

Higgins Lake Swimmer's Itch Organization
P.O. Drawer 665, Grayling, MI 49738

December 26, 2017

Dear HLSIO Supporters and Members of the Higgins Lake Community,

The HLSIO board wants to wish you a happy holiday season and thank you for your generous support for our swimmer's itch (SI) program on Higgins Lake. It's hard to believe we have been working to control SI on Higgins Lake for more than four years now. We have made great progress but need to remain vigilant and continue to develop new tools to ensure we keep SI at a low level and hopefully reduce it even further. We could not have made this progress without your generous support and sacrifice. This note will attempt to summarize some of the extensive efforts to address the critical problem of SI.

Attached to this note are two reports. First, as usual, we are sending you the 2018 summary Final Report from Dr. Curt Blankespoor and his team at Swimmer's Itch Solutions (SIS.) This report summarizes the 2018 SI control program work on Higgins Lake. Also attached is a research project conducted this summer by Dr. Curt Blankespoor and his team paid for by the state appropriation that studied the possible correlation between our two objective measures of SI infection, snail infection level and qPCR. We are using both measures to assess and monitor SI infection in Michigan lakes, including Higgins Lake.

We have used snail infection level on Higgins Lake from the beginning of our program and documented a more than 98% reduction of infected snails. This summer, our brood count dropped to a new low with only two broods and 16 ducks trapped and relocated.

We are beginning to also use the newer measurement, qPCR. qPCR is a DNA-based measurement that can count the number of SI causing parasites in a given sample of water. This summer, expert scientific teams from the Michigan Swimmer's Itch Partnership (MISIP), including SIS, made further advancements in qPCR so that we can now use qPCR to begin to differentiate the swimmer's itch-causing parasites by source using their DNA from lake water samples. For example, we can now differentiate DNA from common mergansers, mallards and Canada Geese and several snails.

This is an exciting new tool and more qPCR research is being planned for next year by MISIP. It is also important because we are finding that some Michigan lakes have multiple duck/geese and snail sources for their SI problem. However, so far, based on Dr. Blankespoor's team's work with qPCR this summer on Higgins Lake, we believe the continuing low level of SI on Higgins Lake is due solely to common mergansers and the stagnicola snail. We will continue to monitor Higgins Lake for evidence it has spread to other ducks/geese and snails. We also plan to conduct another Canada Geese trap

and relocation program on Higgins Lake next year (2019) which will reduce the risk that they will contribute to the SI problem in the future.

The exciting new research being conducted on Higgins Lake by SIS using high tech, miniature geo-locators to help find common merganser nests and track their movements will continue next year. It is pre-funded thanks to the generous contributions of Bob Hoffman and Bill Demmer. A report will be drafted and shared with you at the conclusion of the study.

HLSIO and HLPOA continue to play a leadership role in the 32 lakes of the MISIP. More lakes are participating in SI infection assessments to determine the presence and source of SI infection, control programs using common merganser trap and relocation and research in the multi-faceted fight against SI. We are also working closely with the DNR as partners in the fight against SI.

We have some current and future personnel changes to report. The HLSIO board is pleased to announce that Greg Semack, Vice President of HLPOA, has replaced Jim Vondale as President of HLSIO. Jim will remain on the HLSIO board for a few months to ensure an orderly transition. Jim will continue for a few more months as a Co-chair of the MISIP. Greg will replace Jim to continue a leadership role of Higgins Lake in the future direction of MISIP.

MISIP is receiving another \$250,000 from the state during this fiscal year to support our SI efforts. We want to thank the state legislature for again recognizing the critical importance of the fight against SI. They have now granted \$750,000 over three years to support our efforts. We are working with the HLPOA lobbyist, John Lindley, to obtain a fourth appropriation. MISIP also is increasing its coordination with Tip of the Mitt Watershed Council in Petoskey, leveraging its experience, knowledge and contacts to help manage our programs.

Finally, we are pleased to announce that we worked with Crystal Lake and Dr. Curt Blankespoor to train three high school teachers to conduct trap and relocation of common mergansers on Higgins and Crystal Lakes in 2019. One of our trainees is Chuck Schepke from Roscommon High School. We have continued to substantially reduce our SI control costs each year and we will see another substantial reduction in 2019 as a result of this training.

The year-end is a good time to take advantage of the tax benefits of giving to HLSIO so we can continue this important work. HLSIO is a 501 (c)(3) tax exempt organization. According to the IRS, checks mailed with a postmark by December 31st are eligible for a tax deduction in 2018. More than 95% of contributions are used to support our programs. HLSIO's mailing address is: P.O. Drawer 665, Grayling, Michigan, 49738. Thank you again for all your support!

HLSIO Board

Bill Carey, Neal Cooley, Dale McDonald, Ed Nellist, Greg Semack, Bob Schneider, Jim Vondale, Dianne Wagner