North Lake Leelanau Swimmers' Itch Reports Through 9-5-19

| Key t | o # Cases ir | n Each Quad | drant |
|-------|--------------|-------------|-----------|
| 1 | 2 | 3 | 4 or more |
| | | | |

| | Swimmers' Icth Summary Statistics | | | | | | | | | |
|------------|-----------------------------------|---------|---------------------------------|----------|--------|--|--|--|--|--|
| | | | Worst severity from each report | | | | | | | |
| Lake | # Reports | # Cases | Mild | Moderate | Severe | | | | | |
| North Lake | 33 | 96 | 16 | 12 | 5 | | | | | |
| South Lake | 62 | 173 | 15 | 42 | 5 | | | | | |

North Lake Familiar Locations

Schneiders Beach (H17); Leland-Chandler St (D11); Leland-4th St. (E11); Nedows Bay(F9); Celebration/Cemetery Pt. (H5); Suelzer Park (K3); Porter Landing Horn Rd End (J6), Wardens Pt (H11).

| | Α | В | С | D | E | F | G | Н | ı | J | K | L | М | |
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| 3 | | | sed wi | | | 1 | 7 | НЗ | 100 | W. | -K3neh | w | | 3 |
| 4 | | re | 11111331 | IOII | | <i>(</i> | 1 | Н4 | 7 | | К4 | 1 | Apers | 4 |
| 5 | | TIL COMPANY | | | 1 | 5 | G5 | Н5 | 150 | J5 | К5 | | | 5 |
| 6 | | LAKE M | CHIGAN | | 1 | F6 | G6 | | | J6 5 | | | | 6 |
| 7 | | | | | 1 | F7 | | 1 | 1// | J7 | | | 3 | 7 |
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| 9 | | | 1 | 35 | | F9 | 1 | Н9 | 19 | | | | Die Rd. | 9 |
| 10 | | | 13 | 7 | | F10 | G10 | 1 | 110 | | | Horn R | | 10 |
| 11 | | 1 | | D11 | E11 | F11 | | H11 | | | | | | 11 |
| 12 | | 1 | C12 | D12 | | 80' | | H12 | | |) | l. | 17 | 12 |
| 13 | | | C13 | | 60 | | | H13 | \ | | | | | 13 |
| 14 | | _ 5 | C14 | | 40 | | | | 114 | _/ | | | 4 | 14 |
| 15 | } | B15 | | | 5' | | | | 115 | | | |)- | 15 |
| 16 | | K | C16 | D16 | E16 | F16 | G16 | H16 | L | J16 | | | 1 | 16 |
| 17 | | | 1 | | Pa | 204 | | H17 | V | J17 | 1 | | 1 | 17 |
| 18 | 6 | / | | | Hoeft | | 1 | 1 | 118 | J18 | K18 | 1 | | 18 |
| 19 | V | (22) | 1 | | | | / | 10 | | J19 | K19 | L19 | 1 | 19 |
| 20 | | | | 1 | 7 | | 1 | | + | 1 | K20 | L20 | esudein (| 20 |
| | Α | В | С | D | E | F | G | H | 1 | J | К | L | М | |

South Lake Leelanau Swimmers' Itch Reports Through 9-5-19

| Key t | o # Cases ir | n Each Qua | drant |
|-------|--------------|------------|-----------|
| 1 | 2 | 3 | 4 or more |
| | | | |

| Swimmers' Icth Summary Statistics | | | | | | | | | |
|-----------------------------------|-----------|---------|------|----------|--------|--|--|--|--|
| Worst severity from each report | | | | | | | | | |
| Lake | # Reports | # Cases | Mild | Moderate | Severe | | | | |
| North Lake | 33 | 96 | 16 | 12 | 5 | | | | |
| South Lake | 62 | 173 | 15 | 42 | 5 | | | | |

South Lake Familiar Locations

L. Leelanau RV Pk (G6); Centerville Twp Pk-Honke Rd (G8); DNR Boat Ramp (G9); Kelenski Pt (H13); Leelanau Pines CG (G16); Solon Twp Pk (F17); Perrins Landing (G20); Bingham Twp Park (J14); Merbert Crk. Mouth (I10); Fountain Pt. (I1); DNR Boat Ramp S of Hwy 204 (I0)

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|----|---|-------|-------|--------------|------|------|----------|------------------|-----------------|------------------|-----------------|----|---|----|
| | Α | В | C | D | E | F | G | H | _ | J | К | L | М | |
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| 4 | | | | sh Ro | | | (|] н4 | 14 | مام | | | | 4 |
| 5 | | | | French Ro | J | `_ | | H5 | 15 | naul | | | | 5 |
| 6 | | | | S | | 5 | G6 | / | 16/ | ٨ | | | | 6 |
| 7 | | | | | 1 | G8 | G7 | H7 (| | _H8 | | | | 7 |
| 8 | | | ş | hnke | Rd/_ | 4 | 1 | K | eela | n u D | | 18 | | 8 |
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| 11 | | | | French | Ž | Ä | (| H11 | 111 | J11 | [| | | 11 |
| 12 | | | | SF | , | H12- | | 1 | | J12 | akol | | | 12 |
| 13 | | | | | 5.6 | | Ž | H13 | -) | J13 < | acla | | | 13 |
| 14 | | | 'n | RIT I | VP. | } | 914 | | / | J14 | าลน (| | | 14 |
| 15 | | | | ~ | = b | 1 | G15 | | 115 | J15 | Ĺ | | | 15 |
| 16 | | | } | 7 | | F16 | G16 | | 116 | | | | | 16 |
| 17 | | | | | E17 | F17 | | Ή | 117 | | | | | 17 |
| 18 | | | - / | D (8 | E18 | | | Н18 | | | | | | 18 |
| 19 | | | | D19 | | | | H19 | - | / | | | | 19 |
| 20 | | | 7 | W20 | E20 | F20 | G20 | H20 | ę, | S | \int_{Ω} | | | 20 |
| | | | - | } | | 33 | | \pm | OU | 1 | 5 | | | |
| 21 | Α | В | С | D | E | F | G | Н | ı | J | К | L | М | |

| | 20 | 19 North La | ke Leelan | au Swimme | ers' Itch Report Through 9-5-19 |
|----------|------------|--------------|-----------|-----------|--|
| Quadrant | Date | # Swimming | # w/ Itch | Severity | Comments |
| B15 | 07/03/2019 | 9 | 6 | Severe | |
| C13 | 7/21/2019 | 1 | 1 | Mild | Saw a large group of merganser chicks following a mother merganser. Got a clear look at her tufted head. Got swimmers itch a week or so ago, but didn't see any mergansers. Today I saw them. I believe their nest is in the brush on the shoreline just south of Oxford Drive. Quadrant C13. Sent email with photos to both Wayne Swallow at leelanaubound@gmail.com and QPsurveys@lakeleelanau.org. |
| C14 | 07/05/2019 | 1 | 1 | Moderate | We live in Robinson's Bay. Was along lakeshore checking out something in our wetlands where we have a large number of ducks living in families. |
| C16 | 08/18/2019 | 3 | 1 | Moderate | Location right at the corner of C16 and B15. Kids playing in the shallow water, only one got it. Covered legs, feet and elbows. No itch, only rash. |
| E16 | 07/07/2019 | 4 | 4 | Severe | We are down Manetoway Drive. Swimming in deep water off dock about 11 am. |
| F9 | 07/28/2019 | 5 | 4 | Moderate | we are 1/4mile north of Nedow's bY WHICH was the quadrant i had to select. girls were floating 10 feet off our dock for a bout 25 minutes and after they got out the itching started. i have not seen any merganzer ducks only mallards, we are on N. Shorewood Lane. The girls have lots of bites or welts on them the day after. temp was 80 plus, calm waters not much wind. wind coming from the south east but very little wind. Kids were in swimming and tubing the day before and no sign of the itch. we need some solutions or I am going to start to use copper sulfate when they come. they are here such a same amount of time and we want to use our lake and not be miserable with the itch. they were miserable yesterday. |
| F11 | 06/28/2019 | 3 | 1 | Moderate | |
| F11 | 07/19/2019 | 8 | 2 | Mild | |
| F16 | 07/18/2019 | 6 | 6 | Mild | Very mild cases and felt fine after a few hours |
| F16 | 07/14/2019 | 3 | 2 | Severe | We were at the sandbar just past Schneider's. I hope I got the coordinates correct. |
| G16 | 07/05/2019 | 2 | 1 | Moderate | I did not have sun screen or other skin lotion on my skin at the time . |
| G6 | 07/01/2019 | more than 10 | 5 | Moderate | |
| G6 | 07/26/2019 | 2 | 2 | Moderate | 15 houses south of Cemetery Point. Ducks are seen in the lake off our dock. Reaction occurs within an hour of swim. |
| H2 | 07/01/2019 | 1 | 1 | Mild | |
| H5 | 7/21/2019 | 3 | 1 | Mild | Mild case. Less severe than previous years. |
| H16 | 07/04/2019 | 8 | 3 | Mild | |
| H16 | 07/05/2019 | 5 | 5 | Mild | |
| H16 | 07/04/2019 | 5 | 1 | Mild | |
| H16 | 8/17/2019 | 12 | 3 | Mild | On the sand bar. Tons of boats. We got a few bites. Not as bad as in the past but still annoying. |
| H17 | 07/05/2019 | 5 | 2 | Severe | The girl that got the most severe case was swimming I. The morning from the east side by Sunset Shores to Schneider's Beach. The other girl was swimming on the east side and got about 10 bites. |
| H17 | 07/10/2019 | 1 | 1 | Moderate | |
| 18 | 08/03/2019 | 3 | 3 | Mild | Swimmers were near the dock and there was a light onshore breeze. Time was 5 to 5:30 pm. |

| | 20 | 19 North La | ake Leelana | au Swimme | rs' Itch Report Through 9-5-19 |
|----------|------------|-------------|-------------|-----------|--|
| Quadrant | Date | # Swimming | # w/ Itch | Severity | Comments |
| 19 | 07/18/2019 | 7 | 3 | Mild | |
| l18 | 07/28/2019 | 8 | 6 | Moderate | Popp Rd |
| l18 | 07/29/2019 | 2 | 2 | Mild | Popp rd |
| J17 | 06/30/2019 | 6 | 5 | Moderate | |
| J17 | 07/02/2019 | 6 | 5 | Mild | |
| J17 | 07/03/2019 | 2 | 2 | Severe | |
| J17 | 7/27/2019 | 4 | 2 | Moderate | On the east side of N Lake Leelanau |
| J7 | 06/30/2019 | 6 | 6 | Mild | Usually we see ducks but not a one that day, just some seagulls. We've been back twice and no one got it those times, thank you |

| | 2019 Sou | th Lake Lee | lanuau Swi | mmers' Itc | h Reports Through 9-5-19 |
|------------|-----------------|--------------|------------|------------|--|
| Quadrant | Date | # Swimming | # w/ Itch | Severity | Comments |
| E17 | 06/29/2019 | 1 | 1 | Moderate | |
| E17 | 07/04/2019 | 4 | 4 | Moderate | several cases but haven't seen mergansers since early May |
| E17 | 07/09/2019 | 2 | 2 | Severe | Severe case on 9 year old and moderate on 7 year old. They spent a lot of time playing in the water catching minnows and having fun. I wish I could attach a picture. I will try to send via Messenger. Duck feeding nearby isn't helpful! |
| E18 | 07/02/2019 | 1 | 1 | Moderate | |
| E18 | 07/04/2019 | 8 | 6 | Moderate | |
| E18 | 08/08/2019 | 1 | 1 | Mild | Sandbar Dr Swimming at 5 pm |
| F16 | 07/04/2019 | More than 10 | 2 | Mild | |
| F17 | | 6 | 5 | Moderate | |
| F17 | 07/03/2019 | 5 | 2 | Mild | |
| G15 | 06/23/2019 | 2 | 2 | Moderate | |
| G15 | 06/23/2019 | 3 | 2 | Moderate | |
| G15 | 07/06/2019 | 6 | 4 | Moderate | |
| G15 | 07/01/2019 | 1 | 1 | Moderate | Was only waste in above knees about 70 feet from the shoreline. Silt was kicking up as I was working around hoists for jet skis |
| G16 | 06/29/2019 | 6 | 2 | Moderate | |
| G16 | 07/04/2019 | 4 | 4 | Severe | Every year my grandkids get swimmers itch. No matter what we do to try and avoid getting it. We gave them shower right away after getting out. We use everything we have been told to use to avoid getting it. It's really sad that we can't enjoy swimming in |
| G20 | 06/29/2019 | 4 | 3 | Moderate | |
| G6 | 07/05/2019 | 4 | 3 | Moderate | |
| G 7 | 07/01/2019 | 4 | 2 | Moderate | |
| G8 | 07/01/2019 | 2 | 2 | Severe | |
| G8 | 07/05/2019 | 4 | 2 | Moderate | |
| G9 | 06/28/2019 | 3 | 2 | Moderate | Seemed to be heavy on west side of south Lake Leelanau |
| G16 | 07/14/2019 | 1 | 1 | Severe | Our young daughter played in shallows late morning 7/14. Location is 2 homes south of Leelanau Pines Campground. A few spots on her arms and stomach. Severe case on her legs below knees, over 100 spots |
| H1 | 07/04/2019 | 12 | 6 | Moderate | |
| H1 | 06/25/2019 | 8 | 5 | Moderate | |

| | 2019 Sou | th Lake Lee | lanuau Swi | mmers' Itc | h Reports Through 9-5-19 |
|--------------|------------|-------------|------------|------------|--|
| Quadrant | Date | # Swimming | # w/ Itch | Severity | Comments |
| H1 | | 8 | 6 | Moderate | |
| H1 | 07/02/2019 | 12 | 6 | Moderate | |
| H12 | 07/04/2019 | 5 | 1 | Mild | |
| H13 | 07/04/2019 | 4 | 1 | Mild | |
| H13 | 07/05/2019 | 4 | 2 | Mild | |
| H13 | 07/05/2019 | 5 | 2 | Mild | |
| H13 | 06/30/2019 | 3 | 2 | Mild | While only 1 person in our party got the itchseveral just a few houses north got it much worse (over 35 spots just on legs alone)! |
| H19 | 07/05/2019 | 4 | 4 | Moderate | |
| Н8 | 06/28/2019 | 1 | 1 | Mild | |
| I1 | 07/02/2019 | 4 | 3 | Moderate | Moderate to severe case required doctor's visit plus medication to resolve. |
| 14 | 07/05/2019 | 10 | 7 | Moderate | |
| 15 | 06/27/2019 | 5 | 5 | Moderate | |
| 15 | 07/01/2019 | 3 | 3 | Moderate | |
| 15 | 07/04/2019 | 5 | 2 | Moderate | |
| 15 | 08/03/2019 | 5 | 4 | Moderate | Kids playing in shallow got it most- obviously. Was down Sandy Ridge road. |
| 15 | 08/24/2019 | 2 | 2 | Moderate | Boys at end of Sandy Ridge road. Were in shallow catching crayfish! |
| l11 | 07/05/2019 | 4 | 4 | Mild | have been getting it for the past month |
| l15 | 07/06/2019 | 9 | 4 | Moderate | |
| I16 | 07/04/2019 | 10 | 3 | Mild | |
| l 1 6 | 08/17/2019 | 4 | 4 | Mild | We live on Shugart Shores, I sent Brian a picture of a brood of 12 Mergansers that swim by frequently. I use swimmers itch guard all over my grandchildren and they still got it. |
| l17 | 06/25/2019 | 4 | | Moderate | |
| J11 | 06/29/2019 | 9 | 5 | Moderate | We were staying at West Wind. The rashes were fairly severe in 3 of the 5. |
| J12 | 08/04/2019 | 2 | 2 | Moderate | We stayed at the West Winds resort and 2 little girls were playing in the shallow part of the beach in the morning. There were lots of ducks in that area. |
| J12 | 08/04/2019 | 2 | 2 | Moderate | We were staying at West Winds Resort and two kids were swimming in shallow water in the early morning. There were also a family of ducks swimming in the area |
| J12 | 08/04/2019 | 2 | 2 | Moderate | We stayed at the West Winds resort and 2 little girls were playing in the shallow part of the beach in the morning. There were lots of ducks in that area. |

| | 2019 Sou | th Lake Lee | lanuau Swi | mmers' Itc | h Reports Through 9-5-19 |
|----------|------------|-------------|------------|------------|--|
| Quadrant | Date | # Swimming | # w/ Itch | Severity | Comments |
| J13 | 07/03/2019 | 5 | 4 | Severe | There are alot of Mallard ducks and geese around our cottage. |
| J13 | 08/03/2019 | 6 | 1 | Moderate | |
| J13 | 08/03/2019 | 6 | 1 | Moderate | Just north of Bingham township park on South Park road. I was the first in cleaning out the boats in shallow water. Noticed the itchy sensation within the hour. We have a lot of mallard ducks hanging out near and on our dock. Pesky buggers. Everyone else entered the lake using the ladder at the end of the dock. No one else got it. |
| J14 | 06/28/2019 | 4 | 4 | Moderate | |
| J14 | 07/04/2019 | 6 | 6 | Moderate | |
| J14 | 06/28/2019 | 2 | 2 | Moderate | |
| J14 | 07/04/2019 | 3 | 3 | Moderate | |
| J14 | 07/01/2019 | 1 | 1 | Moderate | |
| J14 | 07/09/2019 | 3 | 1 | Moderate | |