Barley Yield in Minnesota Across Sites (1931-1932)
I decided to orient my design towards comparing the yields of each variety across different sites over time. I wanted to see which site is best suited for which variety of barley. I opted to use a simple bar graph with the site as the X axis and the yield as the Y axis. I also colored the bars by the year to show the change in yield from 1931 to 1932 at a particular site. In addition, I decided to make the graph readable left-to-right so that we can easily see the increase/decrease in yields from 1931 to 1932 across all sites. I wanted both the absolute comparison across sites as well as the relative comparison of change between years.

With this visualization I want to help better communicate which sites were most appropriate for which variety as well as showcase that with an increase in yield, we can further investigate what improvements the sites did that could potentially be adopted for the future at other sites. For example, we can easily see that Waseca had the greatest yield for the Glabron variety, but the only increase in yield we saw 1931-1932 of the Glabron variety was the Morris site. What was so special about the Morris site? We can now investigate that.

In my visualization, I definitely downplayed the importance of comparing a site across different varieties; this would have been useful in deducing whether a site should even be used for cultivating any sort of barley. However, one may still be able to do this as I decided to put all 10 graphs on the same graph template and they all have the same scale. I wanted to ensure uniformity across all the graphs in the case that one would want to delve into more information than the ones immediately presented. I also limited the number of colors to 2 so that the viewer wouldn’t have to keep referring back to the key to understand what each color means; the tradeoff was that I instead had to use text labels to clearly label each section to its variety. In addition, I made sure that the order of the bars was consistent across all graphs; the first bar in the couple is always 1931, and the sites are always in the same order (so Crookston is the first couple bars in each graph).

I used Microsoft Excel to create my graph.