



# Higgins Lake Property Owners' Association

## Annual Meeting - July 15, 2017





# Our Team of 5 Ph.D.s



*Dr. Dave Jude*

*Dr. Randy DeJong*

*Dr. Ren Tubergen*

*Dr. Harvey Blankespoor Dr. Curt Blankespoor*





# Shout Outs/Huge Thanks!

It takes a ~~village~~ community  
to ~~raise a child~~ control SI

- Ron Wiltse (NuCraft Metal Products)
- Ric Blamer
- Chuck and Linda Brick
- Dave and Karen Jordan
- Bob and Dianne Wagner







# Looking for COME nests





# Merganser's-eye View





# Merganser Hide-n-seek (?)





# Merganser Hide-n-seek (?)



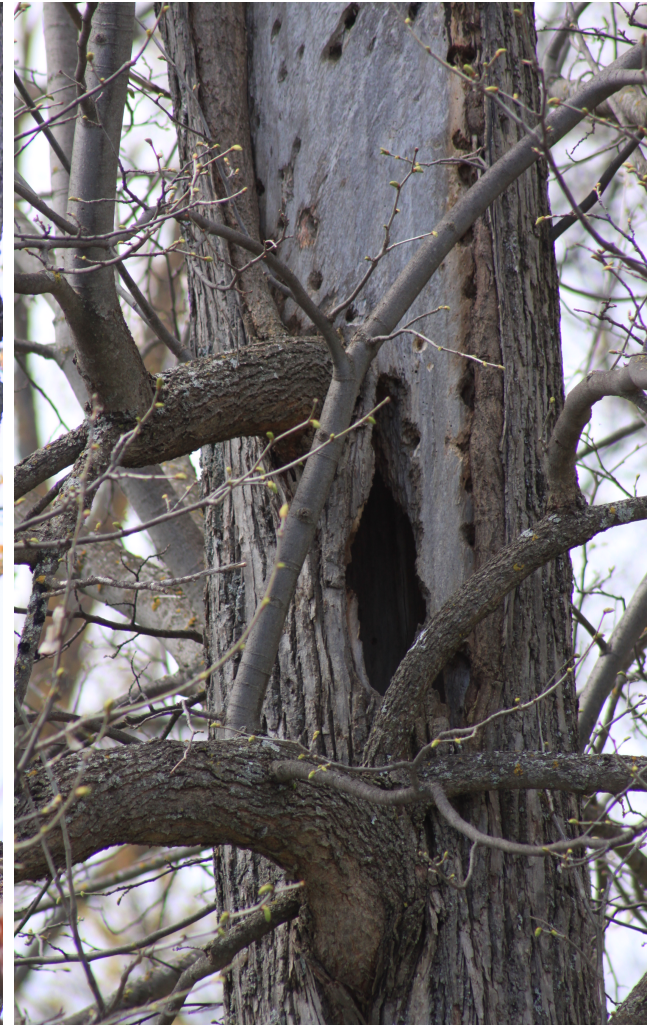


# Merganser Hide-n-seek (?)





# Candidate COME Nests







# COME Nest Cam in Action



*SPECIALIZING IN EDUCATION AND CONTROL*



[WWW.SWIMMERSITCHSOLUTIONS.COM](http://WWW.SWIMMERSITCHSOLUTIONS.COM)



# Treasure Island Nest Box





# All But 1 Hatched





# From Nest Box to Net





# Web Tags, NOT Leg Bands





# Road Trip (to Tawas City)







# A New Summer Home



*SPECIALIZING IN EDUCATION AND CONTROL*



[WWW.SWIMMERSITCHSOLUTIONS.COM](http://WWW.SWIMMERSITCHSOLUTIONS.COM)



# COME (Merganser) Counts

## ❖ 2015 Totals

- 9 broods/88 total birds

## ❖ 2016 Totals

- 6 broods/47 total birds

## ❖ 2017 Totals

- 4 broods/56 total birds





# 2017: Faith Rewarded

## FAITH is...

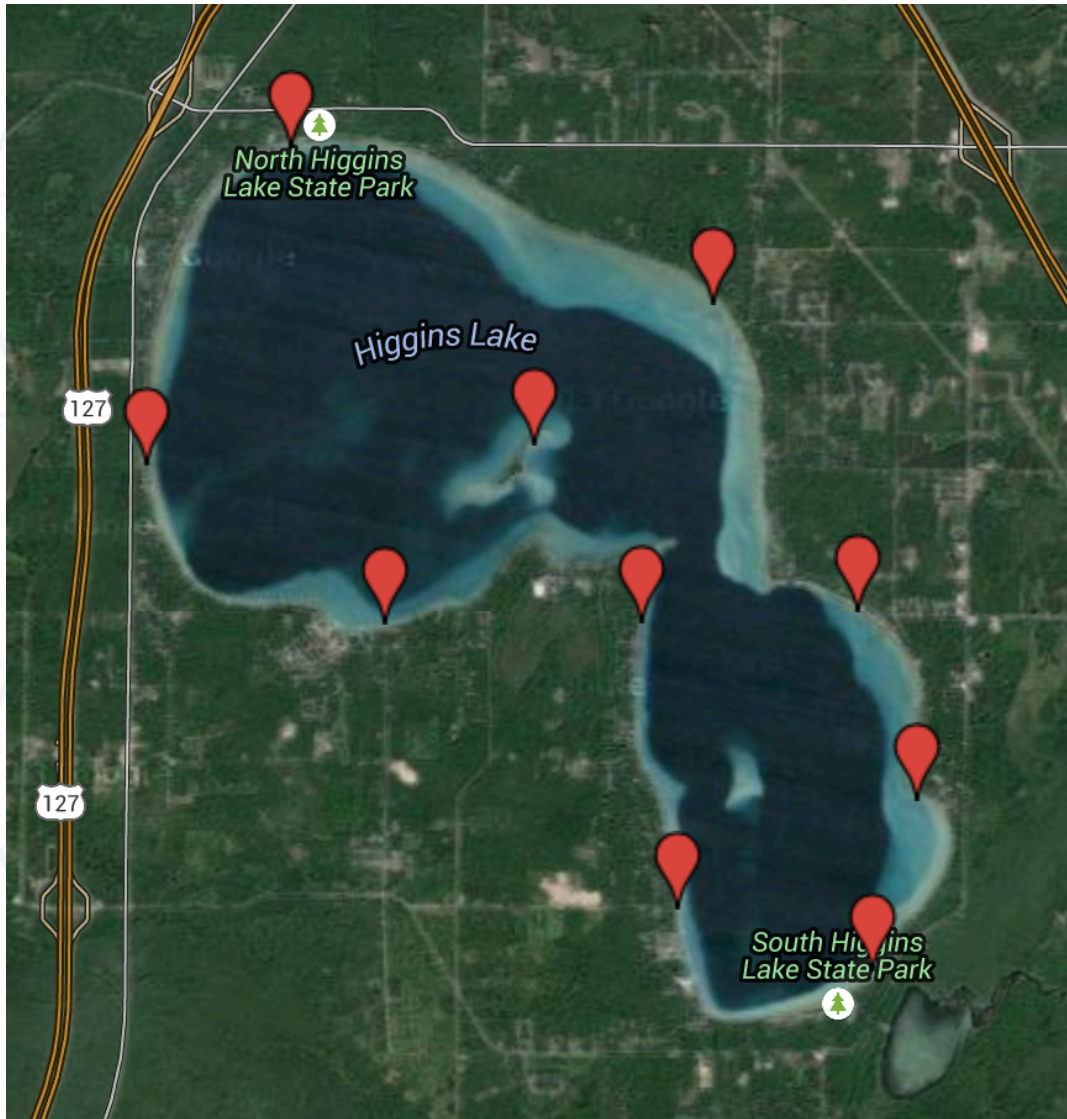
- The confident assurance that what we hope for is going to happen.
- The evidence of things we cannot yet see.

Hebrews 11:1

Photo credit: Joe Holley



# Program Assessment



## Snail Collection Sites

1. Dragonfly House
2. Detroit Point (South)
3. Yacht Club
4. Sam-O-Set Park
5. West Boat Launch
6. North State Park
7. Gerrish Township Park
8. Kelly Beach
9. Columbine Lane
10. South State Park





# Snail Infection Levels - 2015

Location	June 9-10	June 24-July 2	July 10-17	July 24-27
Dragonfly House	0.5% (200)	1.7% (179)	4.2% (167)	4.0% (200)
Detroit Point	0.0% (192)	2.0% (200)	3.5% (200)	3.2% (156)
Yacht Club	0.0% (200)	0.0% (200)	0.5% (200)	0.0% (200)
Sam-O-Set Park	0.6% (168)	2.5% (200)	2.0% (200)	3.5% (200)
West Boat Launch	1.6% (187)	4.5% (200)	5.5% (200)	4.5% (200)
North State Park	1.7% (177)	1.0% (200)	1.9% (155)	5.0% (200)
<u>Gerrish</u> Township Park	7.4% (94)	12.7% (181)	6.2% (113)	5.0% (200)
Kelly Beach	3.5% (172)	7.7% (65)	2.5% (122)	3.8% (158)
<u>Almeda</u> Beach	1.0% (200)	0.5% (200)	0.5% (200)	1.5% (200)
South State Park	1.1% (189)	8.0% (200)	3.5% (200)	8.0% (200)
Lake-wide	1.4% (1779)	3.7% (1825)	2.9% (1757)	3.9% (1914)

## SI Infection Level

- = Ideal (<0.24%)
- = Tolerable (0.25-0.49%)
- = Moderate (0.5-0.9%)
- = Severe (1.0-1.9%)
- = Epidemic (>2.0%)





# Snail Infection Levels - 2016

Location	June 9-10	June 17-29	July 11-12	July 20-24
Dragonfly House	0.0% (200)	0.25% (400)	0.0% (200)	0.0% (250)
Detroit Point	0.0% (200)	1.1% (366)	0.0% (200)	0.5% (200)
Yacht Club	0.0% (200)	0.0% (322)	0.0% (200)	0.0% (200)
Sam-O-Set Park	0.5% (191)	0.25% (400)	0.5% (200)	0.0% (200)
West Boat Launch	0.0% (200)	0.0% (381)	0.5% (200)	0.0% (170)
North State Park	0.0% (200)	0.25% (400)	0.0% (200)	0.0% (200)
<u>Gerrish Township Park</u>	1.0% (200)	0.0% (400)	1.0% (200)	0.0% (250)
Kelly Beach	0.0% (200)	0.25% (400)	0.0% (200)	0.0% (181)
<u>Almeda Beach</u>	0.5% (200)	0.8% (400)	1.0% (200)	0.5% (200)
South State Park	0.0% (241)	0.0% (396)	2.0% (200)	0.5% (200)
Lake-wide	0.2% (2032)	0.3% (3865)	0.5% (2000)	0.1% (2051)

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# Snail Infection Levels - 2017

Location	June 13	June 28	July 10-11	Late July
Dragonfly House	0.0% (200)	0.0% (244)	0.0% (222)	??% (~200)
Detroit Point	0.0% (200)	0.0% (171)	0.47% (214)	??% (~200)
Yacht Club	0.0% (200)	0.0% (232)	0.0% (196)	??% (~200)
Sam-O-Set Park	0.0% (200)	0.0% (212)	0.0% (202)	??% (~200)
West Boat Launch	0.0% (200)	0.0% (220)	0.48% (210)	??% (~200)
North State Park	0.0% (200)	0.0% (218)	0.0% (225)	??% (~200)
<u>Gerrish Township Park</u>	0.0% (200)	0.0% (212)	0.40% (253)	??% (~200)
Kelly Beach	0.0% (200)	0.0% (206)	0.0% (208)	??% (~200)
<u>Alameda Beach</u>	0.0% (200)	0.0% (208)	0.0% (216)	??% (~200)
South State Park	0.0% (200)	0.0% (197)	0.0% (239)	??% (~200)
Lake-wide	0.0% (2000)	0.0% (2120)	0.14% (2185)	??% (~2000)

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# Questions?

