



Community Orchard Vision to Reality

Indiana State University
Community Garden Initiative



“Seventy-five percent of the food and fiber we grow today was discovered and cultivated by the native farmers and hunter-gatherers of North, Central and South America. These indigenous varieties include corn, beans, peanuts, cotton, potatoes, tomatoes, chili peppers, avocados, blueberries, cranberries, strawberries, squashes, black walnuts, pecans, chocolate, tobacco, rubber, sunflowers, and medicinal herbs and plants.”

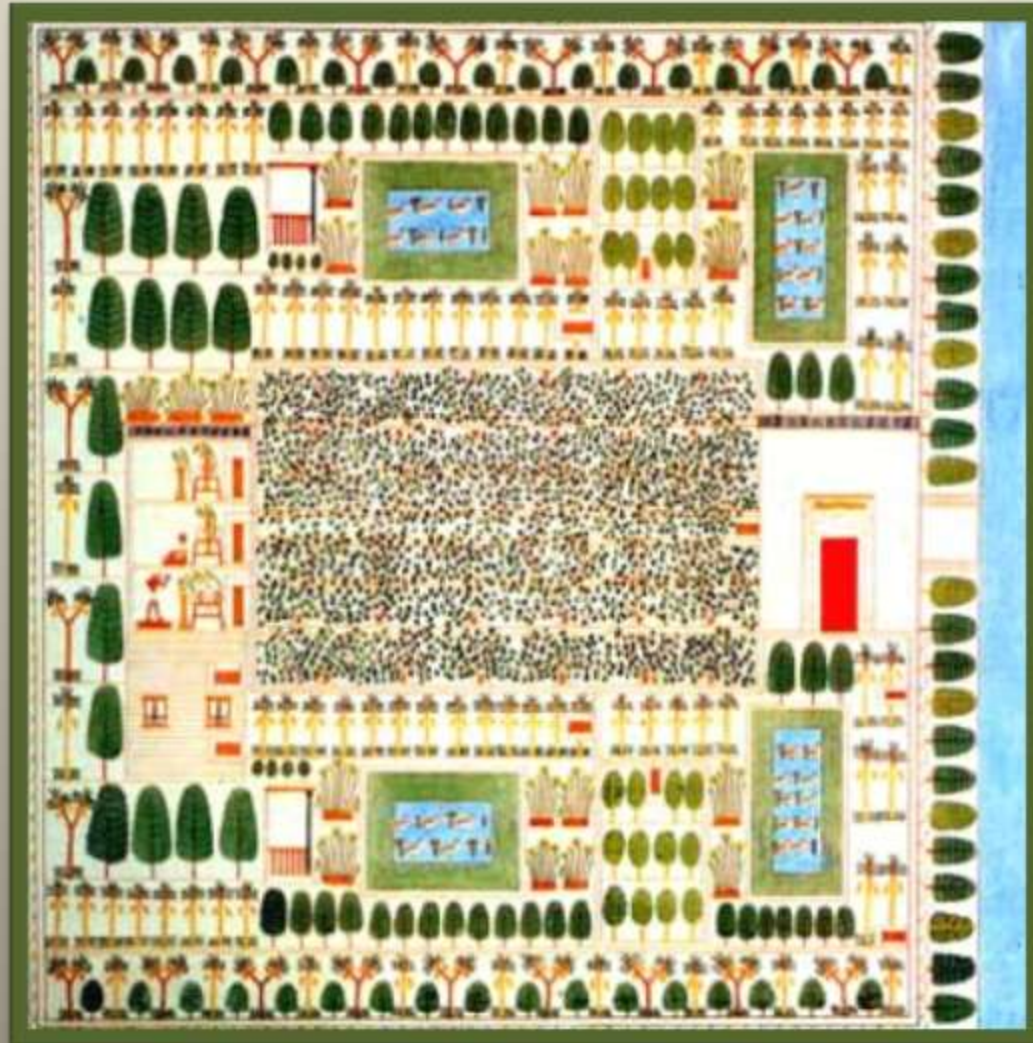
History of Community Orchards in the Western World

- Ancient Cultures of the Mediterranean and South America
- “Village Farming” of Europe
- Tudor England with Noble Landowners and Tenant Farmers
- Community Efforts in early New England

Mayan Farming



Egyptian Farming



Colonial Williamsburg Garden



Monticello Garden



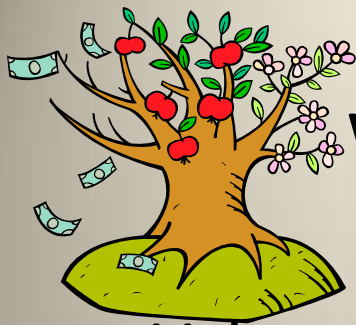


Schrebergartens

- During 7 month internship in Germany I spent many evenings wandering the local Schrebergarten **district** along the RR tracks
- **Variety** of Plants, Animals and Art (sometimes kitschy) is amazing
- Average **size** in this area was about 25 by 50 feet
- Most had a small **structure** for shelter from weather (garden shed with furniture)
- Almost all trees were **fruiting trees**
- Many of the **public spaces** between garden plots had old fruit trees that were open picking (I brought home bags of plums and apricots for my grandmother to make preserves)
- Fruit trees were always **integrated** into the garden, not planted orchard style
- Many owners spent weekends here during warm months, like **camping**

German Schrebergarten Popularity





What can we learn from these Gardens?

- Urban apartment living creates a need for green space and **personal expression** outdoors
- Growing crops of one's own is considered a good investment by many, even when the garden space has to be **leased**
- Many people gain relaxation and **stress relief** from gardening
- A **mixed** development with small houses, animals, water features, trees, perennials and annuals results in a very interesting and **educational** environment



“The word *permaculture* is described by Mollison as a [portmanteau](#) of *permanent agriculture*, and *permanent culture*.

The intent is that, by training individuals in a core set of design principles, those individuals can design their own environments and build increasingly [self-sufficient](#) human settlements — ones that reduce society's reliance on industrial systems of production and distribution that Mollison identified as fundamentally and systematically destroying Earth's ecosystems.”

Recent Change Away from Community Agriculture

- Only recently have we **industrialized** agriculture and created an entire class of people who don't have to invest time and work into feeding themselves
- This has **pros and cons** regarding the resulting food products, the natural ecosystems of the earth, and the culture and lifestyle of this class of people.

Urban Permaculture





Some examples of perennial or woody plants that have been successfully grown and harvested for centuries to meet human consumption needs:

Fruits and Nuts of all kinds, Coffee, Olives, Wood for Fuel, Wood for Building Materials, Charcoal, Cinnamon and other spices, Rubber, Cork, Maple syrup, Pharmaceutical Drugs, and Botanical Decorations.

Annual vs. Perennial Plantings

- Modern Agriculture in the U.S. has evolved around **annual** planting of seed in a large scale industrialized fashion
- Even fruit orchards are focusing on yield by planting ever **smaller grafted trees** in greater numbers for ease of harvest and shorter turnover of peak production cycles
- These methods are extremely **high maintenance** and take the land or “facility” out of the natural ecological cycle of the surrounding landscape.



"We're only truly secure when we can look out our kitchen window and see our food growing and our friends working nearby."

-Bill Mollison, co-founder of Permaculture

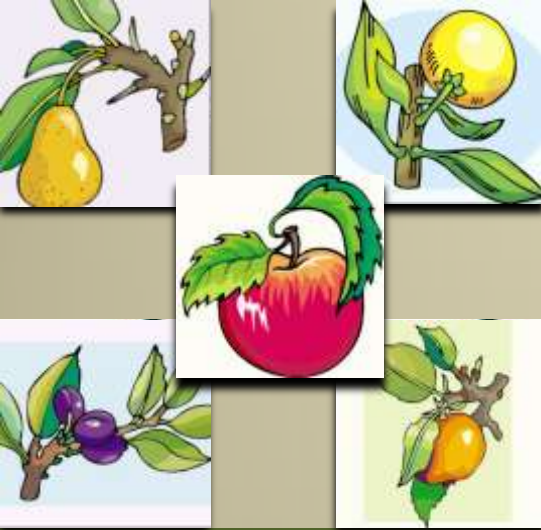
U.S. City Planning is Opportunity for Community Based Food Production

- Many **experts** today such as planners, scientists and architects are writing and suggesting that U.S. cities, particularly suburbs, are a grand opportunity for a return to local food production
- This would reduce stress on the ecosystems and improve protection of our rich heritage of **bio-diversity** that industrialized agriculture cannot as effectively preserve.
- This requires a **major shift in thinking** on the part of citizens, public servants, political leaders and developers.



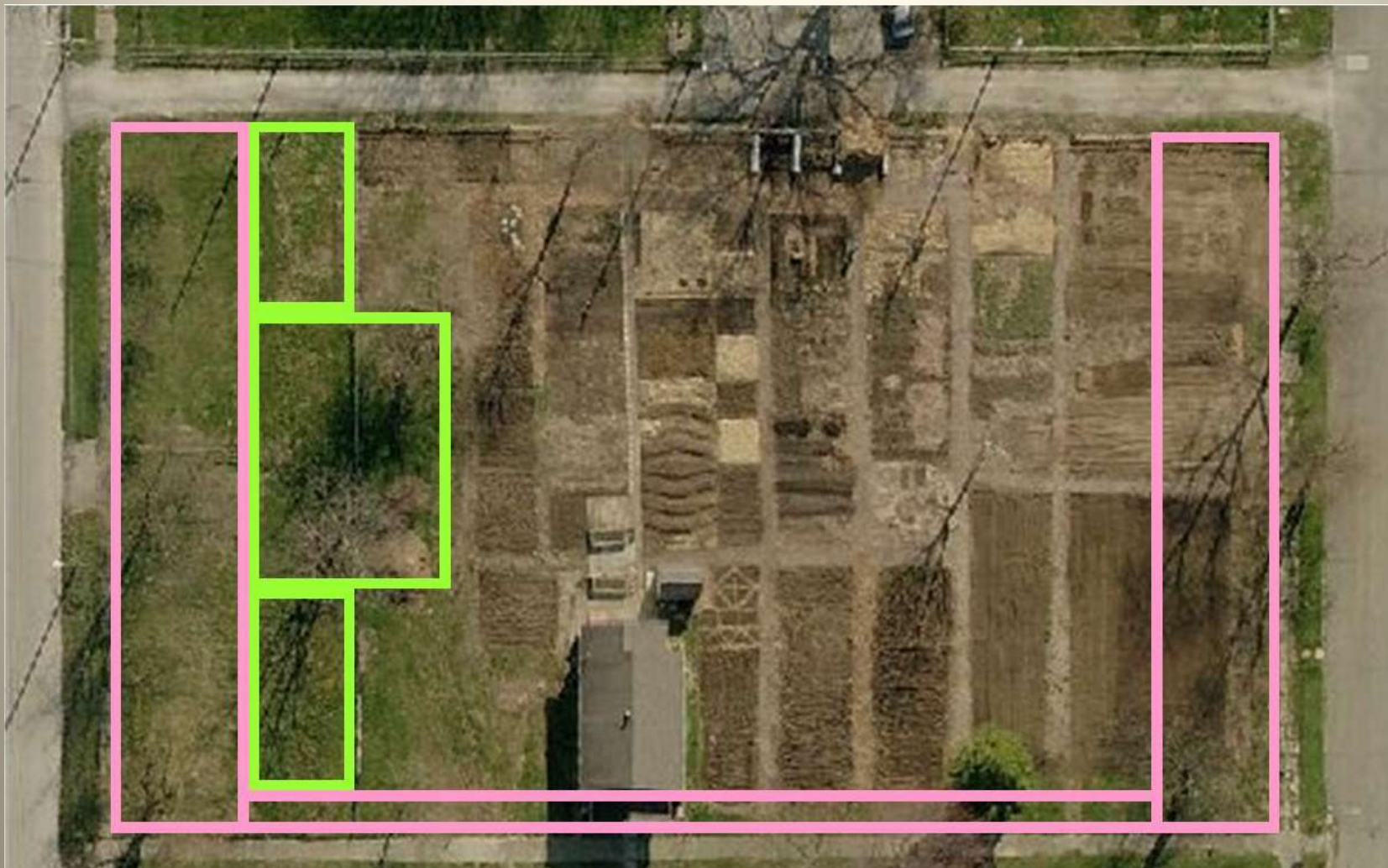
Local Woody Perennial Crops

- **Traditional Fruits:** Apples, Pears, Plums, Cherries, Peaches, Apricots, Raspberries, Blueberries and Grapes.
- **Native Fruits:** Pawpaw, Mulberry, Crabapple, Elderberry, Persimmon, Nanking Cherry, Wild Plum, Gooseberry, Chokeberry, Huckleberry, Hawthorne, Partridgeberry, Cranberry Viburnum, Serviceberry, Black Currant and Cranberry
- **Traditional Nuts:** Black Walnuts, Pecans (southern IN)
- **Native Nuts:** Hickory, Chinquapin (chestnuts), Hazelnuts, and Beech



Conceived 2007, Born Spring 2008

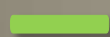




ISU Community Garden Site:



Potential Locations for Fruit Trees or Perennial Fruiting Shrubs



Additional Garden Plots to replace those lost on the south side.



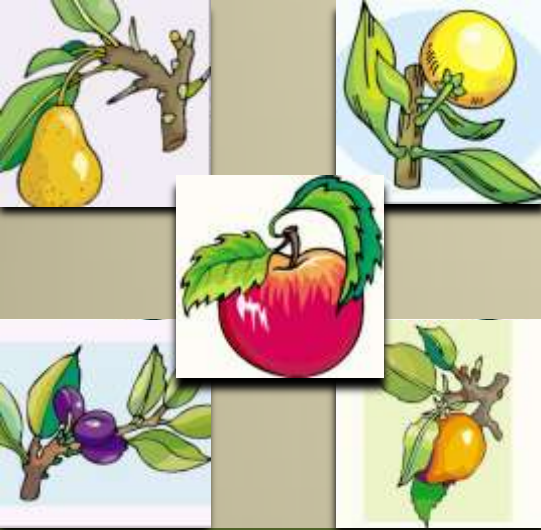
Implementation Stages

- We started with herbs and strawberries as our first perennial “communal” crops
- Many gardeners interested in berries, some in fruit trees
- We are exploring local business funding, grants and individual tree sponsorship by gardeners
- ISU Grounds provides equipment and raw materials such as compost for planting process
- Slow to reach fruiting stage plants first
- We are considering understory plants also producing food, such as strawberries and herbs



Funding for Edible Perennials

- Fruit Orchard Grant Programs
 - Fruit Tree Planting Foundation of Mill Valley, CA
 - SIA Foundation Inc of Indiana (health & education grants in IN)
 - Old National Bank Foundation
 - (etc.)



Spring 2011 Orchard Phase 1

- Create **Plan** at first annual meeting, Jan 25th
- Come up with **installation schedule** and price list
- Develop **volunteer schedule** for first year establishment success
- Decide on appropriate **funding** and begin fundraising efforts
- **Reassign plots** that will be converted to orchard space
- Plan **irrigation modifications** necessary for orchard watering



Our Goals and Guidelines...

- Plan our woody perennials carefully for minimal transplant
- Find the closest possible local sources for plants (ask local wholesalers)
- Prep the soil carefully throughout the site
- Make use of ground covering herbs, etc., to minimize necessity for weed control
- Use native berries to minimize use of pesticides
- Develop guidelines for how the crop will be shared
- Never, ever, ever let any harvest go to waste!!!

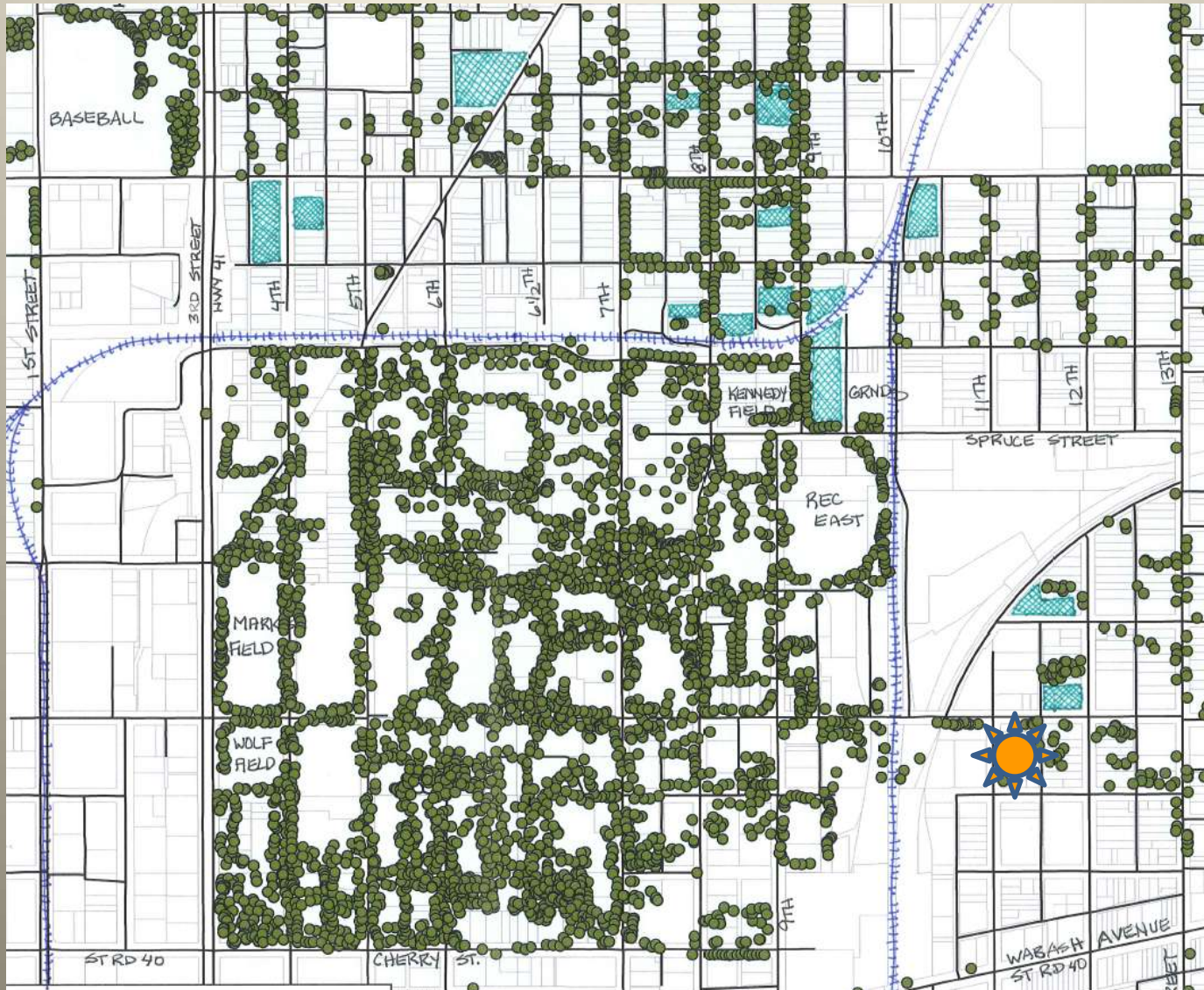


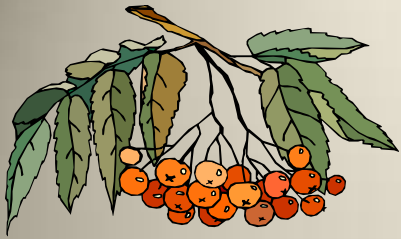


Tree Farms on Surplus Properties

- University acquiring small residential lots for several years now to accommodate future expansion
- 14 have been planted with tree farms of various types
- Black Walnut, Black Cherry, Mixed Natives, Screening...
- Tree Farms provide many benefits:
 - Raise property values
 - Beautify neighborhoods
 - Provide tree bank for transplanting to campus as needed
 - Decrease carbon footprint of campus
 - Add to Urban Greenery
 - Provide Fruits, Nuts and Wood for future campus community
 - Bring to “life” otherwise wasted space

15 Campus Tree Farms





Campus –wide Opportunities for Edibles Education

- Campus is currently planted with numerous edibles – how to market and harvest
- Education through diversity planting and incorporation into curriculum in various departments
- Participation in Earth Day on campus is opportunity for education and sharing
- Gain involvement from Family & Consumer Science such as preparing crabapple preserves and selling as fundraiser
- Create a master list of university owned fruit and nut trees for public harvesting (or charitable volunteer efforts)



Washington State Raspberry Farm

