

# UF/IFAS Extension

## The Journey to Sustainability Begins with Education



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# **“ Guide to Finding Local Foods”**

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# Presentation Outline

- **Local Food System Concept and Issues**
- **Benefits of Local Foods**
- **Where and How to Find Local Foods**
- **Summary**

# First, A Public Service Announcement

## \* A “LOCAVORE” ALERT \*

- Do you find yourself always questioning where food came from, its packaging, and its ecological footprint?
- Have you experimented this year with exotic foods with bold flavors that are grown close to home -- like currant, yukon gold potato, blood orange, fresh ginger, and grains such as wild rice, amaranth, and blue corn?
- Do you find yourself naturally not hungry for out-of-season ingredients?

Are You Scratching Your Head  
asking, "What exactly is a  
Locavore and could I be one?"



# "Locavore"

- “a person who seeks out and only eats and cooks with ingredients and foods grown and/or produced locally”
- was designated the 2007 word of the year by the New Oxford American Dictionary
- have made eating locally the biggest food trend of 2008
- if applicable, feel free to start using it to describe yourself . . .



# “How Do You Define Local Foods?”

## Example Definitions:

- Foods from your local foodshed or food system

Primer on Community Food System, <http://foodsys.cce.cornell.edu/primer.html>

- Foods from a determined radius from your home (commonly either 100 or 250 miles)

100 Mile Diet, <http://100milediet.org/>;  
Food Routes, <http://www.foodroutes.org/>

- Within a day's leisurely drive of our homes

Joan Dye Gussow. 2006. This Organic Life.

# “How Do You Define Local Foods?”

- Identify where the food was grown and let the consumer choose what is local.

Florida Association of Community  
Farmers' Markets (FACFM)





# “How Do You Define Local Foods?”

- Are food miles your only criteria for defining what is local?
- What about the following criteria used to promote local economies?:
  - ownership (e.g., local family farms)
  - labor force (e.g., farm workers from local communities)
  - supply source (e.g., farming inputs from local manufacturers and companies)

Shuman, M. 2006. The Small-Mart Revolution. Berrett-Koehler Pub., San Francisco, CA

# Why Buy Local Foods?

- EXCEPTIONAL TASTE AND FRESHNESS
- STRENGTHEN YOUR LOCAL ECONOMY
- SUPPORT ENDANGERED FAMILY FARMS
- SAFEGUARD YOUR FAMILY'S HEALTH
- PROTECT THE ENVIRONMENT

Buy Fresh Buy Local, <http://guide.buylocalca.org/index.html>

# Why Buy Local Foods?

- REDUCE MILES FROM FARM TO TABLE
- SUPPORT AMERICA'S RURAL COMMUNITIES
- BUYING LOCAL IS EASY

Buy Fresh Buy Local, <http://guide.buylocalca.org/index.html>

# Can We Have Local Foods?

- What are the food facts?
  - Variety
  - Abundance
  - Seasonality

# Local Food Variety & Abundance





# Local Food Seasonality



## Four Seasons of FRESHNESS

Florida Produce Availability *at a glance*

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
AVOCADOS												
BLUEBERRIES												
CABBAGE												
CANTALOUPE												
CARAMBOLA												
CARROTS												
CAULIFLOWER												
CELERY												
CHINESE CABBAGE												
CUCUMBERS												
EGGPLANT												
GRAPEFRUIT												
GREEN BEANS												
GREEN PEPPERS												
LETTUCE												
MANGOES												
ORANGES												
RADISHES												
SQUASH												
STRAWBERRIES												
SWEET CORN												
TANGERINES												
TOMATOES												
WATERMELON												

[www.Florida-Agriculture.com](http://www.Florida-Agriculture.com)

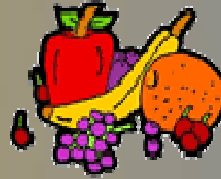


# Do We Already Have Local Foods?

- What are the food facts?
  - Local availability
  - Food miles

# Sarasota County Food System

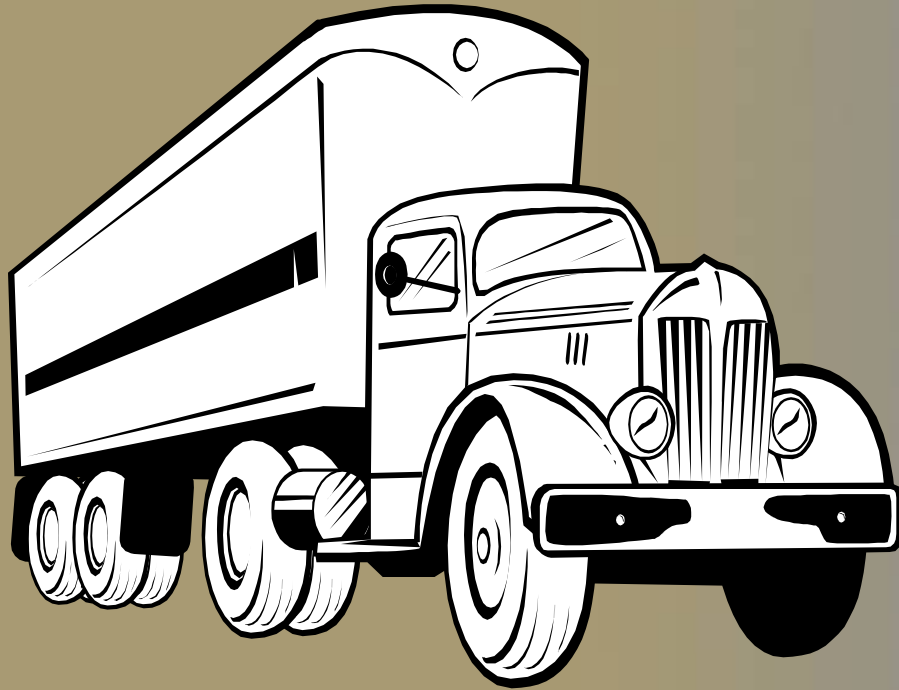
## Informal Survey Results of Local Chain Grocery



Fruit Platter Survey			LOCATION OF ORIGIN		
Fruit	CULTIVAR	LOCAL	FL	USA	FOREIGN
Watermelon				GA	
Melon	Honeydew				Costa Rica
Melon	Cantelope			CA	
Grapes	Green			CA	
Strawberry				CA	
Blueberries				NC, CA	
Mango					Mexico

**No Florida grown fruits identified in May 2005**

# Food System Facts

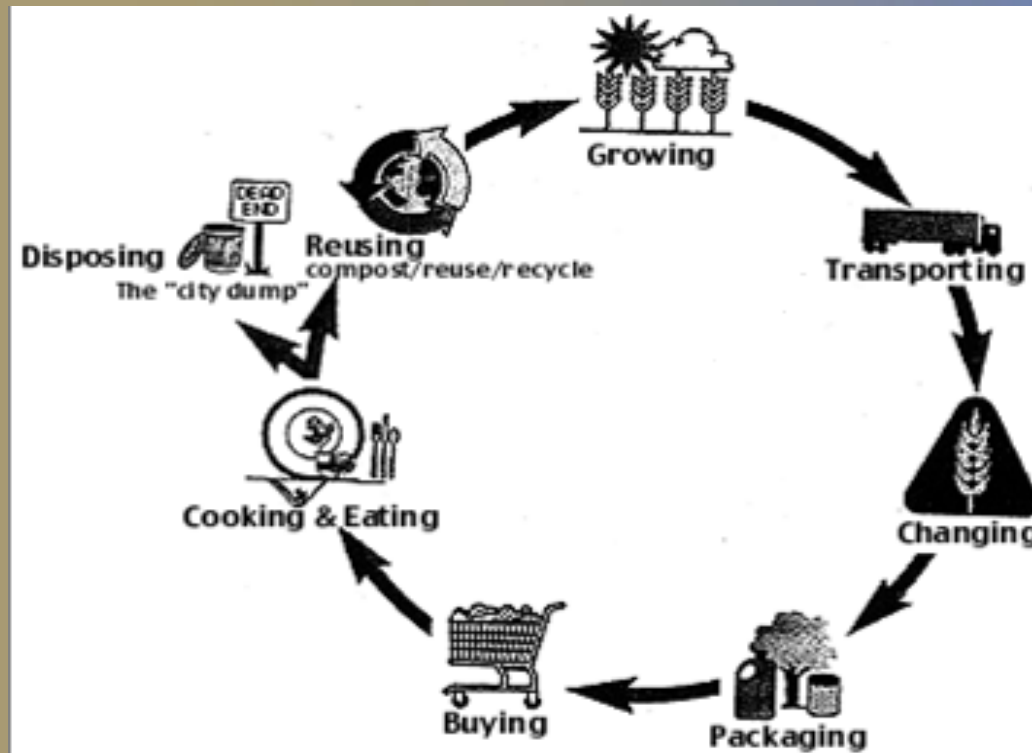


- An average food item in the U.S. travels 1,500 miles – up to 25% farther than in 1980

**Pirog, R. 2003. Checking the food odometer: Comparing food miles for local versus conventional produce sales to Iowa institutions**  
[www.leopold.iastate.edu/pubs/staff/files/food\\_travel072103.pdf](http://www.leopold.iastate.edu/pubs/staff/files/food_travel072103.pdf)

# What is a Local Food System?

**The Who, What, Where, When, Why and How of Our Food - From Farm to Plate**



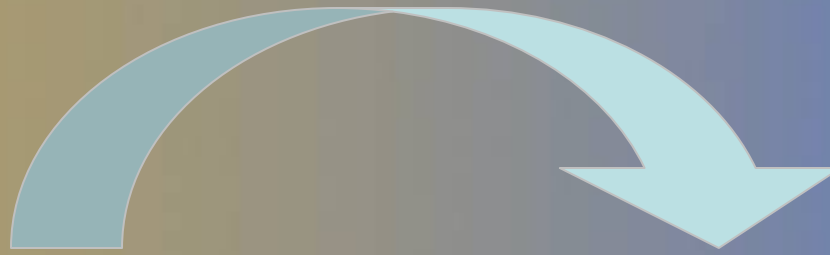
Source: EarthFriends. 1995

# The Current Food System

“Agricultural  
Supplies”



Food production  
(largely technological and  
removed from society)



Global Food Distribution  
(nonrenewable energy)

System Is Not A Closed  
Loop or Locally Based!

Food Preparation and  
Consumption  
(fast and cheap)



“waste  
products”



# The Current Food System

- What are the food facts?
  - Carbon Footprint
    - Are food miles the major factor?
    - No! See the data in following slide

*Source: Weber, C. and H. Matthews. 2008. Food-Miles and the Relative Climate Impacts of Food Choices in the United States *Environ. Sci. Technol.*, 42 (10): 3508–3513)*

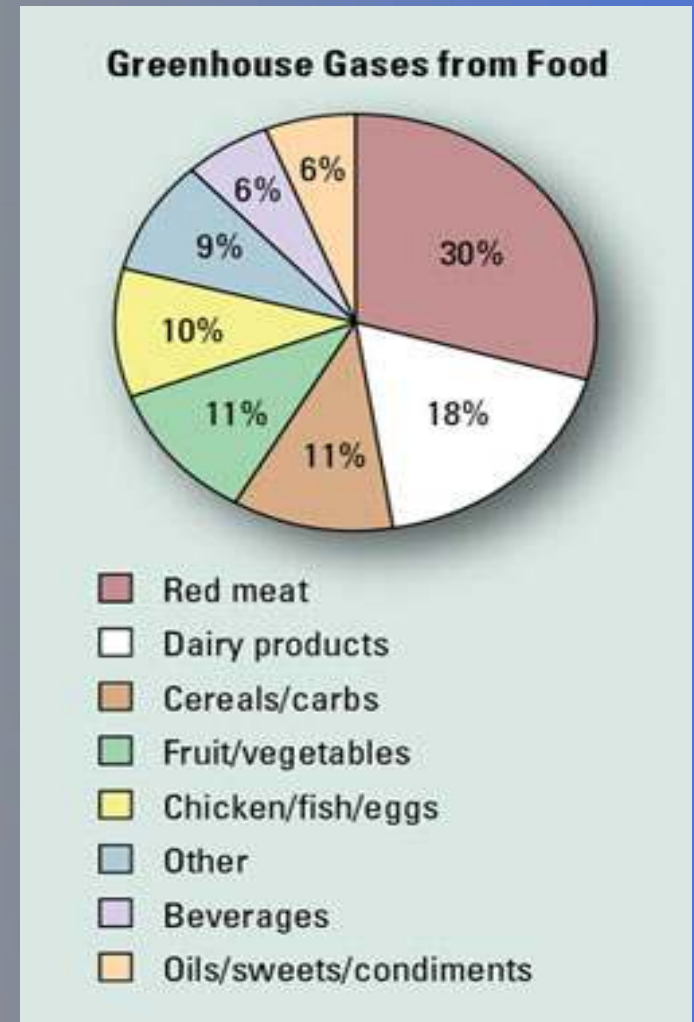
<http://pubs.acs.org/cgi->

[bin/abstract.cgi/esthag/2008/42/i10/abs/es702969f.html](http://pubs.acs.org/cgi-bin/abstract.cgi/esthag/2008/42/i10/abs/es702969f.html)



# Statistics of Average U.S. Food Carbon Footprint Per Household

- **Amount**
  - 8.1 metric tons of greenhouse gases annually from food consumption choices
- **Sources**
  - Food industry
    - ✓ transportation - 11%
    - ✓ **conventional production & harvesting - 83%**
    - ✓ final delivery from producer to retail – 4%
  - **Food types are different – see chart**



# Statistics of Average U.S. Food Carbon Footprint Per Household

- **What are the conclusions of the food carbon footprint facts from this report?**
  - Are “food miles” the greatest factor?
    - **No!**
    - **Purchasing local foods is only a partial solution.**
  - What is the greatest factor?
    - **How the food is produced!**
    - Purchasing foods that are produced using sustainable and organic agriculture practices is a better solution.
- **What's the best solution?**
  - Purchase local, sustainable & organic foods!
  - Choose food categories with reduced total footprints.



# Food Carbon Footprint Analysis: Cheese Example

## **Calculate the carbon & equivalent gas emissions at each stage:**

1. Factories manufacturing fertilizer use a fuel-intensive process that emits CO<sub>2</sub>
2. Excess fertilizer applied to fields produces nitrous oxide, which has 296 times the warming potential as CO<sub>2</sub>
3. Corn, used for feeding cows, is harvested, processed, trucked and stored, all of which use CO<sub>2</sub>-emitting equipment
4. A cow belches annually 145 pounds of methane, which has 23 times the warming potential of CO<sub>2</sub>
5. Refrigeration, production and packaging of cheese use CO<sub>2</sub>-emitting equipment
6. Transporting the cheese requires refrigeration equipment as well as vehicles that emit CO<sub>2</sub>
7. At the supermarket, the cheese is displayed in CO<sub>2</sub>-emitting containers
8. Consumers travel to food stores and then go home and store the cheese in a refrigerator, and both activities emit CO<sub>2</sub>
9. Cheese that is thrown out gets to a landfill which generates methane and CO<sub>2</sub>

*K. Weiss. April 22, 2008. Treading Lighter With Low Carbon Diets. Los Angeles Times*  
<http://articles.latimes.com/2008/apr/22/local/me-lowcarbon22>

# Food Carbon Footprint Analysis

## Cheeseburger Example

- Estimates for the average American diet of cheeseburger consumption range from one to three per week, or about 50 to 150 per year.
- Annual greenhouse gas emissions from the production and consumption of cheeseburgers is estimated as the amount emitted by 6.5 million to 19.6 million SUVs. Today 16 million SUVs are on US roads.

[http://www.openthefuture.com/cheeseburger\\_CF.html](http://www.openthefuture.com/cheeseburger_CF.html)



### Carbon Facts

Product Size 1 Cheeseburger (130g)

Amount Per Serving

Kilograms CO<sub>2</sub> Equivalent 3.08

Kilograms CO<sub>2</sub> .243 Kilograms CH<sub>4</sub> .123

**Total C: Energy Sources** 243g

Transportation

Fossil Fuel (Diesel) 120g

Fossil Fuel (Gasoline) 48g

Electricity Production

Fossil Fuel (Natural Gas) 75g

Fossil Fuel (Coal) 0g

Other

**Total C: Non-Energy Sources** 2840g CO<sub>2</sub>E

Enteric Fermentation 81.0g (1864g CO<sub>2</sub>E)

Manure 25.8g (656g CO<sub>2</sub>E)

Other 5.2g (120g CO<sub>2</sub>E)

**Carbon/Product Ratio** 23.7

Localism Rating

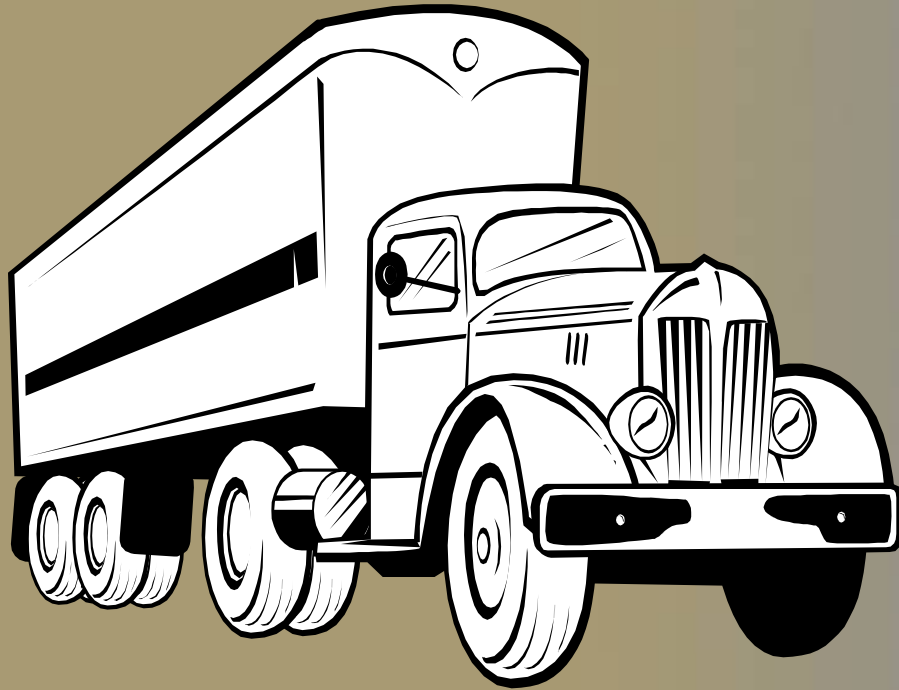
Sustainable Production Rating D+

overall carbon code: orange

# Sustainable Local Food System



# Local Food System Facts



For a local food system  
the average food item  
travels 56 miles

**Pirog, R. 2003. Checking the food odometer: Comparing food miles  
for local versus conventional produce sales to Iowa institutions**  
[www.leopold.iastate.edu/pubs/staff/files/food\\_travel072103.pdf](http://www.leopold.iastate.edu/pubs/staff/files/food_travel072103.pdf)



# How Do You Define a Sustainable Food System?

- Recognition of the whole systems nature of food, feed, & fiber production
- Equitably balancing concerns of
  - environmental soundness
  - social equity
  - economic viability
- Functional interactions between agroecological & social/economic systems

# Sustainable Agriculture

- Satisfy human food and fiber needs
- Enhance environmental quality and the natural resource base
- Efficient use of nonrenewable resources and on-farm resources and integrate, where appropriate, natural biological cycles and controls
- Sustain the economic viability of farm operations
- Enhance the quality of life for farmers and society as a whole."

Source: 1990 Farm Bill Definition

# How Do We Make Finding Locally Grown Food Easier?

- Development of a Sustainable Local Food System
  - ✓ Voice your consumer demand & support of local food sources
  - ✓ Grow your own food

# Where to Find Sarasota Local Foods

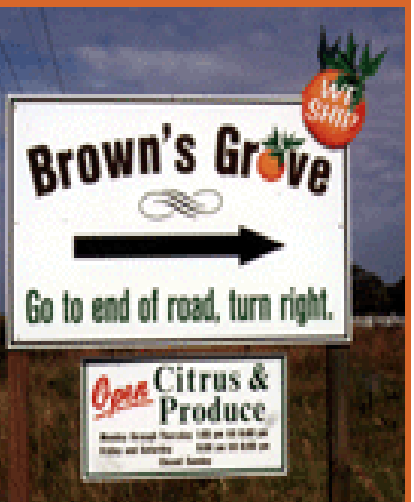


**Farmers Markets:**  
Downtown Sarasota  
Lakewood Ranch  
North Port  
Englewood  
Siesta Key  
Venice

Jessica's Organic Farm



Sarasota Farms



**On-Farm Sales**  
**& Community Supported Farms**



# Meet Bill Pischer -local Sarasota County Organic Farmer



# Meet Antonio Fiorelli – local Manatee County Vitner Farmer





# Join a Sarasota County Community Garden



<http://sarasota.extension.ufl.edu/Hort/commgarden.shtml>



# Volunteer at Sarasota County School Garden Projects



# Start A Backyard Vegetable/Fruit Garden



# Where Do I Learn Gardening?

- Access Sarasota Co. TV
  - See Video Series flyer
- Sarasota Co. Extension
  - Master Gardener Program
  - **‘First/Third Saturdays’** classes at Orange Blossom (1-2:30 pm) & Laurel (10:30 am – 12:00 pm) Community Gardens every month. For more info go to education calendar at <http://sarasota.extension.ufl.edu/index.shtml>

Grow your own food!



LEARN HOW BY WATCHING  
**“HEALTHY SARASOTA”**  
TUESDAY & THURSDAY, 8 A.M.  
SATURDAY & SUNDAY, 10 A.M.  
CH. 19, 32, 34  
PRESENTED BY  
ACCESS SARASOTA TELEVISION  
SARASOTA COUNTY EXTENSION  
SARASOTA COUNTY HEALTH DEPT.



**BENEFITS OF GROWING  
YOUR OWN FOOD:**

- Save money
- Eat fresh and healthy
- Reduce fuel transportation costs
- Grow in yards or containers
- Connect with your environment
- Great family activity
- Its fun!



# Use Your Backyard Gardening Skills for Your Community Needs



Whether you are an individual, family or business, we invite you to join with GWA's Plant A Row for the Hungry campaign...

**COMMUNITIES  
HARVESTING  
HOPE...**



In 2004, the Plant A Row for the Hungry (PAR) program celebrated a decade of supporting gardeners committed to alleviating hunger in the U.S. and Canada. Numerous volunteers and sponsors have made our achievements possible.

PAR is endorsed by America's Second Harvest, Master Gardeners, American Community Gardening Association, American Nursery and Landscape Association, National Gardening Association, and by nurseries, seedsmen and garden suppliers across the United States and Canada.

#### WE INVITE YOU TO JOIN US!

PAR is administered by the Garden Writers Association Foundation, a 501(c)(3) charitable organization. We are proud to include the following among our valued sponsors:

**PLATINUM**—The Scotts Company  
**GOLD**—Garden Writers Assn.  
**SILVER**—  
**BRONZE**—Bradfield Organics  
—Fafard, Inc.  
—Gardener's Supply  
—Goldsmith Seeds  
—The Happy Gardener  
—Longwood Gardens  
—National Garden Bureau

PAR is proving that each person can make a difference! We hope you will consider joining us today through financial support or volunteer participation.

Garden Writers Assn. Foundation  
10210 Leatherleaf Court  
Manassas, VA 20111  
T: 703.257.1032  
E: PAR@gardenwriters.org  
[www.gardenwriters.org/par/](http://www.gardenwriters.org/par/)



Plant A Row For The Hungry

GARDEN WRITERS ASSOCIATION  
Toll Free: 877.493.2727 • PAR@gardenwriters.org

View the Video: <http://www.gardenwriters.org/par/>



# Become a Market Gardener



Urban



Rural



Suburban





# Where Else to Look for Local Foods in the Area?

- Restaurant Examples:

- **Carr's Corner**

- Location: 3025 N. Tamiami Trail  
Sarasota, FL
    - Contact Info: 941/355-4051



- **Derek's Culinary Casual**

- Location: 514 Central Ave.  
Sarasota, FL
    - Contact Info: 941/366-6565



# Where Else to Look for Local Foods in the Area?

- Retail Food Store Examples:

**WHOLE FOODS**  
M A R K E T

SELLING THE HIGHEST QUALITY  
NATURAL & ORGANIC PRODUCTS



# Where Else to Look for Local Foods in the Area?

- **Local Food Networks:**

- Slow Food Greater Sarasota Chapter



- Promoting a philosophy of consumers as “co-producers”, as well as the enjoyment of fine cuisine with locally grown, seasonal foods
    - <http://wholefood.meetup.com/192/calendar/>

- **Sarasota Co Extension Website**

- <http://sarasota.extension.ufl.edu/>

- See the link to the “Local & Organic Foods Guide of Farms & Markets in Greater Sarasota Area”
    - Guide includes web-based resources of local foods



# How Do We Make Finding Locally Grown Food Easier?

- **Development of a Sustainable Local Food System**
  - ✓ Ag Economic Analysis
  - ✓ Local Economy Benefit Analysis
  - ✓ Market Research

# Sarasota County Ag Economic Analysis

## “Growth Potential for Local Agriculture”

<b>2002 Data</b>	<b>\$ Millions</b>
<b>Consumed Food Total Value</b>	815.8
<b>Categories:</b>	
Home consumed food	458.7
Away from home consumed food	351.5
Out of town consumed food	5.6

<b>Total Market Value of Sarasota Agriculture</b>	17.8
<b>Categories:</b>	
Floriculture	8.3
Fruits	4.9
Cattle/calves	3.6
Misc small livestock	1.0
Vegetables	N/R

Data provided by Ken Meter of Crossroads Resource Center; & by FL Farm Bureau

# Local Economy Multiplier Benefits

## Example Analysis

**Table 11B: Economic Impact of Iowa Farmers' Markets (\$ Income)**

Industry	Direct	Indirect	Induced	Total
Agriculture	4,818,841.0	440,896.0	9,687.0	5,269,424.0
Mining	0.0	380.0	45.0	424.0
Utilities	0.0	45,008.0	37,071.0	82,079.0
Construction	0.0	37,899.0	20,147.0	58,046.0
Manufacturing	0.0	153,209.0	115,550.0	268,759.0
Transportation & warehousing	0.0	313,316.0	227,787.0	541,102.0
Retail trade	3,541,135.0	34,953.0	448,798.0	4,024,887.0
Information services	0.0	48,347.0	49,266.0	97,613.0
Finance, insurance & real estate	0.0	179,169.0	246,167.0	425,337.0
Professional and technical services	0.0	217,708.0	854,906.0	1,072,614.0
Other services	0.0	42,476.0	281,736.0	324,212.0
Government	0.0	27,722.0	25,048.0	52,770.0
<b>Total</b>	<b>8,359,975.0</b>	<b>1,541,084.0</b>	<b>2,316,207.0</b>	<b>12,217,266.0</b>

Source: IMPLAN model for Iowa

Leopold Center for Sustainable Agriculture, 2005



# **Market Research Example: Consumer Study for Increasing Local Foods Purchasing**

- **2 types of consumers identified based on sociological/civic\* and expediency\*\* factors**
  - acceptance of the idea (symbolic acceptance)\*
    - **Lower price-consciousness and lower incomes seem to lead to an increased tendency to buy local foods.**
  - acting on the idea (use adoption)\*\*
    - **increased price-consciousness and higher incomes lead to an increased tendency to buy local.**

2004 Leopold Letter, Leopold Center for Sustainable Agriculture  
[http://www.leopold.iastate.edu/pubs/nwl/2004/2004-1-leoletter/buy\\_fresh.htm](http://www.leopold.iastate.edu/pubs/nwl/2004/2004-1-leoletter/buy_fresh.htm)

# Market Research: Consumers and Local Foods Purchasing

- **Conclusions for marketing to both consumer types**
  - A higher educational level and knowing a farmer are significant to the orientation of someone purchasing local foods
  - **efforts to boost the relational aspects of food products are warranted**
  - Source local foods in low to medium priced, quick-service establishments
  - **Promoting quality aspects of local foods (freshness, taste, nutrition)**

# How Do We Make Finding Locally Grown Food Easier?

- **Development of a Sustainable Local Food System**
  - ✓ Food Policy Development
  - ✓ Community Food System Assessment

# Local Food Policy

- **2006 New Agriculture Policies in Sarasota County Comprehensive Plan**
  - Sarasota Agriculture Policy Council (SAPC)
    - Provides broad community food system representation
    - Originator of recommendations for 2006 agriculture policies
    - Currently formulating recommendations for their implementation
  - Based on promoting
    - sustainable agriculture
    - local food system development
    - farmland protection

# Community Food System Assessment



- Examines a broad range of food issues and links to community goals
- Designed to inform and build support for practical action
- Planned & systematic process

- It's an assets-based approach
- Focuses on a geographically defined place
- Involves a diverse group of community members
- Emphasizes collaboration

# Community Food System Assessment

## Outcome Benefits:

- Program development for addressing needs
- Policy identification and review food system
- Public awareness and visibility of issues

## Process Benefits

- Develops networks and coalitions
- Community participation and collaboration
- Capacity building of participants

# Local Food Policy Opportunities

- **Woodbury County, Iowa, Model**
  - County policy incentives to promote local, organic foods & farming based on:
    - property tax rebates (5 years)
    - local foods purchasing policy
  - View the video

[http://web.mac.com/marqusee/Woodbury\\_Organics/Welcome.html](http://web.mac.com/marqusee/Woodbury_Organics/Welcome.html)



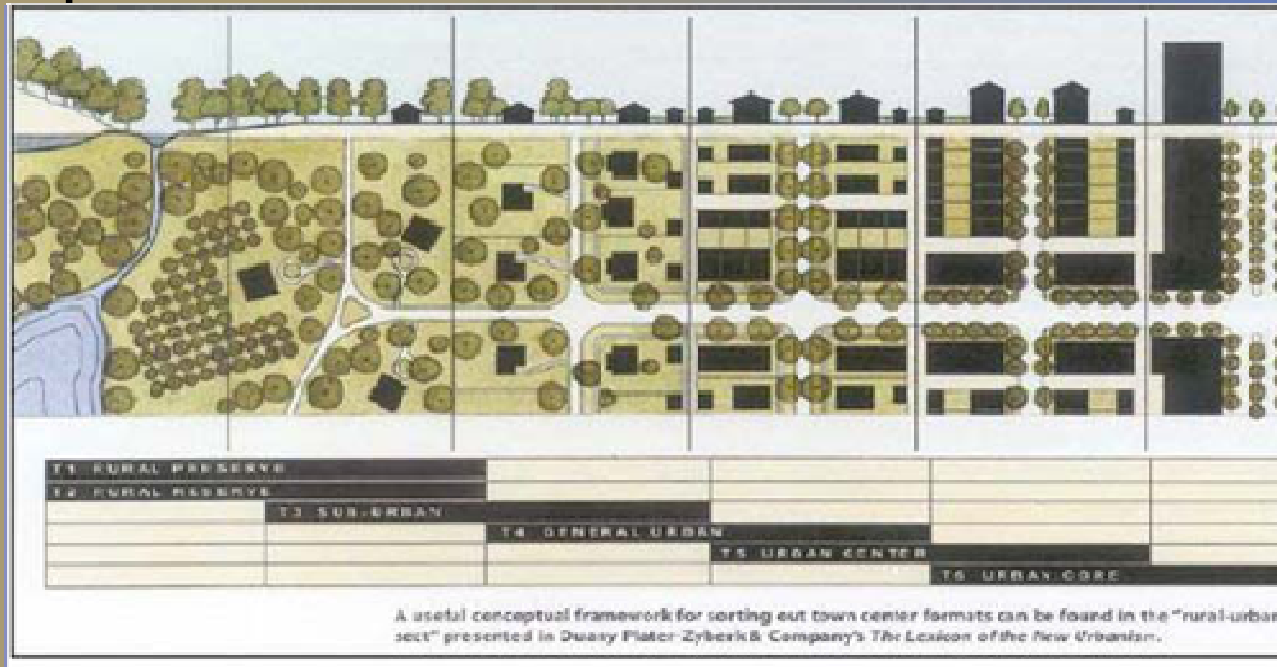
- Implement similar incentives for locally grown & organic foods in Sarasota County?





# One Vision of a Local Food System

- Smart Growth Integrated Land Planning Example



**More Rural**

**More Urban**

**Mixed Land Use Along The Transect**

# Local Food System: Design

## Example of Integrated Production

**SMARTCODE**  
*smartcode*

**TABLE 19 FOOD PRODUCTION**

TABLE 19 Food Production: This table shows ways of incorporating food production within the transit.

	T1	T2	T3	T4	T5	T6	SD	Specifics
Farm								
Agricultural Plots								
Vegetable Gardens								
Urban Farm								
Community Gardens								
Green Roof								
Vertical Farm								

Extensive Green Roofs are well suited to sites with little load bearing capacity and areas which are not meant to be used for growing. Semi-intensive Green Roofs fall between Extensive and Intensive Green Roof systems, they require more maintenance, higher winds and more weight. Intensive Green Roofs often have gardens and trees. They may have walkways, benches, playgrounds and ponds.  
© Jaime Correa and Associates 2007 Last Modified 11.26.2007

Jaime Correa and Associates

### FOOD PRODUCTION

Farm

Agricultural Plots

Vegetable Gardens

Urban Farm

Community Gardens

Green Roofs

Extensive

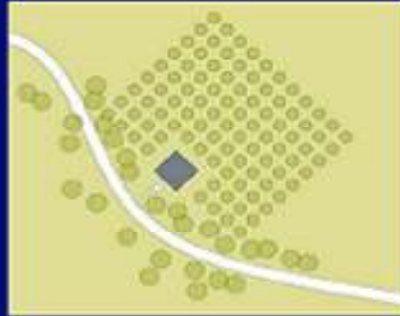
Semi-Intensive

Intensive

Vertical Farm

# Farm Production

FARMS



More Rural

More Urban

# Agriculture Plots Production

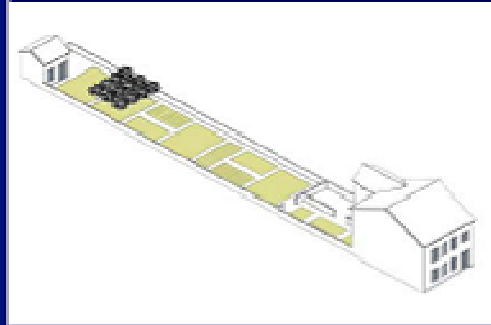
**AGRICULTURAL PLOTS**



← More Rural      More Urban →

# Vegetable Gardens Production

## VEGETABLE GARDENS



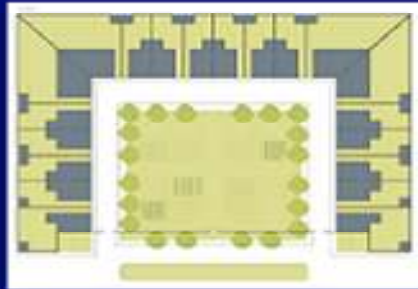
← More Rural

More Urban →



# Urban Farms Production

## URBAN FARMS

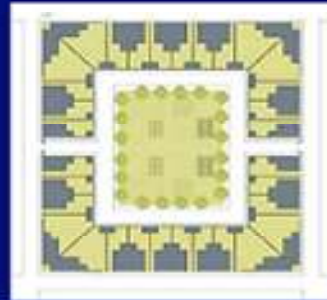


←-----→  
More Rural                      More Urban



# Community Garden Production

## COMMUNITY GARDENS

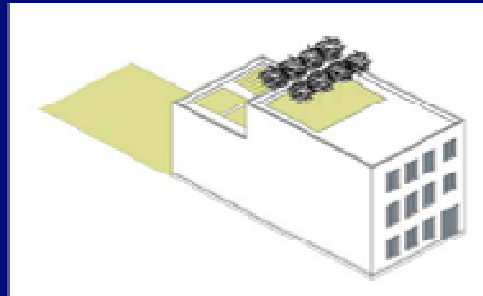


←  
More Rural

More Urban →

# Green Roof Production

## GREEN ROOFS



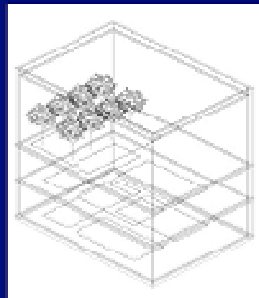
More Rural



More Urban

# Vertical Urban Farms

## VERTICAL FARMS



← .....  
**More Rural**



↓ .....  
**More Urban**

# Summary

- **Finding Local Foods Requires a Sustainable Local Food System**
- **Multiple Benefits of Local Foods**
- **Sustainable Agriculture Model**
- **Local Food Policy and System Assessment Opportunities**
- **Public Participation & Support Is Required**

# Food For Thought

- **“Eating is an agricultural act . . .”**  
**- Wendell Berry**
- **“Eating is a political act . . .”**  
**– Alice Waters**
- **“Eating is an ecological act . . .**  
**Michael Pollan**