Mapping Historical Data Using ArcGIS

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Historical quantitative data, such as is found in censuses and voting returns are extremely difficult to use, for quantitative data can be overwhelming. However, by using GIS software, the process of using quantitative data is simplified, allowing Bowdoin students to test various historical hypotheses about nineteenth century America. Thus, the GIS software offers students an opportunity to explore their own original historical theses, as well as test the theses of other historians, by using primary source quantitative data.

This summer, my job in working with the GIS program and Bowdon’s historical GIS data set was twofold. First, I worked to smooth out some of the bugs and issues with the data set, as well as update and edit the guide used by students in Professor Rael’s courses. Having taken “The Civil War Era” with Professor Rael, I used the lessons I learned through my own use of GIS map to revise some of the guides that will be used by students in future courses utilizing the GIS software.

The second and more significant part of my internship was to expand Bowdoin’s historical data set, thereby expanding the possibilities for research at Bowdoin using GIS software. The main expansion was in adding a very large data set for the 1860 Agricultural Census of the United States. In 1860, the United States Census Bureau completed an extremely thorough, county-by-county inventory of all agricultural products produced in the United States. As mentioned above, such data is very difficult for any historian to use. However, with the GIS mapping software, the production of various agricultural products can be mapped, and then compared to other variables, such as slave population, or the 1860 voting returns. Thus, I spent the majority of my time creating a data set for the Southern United States using this Agricultural census.

Another project I began was to research and evaluate the various Secession Conventions, which took place in the American South in 1861. By looking at how various delegates voted, the regions that supported secession and the regions that opposed secession can be differentiated. This involved a great deal of primary source research, to find out how each delegate voted and to see which county they represented. GIS will offer a new way to look at these conventions, and offer excellent visual representations of Southern support for secession.

I look forward to seeing the many creative ways these new data sets will be used, and I hope at some point in my Bowdoin career to use this new data set for my own research, perhaps in Professor Rael’s 300-level course in Nineteenth Century American History.

To the right is a GIS map, using the new agricultural data set, mapping cotton production in the Southern United States in 1860. The darkest regions represent the highest production of cotton, as a percent of all cotton produced in the United States.

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