

## INTRODUCTION

Flat Iron Lake Preserve contains a wide variety of habitats, including restored prairie, swamps, vernal pools, hardwood forest, and of course, a lake. The area boasts a large diversity of plants, both native and introduced. This is the 10<sup>th</sup> year of an ongoing project looking at the potential influence of climate change on the timing of flowering patterns. Each summer, students have surveyed the various habitats on a weekly basis over the course of 10 weeks. The data collected are paired with climate records for that year. Initial comparisons can be made between years, but this study aims to build a large, multiple-year database from which an assessment can be made regarding long term patterns.

## METHODS

Each week, I walked established routes through the various habitats, recording which species were flowering in each location during that week. Plants were identified using Newcomb's Wildflower Guide in the field, and species confirmation was made using the resources at [www.michiganflora.net](http://www.michiganflora.net). Identification was aided through detailed note taking, photography, and sketches. Climate parameters were obtained from [www.ncdc.noaa.gov](http://www.ncdc.noaa.gov). Weekly rainfall, and temperature highs and lows were paired with the observed flowering data. These will be used in conjunction with previous years' data to detect associated changes or trends in flowering periods.

## RESULTS

Data collection is still underway, so it is too early to present any results or conclusions.

## PERSONAL IMPACT

Learning to recognize the 200 plus plant species that flower over the course of the summer has been quite the challenge, but I have deeply enjoyed the opportunity to explore plants in this way. Putting my fledgling botanical taxonomy skills to the test on a daily basis, I have become increasingly familiar with the local flora and its characteristic habits. It is amazing to be able to feel time passing so vividly, watching and recording as the first milkweeds begin to bloom, and then again as they wilt and the follicles begin to swell. I will take away from this experience an increased knowledge of West Michigan's plants, but also an increased awareness of their steady presence, keeping time amidst our busy lives.