



LakeFront

Quarterly Newsletter of the Whitefish Lake Institute

Summer 2023



Registration Now Open!

Reserve your spot today for the Montana Lakes Conference, October 18-20 at The Lodge at Whitefish Lake—it **won't be back for another four years!** Organized and hosted by WLI, the conference brings together natural resource scientists, academia, businesses, and the public to engage on myriad lake topics.

The conference kicks off Wednesday October 18th featuring a workshop on conflict resolution and management. The workshop is followed by “Community Night” at 5pm which is free to the public and will showcase student posters followed by the popular Science Quencher.

On Thursday October 19th, Andrew Sansom, PhD from Texas State University, Jim Elser, PhD from the Flathead Lake Biological Station and Dan Wickham, PhD from Sludgehammer Group LTD will provide keynote and plenary presentations.

Breakout sessions include; Nutrients, Lake Associations and Citizen Science, Contaminants, Mountain / Alpine Lakes, Managing Native Fish, Ecosystem Resilience, Aquatic Invasive Species, On-site Wastewater Treatment, Education & Outreach, and Aquatic Plants.

Reserve your spot today!



Support WLI via the Great Fish Community Challenge August 10 to September 15!

The 9th annual Great Fish Community Challenge is a charitable giving campaign in which donors can choose to give to any of the 78 participating Flathead Valley non-profit organizations with a single transaction. At the conclusion of the campaign, Whitefish Community Foundation will award a percentage match on the first \$20,000 raised by each participating organization. Nonprofits must raise at least \$10,000 to be eligible for the match.

Since 2015, the Great Fish Community Challenge has raised over \$22 million for more than 85 local nonprofit organizations.

Inside this issue of *LakeFront*—

Montana Lakes Conference.....	1
Great Fish Community Challenge.....	1
NMLN Volunteer Training and Awards.....	2
On-site Wastewater Treatment Update.....	3
Summer Intern Experience.....	3
Summer Photos.....	4
WLI Supporters.....	5
Become a WLI Member.....	6

Back issues of *LakeFront* available at www.whitefishlake.org



A 501 (c)(3) Nonprofit Corporation



Whitefish Lake Institute
550 East 1st Street #103
Whitefish, MT 59937

Voice: 406.862.4327
info@whitefishlake.org
www.whitefishlake.org

Founded in 2005

Mission Statement

The Whitefish Lake Institute is committed to science, education, and aquatic resource initiatives to protect and improve Whitefish Lake and Whitefish area water resources today, while providing a collective community vision for tomorrow.

Board of Directors

Andy Feury, President
Hank Ricklefs, Vice President
John Collins, Secretary/Treasurer
Brian Averill
John Muhlfeld
Monica Pastor
Debbie Pierson
Mitch Robinson
Camisha Sawtelle
Todd Votteler
Jim Williams

Science Advisory Committee

Sam Bourret, co-chair
Ryan Richardson, co-chair
Megan Chaisson
Paul McKenzie
Eric Sawtelle
Erin Sexton
John Wachsmuth

Staff

Durae Belcer: Program Coordinator
Mike Koopal: Founder, Executive Director
Cassie Roberts: Limnologist
Carol Treadwell, Ph.D: Finance & Grants Manager

LakeFront is published quarterly by the
Whitefish Lake Institute

Cover Photo:
Whitefish Lake from City Beach.



NMLN Volunteer Training and Awards

WLI hosted the annual Northwest Montana Lakes Network volunteer training on April 29th at the FWP public meeting room. WLI provided program background, data updates, and water quality monitoring protocols. Montana FWP expert, Scott Freeman, provided information on Aquatic Invasive Species including snails, plants, and crayfish. The training was just in time for the winter ice to leave and the unusually high spring temperatures to kick in! Thanks to all that attended and to FWP for their partnership in this program.

Each year WLI recognizes a lake volunteer for their dedication to monitoring water quality and promoting watershed stewardship in northwest Montana. The 2022 Northwest Montana Lake Network volunteer award went to two outstanding citizen scientists, Susie Bouton and Terry Divoky.



Terry has monitored Halfmoon Lake with her dog by canoe since 1992. She collects baseline water quality data and records and tracks bird and wildlife sightings such as bear, mink, cranes, sunning turtles, fish, and eagles. Being a lake monitor has allowed her to discover many interactions that happen on the lake that she may not have noticed if she

wasn't carefully monitoring the water quality. This includes keeping a close eye on the loons that nest on Halfmoon Lake and the many predators that often prevent the loons from producing chicks. Terry and her husband have lived on Halfmoon Lake since 1988. Terry started the Windflower Native Plant Nursery on their property where she grew Montana native plants for 12 years. Previously she worked seasonally for Glacier, was an elementary teacher in West Glacier School and a school librarian in Columbia Falls. Terry and her husband are now retired and enjoy backpacking, hiking, and traveling, as well as volunteering for several organizations including NW Montana Forest Fire Lookout Association and Gateway to Glacier Trail.



Susie Bouton and her husband moved to Bailey Lake in 1990 and soon after she attended a water quality training to be a volunteer water quality monitor. She has been monitoring water quality on Bailey Lake by canoe since 1993. **She stated that "Bailey Lake is small but has a big heart"** and over the years has welcomed swimmers and paddlers to its rela-

tively warm water along with a multitude of wildlife and interesting birds. She has 30 years of records to fall back on and laments the demise of our Red Necked Grebes but welcomes the nesting hooded mergansers. Recently, she has been concerned with the algae blooms on the lake and has focused her monitoring efforts on documenting them in Bailey Lake.

On-site Wastewater Treatment Issue Update

WLI has been working on the issue of septic leachate and its effect on groundwater and surface water for over a decade. In 2015, WLI published a report documenting septic leachate along the shoreline area of Whitefish Lake. That report is available on our website www.whitefishlake.org.

The Flathead Basin Commission (now Western Montana Conservation Commission) developed the Flathead Basin Septic Risk Model to visually display the risk of underperforming onsite wastewater treatment systems in the Flathead Basin. The model incorporates both physical landscape characteristics and the age and density of existing septic systems, where data allowed. That model can be found at flatheadbasincommission.org.

The Flathead Basin Commission also partnered with Cornell University to determine the utility of Synthetic DNA as a source tracking tool for septic leachate near lakes. Of the six landowners along Whitefish Lake and Lake Mary Ronan who voluntarily participated in the study, the synthetic DNA from all homes eventually showed up in lake water samples.

WLI also participated in a National Science Foundation Smart & Connected Communities grant that explored the topic, including a workshop held at the Flathead Lake Biological Station in 2022. Recently, pharmaceutical and personal care product sampling equipment was deployed in Whitefish Lake and Flathead Lake (results pending).



WLI Limnologist, Cassie Roberts, prepares to deploy a pharmaceutical and personal care products sampler in Whitefish Lake.

Senate Bill 383, introduced by Sen. Hertz (R) during the recent Montana legislative session called on Montana DEQ to investigate model rules and look at a statewide septic database. The bill passed the Montana Senate Natural Resource Committee but was tabled by Finance and Claims.

Mike Koopal from WLI also serves on the Montana Water Pollution Control Advisory Council where there is active discussion with Montana DEQ regarding individual on-site wastewater systems and the issue of septage (the solids pumped from individual systems or public vault toilets, etc.).

Summer Intern Experience

-by Niko Hunter

Entering my summer internship with Whitefish Lake Institute, I didn't know exactly what to expect. Despite my high expectations and brief previous experience with the organization through FREEFLOW (the environmental club at Whitefish High School), I couldn't have possibly anticipated the breadth of experience that I was about to gain.

The summer kicked off focused on educational programming. I was immediately thrust into giving presentations about water quality to kids aged 2-14. While it took a short while for me to gain confidence, Durae and Mike were excellent mentors, and I found that learning through experience allowed me to retain information much more quickly than in a classroom setting.



Niko with a young participant at WLI's educational programming at the Whitefish Library.

I also spent many early summer days in the field collecting data on Whitefish Lake and its tributaries. Learning the data collection process was extremely rewarding, and the guidance of the WLI team helped me understand the workflow.

Montana Fish Wildlife & Parks and the Flathead Lake Biological Station additionally played a large role in my internship, demonstrating the importance of organizational partnerships in the field of environmental science. I attended an aquatic invasive species prevention training at the Bio Station, and I was given the opportunity to spend a few days with FWP spawning fish and conducting field work.

The final portion of my internship has consisted of the Northwestern Montana Lakes Network, a research project that involves surveying 41 lakes in the Flathead Valley and beyond. This has been one of my favorite aspects of the summer, as it has served as a culmination of everything I've learned thus far while allowing me to explore and experience myriad beautiful lakes in the region.

I could not be more grateful for the time I've spent with WLI. I have yet to hear of an internship opportunity that includes as wide a breadth of experience as the one I just received, and the amazing team only served to make everything even better. Upon my return to Columbia University this fall I am going to feel academically rejuvenated and experientially enriched, and I know I will carry this experience forward into the future of my educational and professional journey.

Summer Photos



Former WLI Summer Intern Mary Webb, now a science teacher at Columbia Falls High School, with her daughter in the Averill's Viking Creek Wetland Preserve.



Retired WLI Science & Education Director Lori Curtis and her husband Walt helped out with upkeep at the Living Wetlands Nature Trail in the Averill's Viking Creek Wetland Preserve.



These two white-tailed deer bucks didn't seem to be nervous of humans on the trail in the Averill's Viking Creek Wetland Preserve.



WLI Program Coordinator, Durae Belcer, heads out to monitor one of the 41 lakes in the Northwest Montana Lakes Network.



WLI Executive Director Mike Koopal talked about "The Mystery of Tally Lake" to Flathead Audubon at their annual Warbler Weekend.



WLI Summer Intern Niko Hunter with a stick bug collected during the annual 5th grade educational outing attended by Whitefish and Kalispell schools in the Averill's Viking Creek Wetland Preserve.

Whitefish Lake Institute Supporters

Active Members who have donated for 10+ years since 2005.
Active Members who have donated for 5-9 years since 2005.

Sustainer (\$20,000 and above)			
The Lodge At Whitefish Lake-Averill Family			
Fellow (\$5,000 and above)			
Collins, John & Anne Foley Family Charitable Foundation Gregory, Joe & Cindy	Hoag, Jim & Anna Jones, Bill & Ann Pastor, Monica	Shennan, Janna & Jamie Taylor, Don & Ruth The Ammon Foundation	Whisler, Steve & Ardy
Guarantor (\$1,000 to \$4,999)			
Abell, Charlie & Susan Atkinson, Richard & Carol Brisler, Tara & Matthew Burke-Feldman Family Fund Covey, Mike & Stacy Gardner, Keith and Lindsey Gordon, Richard & Cheryl Watkins	Grenier, Charles & Teresa Gustafson, Mike Ila B. Dousman Fund, Inc. InvesTech Research- Jim & Lisa Stack Lyman, Charles & Becky McCann, Paul & Janice Nelson, Marilyn & Rick	Quinn, Tom & Teresa Raudabaugh, Joseph & Beverly Reich, Victoria River Design Group Ryan, Bill & Bev Sullivan, Rick and Judi Valner, Alberto and Stacy	Votteler, Todd Whitefish County Water District Whitefish Credit Union Young, Alison
Visionary (\$500 to \$999)			
Bannigan, Thomas and Louise Blair, Ric & Dawn Bulkley, Brad & Ann Campbell, Luther & Dorothy Cleveland, Gail & Bruce Tannehill Cowett, Mark & Connie	Erickson, Bart & Carole Fleming, Don & Joann Forestation, Inc. Glacier Bank Hildner, Richard & Suzanne Daniell Houston Point HOA	Kramer Family Fund Lion Mountain Homeowners Mance, Mark & Katie Callahan Peace Waters Repke, John & Beth Richardson, Ryan	Ricklefs, Hank & Sue Salt, Deb & Tim Shanti, Shima Solberg, Dick & Jane Steck, Ann Stinson Family Foundation
Benefactor (\$250 to \$499)			
637 Nature Trail, LLC Abell, Tarn & Marybeth Anderson, Julie Anderson-Montgomery Consulting Engineers Averill, Brian & Fabienne Averill, Sean Bailey, Michael & Kathleen Bayne, Bill & Betsy Blake, Cameron & Sandy Gray Bryan, Kirk Bucher, Charles and Sandra Casey, Maureen Center For Native Plants	Daniels, Matt & Kate DM Miller Properties, LLC Fletcher, Greg Fletcher, Sue Frost, Michael & Patti Grady, Dave & Linda Engh-Grady Hauf, Ron Haymon, Robert & Barbara Krausekhopf Heinrich, Klaus & Joaqueria Johannes, Amy Koopal, Jack Koopal, Mike & Mae Kovacich Family Trust	Little Bitterroot Lake Association Losleben, George & Connie Johnson Lyon, Lawrence & Yvette Meagher, Nathan and Kristy Merrick, Colleen Monzingo, Betty Nelson, Lelf and Gloria Nelson's Ace Hardware North Country Builders, Inc. Phelps, John & Melissa Ritter, William and Kristen Robitzski, Steven Rowles, Roger & Val Konnerup	Salvagio, Phillip Schultz, Ralph Scott, Peter & Lori Asplund Scott, Toby Short, Dan & Kim Sutter, Ronald & Margo Svenningsen, Nancy & Mark Vandermeer, Janet & Rick Packard Watershed Consulting, LLC Whitefish Marine & Powersports
Leader (\$100 to \$249)			
Abell, Koel & Lazette Akey, Lin and Kathy Anderes, Elise & Stefan Appelgren, Brent Bauch, Duane & Valerie Bennett, Bob & Caryl Brueggeman, John Chadwick, Doug & Karen Reeves Chauner-Niendorf, Cyndi Christian, Steve & Doreen Coyne, Wendy Cuffe, Mick & Lanette Curtis, Kitty & Stewart Stadler Curtis, Walt & Lori Dakin, William & Sarah Danczyk, Gary & Annell Daniels, Scott & Karen Dennis, Ian & Antonia Malchik Eckert, Will Elser, Monica & Jim Ennis, Felicia Flag Nor Fail, Inc. Follett, Doug & Ann	Gersh, Judah & Tanya Graf, Dick and Gayle Gunderson, Greg & Catherine Gunderson, Karen Harding, Tom & Sue Hartman, Dewey & Sandra Heinzig, Dennis & Iona McMillan Hoppes, Tobin & Molly Ingelfinger, Franz & Cynthia Jordan, Wink & Joy Kibbe, Jim & Marion King, John & Maureen Knechtel, Murray & Deb Bartlett Koopal, Craig & Ann Labrie, Bill & Alice Lieser, Ed & Susan Lull, Steve Malletta, Sue & Joe Martin, David & Lynne Metcalfe McCartney, Sierra & Brett Svetlik McDermid, David McIntyre, Curt & Sherry McMahon, Kate & Bob Horne	Mechem, Jim and Jean Anne Swope Menicke, Richard & Jennifer Asebrook Miller, Ronald and Jean Moll, Sue & Gaylen Moore, Pixie Moore, Shawna & Jamie Morgan, Devonna Morrison, Sharon Noftsinger, David & Michelle Olson, Ron & Linda O'Neil, Christy Paslawsky, Andrew & Kim Sands Patterson, James & Lori Peschel, John & Laura Pierson, Debbie & Mike Ridenour, Ron Roosa, Karl & Elaine Rothberg, Marty Sanderude, Scott and Julie Sawtelle, Bill & Linda Sawtelle, Cami Schott, Brian & Lyndsay Schroeter, Franklin	Schuber, Charlie & Nancy Shaw, Pam Sheffels, Marcia Shors, Heidi & Andy Small, Lindy and Stephen Shapiro Smith, Garry and Linda Stearns, Chuck & Rita Steitz, John & Carol Treadwell Strand, Tim and Sukey Pfirman The Landlord The Simple Chef Catering Theissen, Dennis & Ginger Trifunovich, Dragi Trousedale, David & Jeannine Van Laere, Sabine VanKoten, Doug Whitefish Lake Golf Club Whitefish Lake Restaurant Williams, Amy & Timothy Williams, Jim and Melora Woodruff, Nancy & Steve Thompson
Sponsor (\$50 to \$99)			
Aronsson, Peter & Cheri Askevold, Gerald & Sally Jo Balaska, Teri Baldwin, Michael Bansak, Tom & Anne Barham, Michael & Kristi Birch Hills Homes Bisharat, Ibrahim & Martha Bruzek, Bill & Judie Burg, Bill & Kay Chaisson, Megan Chauner, Linda Cohen, Connie Corwin, Bill & Christina Cox, Besty & Woody Ericson, Dave and Sarah Fanning, Michael & Jill Gehri, Richard & Glenda	Haller, Bruce & Kaye Harrison, Gil & Ruth Hartlieb, John & Kathi Hartman, Greg Hartman, Melissa Henry, Emilie Hobson, Carmen Holdhusen, Chris Holt, Mark & Chris Hope, Kendra Howard, Trevor and Kacy Hunt, Leslie & Will Johnson, Claudine Joly, Steven Jopek, Mike & Pam Gerwe Kavanagh, John Keane, Leo and Gail Leonard Kemp, Craig & Holly	Kirk, Phil & Lesia Kohnstamm, Betsy & Dan Kuhl, Tanner & Stephanie Larsen, Arnold & Karen Lawson, Bob & Dyan Lewensohn, Leonard and Carol Lewis, Casey Linne, Gail Madler, Marianne Magone, Larry & Barb Manning, Brian & Denise Moore, John & Janice Morse, Craig Olson, Scott and Amy Paone, Robin Paul Moffatt Construction Pearce, Bryan and Danielle Powers, Mary Drew	Regev, Nir & Cherie Ronseth, Shirley Ruffatto, Chris Smart, Mike & Timmie Smith, Dana Smith, Will & Bonnie Souther, Merry Lynn Sramek, Joseph & Deanne Streeter, Mike & Bonnie Sullivan, Colleen Van Lawick, Marisa Vars, Tom & Caroline Verdon, Paul & Colleen Vine, Carrie & Tagen Ward, Diane Whitby, William & Karen Wilson, John & Marjorie Zeisse, Jivan
Current Grantors & Research Funders			
City of Whitefish Flathead Conservation District	Montana Fish Wildlife & Parks Montana Invasive Species Council / MT DNRC	United States Forest Service Western Montana Conservation Commission	Whitefish Community Foundation Whitefish County Water District






550 East 1st Street #103
Whitefish, MT 59937



Whitefish Lake Institute Membership Coupon

Yes! Please enroll my membership in the Whitefish Lake Institute, and send me the quarterly newsletter *LakeFront* to keep me informed of the current projects underway and issues being addressed by the Whitefish Lake Institute.

☐ My check is enclosed

☐ Visa  ☐ MasterCard  ☐ Discover 

Account #:

Expires: _____ 3-digit CVV code: _____

Name _____

Address _____

City _____ State _____ Zip _____

Email _____

Please check your membership category:

- | | |
|-------------------------------------|--------------------|
| <input type="checkbox"/> Sustainer | \$20,000 and above |
| <input type="checkbox"/> Fellow | \$5,000 |
| <input type="checkbox"/> Guarantor | \$1,000 |
| <input type="checkbox"/> Visionary | \$500 |
| <input type="checkbox"/> Benefactor | \$250 |
| <input type="checkbox"/> Leader | \$100 |
| <input type="checkbox"/> Sponsor | \$50 |

Gold
Transparency
2023

Candid.

Your Contribution is 100% tax-deductible.

501 (c)(3) non-profit corporation



Whitefish Lake Institute ♦ 550 East 1st Street #103 ♦ Whitefish, MT 59937

Voice: 406-862-4327 ♦ Fax: 406-862-0686

www.whitefishlake.org

Great Gift Ideas
from WLI-

Visit our website
www.whitefishlake.org
or stop by the office to
get a bumper sticker,
various publications,
a map, and other items.

