# **Gaylord Donnelley Prize 2012**

## • Holly Rippon-Butler, Environmental Studies (Advisor: John Wargo)

# Moving Milk: Transportation and Commodification of Milk in New York State

Transportation plays a critical role in the dairy industry because fluid milk must be handled and delivered rapidly between cow and consumer, due to its highly perishable nature. In this paper, I ask how the development of the transportation industry has affected New York State farmers over the past two centuries, and how this has directly impacted farmers in the state today. As the mode of milk delivery changed from carts to railroads – and eventually to tanker trucks – the spatial arrangement of farms, the volume of milk production, and the intensity of resource use were altered as well. Dealers entered into farmers' relationship with environmental and market conditions as the region of fluid milk production expanded – creating an industry that looked to growth, no matter what the demand or cost, as inevitable and guaranteed. I argue that the way the transportation industry evolved over the past two centuries has created economies of scale in the dairy industry that enabled milk to become a commodity and encouraged the development of large-scale dairy farms in New York State, making it difficult for small farms to compete.

#### • Rachel Shaffer, Environmental Studies (Advisor: John Wargo)

#### Ozone Pollution and Health in Atlanta: The Implications of a Presidential Decision

Due to recognized adverse effects on human health and the environment, tropospheric ozone is regulated and limited by the Clean Air Act's National Ambient Air Quality Standards (NAAQS). Despite the legal mandate to revise these standards according to updated scientific evidence and to ensure protection of public health, the Obama Administration suspended the September 2011 recommendations for limits of between 0.060-0.070 ppm and instead set national limits at 0.075 ppm. The goal of this project was to understand the public health implications of this decision in Atlanta, Georgia. Population data, incidence rates, air quality levels, and effect estimates were analyzed in the Environmental Protection Agency's BenMAP program t predict the difference in premature mortality, respiratory hospital admissions in the elderly, and emergency department (ED) visits for asthma under the different standards. Results suggest that there will be minor changes in premature mortality and asthma ED visits, but the most significant public health effects will be experienced by the elderly population. Overall, the data generated provide a concrete estimate of the consequences of neglect of environmental legislation that will continue to burden this country in the coming years.

## • Rachael Styer, Environmental Studies (Advisor: Paul Sabin)

Faith, Family and Farming: The Survival of Small and Mid-Sized Farms in Lancaster, PA throughout the Twentieth Century

Throughout the twentieth century, U.S. farm structure and size trended toward fewer but larger farms, with serious negative implications for environmental and human health. Lancaster County, Pennsylvania, is an example of a functioning farming region based on small and mid-sized family farms. This paper explores Lancaster's farming history, from its origins in eighteenth century colonial subsistence farming, through its "golden era" in the 1920's, and concludes in its agricultural zoning battles throughout the latter half of the twentieth century. The county has not been immune to the consolidating effects of government subsidy payments, mechanization and changing land use. However, Lancastrians' had a strong commitment to a "sense of place" that caused them to confront head-on the powerful forces that had consolidated small farms across the nation. Their desire to sustain the lucrative tourist industry, and the religious Amish community's belief that farming is the only way to live a proper life combined to create a powerful narrative of a specific place in time. Lancaster's story speaks to the power of community, the commitment to farming as a way of life, and the importance of family values... Faith, Family and Farming.

#### • Michael Wysolmerski, Environmental Studies (Advisor: Paul Sabin)

#### The Fight for a Neighborhood: Flood Control and Race on the Anacostia Tributaries

Lakeland, an African American neighborhood in College Park, Maryland, historically suffered from severe flooding. The neighborhood was located on Paint Branch, a tributary of the Anacostia River. In the early 1970s, the Army Corps of Engineers proposed a channelization project to protect the neighborhood from floods. A vigorous debate emerged during the approval process. White environmentalists from College Park and the University of Maryland opposed the project on ecological grounds. Residents of Lakeland and local government officials argued that flood control for the neighborhood was a civil right and thus the Corps should build the project. The project served as a prerequisite for the Lakeland Urban Renewal Project, adding another layer of intrigue to the debate. Eventually, the project was approved, and the Corps finished construction in 1975. Urban renewal also moved forward, and Lakeland changed dramatically. The debate provides a case study to investigate the relationship of race and the environmental movement of the late 1960s and early 1970s. It serves as an opportunity to begin to bring race into dialogue around the campaign to preserve open space. The story of flood control in Lakeland is a tragedy, as both the proud neighborhood and the undisturbed stream ceased to exist after channelization and urban renewal occurred.