

Abstract

Over time, the methods and technologies by which we produce and harvest our food have advanced. Large corporations are quick to adopt new technologies and processes, but smaller farms can struggle to see the value in pursuing advanced technologies for farm management. Development of a streamlined protocol for introducing geospatial technology at the individual farm level can help prioritize operations, and help develop long-term operational plans. While the benefits of integrating GIS software and tools are apparent to corporate farm managers, or agricultural economists, they are not always as apparent or easily accessible to small farmers. Using the research farm in Freeville as a case study, a developmental framework for other farmers at Cornell University and around Tompkins County for small-scale geospatial data integration will develop. With a focus on easy-to-obtain datasets, the procedures outlined on this paper will articulate in a way that non-geospatial data users can understand and build upon. This paper will examine the possible benefits of implementing GIS technology in small farming communities of like that of the Homer C. Thompson Research Farm and discuss how it can improve the visualization and management of small farms. While the overall impact of introducing geospatial technology at the small farm level is not quantifiable in this paper, understanding what data is available, and its impact on farm operations, can be beneficial in the long-term planning and management of small farms.