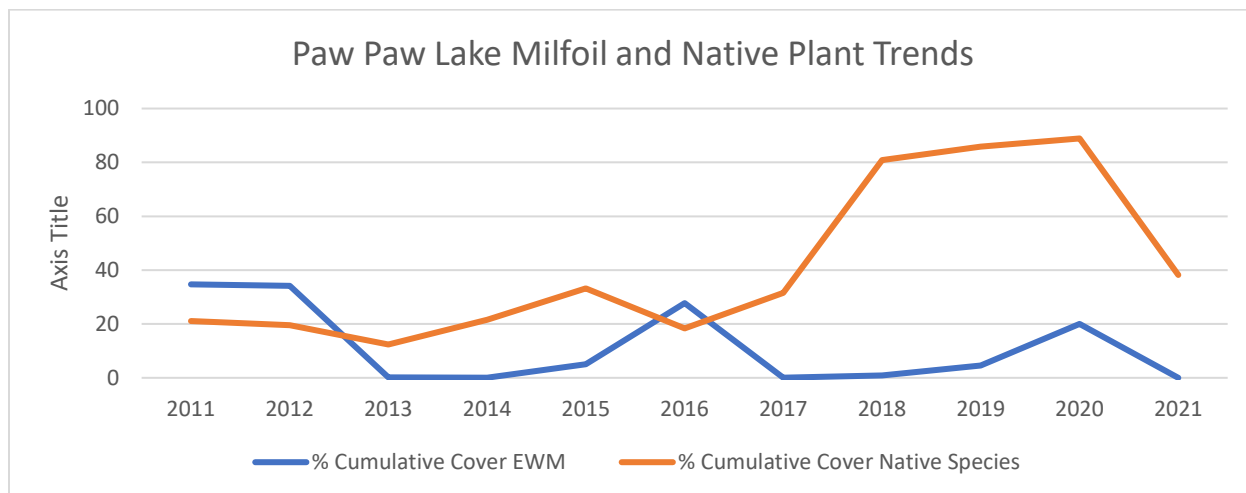


Paw Paw Lake Aquatic Plant Management Program Summary 2011-2021

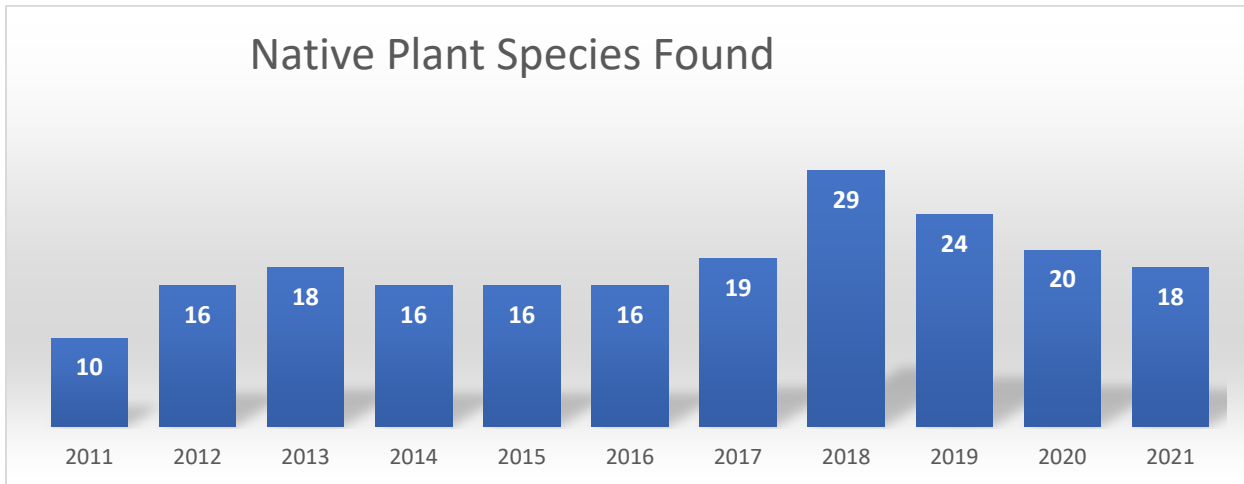
The following is a summary of the overall plant community on Paw Paw Lake since the inception of the whole lake management program. This program is intended to focus mainly on exotic/invasive species. In 2012, a whole lake Sonar application was conducted for the purpose of controlling Eurasian watermilfoil on Paw Paw Lake. This treatment was successful and management in the subsequent years focused on localized spot treatment where milfoil regrowth was found. In 2016, another whole lake Sonar application was conducted followed by three years of spot treatment. This strategy of whole lake treatments followed by years of spot treatments has been successful in keeping milfoil in check. In 2020, there was a resurgence of milfoil which prompted another whole lake Sonar treatment in 2021. Unlike the previous two Sonar applications, the 2021 treatment utilized a “thermocline treatment” which took into account real time data to achieve an accurate dose. The previous Sonar treatments used a hypothetical thermocline of 10 feet which made it difficult to achieve the correct dose. The 2021 treatment achieved the 6 ppb target rate much better than the previous treatments. In addition to Eurasian watermilfoil, the program has also addressed the exotic species Curlyleaf pondweed and more recently Starry stonewort.

A secondary goal of the program has been to promote the growth of native vegetation both in abundance and species diversity. For the most part, native plant species have not been a target of the program unless they are found growing at nuisance levels. Most native plants have not been problematic with the exception of Thinleaf pondweed which becomes a nuisance in mid to late June.

The graphs below show the trends in Eurasian watermilfoil and native plant species. What we have found is that Eurasian watermilfoil has been maintained at much lower levels than those found pretreatment. We did have an increase in 2016 and 2020 which prompted an adjustment/whole lake treatment. Native plants have shown recovery since the management program started. We have seen a steady increase in both the abundance and diversity of native plant species on Paw Paw Lake. The number of native plants found is has increased significantly compared to pretreatment levels. Fluctuations from year to year are normal and are typically related to seasonal/weather conditions. In addition, the cumulative cover of native species shows an increasing trend since 2013. The only exceptions are in the years where Sonar is required. Sonar tends to “stunt” the growth of native species the year of treatment. However, they have recovered well the following seasons given that they are free from competition from Eurasian watermilfoil.



Native Plant Species Found



Looking forward, there are some very promising options to further improve the program. We anticipate Paw Paw Lake to start 2022 in very good condition. New tools such as ProcellaCOR (approved in 2019) provide an opportunity to treat Eurasian watermilfoil regrowth systemically (root control). Given that we have had a very effective treatment in 2021 and ProcellaCOR as a follow up tool in the upcoming seasons, we are optimistic that we can maintain control of Eurasian watermilfoil for an extended period of time