



3088 Hottis Rd. Hale, MI 48739 Hale: 989.728.2200 Clare: 989.386.0600 Fax: 989.516.5900

Henderson Lake Report

On July 15th, 2016 Savin Lake Services conducted an aquatic vegetation survey of the littoral zone of Henderson Lake. It was requested to be done because of some concern about some of the native weed beds that were present in years past no longer being there. Also there was concern about the overall health of the lake, and whether or not the weed control program was a good thing to continue to do or not. This survey was conducted using a high frequency sonar system to identify areas of the lake that aquatic vegetation was present. We then take a double headed rake attached to a tether and throw it into the lake and drag it for a couple feet to pull up the vegetation for observation. The following is a report of what we observed while out on Henderson Lake.

We did approximately 100 rake tosses in various locations and depths. We found vegetation with every rake toss out to about the 15 ft. depth contour. All vegetation requires at least 1% of sunlight to grow and that is why there is no vegetation beyond the 15 ft. depth contour. There were many different plant communities that exist on Henderson Lake. There were many various pondweeds like Robbin's pondweed, Richardson's pondweed, Slender leafed pondweed, Sago pondweed, and a little bit of Large leafed pondweed. We also found Naiad, Vallisneria (wild celery), Chara, Lily pads, and what I believe is Widgeon grass. All these plants are native plants and great plants for the lake to have.

There was one plant that was pretty dominant and was in every rake toss that I threw and that was Chara. Chara is a form of macro algae and is one of the best plants a lake could have. Chara acts as a water filter for the lake and helps to clarify the water column. It stays low lying across the bottom of the lake so it doesn't become a nuisance for water sports. It is a non-rooted vegetation, so can easily be moved by fish for spawning areas, and can also provide cover for smaller fish. Also will help to keep the undesirable weeds from growing by creating a dense mat across the bottom of the lake and not allowing sunlight to get to the roots and seeds of the less desirable plant communities. All these factors together are what makes this plant one of the greatest plant a lake could have.

It is my gathering that the Chara has moved into those areas where the Large leaf pondweed beds used to exist and did not allow the sunlight through to help them grow. There is no lack of vegetation there is vegetation all over the lake out to the 15 ft. depth contour, just some different plant communities in different areas. The overall state of the lake is very healthy and is only getting better. We have greatly reduced the amount of non-native invasive plant communities, and have now have native plant communities growing in areas that they haven't existed before.



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The Large leaf pondweed beds being gone has no affiliation with the weed control program due to the fact that we never treat for native vegetation past the 5 ft. depth contour. The herbicides that we use for invasive weeds past the 5 ft. depth contour are selective herbicides and will not harm the native plant communities. The herbicides used for native plant communities are contact herbicides and only kill the plant for 4-8 weeks and then they will return. There are no herbicides that we use that will systemically control pondweeds. The weed control program goals are to keep the non-native invasives in check, and to treat nuisance native weeds in the 0-5 ft. depth contour in developed areas of the lake only to make them more desirable for use to swim and boat. We are not out to make the lake a "bath tub", we have always had the overall health state of Henderson Lake in mind.

Moving forward we plan to do some water quality testing this fall and continue the water quality program through 2017. We plan to continue with the weed control program as we have in the past by treating the developed shore line for algae, and spot treating here nuisance vegetation exist. We also plan to do some bacterial augmentation (Mukk Busster) treatments to help reduce the amount of organic substrate that exist in some areas of the lake.

If anyone has any questions, comments, or requires any additional information please feel free to contact us. My contact information is listed below. We appreciate your business and look forward to working with Henderson Lake in the future.

Sincerely,

Paul Barber - Regional Lakes Manager

Savin Lake Services Inc.

3088 Hottis Road

Hale, Michigan 48739

Hale Office: 989-728-2200

Clare Office: 989-386-0600

Toll Free: 877-SAV-LAKE

Fax: 989-516-5900

Email: Paulbarber@LakeAndPond.com

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