

Suitable Sites for Urban Beekeeping in Somerville, MA

Introduction

The European honeybee, *Apis mellifera*, is responsible for pollinating over 100 types of crops grown in the United States. Unfortunately, the species is on the decline due to factors that are not yet well-understood. Small-scale urban beekeeping is a source of hope: Urban beehives are often healthier and produce more honey than hives in rural areas.

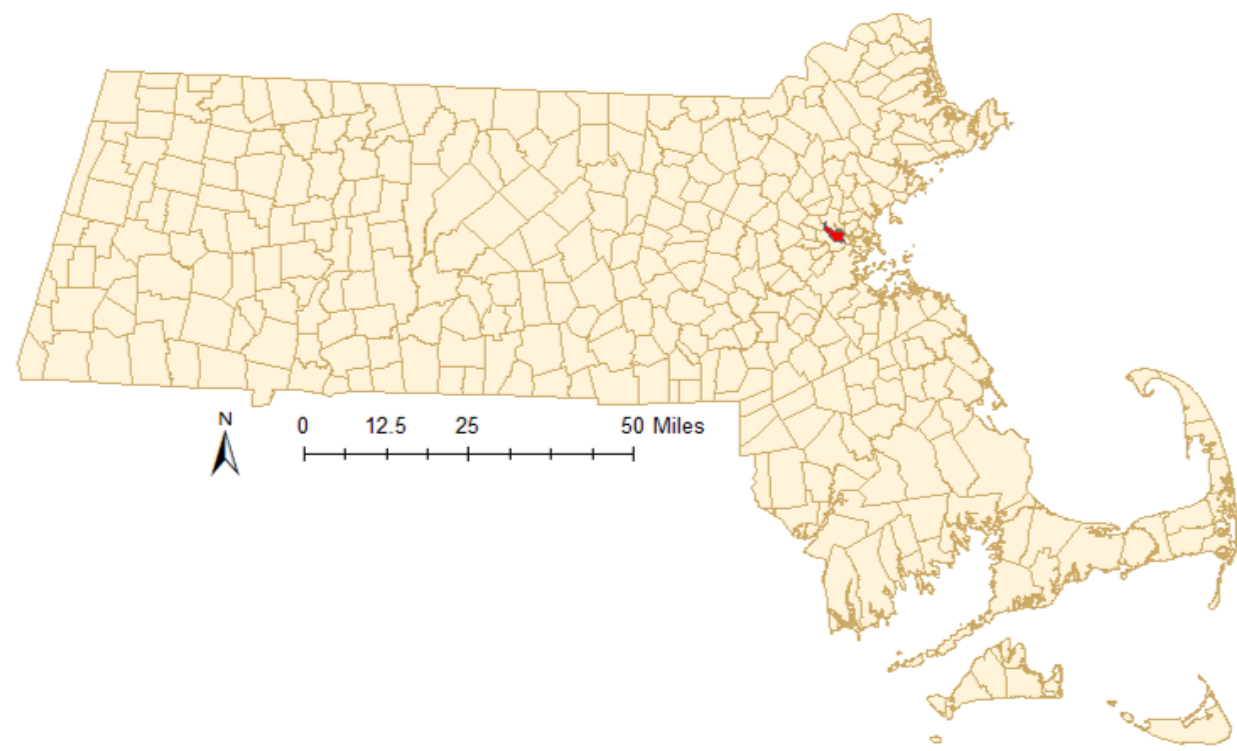


Figure 1. Location of Somerville in the state of Massachusetts.

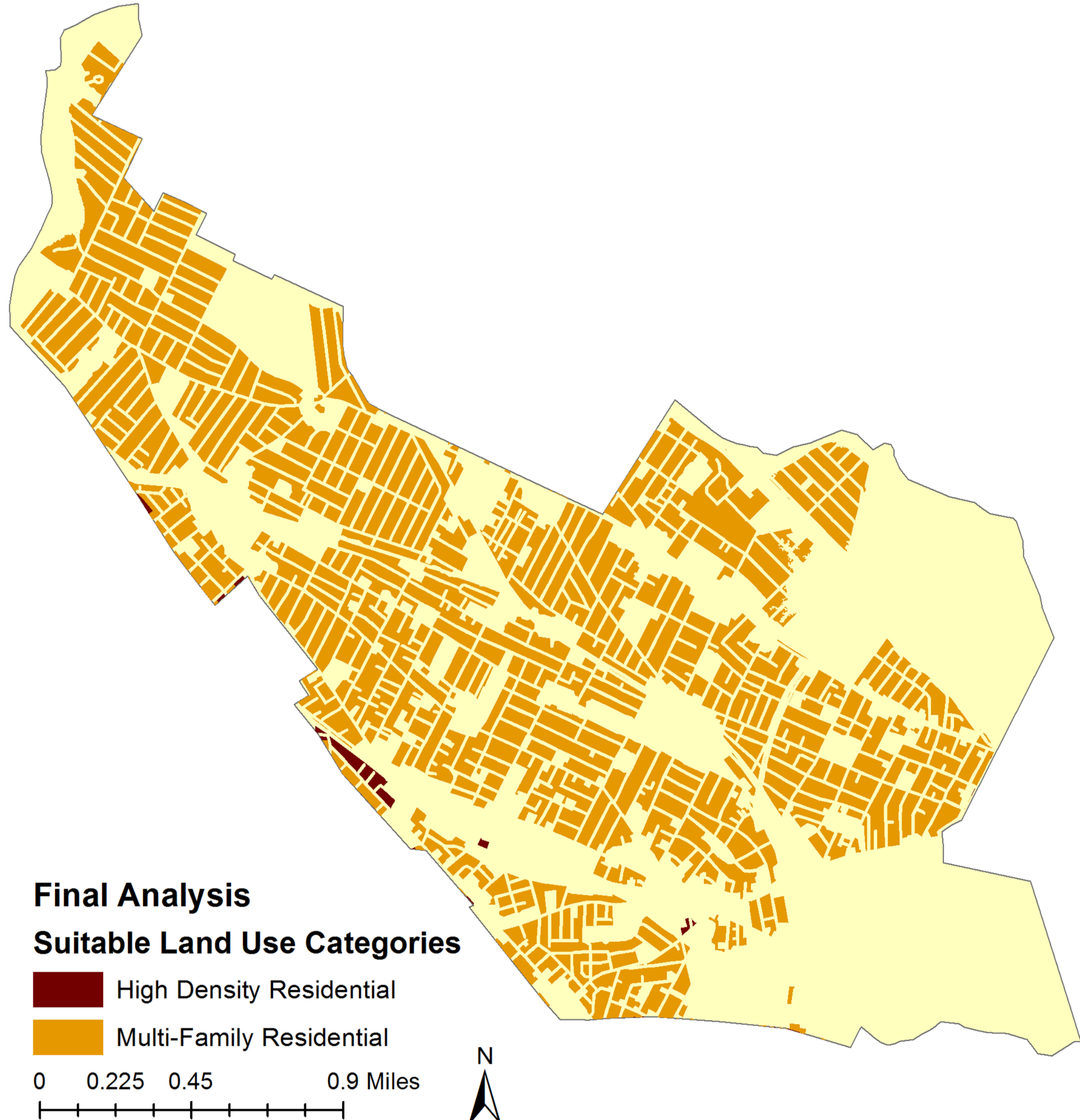
The city of Somerville, Massachusetts recently implemented an urban agriculture initiative intended

to encourage local agricultural activities such as urban beekeeping. This analysis is intended to identify the number of lots in Somerville suitable for urban beekeeping under the city's new agricultural initiative.



Figure 2. The European honeybee, *Apis*

Final Analysis



Methods

Four factors were analyzed in order to identify suitable sites for urban beehives: Flood zones, road locations, bicycle path locations, and land use. Buffers were created around bicycle paths and roadways. Buffered paths and roadways, as well as flood zones, were then erased from the map of land use. Suitable residential land use categories were identified, and the resulting map was unioned with tax parcel data in order to determine the number of usable lots.

Results & Conclusions

There are 12,002 residential lots in Somerville, MA potentially suitable for urban beekeeping. This constitutes the majority of the residential lots in Somerville. The city's new agricultural initiative therefore has the potential to significantly change the face of urban agriculture in Somerville.

Cartographer: Rebecca Alpert / GIS 101 / 1 May 2014 / Data source: MassGIS / Projection: NAD 1983 State Plane Massachusetts Mainland FIPS 2001

Flood Zones



Roads



Bicycle Paths



Land Use

