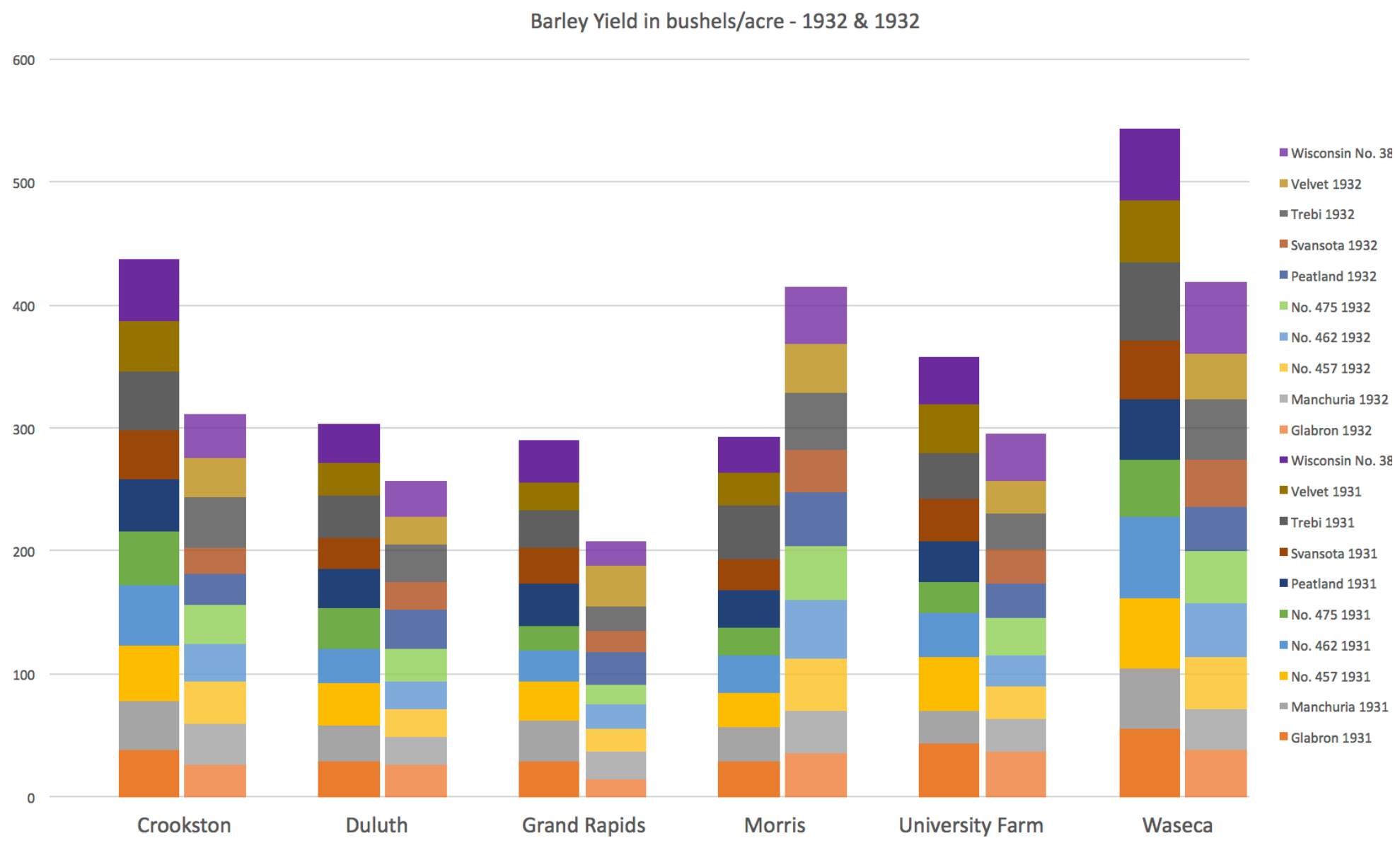
Barley Yield in bushels/acre - 1932 & 1932
600
500
400
300
200
100
0
Crookston
Duluth
Grand Rapids
Morris
University Farm
Waseca
Wisconsin No. 38
Velvet 1932
Trebi 1932
Svansota 1932
Peatland 1932
No. 475 1932
No. 462 1932
No. 457 1932
Manchuria 1932
Glabron 1932
Wisconsin No. 38
Velvet 1931
Trebi 1931
Svansota 1931
Peatland 1931
No. 475 1931
No. 462 1931
No. 457 1931
Manchuria 1931
Glabron 1931

The chart style chosen to represent the data is a clustered stacked chart. The column stacks are divided by farm locations and adjacent columns represent years, with continuity going from a standard left to right direction (bar to the left is 1931, bar to the right is 1932). The decision for this representation came down to practicality. If, for example, a bank or financial institution wanted to see the change over time in the production per farm for loan purposes it can easily do that from the bars themselves. Moreover, if there is need for more detail one can see the distributions of the crops per individual year per farm.

Since the data represented is nominal, labels for the farms are the most efficient way to represent the distinction between them. This also allows the user to distinguish between each. The y-axis is represented by numbers since the yield is quantitative data. This allows one to see the combined total yield of each farm per year clearly by their size and values, which is an efficient and intuitive way to represent the data as shown in Bertin's levels of organization.

The data obscured by this representation is the strain of the crop. In order to find more about it the user would need to pay attention to the divisions of the colors, where they start and end, and what each color represents. The color system has one shade of color per crop, and the opacity change is meant to distinguish the year. Color was chosen since the data is nominal and this is an efficient way to represent the data according to Bertin. The start and end of each individual crop is obscured and would require considerable effort by the user to find, but this trade off was taken since this is a detail that I felt was not as important for the purposes this representation would serve (providing per farm details). If a user is inclined to get more insight in a specific farm they can find out more, but the greater aspect of the data, which is the total yield for that year, is clearly and easily shown.

Excel was used to manipulate and represent the data, this was done using the built in stacked chart but manipulating the data to include blanks to simulate a clustered chart look.