Canoe Club, joined the A.C.A. in 1885 and continued a member until his death about 1911. He was a man of considerable means and an excellent mechanic. He early became greatly interested in the designing and building of canoes, and for quite a number of years, in the late eighties and in the nineties, to be the possessor of a new Ruggles canoe stamped the owner at once as a good sailor. He would build for no man who was not reasonably sure to do his boat and her builder credit. Building as he did at the time when unlimited sail-area was allowed, when frequency the two huge sails were of approximately equal area, his canoes possessed marked individuality. Very narrow planking, very little shear, long straight keel with very little rocker, plumb stem and stern and very small cockpit were their outstanding features. A Ruggles canoe could be told almost at a glance." [http://www.intcanoe.org/iclife/hist/schoettle/wilt_canoeing_under_sail.html]
As I sit here in my office on a gloomy Friday in April I can tell you there’s one thing I’m thinking about. MAN do I miss being on the water! Fortunately, due to my procrastination in writing this I don’t have to wait too long because boats out day is tomorrow!!! I can’t wait to see everyone especially since spring time is Thistle time! I want you all to think about this (and I’m sure you already know) but at RCC, what boat is there that’s better in the spring? It’s got a high freeboard so you’re nice and high out of the cold water, you have two of your closest friends there by your side for camaraderie, teamwork, and warmth. The forward crews stay dry because there’s no motorboat traffic yet, and the other two stay dry because … well, heck we have the forward blocking the waves! I’m getting pumped for 2015!!!

This year, there are going to be a few changes for the Thistle fleet. Number one and most noticeably keep your eyes on the driveway because we’re going to begin having assigned parking. I have meant to do this already, but let’s be honest: the snow melted off the driveway yesterday and it has been raining ever since so I haven’t been able to. There are going to be lines drawn on the driveway where your trailer tongue is to go, and numbers so that we all put our boats back in the same spot. There shouldn’t be ANY boats tucked back behind in the grass by the JY’s because my number one commitment to the fleet this year is to take away the excuses. In 2015 no one will be able to say, “Well I’d sail, but I can’t get to my boat easily enough with just two people.” Or, “I’d love to sail but I don’t have working sails.” “I’d be down every week if I had crew.” “I love my boat but I just don’t feel confident racing it.” “I’m 100% gung ho, but my crew isn’t up to speed.” NO MORE EXCUSES!!! When Chris Connelly says, “Free beer and let me win one,” I say “I’ve got a brew for you here and I’m on crash boat week one baby!” This is the YEAR!

Let me one-by-one address the objections I mentioned above.

1. We’re going to have assigned parking spaces right on the driveway so everyone should have no issue getting to their boats.

2. In the next few weeks you’re going to receive an email from me for a start-of-the-year Thistle work day. This day will be to A. to measure any boats not currently R&D’d so that any boats that have changed hands can be properly measured; and B. a swap day where anyone with gear (that they want to get out of their basement/garage/locker) can bring it down to the club and anyone who is in need of parts can possibly find that part.

3. Crew is an issue and always has been. What I’m planning to do is start communication earlier in the week where teams who need a body, or someone who’s in need of a boat can connect. Also, I’m looking for someone who’ll help me create and manage a crew board where people can post that they are interested in sailing thistles.

4. To help with confidence of skipper and crew, every Saturday in May we’re going to be running free on the water clinics called “Bridge to Racing”. More information on this will be coming in a related article and email correspondence.

IF you have an objection that has been keeping you away, let me know! The motto for 2015 is NO EXCUSES and we as a team will do what we need to do to get every boat on the water!!! I can’t wait to see you with me on the starting line! Thanks for putting your confidence in me as Fleet Captain!
From the Membership Chair

by Tim D. Hammer

We are starting out 2015 on a great trajectory, with two membership applications being submitted and in process before the clubhouse even opened! This builds on a very good new member class in 2014, with a new family, 5 new individuals (2 of which actually are a “group”!), and the return of a few previous members.

In case you have not yet met the new members from 2014, here is a quick introduction:

Alex & Natalia Paciorkowski, son Lev, and daughter Sophia were sponsored by Lyn Parsons (Alex’s sister) and Doug Kaukeinen. Doug stated that Alex and Lev caught “the fever” after taking our sailing lessons! They are interested in crewing on a Thistle as well as continuing their Sunfish adventures.

John & Lisa Fields and daughter Hanna were sponsored by Barb Harmer, who said John is “a competitive racing sailor, very handy for projects, also funny” in addition to being her brother and a former member! John does have a Sunfish and was seen often racing on Sunday afternoons.

Kelly Chang and Katy Luly are members of the University of Rochester Sailing Club. Their membership is part of the official relationship established between RCC and the UofR SC. With them come a group of college sailors who use our club grounds for storing and practicing with their Flying Junior fleet. They have also sailed with other club members in our regular fleet racing as well as in some regattas. And they have been a great help on work days!

Celeste Blair has been crewing on different JY-15s and was sponsored by Mike Gerard and Ralph Simpson, who said she keeps coming back for more! Celeste has a background in larger sailboat racing but is looking forward to gaining more experience in our dinghies.

Jacob & Susan Vinocour return to the RCC family after a few years away. Sponsored by Ralph Simpson and Rich Connelly, we are glad they can rejoin us.

Daniel Wallace was introduced through our invitation to Thursday evening sailing and socializing and was sponsored by Andy Heyer and Jim Tompkins. Jim commented that Daniel was "very enthusiastic"- so much so that Daniel indicated on his application that he was interested in skippering an Optimist (at 6’ plus, I pointed out the challenges and he has reconsidered that option).

Danica Eskind also found us through Thursday evening activities. She is interested in getting back to Sunfish sailing (although we have not convinced her about racing with us) and has purchased Steve Burns’ boat. On the day she took it out for a test sail, racing was cancelled by the committee due to storms in the area- Danica stayed right out there with

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some other die-hard Sunfish sailors and has not quit yet! In addition to Steve Burns, she was sponsored by her neighbor Tom Bannister.

**Marshall (Doc) Gates** returns to RCC! It was difficult to get only 2 sponsors for this long-time member who took a short break and is now back and sailing his Thistle at the top of the fleet as always.

You can find most of their pictures in the 2014 Annual Meeting Minutes available in the “Members Only” section of the RCC website or in the new member applications area of the website (navigate into the “Members Only” section, click on the “New Member Applications” link, and then on the “Class of 2014” link).

While we do need the sponsors to continue helping the new members integrate into RCC and our activities, it is important for everyone to make them feel welcome and involve them whenever and wherever possible. I know that you all will continue to do that.

I have had the privilege of getting started in and learning about the Membership Chair position with help from a couple great mentors who previously served in this position - Rich Connelly and Patty Tompkins (not to mention the challenge of filling their shoes!). The work they and other past chairs have done has gotten us to where we are today. I hope to continue that tradition.

But it is with the help of every member that we truly identify and nurture new members. The work done to advertise our club and activities by the Marketing committee is a great thing, but it requires personal contact with those who respond! Remember to introduce yourself to visitors and help them get acquainted with us and our property.

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**No small feat**  
*by Dan Fien*

RCC members dominated the offseason Thistle regattas this year:

- CofCs 1st
- MidWinters East 1st
- Orange Peel 1st
- Southern Series 1st
- Florica District Champ 1st

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[Image of sailboat]
Learn to Sail

by Mark Weider

The Rochester Canoe Club offers a sailing instruction program for all levels of sailors. Even if you have never set foot on a sailboat, we can teach you the basics of sailing, and have you out on the water sailing by yourself.

Instructors

We have 2 senior instructors that teach the Jr. Sailing program. Doug Kaukeninen will be back for his 21st year teaching this program. Doug is a High School math teacher at Fairport High School. He has been sailing for over 30 years, and finishes top in both Sunfish and Thistle fleets at the National level. Our other senior instructor returning for his 10th year is Mark Weider. Mark is an Earth Science teacher at Wayne Central High School. Mark has been sailing pretty much his whole life and is a Sunfish "master" finishing top in a lot of the sunfish races. He also races his Thistle at the national level. Helping teach the program are a few "Jr. Instructors." All of them have gone through the program themselves, and actively sail at the club.

Equipment Needed

The students will need to bring and wear a Coast Guard approved life jacket. The students are to have and wear it at all times when they are on or near the water. It is also a good idea to bring an extra change of clothes. We will often take a break where we allow the kids to go swimming, and when they are sailing, they will most likely get wet. A hat and sunscreen is a good idea to bring as well. The students should bring "closed toed" shoes. Broken glass and zebra mussels wash up on the beach, and we don't want people to cut their feet.

Daily Lessons

The instructors have organized the sessions into a structured, fun way to learn to sail. The day usually starts out by the students rigging the boats that will be needed for the day. Following that is a "chalk talk" where the instructors will teach the material that we will be doing that day. Also during that time we will practice the drills on land before we take them out onto the water. Once we get onto the water, we run them through a series of drills to have them practice all aspects to sailing. During this time we will take some breaks and play a few games on the water. We end the day de-rigging the boats, and end with another "chalk talk" for students to ask any questions they might have.

In Case of Bad Weather

If the weather is not safe to sail, or there is no wind, the instructors have alternate activities planned. These activities still help with their sailing, and are also fun. We try to provide as much on the water sailing practice, but sometimes the weather doesn't co-operate. The
instructors always monitor the weather on the marine radio listening for bad weather coming.

If you want more information and want to sign up, please look in our brochure found at www.rochestercc.org/jrsailing/2008Jrsailingbrochure.pdf. Also we will have an information night at the club on June 8th from 6:30-7:30 PM.

Interested? Here are the forms you'll need to fill out:

www.rochestercc.org/jrsailing/Medical.PDF

www.rochestercc.org/jrsailing/rccwaiver.pdf

All forms must be completed to register
University of Rochester Sailing Club at RCC

by Ralph Simpson

I am pleased to announce the University of Rochester Sailing Club (URSC) is back for another season of sailing out of the Rochester Canoe Club. URSC Commodore Kelly Chang leads the student club of 25 members keen to get sailing on the Bay and at out of town collegiate regattas. Peter Fiala is Vice Commodore of the club and our URSC liaison is Tyler Rochon who doubles as the team’s practice coordinator.

2014 was a year of getting a URSC-RCC agreement in place, moving boats and equipment down to RCC and establishing a solid working and social relationship between our respective organizations. For 2015, several members of the team joined us at the recent Webster Arboretum spring banquet and more were out in force to help with RCC Boats out Day in early April. The 2015 URSC-RCC agreement is signed and approved so the team can hit the water sailing!

Feel free to direct any questions or comments about URSC or our agreement to Ralph Simpson (RCC’s liaison with the UofR Sailing Club). Your help to make the URSC members welcome at the club and to share your love and knowledge of sailing is appreciated.

Have fun, sail fair, sail fast

The Rochester Community Boating Foundation

by Ralph Simpson

Established in 2010, the Rochester Community Boating Foundation (RCB) is an Internal Revenue Service designated 501(c)(3) corporation. As such, RCB functions as a not-for-profit corporation, able to accept tax deductible gifts to promote boating and sailing in the Rochester community. Rochester Community Boating was formed to make the joy of sailing and boating accessible to the Rochester community in general and to area youth specifically, regardless of income, ability or disability by providing affordable access to quality programs and events.

RCB’s mission is to support and promote boating training, racing, marine ecology and preservation and contribute to maritime related charitable and educational organizations in the Rochester region.

RCB raises funds in addition to purchasing and collecting donated assets in support of its mission. RCB manages a youth boating scholarship program and evaluates grant proposals throughout the year.

Grants are awarded in five categories:

- Amateur Sailing
- Educational Scholarships and Clinics
- National and International Regattas
- Maritime Organizations
- Local Charities that promote the health, wellness and active lifestyle of the yachting and boating community

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2015 will be my second year as a director on the RCB Board and I am finding the organization very interested in expanding its support of youth sailing and boating activities including those at the Rochester Canoe Club. RCC shares common ground with RCB with our mission of advancing the interest of sailing on Lake Ontario and Irondequoit Bay. Supporting our long standing, popular RCC Sailing School fits well within the RCB mission.

So how can RCC members help RCB in turn help RCC promote and increase sailing participation in the Rochester community? Consider a tax deductible cash donation or donate that Sunfish or JY15 you are no longer using to RCB with a request it be leased back to the RCC sailing school to enable others to learn and enjoy the sport of sailing. Other donation, scholarship request or grant proposal ideas? Check out the RCB website for details and feel free to contact me with any questions, comments or ideas to take back to the RCB Board. For more information: www.rochestercommunityboating.org

Good sailing
Rear Commodore’s Notes

by Bill Dexter

Thanks again to everyone who made it to Boats Out Day. We accomplished a lot in one morning of work.

Things to remember during the season:

• This is a do-it-yourself club. If you see something that you think needs to be done or fixed, you may do so without an okay from me or the board. This would include any maintenance or general up keep. Supplies are kept in the captain’s locker upstairs. If something needs to be purchased, submit the receipt to Rose with a description of the expense and send me an email.
• If repair or maintenance is more involved, please contact me and I will make the necessary arrangements to get it done.
• Be prepared to volunteer time for improvement projects during the season

For all of you interested in how my MG project turned out, here is a picture from last October after just finishing up. It took all summer to complete the body and interior. I plan to drive it a lot this summer and I am sure it will make frequent visits to the club.
Water Levels Surge on Great Lakes

by Andrew D. Gronewold, Anne H. Clites, Jacob Bruxer, Keith W. Kompoltowicz, Joseph P. Smith, Timothy S. Hunter, and Cary Wong

The recent 2-year surge represents one of the most rapid rates of water level change on the Great Lakes in recorded history and marks the end of an unprecedented period of low water levels.

Water levels on Lake Superior and Lake Michigan-Huron (Lake Michigan and Lake Huron are commonly viewed as a single lake from a long-term hydrological perspective), the two largest lakes on Earth by surface area, rose at a remarkable rate over the past 2 years. The recent surge represents one of the most rapid rates of water level change on the Great Lakes in recorded history and marks the end of an unprecedented period of below-average water levels that began in 1998.

Monitoring Water Levels

Routine measurements of Great Lakes water levels have been continually recorded, documented, and communicated to the public since the mid-1800s [Gronewold et al., 2013a] as part of a long-term international partnership between federal agencies including the National Oceanic and Atmospheric Administration, the U.S. Army Corps of Engineers, Environment Canada, and the Department of Fisheries and Oceans Canada.

The binational Great Lakes water level monitoring program has also served, and continues to serve, as a basis for numerous studies [see, e.g., Buttle et al., 2004; Mainville and Craymer, 2005; Millerd, 2010] focused on understanding impacts of water level changes on the roughly 17,000 kilometers of Great Lakes coastline across both the United States and Canada [Gronewold et al., 2013b]. These impacts include, but are not limited to, changes in waterway navigability (for both commercial and recreational vessels), hydropower generation, and tourism.

The Recent Surge

Water level data from the long-term binational monitoring program indicate that Lake Superior rose roughly 0.6 meter from January 2013 to December 2014 (Figure 1a), the highest rise ever recorded for that specific 24-month period (January through the following December). Similarly, from January 2013 to December 2014, water levels on Lake Michigan-Huron rose nearly 1.0 meter (Figure 1b), a rise nearly equal to the record-setting rise from January 1950 to December 1951.

Historical month-to-month water level changes (Figures 1c and 1d) indicate that the recent extreme 2-year rise on Lake Superior is associated with persistent near- or above-average water level rises for nearly every month. Notable above-average increases occurred from April 2013 to September 2013 and in April, May, and August 2014 (Figure 1c).
Similarly, the recent rise on Lake Michigan-Huron appears to be the result of not only above-average rises in the late spring and summer months (specifically April to June 2013 and April to August 2014) but also above-average rises in both September and October 2014 (Figure 1d). It is very unusual for water levels on Lake Michigan-Huron to rise in the early fall months (in only 11 of the previous 154 years on record, for example, did water levels rise from September to October).

**Surge Preceded by Record Lows**

Both Lake Superior and Lake Michigan-Huron had been persistently below long-term monthly averages for a period of roughly 15 years following a rapid decline in the late 1990s. Both Lake Superior and Lake Michigan-Huron had been persistently below (or, for brief periods on Lake Superior in 2004 and 2005, extremely close to) long-term monthly averages for a period of roughly 15 years following a rapid decline in the late 1990s [Assel et al., 2004]. During this period, water levels reached record lows for the months of August and September on Lake Superior (in 2007) and for the month of December on Lake Michigan-Huron (in 2012).

In January 2013, Lake Michigan-Huron dropped to its lowest level on record for any month of the year [Gronewold and Stow, 2014]. The longest prior continuous periods of below-average water levels on Lake Superior and Lake Michigan-Huron were, respectively, 1921–1928 and 1930–1943.

**Water Level Fluctuations in Context**

The recent surge in water levels has provided relief to systems and economic sectors stressed by hydrologic extremes. The prolonged period of low water conditions preceding the recent surge, for example, catalyzed demands for new structures designed to reduce...
flow rates through the St. Clair River and increase water levels on Lake Michigan-Huron [Gronewold and Stow, 2014]; the recent surge has changed the context of the debate over the benefits and the urgency of putting these structures in place.

**Future Conditions**

Internationally coordinated seasonal water level forecasts through the summer of 2015 indicate that monthly average water levels are likely to follow their typical seasonal trends at above-average levels. Beyond that time frame, however, drivers of regional climate variability that can significantly impact regional water budgets and lake water levels remain difficult to predict [Assel, 1998; Rodionov and Assel, 2003].

The recent rise in water levels on Earth’s two largest freshwater surfaces and the preceding period of below-average levels therefore underscore the need for improved understanding of how long- and short-term climate fluctuations (such as the 2014 Arctic polar vortex deformation [see Clites et al., 2014]) propagate into abrupt changes in the regional water budget and water levels.

Future research focused on understanding interactions between large lake surfaces and atmospheric processes and how those interactions lead to changes in ice cover, surface water temperatures, and evaporation rates may provide insights that support prudent water resource management planning not just in the Great Lakes, but in other regions as well.

**Acknowledgments**

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**References**


Author Information


Citation

Word Find

by John Gorton & Family

Perhaps it was because we wanted to get back out on the water, or maaaayyybe we needed to occupy a few people for an hour (just saying). Either way, here is a word and numbers search we built from terms related to sailing. You’ll be looking for 92 different words relevant to the RCC, sailors of old, current terms, and activities both on and off the water. To help you find them all, I’ve included a table that indicates how many words of each length are to be found. Next month we’ll list all the words you can find. Good luck!

Length: 2 3 4 5 6 7 8 9 11 13 14
Number of words: 1 8 24 11 13 16 8 4 3 1 3
Ruggles “Rotary” Snow Plow.

The Only Snow Plow that Can Remove Deep Snow.

Guaranteed to Cut Through Snow Banks 8 Feet High.

Strong, Durable and Always Ready.—No Brooms to Keep in Repair.—Cost of Maintenance Ninety per cent Less than any other Plow.—Requires Fifty per cent less Power.—Removes Snow three feet from each side of the track.

THE RUGGLES “ROTARY” SNOW PLOW is constructed upon the same rotary principle as the successful snow plows used upon steam railroads, this method having been found to be the only one that could remove large bodies of snow. The Ruggles plow contains some desirable improvements not heretofore used in any rotary snow plow. It has been thoroughly tested the past three winters, and in every instance has given perfect satisfaction, keeping the roads open during the most severe storms.

The common faults of the old style sweepers and plows, viz., the rapid destruction of brooms and the inability to cut through long and heavy drifts—have been overcome in this new rotary plow, which costs practically nothing for repairs and will remove drifts as high as the machine itself.

WE GUARANTEE THE RUGGLES PLOW TO KEEP ANY ROAD OPEN, NO MATTER HOW SEvere THE STORM.