

Aquatic Plant Lake Mapping Project Sept 24, 2016

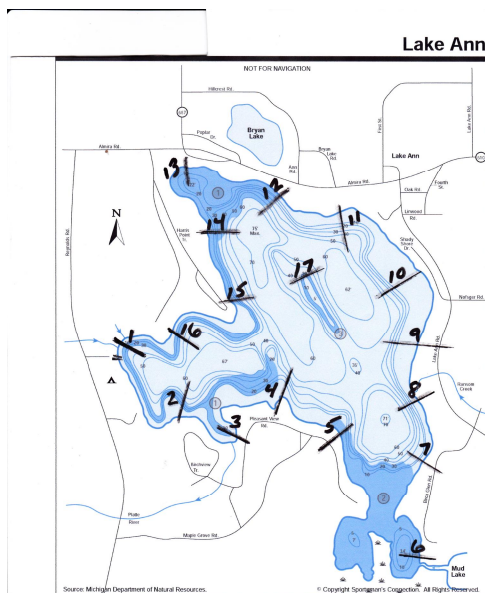
The Invasive Species Committee of Ann Lake Property Owners Association (ALPOA) undertook a mapping of the aquatic plants within Ann Lake this on Sept. 24th. We had not planned on doing a mapping this year; we had decided to complete this activity every other year. However, after hearing about the finding in Duck Lake, the committee decided it would be appropriate to map the lake every year. We have now complete mappings of the lake in 2012, 2013, 2015 and 2016. The goal continues to be:

- Are there any new plants found?
- How did the densities compare to the results of previous years.

This year we again decided to change the format slightly from the MLSA guidelines due to the sharpness of our drop offs and the absence of flora at 1 foot depths around the lake. Since we did not find anything of significance at 1 foot, and it was hard to get the pontoon boat consistently at 1 foot, we have decided to sample at 2 feet. We have marked the data sheets as 2 feet but have entered the tables as 1 sheet to allow for comparison to previous years.

We again used two rakes, sampling off the left and right of the pontoon. This allowed us to form 2 identification teams. The team members consisted of Kathy Taylor and Bethany Onthank on one side with Maggie and Terry Sowers (substituting for Drew Peterson) on the other side. Kent Taylor provided and drove the pontoon boat. Dianne Minicucci served as scribe. The whole process took a little over 3 hours as we now do it.

Since we only did 2 samplings at the 4 foot and 8 foot levels, rather than the 4 required by the MLSA procedure, we again changed how the density was determined. We continue to mark the density as was adjusted by the committee in 2013 for using only 2 rakes. Because of that, the trend (comparison) charts comparing 2013, 2015 and 2016 are the most relevant since they were created using identical protocols.



Charts have been completed for each transect, comparing plants found year to year for your information. These variants demonstrate the randomness of any sampling survey. That we once again found these two plants serves to support the process we've adopted and the need to do this regularly to minimize randomness. What follows in this report is a series of charts summarizing all of the work noted above. These tables show plant types and densities at all transects and all sampling depths. They are organized both by plant type and locations (the 17 transect points).

Kent Taylor and Sven Anderson also conducted a sampling by snorkeling the area around the boat launch. In particular, they were looking for Eurasian Water Milfoil (EWM). Though they did not find any EWM, they did determine that identifying this plant via snorkeling is viable. We believe all shallow areas around the lake should be snorkeled by volunteers lake owners.

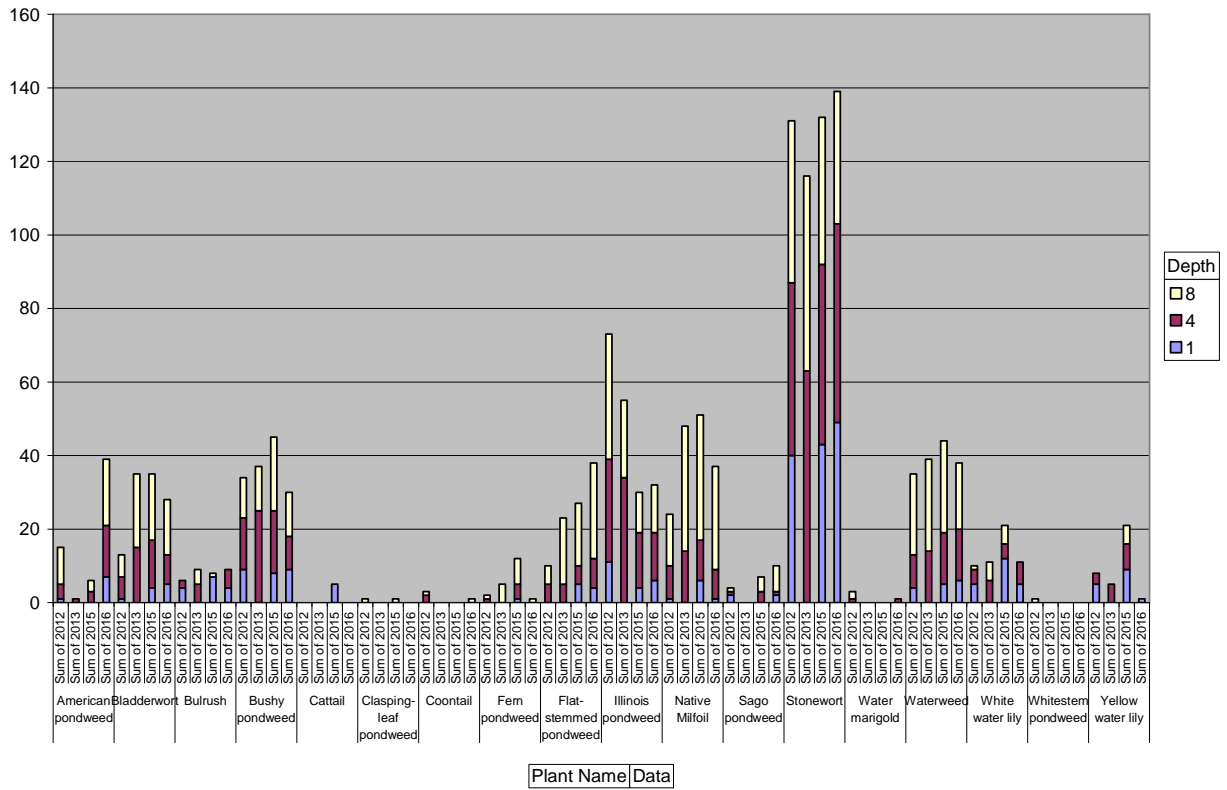
Conclusion

The Committee stands behind the work done in generating the data and creating this report. While we believe Ann Lake is in good shape, since Eurasian Milfoil is prevalent in surrounding lakes, the committee would recommend this mapping should be done on a yearly basis. As an additional check, several members of the committee snorkeled the boat launch area to provide an more in-depth investigation. This area should be checked more often since it is most likely Eurasian Milfoil would be introduced by boats; even though it would be highly influenced by wind.

Committee members deserve thanks for the hard dirty work they do on the behalf of the Association. The committee would also like to thank Terry Sowers for filling in that day. In our opinion the most important chart is the first one, the year to year plant comparison chart. If you have any questions concerning this report or would like additional information on its findings, you can contact the chair of the committee, Kent Taylor kent@annlake.org.

- Dianne Minicucci
- Bethany Onthank
- Drew Peterson
- Kathy Taylor
- Maggie Sowers

Year to Year Plant Comparison Chart



The above table shows all plants found at all transects for each of the three samplings completed. Since the first sampling, no new plants have been found. One can see that stonewort continues to be the most prominent plant found under 8 feet.

Individual transect charts are shown at the end of this report.

Transect Diversity Charts

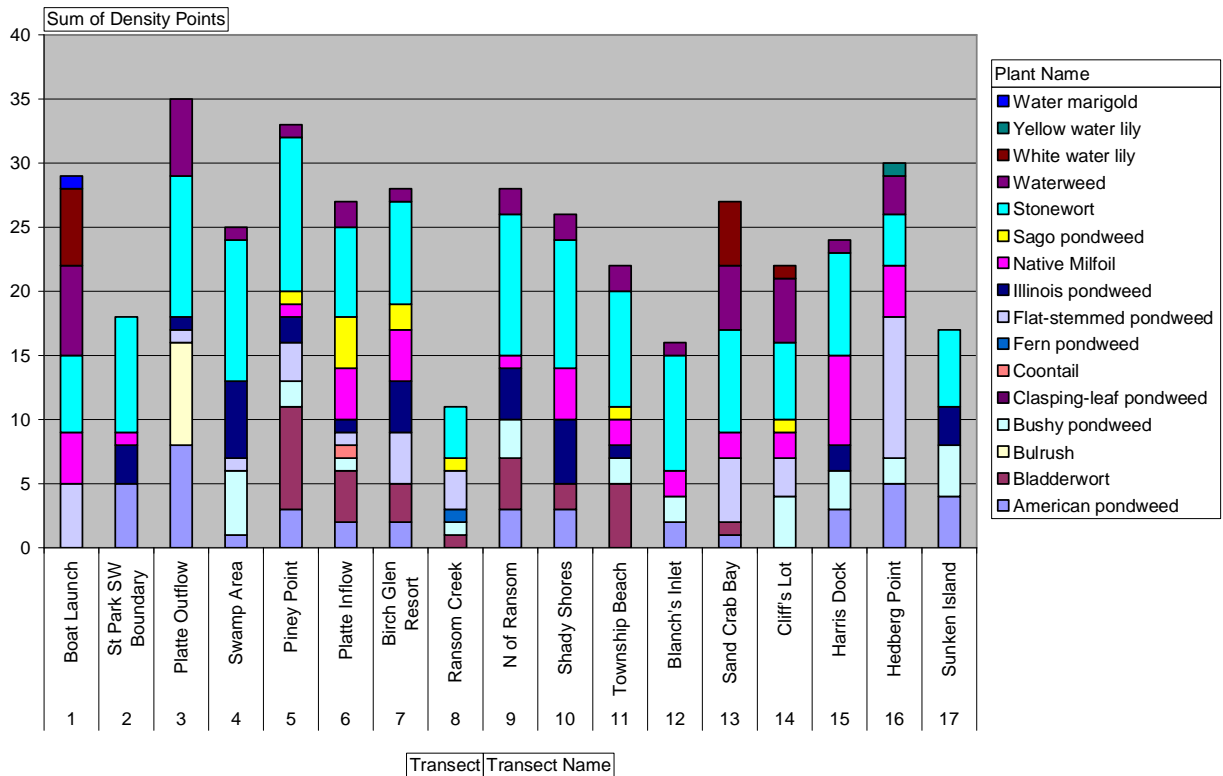
There are 3 charts which show the plants found at each transect location. The first chart shows all plants found. The following charts are for each of the specific depths: 2 feet, 4 feet and 8 feet.

To read the charts, the plants found are shown in the top to bottom order depicted in the key. For example, at the first transect, the Boat Launch, the plants found are: Bushy Pondweed, Flat-stemmed Pondweed, Illinois Pondweed, Native Milfoil, Stonewort, and Waterweed. Using these plants as reference points, it will help you determine the other plants found at each transect.

Lake-wide Plant Densities - All Depths

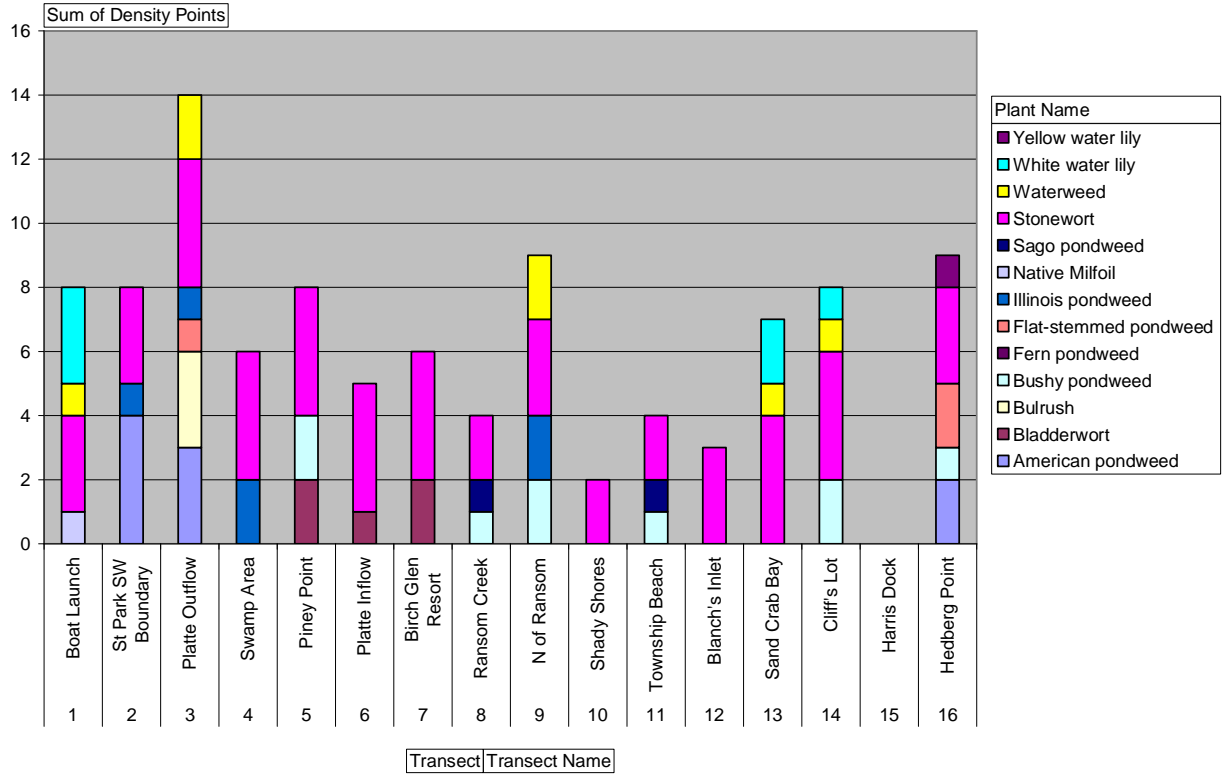
The most common plants found in the lake were Waterweed, Stonewort, Native Milfoil and Illinois Pondweed, all native.

Depth in Feet (All)



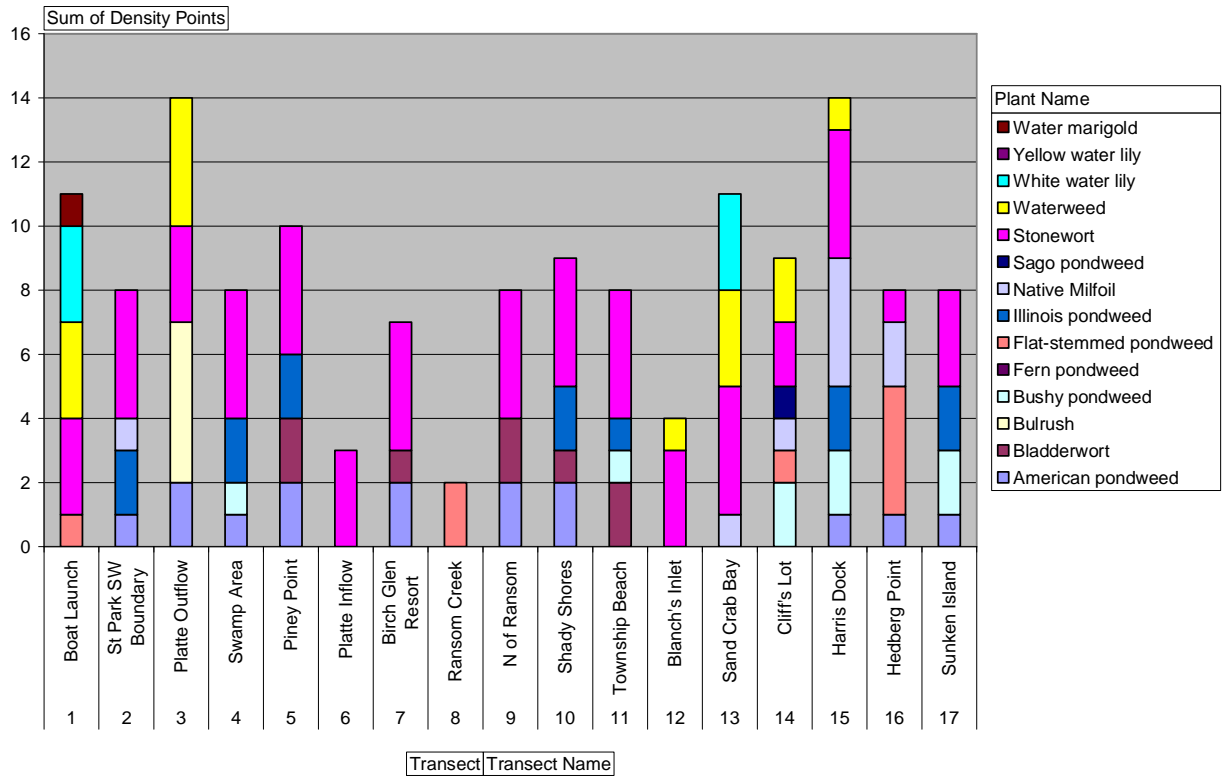
Plant Densities at 2 feet Sorted by Transect

Depth in Feet | 1

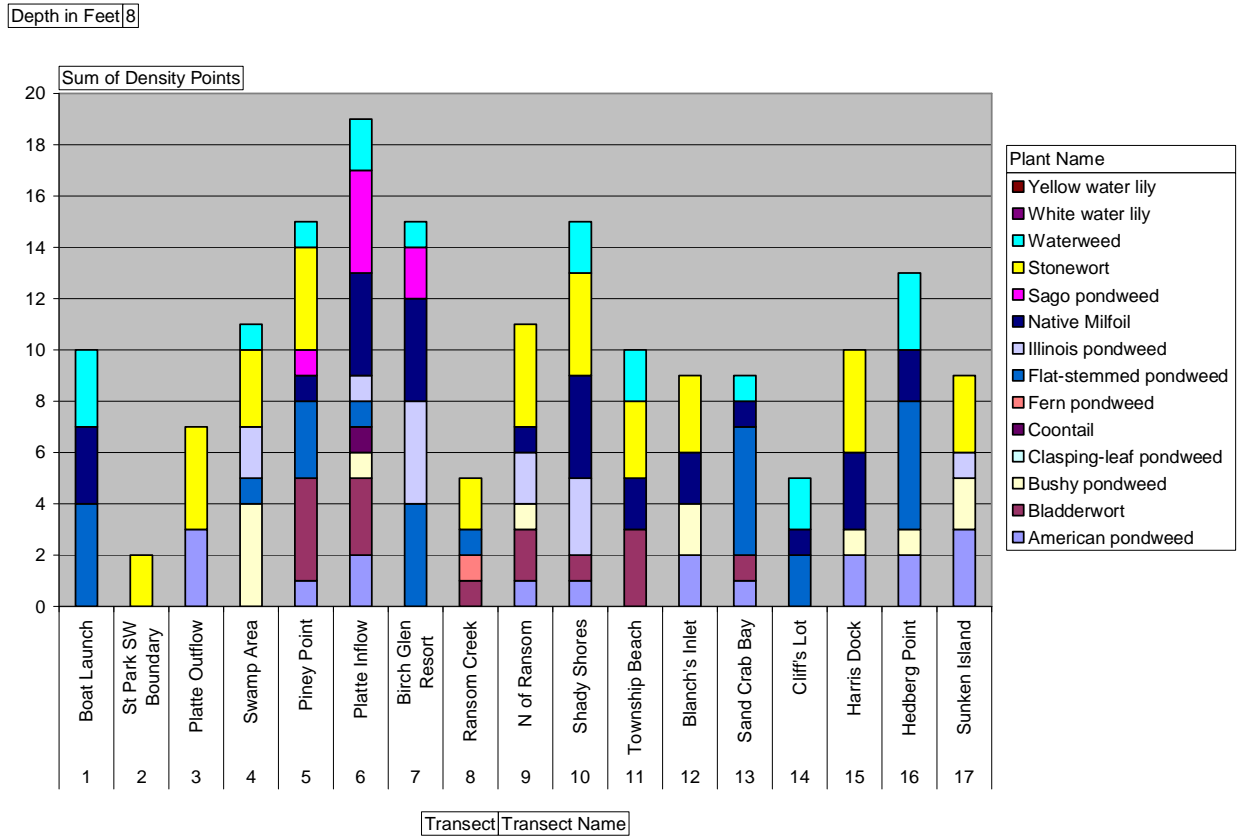


Plants Densities at 4 feet Sorted by Transect

Depth in Feet | 4



Plants Densities at 8 Feet Sorted by Transect



Plant Location Charts

There are 3 charts which show each transect at which a specific plant is found. The first chart shows all plants found. The following charts are for each of the specific depths: 2 feet, 4 feet and 8 feet.

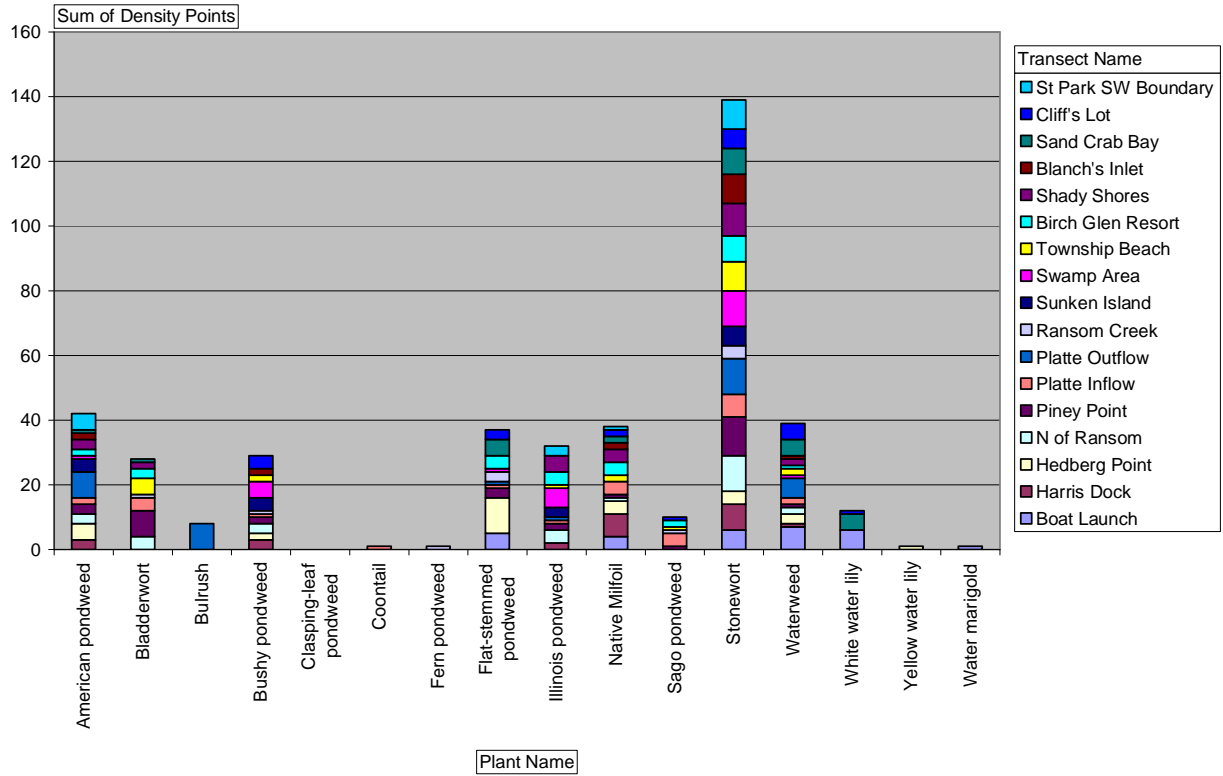
Not all plants are found at each depth. For instance, white and yellow water lilies are only found at 4 foot.

Native stonewort was found at almost every transect.

To read the charts, the transects found are shown in the order depicted in the key. Transects are NOT listed in the key in the order they were sampled.

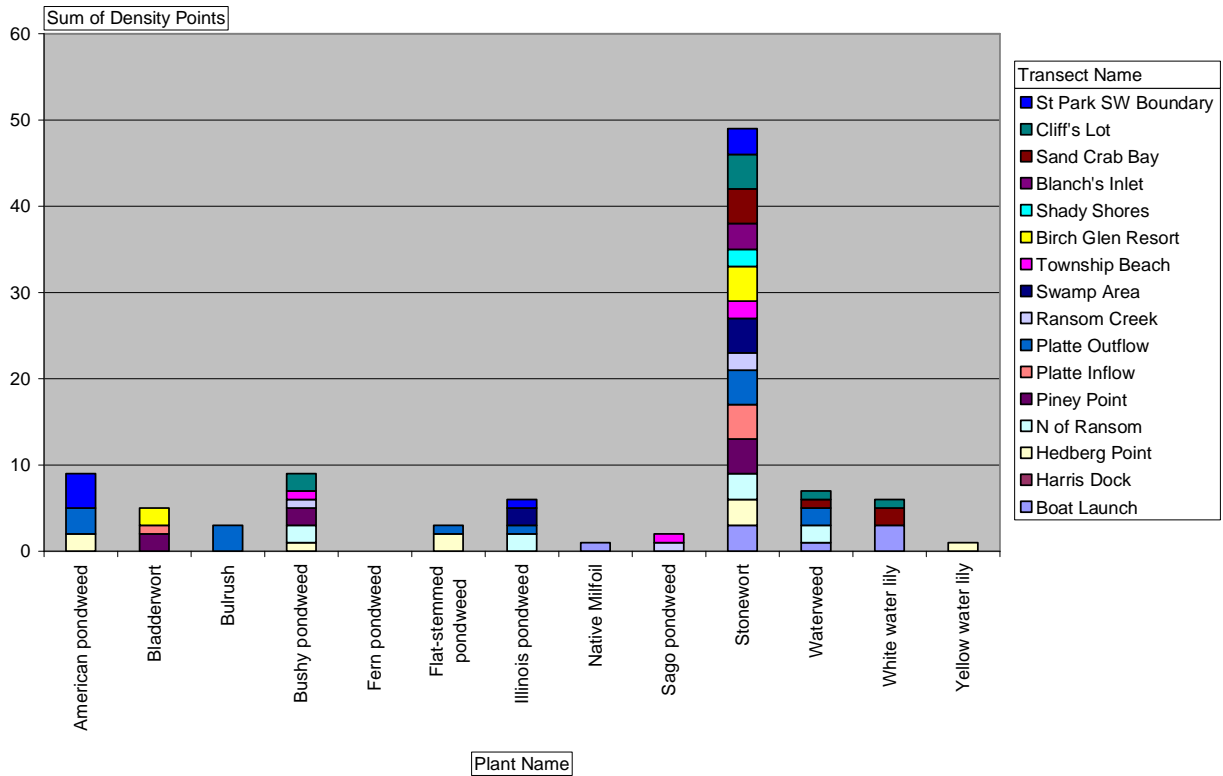
Lake-wide Plant Densities Sorted by Species

Depth in Feet (All)



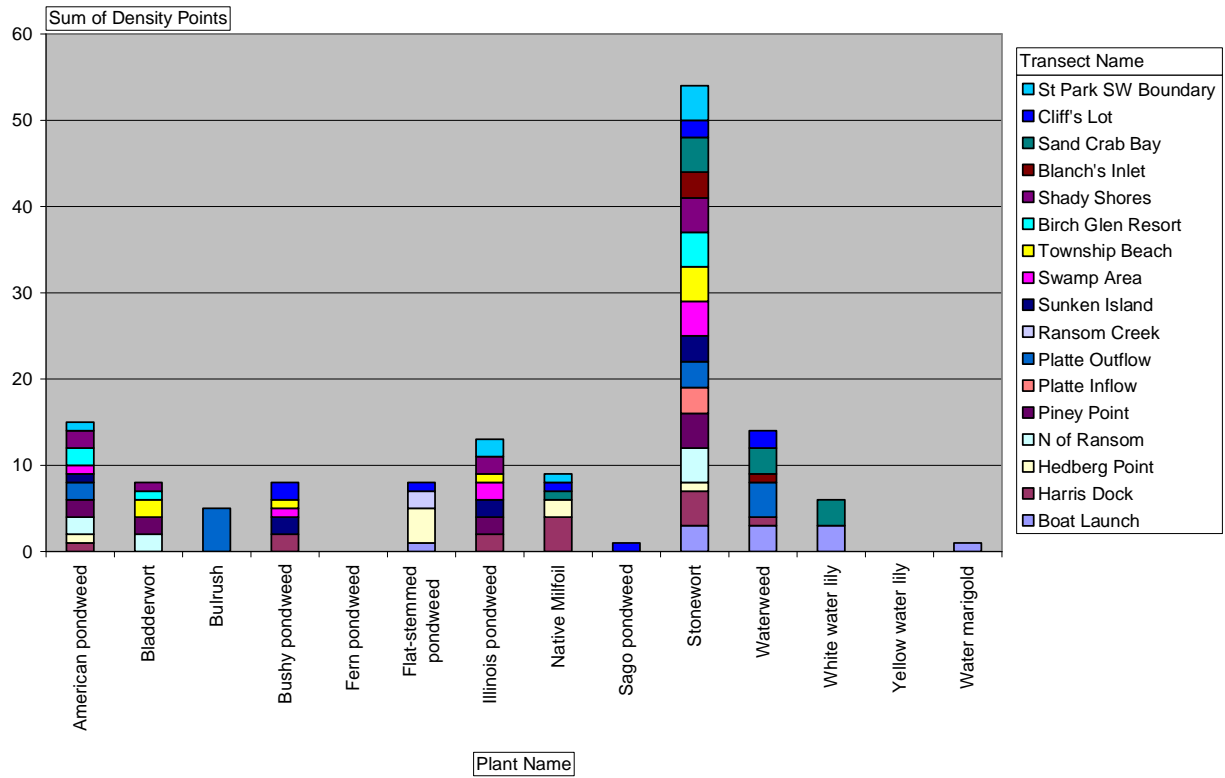
Plant Densities at 2 Feet Sorted by Species

Depth in Feet 1



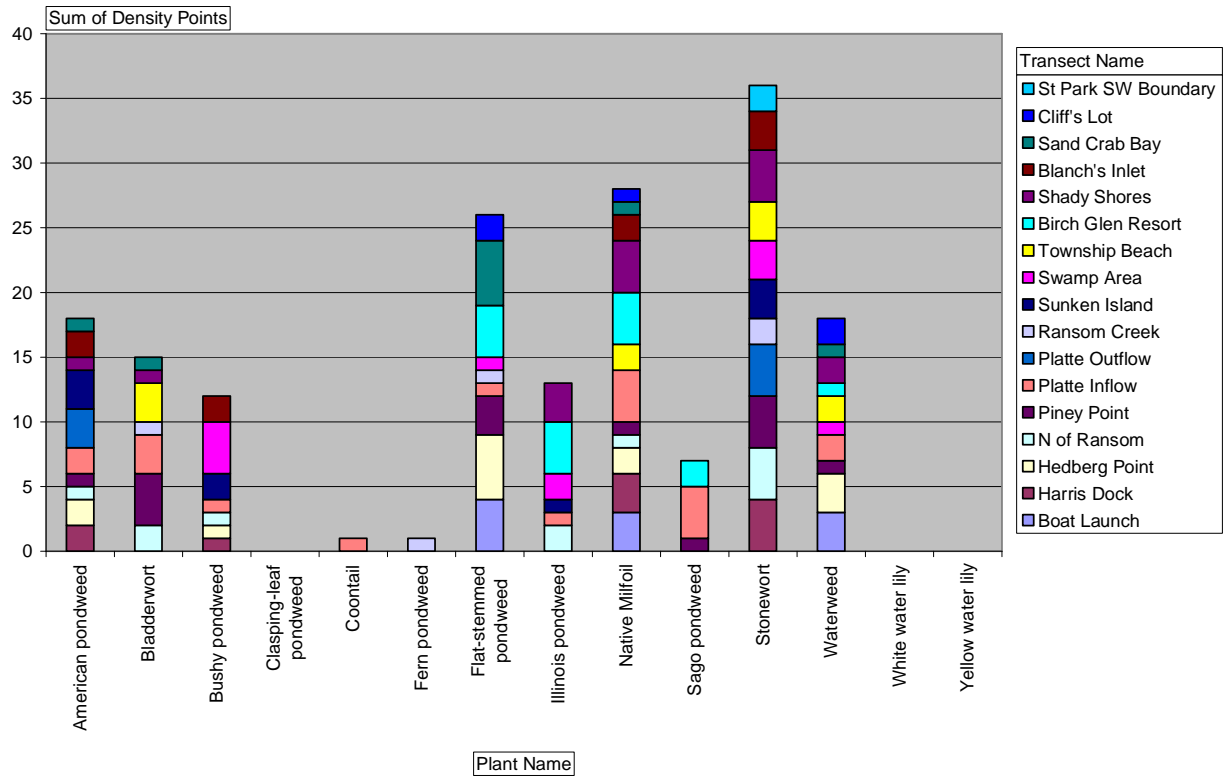
Plant Densities at 4 Feet Sorted by Species

Depth in Feet 4



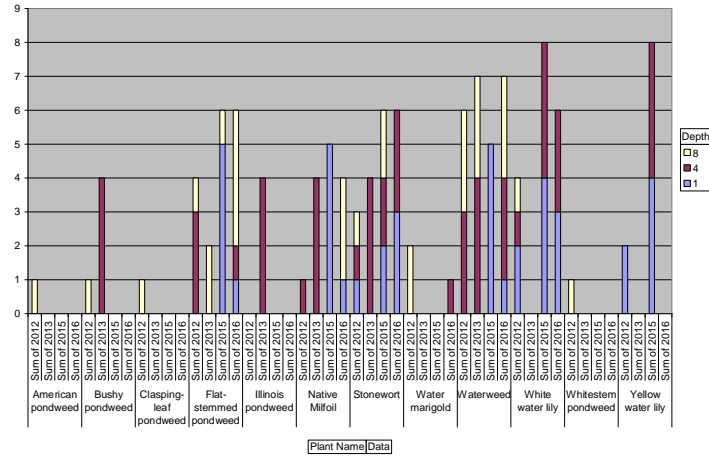
Plants Found at 8 feet Sorted by Species

Depth in Feet 8

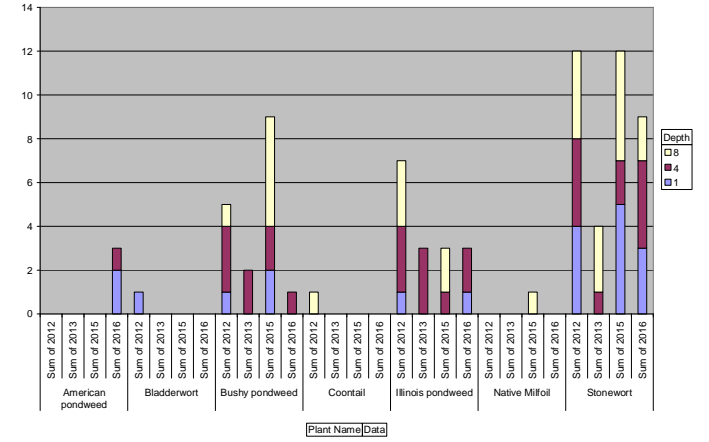


Year to Year Comparison of Weed Sampling by Transect

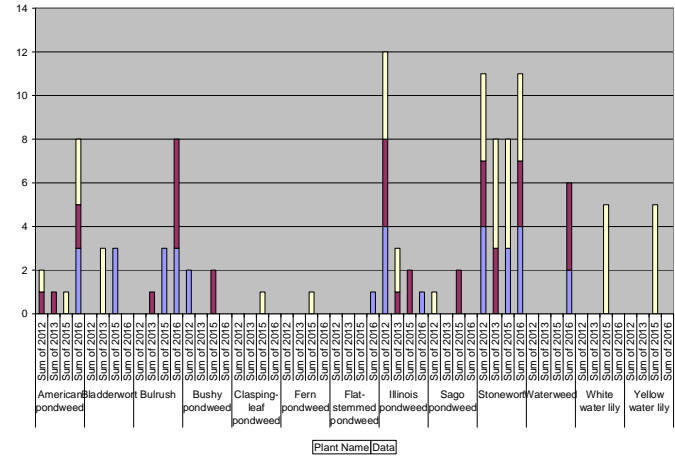
Transect Name|Boat Launch



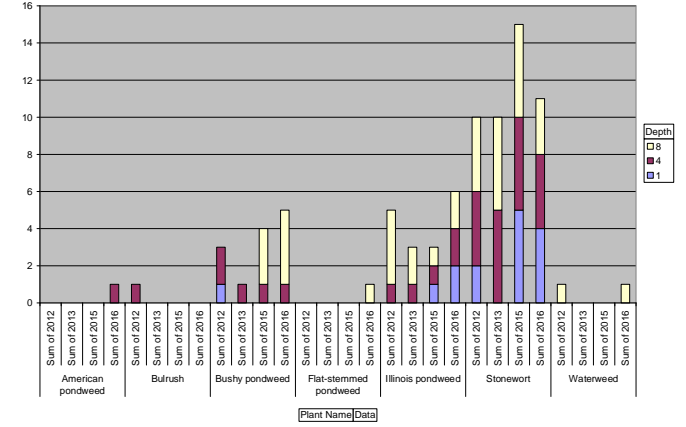
Transect Name|St Park SW Boundary



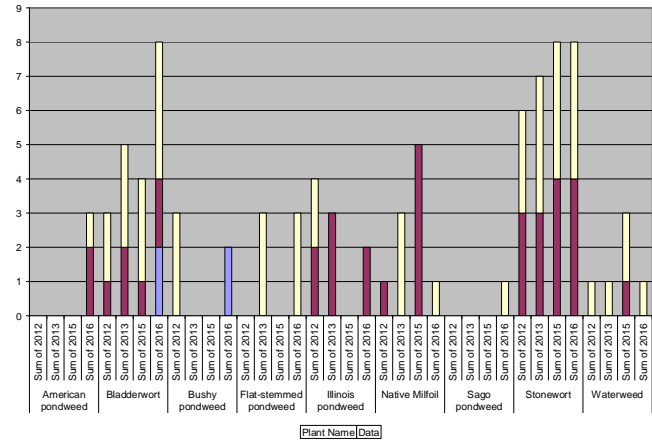
Transect Name|Platte Outflow



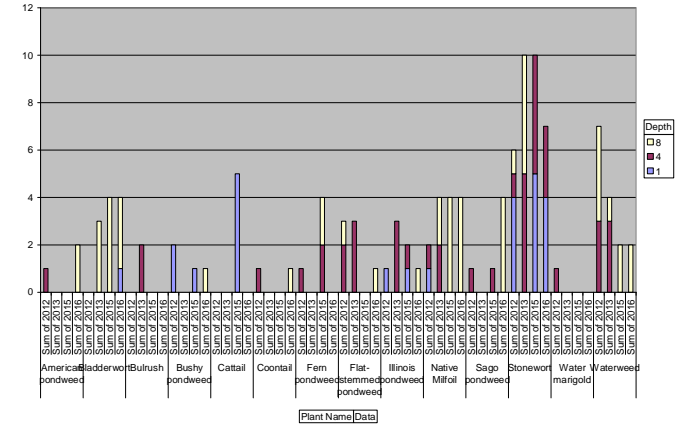
Transect Name|Swamp Area



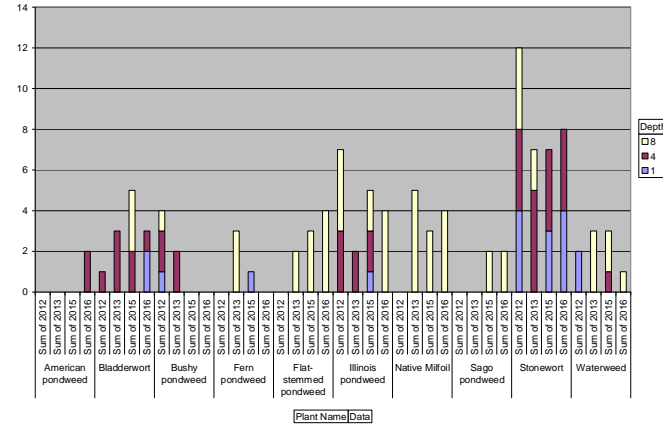
Transect Name|Piney Point



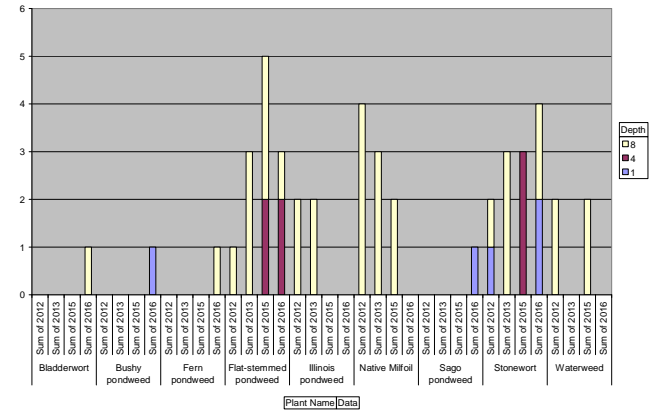
Transect Name|Platte Inflow



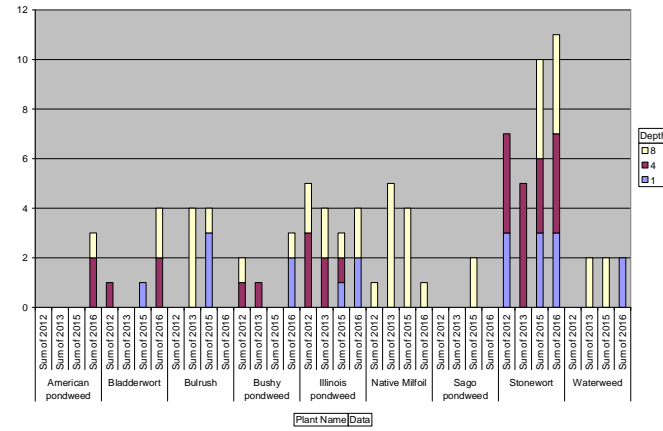
Transect Name|Birch Glen Resort



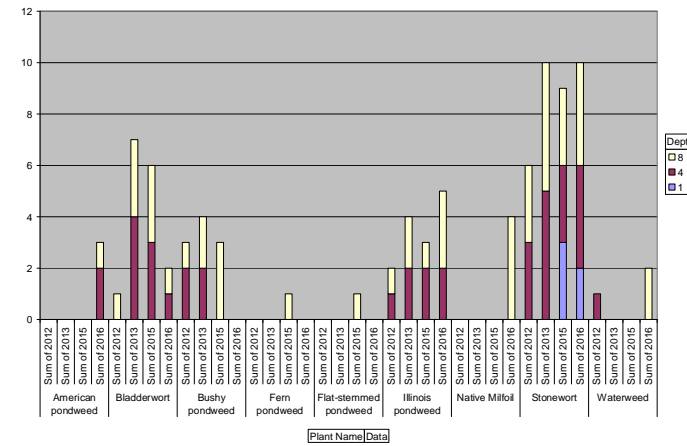
Transect Name|Ransom Creek



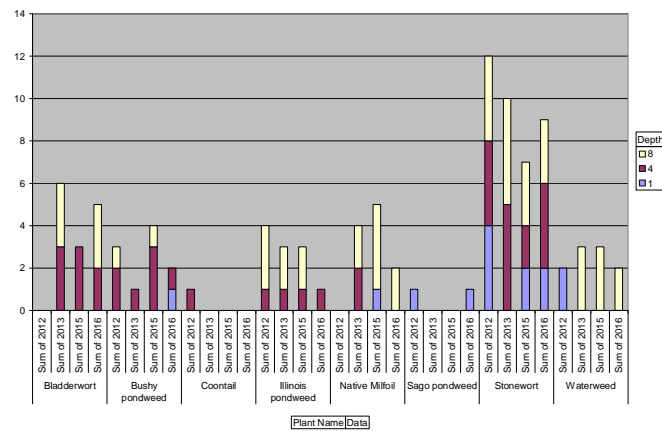
Transect Name|N of Ransom



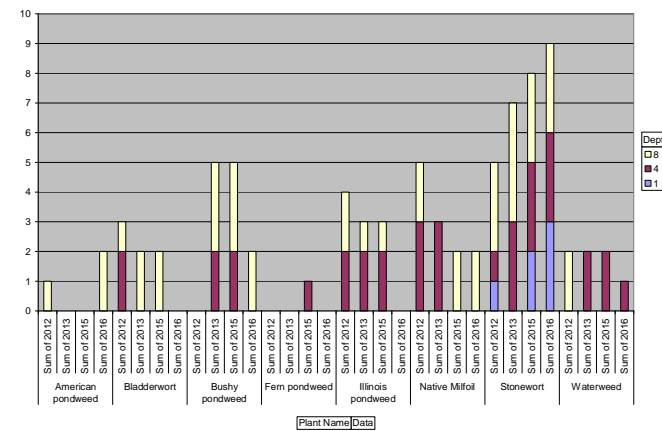
Transect Name|Shady Shores



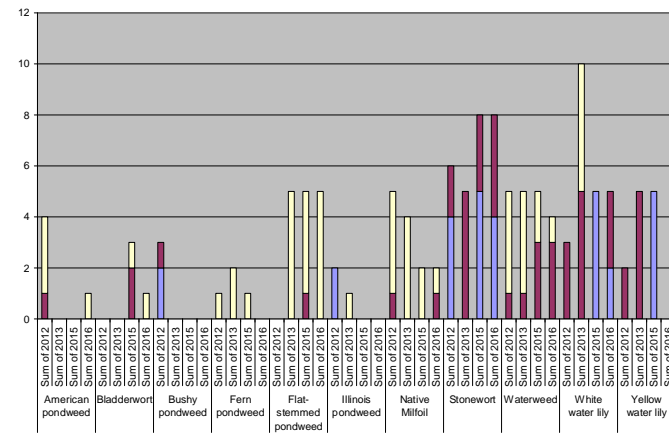
Transect Name|Township Beach



Transect Name|Blanch's Inlet

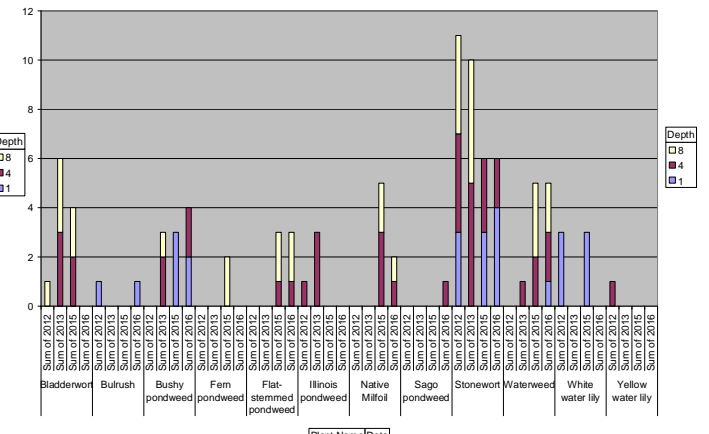


Transect Name|Sand Crab Bay



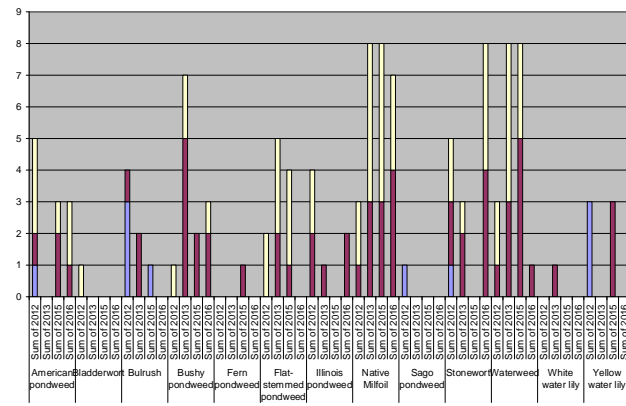
Plant Name|Data

Transect Name|Cliffs Lot



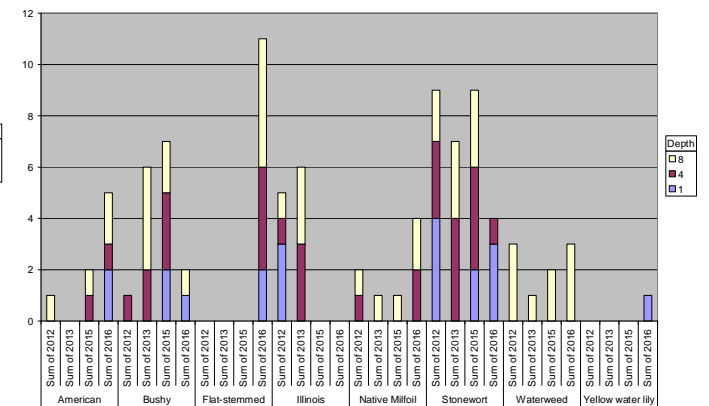
Plant Name|Data

Transect Name|Harris Dock



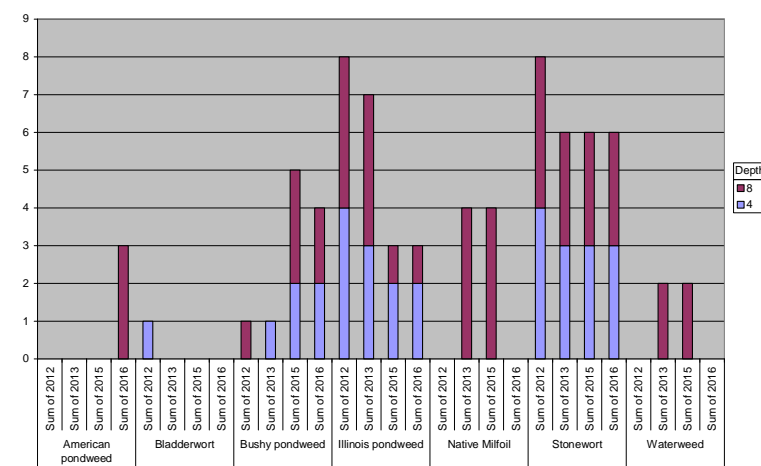
Plant Name|Data

Transect Name|Hedberg Point



Plant Name|Data

Transect Name|Sunken Island



Plant Name|Data