

# MOON LAKE NEWS

ISSUE 122 - APRIL, 2015

## WELCOME SCOTT AND PAM JEIDY AND FAMILY TO MOON LAKE

Our newest members of Moon Lake Riparian Assn. are Scott and Pam Jeidy. They have purchased the former home of Roy Porterfield. They have three children: Alexandra who is a senior at the University of Mankato, MN; Colin who is a sophomore at UW-EauClaire; and Mrogan who is a junior at Sun Prairie High School. Scott is a sales person in the computer tech industry and Pam is a homemaker.

They had vacationed several years on Moon Lake and had such fond memories that after keeping an eye out for lake property they bought the Porterfield home in November. They are looking forward to spending their first summer as MLRA members and residents. Let's all give them a warm welcome.

## A GIFT FROM THE LES & DOROTHY JOHNSON ESTATE (By Jim Reiels)

Several weeks ago Jim Reiels received a phone call from Kip Johnson, a grandson of Les and Dorothy Johnson. The Johnsons lived on Moon Lake in the home that is now owned by Sean and Erin Hill. Kip shared his boyhood memories of Moon Lake, with its loons, the solitude and beautiful sunsets. He especially loved the sound of the loons echoing across the lake. As a young lad he spent summers at the lake with his grandpa. He remembered the great friends and neighbors who lived nearby: the Snyders, the Chases and the Gorskis. Years after these friends had passed, the Johnson family wanted to leave a gift to celebrate the fond memories of the northwoods and Moon Lake. Thus they sent a check for \$1000 to our lake association in memory of Les and Dorothy. This gift was donated to support the continuation of water quality studies and the preservation of the loon habitat on Moon Lake. **We are most appreciative of their thoughtful gift and have placed their donation into our ANS fund.**

## TREASURERS REPORT: January thru April, 2015 (By Jim Reiels)

|                             |          |
|-----------------------------|----------|
| Beginning balance           | \$534.18 |
| Receipts: Dues - Dues \$300 | \$300.00 |
| Subtotal                    | \$834.18 |
| Expenses:                   |          |
| MLSA water quality          | \$170.00 |
| MLSA membership\$           | \$50.00  |
| State of Mi License         | \$20.00  |
| Total Expenses              | \$240.00 |

|                     |                         |
|---------------------|-------------------------|
| Ending balance      | <b>\$594.18</b>         |
| Savings             | <b>\$3328.18</b>        |
| ANS Fund            | <b>\$4250.01</b>        |
| <b>TOTAL ASSETS</b> | <b><u>\$8172.37</u></b> |

## **DNR APPROVES FISH STOCKING PLAN FOR MOON LAKE** (By John Sick)

We received word in February that a six year plan for stocking splake (a hybrid trout) has been approved by the Michigan DNR and is scheduled to begin in May. The schedule calls for 4600 fingerling splake to be planted each year through December 31, 2020. The splake will be coming from the Marquette hatchery and the number planted each year may vary somewhat depending on availability. The "management plan" approval document we received includes some interesting background and historical information. It is too lengthy to include here, but you may access it by going to our website.

Our DNR representative, Mr. George Madison, has indicated he will let us know about two weeks in advance of the day and the approximate time of the planting. We will pass this information on to our members as soon as we receive it in case there are some who would like to witness the planting. Mr Madison has suggested that once the fish are planted, we should be vigilant for avian predators (gulls, mergansers, loons) that sometimes key in on newly stocked fish. He points out that moderate boat activity to discourage avian predators from targeting the stocking site is advantageous to improve survival. If you see a lot of avian predators near the boat landing area, it would help to slowly motor through that area to try to move the predators out.

We should be pleased that the DNR has approved the stocking plan for our lake. The cost to the state for this stocking program is approximately \$60,000, a little more than pocket change. It is a compliment to the quality and health of our lake, and to our association that worked diligently to help this happen.

## **LOON NEWS**

The loons are back! Jim Reiels reported seeing a single loon on April 15 and Tom Wheeler reported (thru Bob Turnquist) that the first loon arrived on April 14 and the second on April 20.

Bob Turnquist reported that he and Tom Wheeler found it necessary to visit the loon platform in the winter to trim some of the vegetation. There was so much vegetation on the platform that high winds were putting so much force on the platform that two out of four anchor ropes were broken. The trimming also provides more space for the loons (we have to keep them comfortable!). They revisited the platform on Monday, April 27, to repair the anchor ropes, clean up the platform, and put some fine tree roots on the platform that loons like for nesting. Tom procures these roots at the Toumey Nursery in Watersmeet. Early that evening both loons were observed swimming around the nest. According to Tom, this is typical.

Our thanks to Bob and Tom for taking care of the loon platform. There are not many people who would tromp through the snow in the dead of winter to trim vegetation off a platform!

## **SNOWFALL 2014-2015 WINTER SEASON**

This past winter Bob Turnquist provided data on snow fall on the website. The source of this information was a recording station approximately 8 miles west of Moon Lake. From November thru March that station recorded 93 inches of snow with a moisture content of 7.1 inches. Snow fall data for April will not be available on the website until early May.

## **LAKE NOTES** (By Dale Sharpee)

**Ice Free Date:** The lake became ice free on April 17th. This was 23 days earlier than 2014 when the last chunk of ice disappeared on May 10th. There were 147 days of ice cover for the 2014-2015 winter season.

**Lake Level:** The water level at the gauge at the time the lake became ice free was the highest that it has been at ice out since recording of the lake level began in 2001. The level this spring, 4.38 feet, was .2 feet (2 1/2 inches) higher than the level at ice over on November 21st. There has been a steady increase in the lake level since ice out last spring. As of now the lake is 1.32 feet higher than it was on May 10, 2014.

**2014 Cooperative Lakes Monitoring Program (CLMP):** We have been provided with the data from the measuring and sampling that was done in 2014. This data was prepared in a report prepared specifically for each of the lakes participating in the program. This is a new feature. Here is the report summary for Moon Lake: "With a TSI score of 33 based on Secchi transparency, Chlorophyll-a, and summer total phosphorus, the lake is rated as an oligotrophic lake. Long term trends indicate that the trophic status parameters have not changed beyond minor year-to-year variations since monitoring began in 1995. The average TSI for Moon Lake over the 2009-2013 time period is 35".

A lake's ability to support plant and animal life defines its level of productivity, or trophic state. Lakes are commonly classified based on their biological productivity. The four categories are oligotrophic, mesotrophic, eutrophic, and hypertrophic. Oligotrophic lakes like Moon are generally deep and clear with little aquatic plant growth.

CLMP uses the TSI (trophic state index) to describe the productivity of lakes enrolled in the program. TSI is a numerical index calculated from water quality data. Chlorophyll-a is the most direct trophic indicator. The TSI expresses lake productivity on a continuous numerical scale from 0 to 100 with increasing numbers indicating more eutrophic conditions. Michigan generally classifies a TSI less than 38 as oligotrophic, 38 to 48 as mesotrophic, 48 to 61 as eutrophic, and more than 61 as hypereutrophic. These dividing lines between trophic categories are somewhat arbitrary since water quality is a continuum. (Source: 2013 CLMP Annual Summary Report.) The average TSI score of 35 for Moon Lake for the years 2009 - 2013 is the reason why Moon Lake is rated by CLMP as a oligotrophic lake. The TSI in 2014 of 33 indicates a positive trend in the water quality of Moon Lake.

**2015 Monitoring Program With CLMP:** 2015 marks the 21st year that Moon Lake has participated in this program. As in the past, we will measure water clarity from May through September, and sample for algae plant pigment chlorophyll-a 5 times during the summer, and total phosphorus during spring and late summer. The spring sample for phosphorus will be taken at the end of April.

**Measuring Dissolved Oxygen/Temperature In 2015:** We are now adding a new test to our arsenal of water quality tests. This season we will undertake the measurement of dissolved oxygen and water temperature. The ISCCW purchased an oxygen/temperature meter and Moon lake will be provided access to this meter. The patterns of dissolved oxygen and temperature reflect the influence lake productivity and affect lake physical/chemical properties, phosphorus cycling, and fish and aquatic animal populations.

Oxygen is one of the atmospheric gases present in lake water in dissolved form. The amount of dissolved oxygen in water is particularly important because creatures in aquatic environments need oxygen to power the life-sustaining respiration process. Different aquatic creatures require different amounts of dissolved oxygen. For example, trout need dissolved levels as high as 6-8 mg/L and smallmouth bass need levels between 5-6 mg/l.

The water temperature is measured along with dissolved oxygen because they are connected. Colder water has the potential to hold more oxygen than warmer water. However, colder water doesn't necessarily hold more oxygen. The density of water increases as temperature decreases, so cold water sinks to the bottom of a lake and is separated from the source of oxygen (the atmosphere). Warmer, less dense water floats at the top of a lake where mixing with the atmosphere keeps the upper waters aerated. The difference in water density results in distinct layers of different temperatures and different dissolved oxygen levels in a lake. This is known as thermal stratification. (Source: Mi Corps Factsheet)

**Editors note:** Dale will be attending a seminar in the near future to learn all about the use of the new monitoring equipment. Thank you Dale for your continued efforts on behalf of monitoring the quality of Moon Lake.

AS ALWAYS, ANY IDEAS YOU HAVE TO IMPROVE OUR NEWSLETTER ARE WELCOME. SEND YOUR SUGGESTIONS TO [jsick@cfl.rr.com](mailto:jsick@cfl.rr.com). TAKE CARE, STAY WELL, AND HAVE FUN