Miles to Go before We Eat: Food Miles & the New York City Foodshed.

A Map Study by Hawthorne Valley Farm’s Farmscape Ecology Program. For more info.: fep@hawthornevalleyfarm.org
**FOOD MILES** estimate certain aspects of the environmental costs directly associated with a food’s transport from farmer to consumer.

However, just as importantly Food Miles help describe a **FOODSHED**. In a manner analogous to a watershed, a “Foodshed” outlines the area of land supplying food to a given geographical spot.

In this little study, we show the location of many of the farms supplying NYC farmers’ markets and CSA’s. We then consider some of the factors affecting where those farms are located. Some such factors are directly determined by the City itself.

As a source of power and wealth, NYC has a huge influence on agriculture at least in the middle and lower Hudson Valley. We hope that these images help you think about that influence and the meaning of Food Miles and Foodshed in a new way.
These are the locations of 139 farms or food producers selling through NYC Farmers’ Markets or CSA’s. What influences the distribution of these farms?
Obviously, landscape will be one factor – farms will tend to be located in the valleys where richer soils and usually milder weather aid production.
Notice how the Hudson Valley, the Finger Lakes, and the Susquehanna Valley are home to many farms, whereas relatively few farms are in the heart of the Adirondacks, Catskills, and Green/White Mountains.
Another factor is the availability of land – is their good, affordable farmland? Urbanization reduces farmland by converting it to other uses and by making it unaffordable to most farmers. Cities of more than 100,000 are shown here.
Urbanization spreads outward from city centers. Here, urbanization (as indicated by the red showing regions with >15% impervious surfaces) is added to the map.
While some farms do occur in or near urban areas, most do not.
Furthermore the nature of farms differs with distance from urban areas.
The nature of farms differs with distance from urban areas. Specifically, some forms of farming or food production require more land than others. For our purposes, we’ve classified food production as indoor (bakery and “other”), land intensive (vegetable production, greenhouse plants), and land extensive (wineries, fruits, livestock for meat and dairy, honey and maple syrup production).

The distances that farmers are willing to travel also are affected by the price they can get for their production – meat, wine and maple syrup, while being land extensive, also bring good prices in the city.
Economically, producers would like to be as near to the City as possible – this reduces their transportation costs and travel time. Notice how production that can occur indoors (e.g., pickles and bakeries) tends to be near NYC, more intensive uses are generally within 150 miles, whereas production requiring more extensive land tends to be somewhat farther away.
The City is also the main source of second home owners. While being eager and able buyers of local produce, those second homes and the services they require contribute to the loss of farmland to non-farm uses.
As land and home prices become driven by the salaries of the urban affluent, they become less accessible to residents such as farmers. A Housing Affordability Index (median house sale price/median household income of residents) above three is considered to indicate affordability problems. Many NYC-retailing farms (black dots) are in areas where houses and land are becoming less and less affordable.
Thus, aside from indicating one aspect of the environmental costs of transport, **Food Miles** also reflect the outward ‘reach’ of urban populations.

Urban markets help support regional farmers. At the same time, (sub)urbanization – fueled by NYC money – threatens farmland both by directly converting land to non-farm uses and by putting land prices out of reach of most farmers.

Managing these impacts is not simple, and yet the preservation of agriculture within much of the NYC **Foodshed** will not occur if these effects are ignored.

**Your foodshed is part of your homestead – think big.**
Data Sources:

• *Just Foods*  
  (www.justfood.org/csa/locations/)

• *CENYC*  
  (www.cenyc.org/greenmarket/ourfarmers)

• *Community Markets*  
  (www.communitymarkets.biz/vendor_bios.php)

• *US Census*  

• *Research & Marketing Strategies, Inc.*  
  (www.RMSresults.com)