New York City [Steady] State

Home Grown

Can New York City become self-sufficient within its political boundaries? Intended as an alternative master plan for the city's future, New York City [Steady] State investigates the possibility for urban self-reliance in such areas as food, energy, waste, water, air supply and quality, manufacture, employment, culture, health, and transport.

Our first volume, Home Grown, is a research and design proposal that interrogates the limit of self-sufficiency in urban food systems. We first demonstrate that it is technically feasible to grow enough food within New York City's political boundary to provide 2,500 nutritious calories to 8.5 million people, but we also point out that such a technological fix would require exorbitant amounts of space and energy, while failing to address the social and economic inequalities embedded in our current food system. We subsequently investigate a variety of more progressive transformations ("sweet spots" at a wide range of neighborhood scales) that would dramatically increase forms of local sustainability without recourse to factory farming and corporate systems of production, distribution, preparation, and consumption.

Essays accompanying the design proposal track the social, economic, built and ecological flows and infrastructures of the city's past and contemporary food system and speculate on transformations that would be governed by more equitable and cooperative arrangements.

Home Grown will be published by Terreform's imprint Urban Research (UR).

http://www.terreform.info/ http://www.urpub.org/







01: Introduction

- A. Foreward (Marion Nestle)
- B. Introduction: Autarky, Import Substitution, and Steady-States (Michael Sorkin)
- C. Ecological Footprinting: Resource demand and biocapacity for nation and cities
- D. Food systems' contribution to footprints and urban solutions to the 2050 food gap
- E. Current scales of urban agriculture cultivation in the US and NYC region

02: Utopian Imaginations: 100% Scenario

- A. Speculating on producing 100% of food within NYC by modifying consumption, waste, and production practices
- B. Surveying areas available for agriculture production in NYC and satisfying remaining need with food towers
- C. Visualizing solar and nuclear energy requirements
- D. Master plan and neighborhood figure ground switch design
- E. Vertical farm case studies and feasibility discussion
- F. Debunking vertical farming and technological fixes as a viable option for local food security

03: Foodsheds and Hinterlands

- A. Essay: Anthropology of food how food has been a significant medium for thinking about cultural systems (Vyjayanthi Rao)
- B. Essay: Analyzing the historic relationship between agriculture, cities, and their hinterlands
- C. Timeline of political, economic, and technological factors contributing to NYC's reliance on expanding hinterlands
 - i. Pre-Colonial: The cultivated commons of the Lenapes
 - ii. The Colonies: Dutch market gardens and oyster pies
 - iii. The Revolution: Merchant milling hubs and trade expansion
 - iv. The Industrial City: Rail mania and the refrigerated boxcar
 - v. The Global City: factory farms and monocultures
- D. Essay: A review of cities that have historically produced food within and at their edges: from the power of blockades and Cuba's organic revolution to Harare's responses to economic structural adjustments and climate change (Nic Cavell)

04: Global Constraints to Localism

- A. Essay: Political economy of agricultural globalization (Fabio Parasecoli)
- B. What we eat and why we don't know where it comes from
- C. Breaking down current corporate agri-business chains from production to consumption
- D. Highlighting energy and waste flows

05: NYC's Food System and its Social and Economic Impacts

- A. Distribution, access, and food insecurity
- B. Hunts Point and the last mile distribution network
- C. Linking food insecurity to gentrification and food deserts to historic real estate redlining
- D. Essay: "Unintentional Food Zoning": How land use decisions made without food in mind dictates specific types of distribution systems and levels of access (Nevin Cohen)
- E. Essay: Culinary authenticity, farmers markets and social exclusion (Sharon Zukin)
- F. Where we eat: consumption practices in and outside of the home
- G. Analyzing concentration and type of restaurants by neighborhood
- H. Essay: Ethnography of restaurateurs in Jackson Heights, Queens and Roosevelt Avenue corridor mapping (Noah Allison)

06: Agriculture Resistance: Stories from NYC's Community Gardens

- A. Current production in commercial farms, backyards, schools, community gardens, and NYCHA developments
- B. Community gardens threatened by housing boom
- C. Essay: Radical Farmers Use Fresh Food to Fight Racial Injustice (Soul Fire Farm, Leah Penniman)
- D. Essay: Growing Food, Growing Communities (Sheryll Durrant)
- $E.\ Essay:\ Racial,\ class,\ and\ gender\ inequities\ and\ strategies\ for\ dismantling\ oppressive\ structures\ in\ our\ food\ system$

NYC Design Districts and Strategies

07: A Local Plan

- A. Introduction to neighborhoods and Steady-State policies
- B. Diagramming food flows before and after
- C. Daily life reconfigured from food production to consumption
- D. Essay: What Every Farmer Needs to Know: A farm education and activism curriculum

08: Autonomous Neighborhoods

- A. Establishing a new level of community governance through the commons
- B. Transforming Sunnyside, Queens with intensive food production and architectural retrofit to promote collective eating
- C. Case study of Ni's backyard in Sunset Park, Brooklyn and speculations for scaling up the backyard at the city scale
- D. Retrofitting a block in Lower Manhattan with aquaponics production and street dining with energy demand analysis
- E. Essay: Origin of the kitchen and the reconceptualization of it in our homes (Ivy Harrison)

09: Foraging Localities

- A. Strategies for public foraging and maintenance in Latourette Park, Staten Island
- B. High- and low-intensity agro-forestry designs
- C. Street appropriation and stormwater collection plan
- D. Case Study: Fallen Fruit—Promoting public foraging in California
- E. Essay: Self-Reliance through foraging and the DIY movement in NYC
- F. Essay: Experience of a NYC scavenger and advocating for a new type of consumer (Cato Sandford)

10: Remediation and Compost Districts

- A. Urban agriculture as a tool for brownfield remediation and climate change resiliency
- B. Speculation: urban agriculture carbon sink scenarios
- C. Compost districts: waste to energy and scaling down anaerobic digestion to the densely populated neighborhood
- D. Speculation: Restaurant oil waste to bio-diesel conversion for electricity generation
- E. Case Study: Rooftop farming at Brooklyn Grange and Hell's Kitchen Farm
- F. Essay: Habitat creation as a component of urban food security
- G. Essay: Rethinking "ugly:" the market's privileging of aesthetic beauty over ideals of nutrition and resource use (Gayatri Kawlra)
- H. Case Study/Interview: Culinary innovations in changing behavior around food waste

11. Investment Zones

- A. Building from assets in East NY: community gardens, vacant lots, and NYCHA campuses
- B. Food hubs/ nodes distribution network
- C. Employment patterns in the food industry and speculation on a new type of food worker
- D. History of community gardens in NYC and their role as neighborhoods experience development pressures
- E. Case Study: Food worker cooperatives

12. Between Possible and Impossible Futures

- A. Strategies and design districts at NYC scale
- B. Final calculation breakdown and regional integration food distribution scheme
- C. Essay: Unmasking local-global and urban-rural dichotomies Exploring the New Urban Agenda (Thomas Forster)