

# COMMUNITY FARMS AND FORESTS AS VENUES TO TEACH ABOUT GLOBAL CHANGE

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The year 2008 marked a major step for humanity, with more people living in cities than in the countryside for the first time in history. By 2050 some 86% and 67% of developed nation and developing nation people, respectively, are expected to live in urban and periurban districts. At the same time, rising fuel costs mean that "staycations" are replacing vacations to distant locales and national parks for even relatively well-off families. Local farms and forests are likely to become increasingly valuable as places where urban residents age 5 to 95 can enjoy the natural world while also learning fundamentals of environmental literacy. In this talk I will show how three interrelated global megatrends can be well illustrated by even a few hectares of urban or suburban open space.

1) **Climate Change.** The importance of agriculture and forestry in the global carbon cycle can be illustrated by any parcel of farm or forest, especially those deliberately managed to build and conserve stored carbon. In addition, community composting programs can help build soil carbon and close nutrient loops between producers and consumers of food. 2) **Invasive Species.** Weedy invasive plant and insect species are eroding biodiversity and net primary productivity (= carbon sequestration) in many natural areas, both large and small, throughout the world today. Tours and talks can raise awareness of these threats while also serving as opportunities to recruit volunteers eager to help stem the invasive species tide. 3) **Habitat Loss and Restoration.** Even small farms and forest reserves can host species of bird, butterfly, tree, or wildflower rarely found in residential or commercial districts. The importance of habitat stewardship and restoration can be highlighted by focusing attention on the needs of these local endemics. Currently the Greater Boston Metropolitan Area hosts scores of small forest preserves and wetlands, and dozens of community farms. These areas present numerous opportunities to better teach about the climate change and carbon sequestration, invasive species, and habitat restoration, among other global megatrends. Few are living up to their full potential.