DOUGLAS LAKE SWIMMERS' ITCH TASK FORCE REPORT JULY 7, 2020

Due to the large number of swimmer's itch cases reported on Douglas Lake this year (Summer 2020), the DLIA agreed to the formation of a task force whose charge is to identify and evaluate cost effective options (solutions) for mitigating the problem of swimmer's itch at Douglas Lake. Kim & Ed Grant agreed to co-chair this task force. Ron Witthoff and Frank Spezia (both are homeowners on the lake), and Karie Slavik (UMBS staff) have also agreed to serve on the task force.

THE CURRENT SITUATION

- As of 7/5/20, the task force has received 50-60 reports of swimmer's itch from all areas of the lake.
- Fishtail and Silver Strand have had the most reported incidences. All areas of the lake have had reports.

WHAT CAN LAKE ASSOCIATIONS DO ABOUT SWIMMER'S ITCH

- Educate members about swimmer's itch and how to avoid it (this has been addressed many times in newsletters and is currently on the DLIA website).
- Assess the problem on the lake (this is the 2020 recommendation of the task force)
- Begin a 3-year control program (this is the 2021-2023 recommendation of the task force)

WHAT ARE OTHER MICHIGAN LAKES DOING?

- Higgins Lake (9600 acres). From 2015-2017, a three-year Swimmer's Itch Control Program resulted in over a
 98% reduction in the lake-wide snail infection level from a pre-program level in 2014. In 2018, the Higgin's
 Lake Swimmer's Itch Organization transitioned to a maintenance control program. Reported cases on their
 website and Facebook posts suggest a significant reduction in the number and severity of swimmer's itch
 cases.
- **Black Lake (10,130 acres)** is in year 2 of the process with Swimmers Itch Solutions. 2019 involved the studies needed to obtain the DNR permit. 2020 catch and release is underway.
- Larks Lake (592 acres) began with Swimmer's Itch Solutions in 2019 with the water study needed to apply for the DNR permit. We spoke with Sue Jeffers from their lake association. She has been very happy with the work of Curt Blankespoor and his crew and has offered to help the task force with the permit application needed to proceed with the project on Douglas Lake.

• Crystal Lake (9711 acres) began working with Swimmer's Itch Solutions in 2017 with the water study and permitting. Per the Crystal Lake Water Shed website, the capture and release has removed multiple broods in 2018 and 2019. It appears that the capture and release is still ongoing with a volunteer group now doing the work. See the table below of SI cases gathered by Congregational Summer Assembly (CSA) waterfront staff on the number of swimmers and cases of swimmer's itch (SI) at the CSA beach. Per the website, this area of Crystal Lake has been keeping the most accurate SI records:

TABLE 1: OVERALL INCIDENCE BY YEAR

YEAR	TOTAL SWIMMERS	TOTAL SI CASES	INCIDENCE RATE (% = #CASES/100 SWIMMERS)
2013	3981	114	2.9%
2014	5068	244	4.8%
2015	6894	367	5.3%
2016	5084	245	4.8%
2017	4468	151	3.8%
2018	5261	90	1.7%
2019	6115	34	0.6%
TOTAL	36871	1245	3.4%

DOUGLAS LAKE SWIMMERS ITCH TASK FORCE RECOMMENDATION:

Ed and Kim Grant spoke with the head of the Larks Lake Association who is also on the Michigan Swimmers Itch Partnership (MISIP) board. Larks Lake contracted with Swimmer's Itch Solutions in 2019. This individual was very helpful and offered to assist the task force in the permit application process.

The Grants also spoke with Curtis Blankespoor of Swimmer's Itch Solutions LLC. This company has been involved with Higgins Lake, Crystal Lake, Black Lake, and Larks Lake. Curt also currently works as an adjunct professor at the University of Michigan and teaches both General Ecology and the Biology of Animal Parasites at the U of M Bio Station. His proposed program for Douglas Lake is as follows:

- Assessment 2020: 1) Perform the lake study as required by the DNR. This study documents the presence of the swimmer's itch parasite and provides evidence that the Common Mergansers are the host associated with the parasite's lifecycle on the lake. 2) Prepare the Swimmer's Itch Assessment Report. This report is needed to submit the 3-year permit request to the DNR.
 - Due to Curt's schedule, the study would need to take place in July/August if we want to begin this year. Because the benefits of the project take 2-3 years before a significant change occurs, the task force strongly recommends beginning the process in 2020. The permit is an application fee of \$200. The Larks Lake Association has offered assistance to the DL Task Force in our completion of the permit. This will take place early 2021.
- Years 1 & 2 of the 3-year permit 2021-2022: Curt indicated that Douglas Lake currently has 2 merganser broods. Swimmer's Itch Solutions will catch and relocate the 2 merganser broods on Douglas Lake at a reduced cost because of the familiarity with Douglas Lake and the good relationship with UMBS and the DLIA. The broods (hen and babies) get relocated to the Great Lakes where the swimmer's itch life cycle is not present.
- Year 3 of the permit year and Subsequent Years (if new permits are obtained): While just in the development stage, Larks Lake is looking to create a Northern Michigan Lakes group that will work together to catch and relocate mergansers on the participating lakes. This would greatly minimize costs to everyone. As this project develops, the task force will keep the DLIA updated.