

The Driftless Area



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Geography 326

Introduction:

Wisconsin's landscape is defined by many physical features resulting from continental glaciation. Wisconsin is unique in the fact that it possesses a region that escaped the physical scouring of the last glaciation 10,000 years ago. Named for its lack of continental ice during the last ice age, the driftless area is located in the southwest region of Wisconsin.

Purpose:

The regions in Wisconsin have unique physiographic properties. These properties contribute to making the driftless area a multi-feature region. Settlement and agricultural patterns are often defined by these regional properties (a great human/environmental study). This paper will discuss agricultural, social, and physical features within the drift and driftless regions. The main premise is that the physical make up of the drift and driftless area will be a main influence for settlement and agricultural patterns.

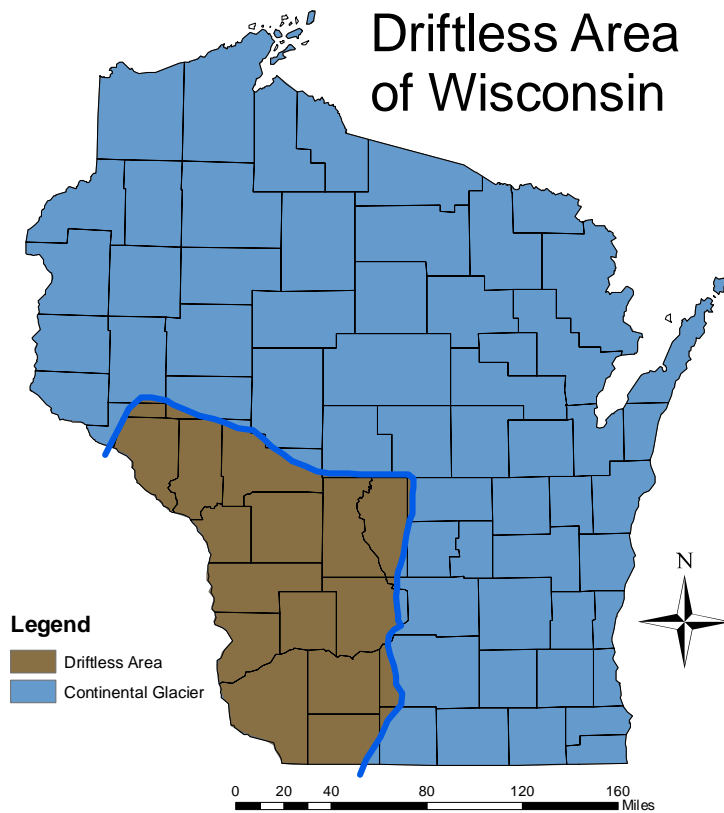


Figure 1

Road Patterns

The physical relief of the drift and driftless area differs in the fact that glaciers scoured the drift area flat, while the driftless area remained a hummocky outwash region. The patterns of the roads mimic the relief left behind from the last glaciation. Figure 2 shows a typical drift area in Washington County. Road patterns in Washington County are for the most part uninhibited by the relief. Richland County on the other hand shows typical road patterns for an area within the driftless area.

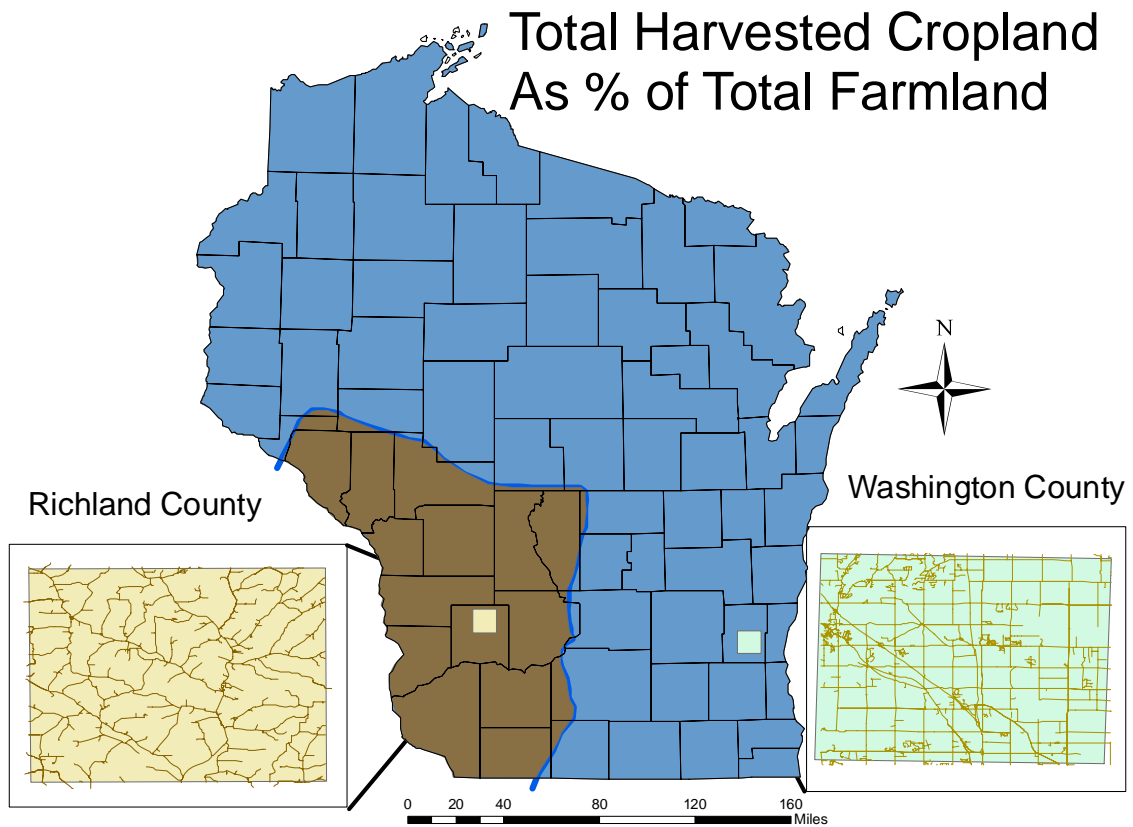


Figure 2

Toponyms:

When people begin settling an area, they find it necessary to establish a nomenclatural system for surrounding features. A good indicator of a driftless region is by looking at the unique nomenclature of the region. These place names are appropriately called toponyms and are easily obtained from any regional atlas. Toponyms unique to the driftless region are coulee, ridge, valley, and hollow. Figure 3 is a dot map showing the distribution of these toponyms throughout the state. Figure 4 is a choropleth map of that effectively shows the concentrations in each county.

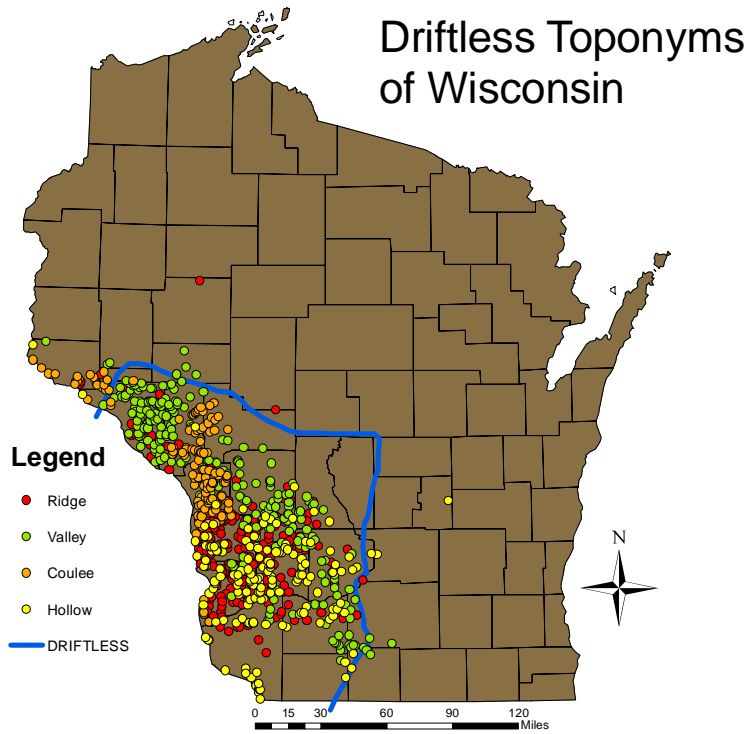


Figure 3

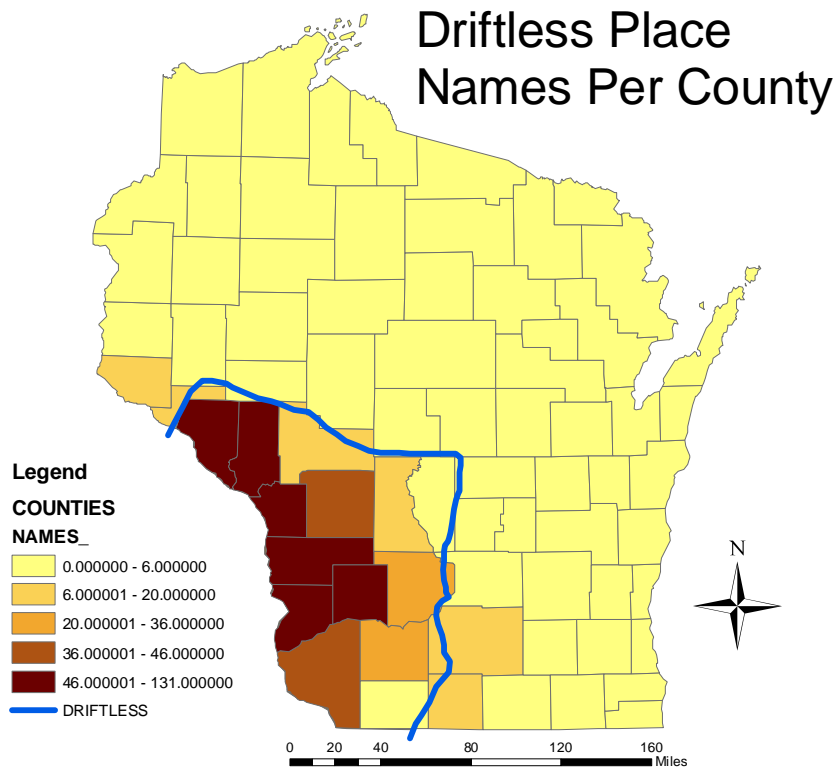


Figure 4

Growing Season

Wisconsin has a wide range of growing seasons. For this study, the growing season equals the total number of frost free days. Figure 5 shows the growing season regions in Wisconsin, as well as the counties used in our study area. Because the growing season has such a wide range, only similarly ranged counties were compared to our study area. This was limited to counties in the south eastern part of the state. Figure 6 shows a numerical average of the growing season between these areas and other areas of the state to reaffirm the close season length.

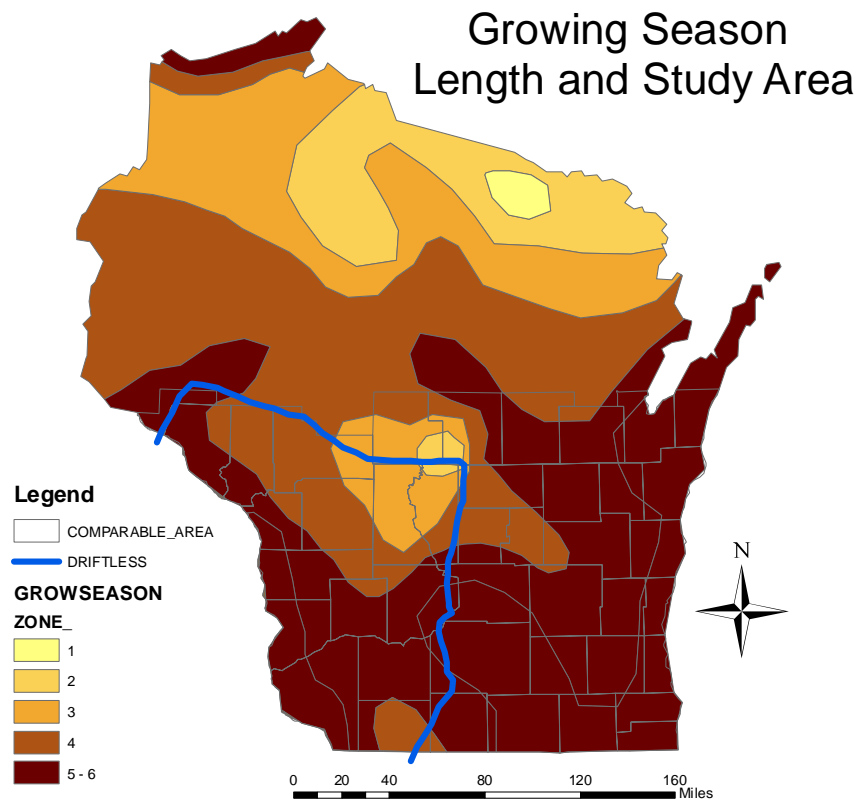


Figure 5

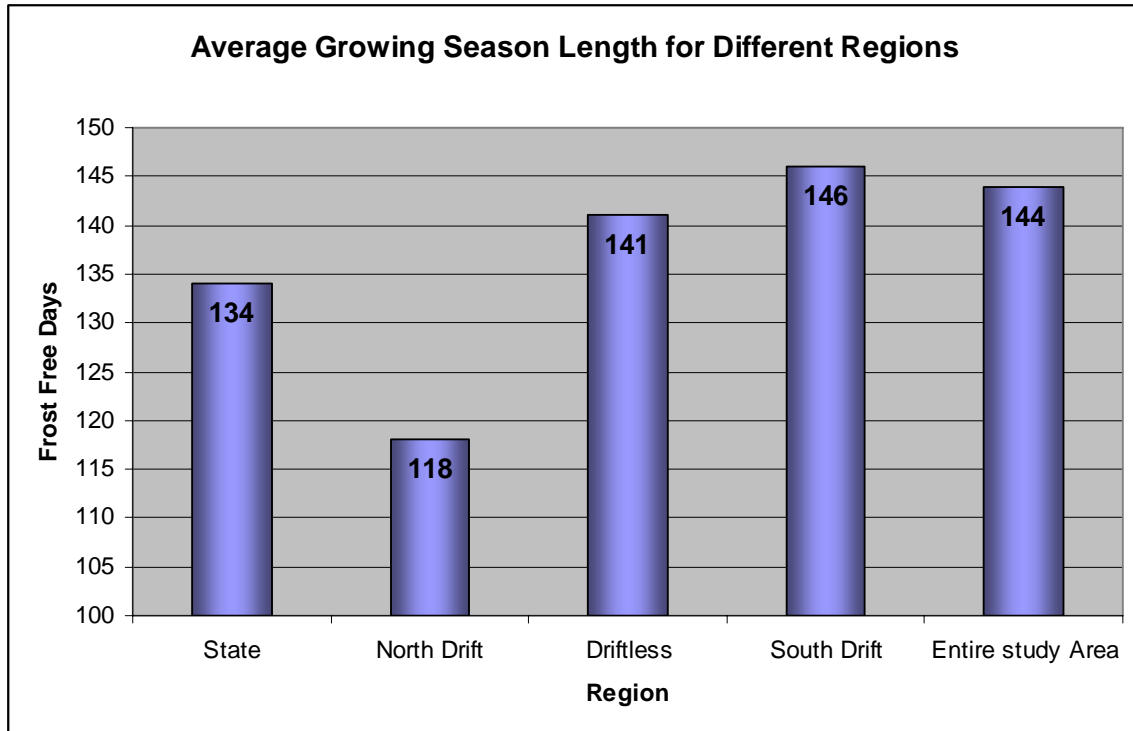


Figure 6

Agriculture

Value of Production

Agriculture is a perfect example of a human response to their environment. Certain crops can be grown only in certain regions due to many variables: soil type, growing season length, topography, rainfall, etc. Differing crop types will also bring different amounts of money to farmers. Figure 7 compares the average value of products per farm. It shows a distinct pattern that farms in the eastern part of the study area are more profitable than those in the western part. There could be many reasons for the difference. However, a likely probability is that the growing conditions in the western, driftless area are less favorable and farmers are forced to grow hardier less profitable crops. Figure 8 shows a statistical analysis of that supports the pattern of values being much less in the driftless region.

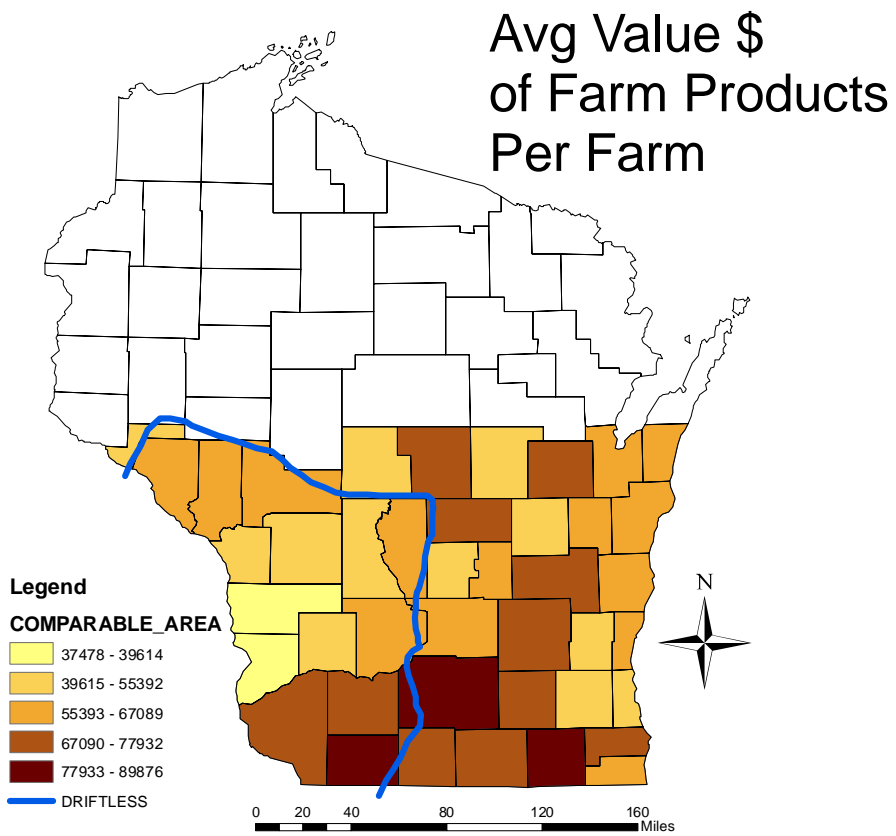


Figure 7

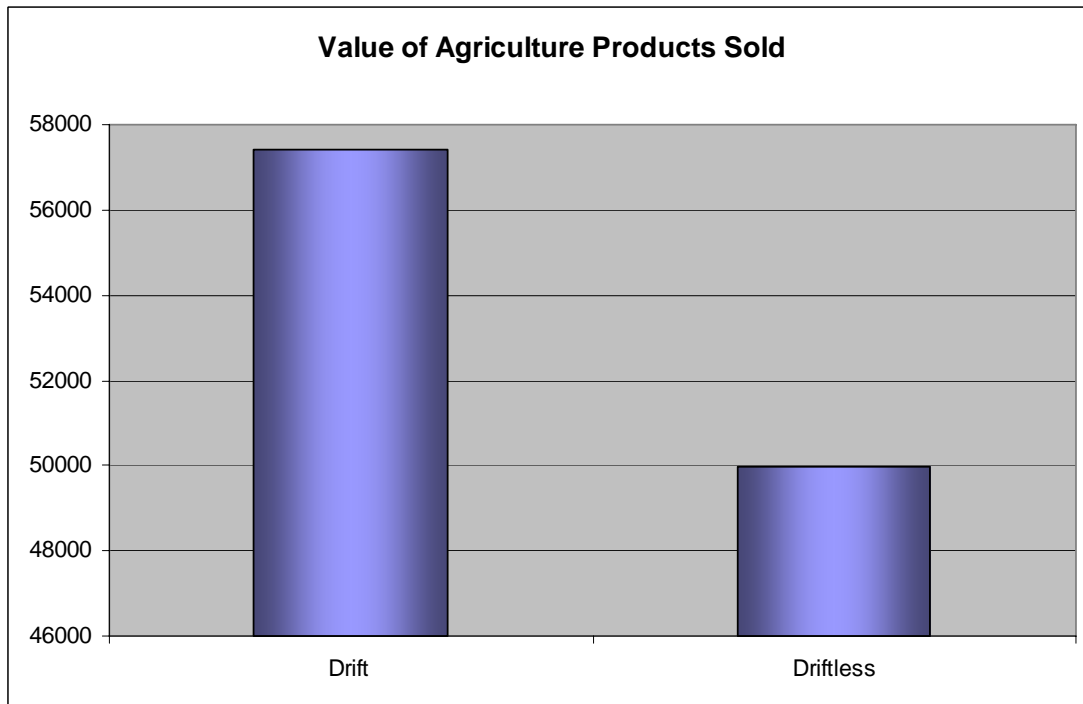


Figure 8

Average Farm Size

Figures 9 and 10 illustrate the average farm production value between each region. The map shows a pattern of larger average farm size within the driftless region. Farms in the eastern part of the study area are, on average, much smaller. This could be due to the fact that there is a larger population in the southeastern part of the state and there is less farmland to be distributed among all farmers. Another reason for this could be that the land in the drift region is more productive and the size of each farm does not need to be as big to produce. Farm sizes in the driftless region are probably larger due to the large amount of unusable land in the valleys, causing the farms to be much larger to get the same amount of usable acreage. The crops planted within the valleys are also probably much different than those in the eastern flat land.

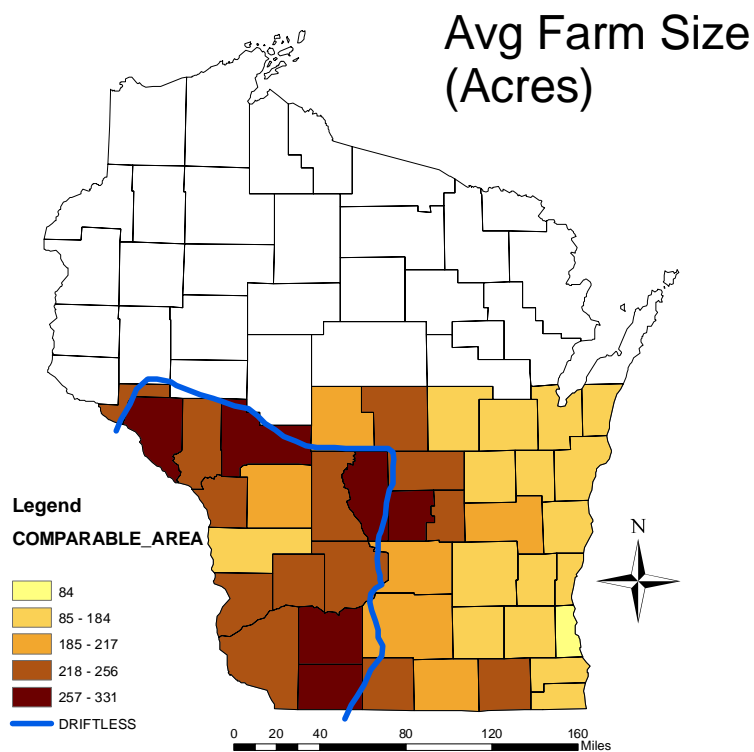


Figure 9

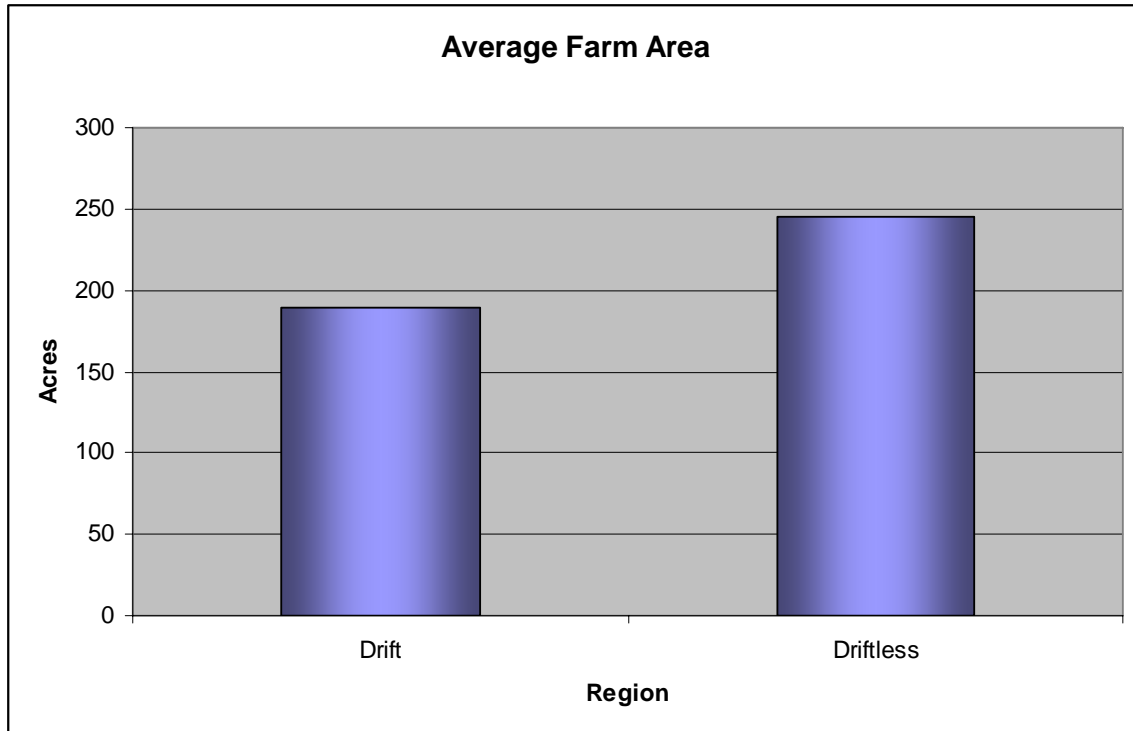


Figure 10

Harvested Cropland as % of Total Farmland

Figures 11 and 12 reaffirm the theme: crops growing in the eastern half of the study area are different than those in the driftless region. They show total harvested cropland as a percentage of total farmland. As one may expect by now, the eastern half of the study area has the largest percentage. The flat, glaciated soils are perfect for row crops such as corn or soy. The hills and valleys of the driftless region are more suited to specialty tobaccos or apple orchards. Figure 12 shows a statistical analysis of the map's general pattern.

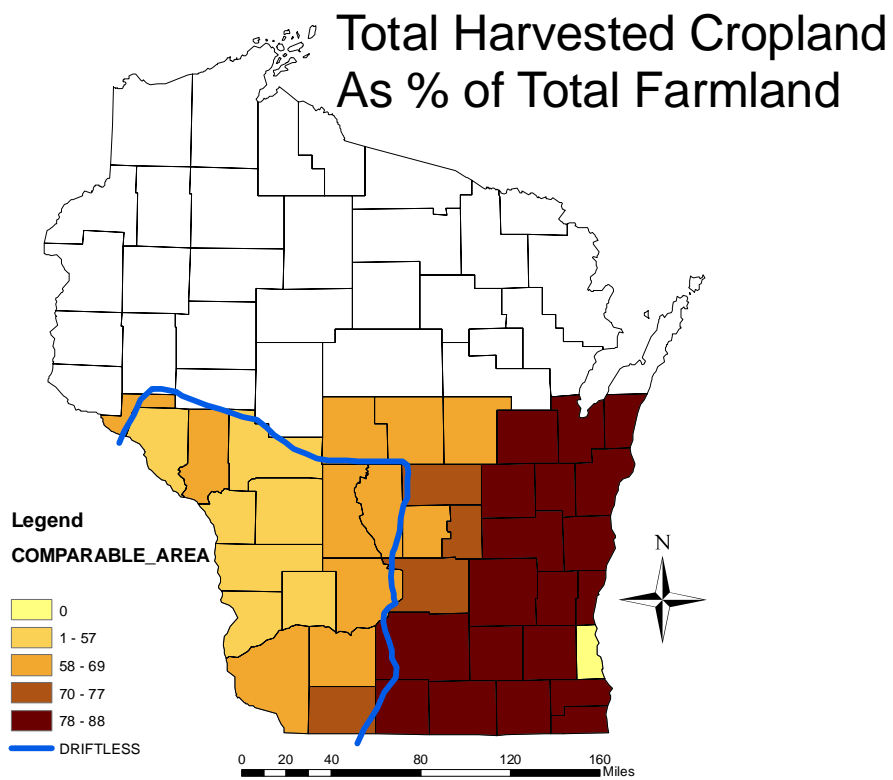


Figure 11

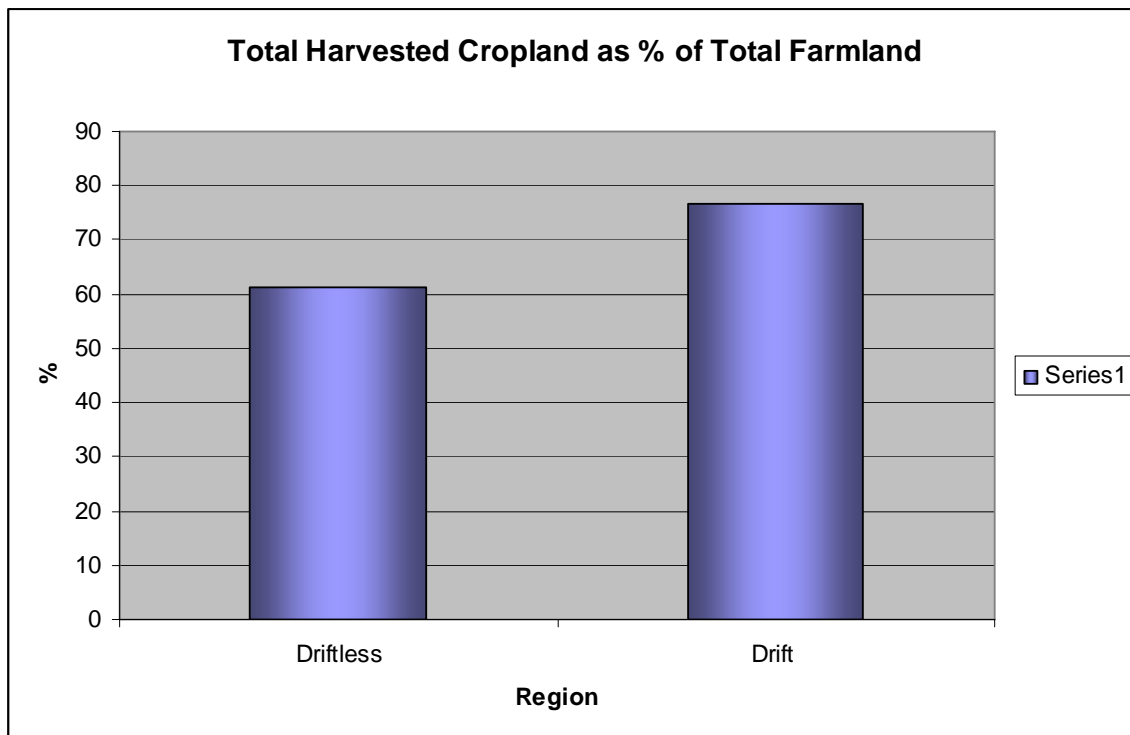


Figure 12

Conclusions

Wisconsin provides a variety of landscapes, but one remains unique to the Midwest and most of the country: the driftless area. Just by comparing a simple road map, one can see the strikingly different ways humans have to settle an area based around the physiographic attributes. Agriculture also appears to be heavily influenced by the terrain since farms in the east are smaller, yet yield more per acre than the west. The landscape is not only physically defined, but also culturally marked through the toponyms inspired by the driftless area landforms. The presence of toponyms within the driftless region and absence outside the region, accurately describes a formal region. Lastly, the study of the driftless area encompasses many different aspects and the study of each aspect helps contribute to extracting a better understanding of the region.

Bibliography and Additional Readings

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