

November 7, 2014 Update:

The following describes the elements of a Comprehensive Swimmer's Itch Control Program, developed by the HLPOA Board, and being considered for Higgins Lake. The proposed Program includes elements that will be provided by contract with Dr.'s Curt and Harvey Blankespoor and Ron Riemink (The Blankespoor's are college professors and widely known as experts on Swimmer's Itch and Ron is a biology teacher who has worked with Harvey Blankespoor for decades on Swimmer's Itch research and control) as well as elements that can be conducted by HLPOA members. The proposed Program follows a model used by Glen Lake and it is supplemented by a new, state-wide Michigan Swimmer's Itch Partnership of lake associations focused on Swimmer's Itch. This is intended to be at least a 3 year program as significant reductions in the incidence of Swimmer's Itch will take 3 summers due to the cycle of Swimmer's Itch.

Significant research on Swimmer's Itch over many decades has shown the cycle of Swimmer's Itch includes birds (primarily the Merganser duck) that defecate in the lake releasing parasites that infect host snails that release parasites that infect birds.

Humans are the unintended hosts in this cycle when parasites enter the skin and cause pustules. Approximately 20 or 30 percent of humans do not get a reaction when the parasite enters their skin, but most people can get a strong reaction when a parasite enters the skin.

The HLPOA Membership survey questionnaires returned to date have identified Swimmers Itch as a top priority. Swimmers Itch is a serious problem on our lake and a Comprehensive Control Plan will be required to deal with it in an effective manner. The key elements of the Plan are:

A) THE STATE-WIDE PARTNERSHIP:

A new state-wide Partnership (the Michigan Swimmer's Itch Partnership) of 10 lake associations focused on Swimmer's Itch has been formed through efforts of the HLPOA. The 10 lake associations include Burt, Mullett, Crystal, Long, Leelanau, Torch, Walloon, Higgins, Margrethe and Glen. The purposes of the Partnership include supporting individual lake association efforts by sharing information about Swimmer's Itch including best practices to control the problem, identifying and funding research projects (e.g.: a study of the economic impact of SI and the increase in the Merganser

population), educating and influencing legislators and government agencies that deal with Swimmer's Itch and developing better preventive creams.

B) THE SWIMMER'S ITCH CONTROL CONTRACT PROGRAM:

The proposed Program follows the model used successfully on Glen Lake and developed by the Blankespoors. The key elements are:

- (1) Identification/confirmation of which species of birds on Higgins Lake are infected with the Swimmer's Itch parasite (reconfirm the target bird is the Merganser)
- (2) Identification of the snail species (one or more) in Higgins Lake that carries the Swimmer's Itch parasite
- (3) Three test sites for removal of infected snails measuring 1000 feet by 200 feet
- (4) Identification of Merganser nests and removal of eggs
- (5) Removal of broods of Mergansers that live on the lake throughout the summer
- (6) Weekly two hour education programs throughout the summer for Higgins Lake property owners and other interested people that will provide information on Swimmer's Itch and updates on the progress of the Control Program efforts and
- (7) Development of a means of confirming the reduction of Swimmer's Itch.

Currently, only college researchers with extensive experience are able to get permits to address nests and move birds. An element of the state-wide Partnership is consideration of extending permits to trained personnel who are not college researchers but this is likely a long term effort. Once the carrier snail is identified, individual homeowners may be able to remove the carrier snails from their lake bottom property to help reduce the risk of Swimmer's Itch. The Blankespoor's also have offered to conduct additional targeted snail removal programs for an additional cost, where infected snail species would be removed by hand and no chemicals would be used.

C) HARASSMENT OF MERGANSERS:

Higgins Lake began a program this Spring to keep Mergansers off the lake. Even when broods are removed from the lake, fly in's come to the lake in the spring and fall.

Removing the broods is the most important element to help break the Swimmer's Itch cycle because they live on the lake, are imprinted on the lake, return each year to breed and are most responsible for infecting the lake. Other lakes have used harassment tactics for many years and we will learn from those lakes to make our program even more effective.

D) HUNTING MERGANSERS:

Other lakes have actively adopted hunting of Mergansers to help reduce the Merganser population (they are not normally considered by sportsmen for hunting because of their foul taste). One lake uses a Wildlife Management firm, while others use various methods to encourage hunting on their lakes. Efforts to increase hunting by adding additional hunting periods is one of the elements of the state-wide Partnership.

E) FINDING AN EFFECTIVE AND USER FRIENDLY PREVENTATIVE CREAM:

Several preventative creams are currently available. Tests of their effectiveness have yielded mixed results. A biologist on Glen Lake, using research from the US government, is developing a new cream that has shown promise. Glen received cooperation from members of the HL Foundation for some of his testing. More testing is underway. The cream has no smell and doesn't stain everything it touches. Since current technology and Control Programs can only reduce Swimmer's Itch (hopefully significantly) and not eradicate it, effective and user friendly preventative creams will be part of a Control Program. This is another element of the state-wide Partnership that will benefit Higgins Lake.

COSTS and FUNDRAISING:

The cost of the proposed contract with the Blankespoors is projected at \$225,000 per year for three years (excluding a nest/egg program) plus a \$50,000 voluntary bonus at the end of the third year if we are satisfied with the results. We will negotiate with the Blankespoors to obtain the lowest cost proposal and the most flexible terms. We will

commit to one year at a time and ensure that we will only commit to what we can fund. We also can consider longer term maintenance programs in future years and there may be an ability to perform some of the work on our own in current and future years. If we are able to gain support for this proposal we will begin fundraising. We will need support from many lakefront associations and property owners as well as those who live near and use Higgins Lake.

The HLPOA board supports the proposed Comprehensive Swimmer's Itch Control Program.

PROPOSED TO DELETE EVERYTHING PAST THIS POINT

The Higgins Lake Property Owners Board, on behalf of its members, has been working with Senator Booher and his staff along with Representative Rendon to get the Michigan DNR to formulate an action plan to address the issue of Swimmer's Itch on Higgins Lake. After several meetings the following is a result of that effort:

Higgins Lake Swimmer's Itch Action Plan

Per the request of Senator Booher and concerned citizens of Higgins Lake, the DNR has identified the following actions to continue to address the issue of swimmer's itch in Higgins Lake, and particularly the role that common mergansers have in its life cycle. Each action has a suggested deadline and a suggested lead:

Action	Deadline	Lead
Consult with Dr. Harvey Blankespoor and get his written professional opinion about the effectiveness of lethal common merganser removal to reduce the incidence of swimmer's itch.	December 1, 2013	DNR
Consult with Michigan Department of Community Health to document the human health and safety concern of swimmer's itch and the severity of the condition.	December 1, 2013	Higgins Lake representative
Consult with DEQ to identify chemical treatment options and their impacts.	December 1, 2013	Higgins Lake representative
Consult with other northern Michigan lakes that have	December 1,	Higgins Lake

swimmer's itch and have taken actions to reduce the incidence of swimmer's itch (e.g., Crystal Lake, Glen Lake, Lake Leelanau) and learn from their collective experience.	2013	representative
Keep USDA-APHIS-WS and U.S. Fish and Wildlife Service updated on discussions between DNR and Higgins Lake	1 st of every month	DNR
Complete a comprehensive issue analysis of the role wildlife plays in the swimmer's itch life cycle and impacts to the public.	January 1, 2014	DNR
Keep agencies, legislators, and Higgins Lake representatives updated on progress of action plan.	1 st of every month	All
Agreement on actions to take for spring/summer 2014, and implementation of those actions.	March 1, 2014	All

In the event that Higgins Lake stakeholders decide to apply for a federal depredation permit to lethally control common mergansers, it is likely that the U.S. Fish and Wildlife Service and USDA-APHIS-Wildlife Services will ask the applicant to address and/or consider a number of items before a determination will be made. Higgins Lake representatives should be prepared to address the following:

- Documentation of the steps that Higgins Lake has taken to date to address the issue (e.g., outreach and education efforts, efforts to quantify incidence of swimmer's itch, efforts to quantify merganser numbers, nonlethal techniques attempted and their success, targeted merganser hunting during regular waterfowl hunting seasons, etc.).
- Documentation of merganser use and abundance on Higgins Lake, and the time of year mergansers are present. Include a description of the methods used to quantify this (e.g., established bird surveys). The DNR does not have this information for Higgins Lake. If this information isn't available through other means, the applicant will need to develop a plan to monitor merganser numbers on Higgins Lake (e.g., using volunteers, schools, universities, etc.).
- Documentation of the incidence of swimmer's itch on Higgins Lake, noting any trends in the number of cases of swimmer's itch. This includes the number of medically documented cases of swimmer's itch reported.

- If claiming that lethal control is necessary for reasons of human health and safety, documentation of the health or safety hazard of swimmer's itch is needed.
- Documentation of the abundance of the host snail in Higgins Lake, and locations where the snail occurs. Note any information on snail infection rates in Higgins Lake. The DNR does not have this information. If this information isn't available through other means, develop a plan for data collection.
- Depredation permits require documentation of the damage that mergansers have caused, the extent of the damage that mergansers have caused on Higgins Lake, an estimation of the value of the damage, an estimation of the number of birds causing damage, the time of year that damage is occurring, the number of birds you want to kill, and the proposed dates of lethal control work.
- Documentation of how the incidence of swimmer's itch has affected public use of Higgins Lake (e.g., numbers of visitors at parks, beaches, etc.).
- If merganser hunting during legal waterfowl hunting seasons has been encouraged on Higgins Lake, address why hunter harvest is insufficient to address the issue.
- If spring harassment of mergansers has been attempted, address why this activity has been insufficient to address the issue.
- Consider what impacts lethal control of mergansers on Higgins Lake will have on merganser populations in a larger region.
- Consider the potential impacts that lethal merganser control will have on other wildlife species, particularly protected species (e.g., shooting activity displaces other nesting birds).
- Consider the social impacts of lethal merganser control on Higgins Lake (e.g., public use and enjoyment of the lake, impacts to recreational opportunities), and address how lethal control would be safely implemented.
- Documentation of majority public support for lethal merganser control on Higgins Lake (e.g., DNR requires at least 70% support through a petition process or a resolution from a local municipality for Canada goose and mute swan control).
- If a depredation permit were to be issued, describe any monitoring efforts the applicant would implement during and after control to determine its effectiveness (e.g., testing mergansers for infection rates, snail infection surveys, monitoring incidence of swimmer's itch).

Both federal and state permits or authorizations are needed for lethal control of migratory birds. Applications for federal depredation permits should be submitted to the following:

Pete Butchko, USDA-APHIS-Wildlife Services, 2803 Jolly Rd., Suite 100, Okemos, MI, 48864, 517-336-1928. USDA-APHIS-WS will review the application and make a recommendation to the U.S. Fish and Wildlife Service to deny or issue the permit.

Federal agencies require a corresponding state authorization before issuing depredation permits. Requests for state authorization to lethally control mergansers on Higgins Lake should be submitted to the following for review:

Barbara Avers, 530 W. Allegan St., P.O. Box 30444, Lansing, MI, 48909-7944, 517-373-1263.

DNR will continue working with Senator Booher and the citizens of Higgins Lake to address swimmer's itch as it relates to wildlife. Other alternatives to address the issue should continue to be discussed (e.g., outreach and education, working with university researchers to frame and quantify the issue, capture/treat/and release of mergansers, merganser egg oiling or destruction, etc.) and DNR will provide additional information as necessary.