SUPPORTING COMMUNITY REVITALIZATION THROUGH COMMUNITY GARDEN PROJECTS IN INDIANA, PA

Indiana University of Pennsylvania

Appalachian Teaching Project Conference

December 5, 2014
Indiana, Pennsylvania

- Northern Appalachia
- Long dependent on resource extraction
- Loss of population
- Focus on community revitalization
What is Environmental Anthropology?

- The study of the relationship between human culture and the environment
- Development of solutions for social, political, and economic problems involving the environment
- Stresses the importance of the environment as a cultural core
- Growing subspecialty in the field of Anthropology
Presentation Roadmap

● Partnership with the Indiana Community Garden

● Three approaches we took:
  o Seed Saving
  o Ethnoecology
  o Food Justice

● Creation of educational resources to assist with the growth of community gardening movement
Indiana Community Garden

• **Mission Statement:** The Indiana Community Garden project seeks to create a healthy and enjoyable community movement through planting, harvesting, cultivating, educating, cooking and sharing of knowledge and ideas. Together, all aspects of community garden will be promoted, explored and implemented.

• Indiana Community Garden Objectives
  • To increase access to fresh food by cultivating communal and individual plots
  • To acquire or purchase all the resources necessary to garden
  • To provide a series of workshops on gardening and related topics
  • To promote personal learning by sharing experience and knowledge
  • To build connections with various community groups
  • To develop opportunities for volunteer activities
  • To use sound ecological practices while gardening
  • To keep the public informed of community garden events
Seed Swap

November 8th - 1st Annual Seed Swap

- Bring the community together to swap seeds
- Speaker presentation
- Help start a local seed bank
Interviews

Interviewed Participants for research
• 13 Participants
• IRB

Questions:
• Why do people save seeds?
• Who participates in this practice?
• What challenges does this practice face in our region?
### Questions

<table>
<thead>
<tr>
<th></th>
<th>Question</th>
<th>Yes</th>
<th>No</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Is this your first seed swap?</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>Did you bring seeds to swap?</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Did you receive seeds?</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>Are you aware of recent attempts to ban seed saving?</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>Do you plan to attend future seed swaps?</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>Do you participate in the Community Garden?</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
Findings

- People save seeds for many reasons, including to preserve diversity, share seeds with family and friends, avoid GMOs, save money, have control over food, and help protect native plants.

- Overall, people felt the practice was becoming more common with growing education about GMOs and economic necessity, though some felt that the practice was restricted to older community members.

- While there are different kinds of seed saving happening in the community (generational/heritage, native plant enthusiasts, and environmentalists) everyone noted that they would attend future seed swaps – pointing for the potential for this event to support and create links between these various practitioners.
Ethnoecology

The scientific and humanistic study of the interrelationship of cultural and biological diversity—how past and present human societies have interacted with, understood, and been influenced by the natural world.
Methods and Goals

• Participant observation, expert interviews, and cultural domain analysis
• Goal:
• To understand people’s knowledge about and attitudes towards these resources as a baseline for creating an ethnoecology tour of the garden
Meditation Garden

- Traditionally across cultures, these are places with minimal distraction for personal reflection
- Health, and mental health benefits are increasingly recognized in the U.S.
- Interest in meditation among IUP students suggests that the garden can do more outreach to encourage use of this space
Bats

- Threatened by white nose syndrome
- High level of misinformation linked to cultural ideas of danger, disease, and darkness
- Varied levels of knowledge about bats don’t necessarily link to stewardship
- The bat box at the garden can address this misinformation as a starting point
Composting

“We hope to accomplish [sustainability] through the use of small steps, starting with local composting and encouragement. If done on a larger scale, we would essentially see less resource use, energy consumption, greener communities, and fresher, local food”.
Native Plants

- Native plants typically require fewer resources and provide more ecosystem services
- Native plants are often seen through our worldview separating nature from culture
- It is important to talk about the social significance of native plants
Pollinators

- There is a small cultural domain among undergraduate students at IUP centered on ‘bees’, particularly ‘honey bees’
- There is a general lack of knowledge about other pollinators, and the ecological function of pollinators
- Because bees are threatened by pesticides, GMO’s, and monocropping, there is an opportunity to educate people about ways to provide healthy habitats year-round for pollinators
Materials Developed

For more information on native plants in Pennsylvania, use the QR code to visit the PA Department of Conservation and Natural Resources.

Pollinators

What is a pollinator?
Pollination occurs when pollen is moved from within a flower or from flower to flower. Pollinators are what makes this possible.

Why do they matter? Nearly 90% of crops and other plants in the U.S. rely on pollinators to thrive! However, pollinators are increasingly threatened and are becoming endangered.

What can I do to help? There are a lot of things you can do to help:

- Limit or eliminate use of pesticides and herbicides
- Mow less... weeds are good!
- Plant pollinator friendly plants (see this list)
  - plant in layers of foliage (tree, bushes, and ground covering)
  - add small stones to a bird bath to give bees and butterflies a place to land
  - reduce your impact on the environment!

Common Pollinators in Indiana County
- honey bees
- bumble bees
- other (native) bees
- butterflies
- moths
- bees
- hummingbirds
- other birds
- bats

Pollinator Friendly Plants in Indiana County
- mint
- oregano
- lavender
- parsley
- sunflowers
- violets
- butterfly bush
- rose
- blackberry
- raspberry

OMGosh! There's a bee!!
If it's near you:
- don't freak out!
- move like you’re in a swimming pool
- no sudden jerky movements
- simply move away

If it's in your home (or other enclosed space):
- follow the above steps
- place a dot of honey on a surface to attract the bee
- once it lands, use a cup and paper to trap it
- take it outside
- alternatively, open windows and doors and encourage it to leave

If there is a swarm:
- DO NOT PANIC
- avoid the area (especially keep small children and pets away)
- call a beekeeper

Bats in Pennsylvania
Tri-colored Bat (pygmy bat), Big Brown Bat, Hoary Bat (largest), Indiana Bat, Little Brown Bat (most common), Northern Long Ear Bat, Eastern Red Bat, Silver-Haired Bat, Small-Footed Bat
“Food Justice is communities exercising their right to grow, sell, and eat healthy food. Healthy food is fresh, nutritious, affordable, culturally-appropriate, and grown locally with care for the well-being of the land, workers, and animals. People practicing food justice leads to a strong local food system, self-reliant communities, and a healthy environment.”

- justfood.org in Alkon and Agyeman 2011
Goals and Research Questions

• Create materials that the ICG can use to help educate the community about different aspects of food justice.

• Highlight the benefits of community gardening specifically, as a way of mitigating problems relating to food justice.

• What role does the ICG play in addressing food justice issues within the Indiana Community?

• How do the activities at the ICG fit into the larger community garden movement?
Research Methods

- Survey of people who maintain garden plots
- Semi-structured and Structured interviews
- Participant Observation at the garden, ‘Into the Streets’, ALI student visits to the garden, and at the Zion Church Food Pantry
Findings

• The garden provides an opportunity for students to learn about growing food and connect with community members, interests that they perceive are not being met by campus infrastructure and food services.

• The most highly ranked reason that survey respondents reported participating in the garden was ‘personal involvement in the community’. One of the garden’s main contributions to food justice involves an opportunity for interaction and meaningful community involvement across age group and income levels.

• When environmental externalities are factored in, locally grown food is more cost effective, and surplus food is donated to Food Pantries and shared with neighbors.
The Benefits of Community Gardening

- Builds and strengthens community and local relationships
  - Creates a venue for social gathering, bonding, and integration
- Empowering choices over food production
  - Is much more efficient and healthy for both people and the environment overall
  - Food grown can be consumed or donated to charity
  - Reinvigorates local identity and business
- Education
  - Develops a closer relationship with food by being an active part of the process
  - Participants actively engaged with local environment

Energy Costs of a Can of Sweet Corn

<table>
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<tr>
<th>Description</th>
<th>Kcal</th>
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<tr>
<td>Transportation</td>
<td>150</td>
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<tr>
<td>Shopping</td>
<td>311</td>
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<td>Processing</td>
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<td>Distribution</td>
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<td>Production</td>
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<td>Home Preparation</td>
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<tr>
<td>Packaging</td>
<td>1002</td>
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</table>

Total Amount of Energy used in creation and distribution of a can of sweet corn on average: 3065 kcal

Amount of Energy a can of sweet corn possesses: 455 kcal

Go locally grown!
Future Research Avenues

- It could be useful for the ICG to create a complete assessment of the Indiana food environment. Attention should be paid to:
  - Location of grocery stores in relation to residential neighborhoods
  - Walkable or public transit access to grocery stores
  - The experiences of and challenges faced by local farmers
  - Alternative food movements (farmer’s markets, etc.)
  - Gauge changing practices of home gardening and seed saving
  - Food assistance options
  - Community demographics
  - Farm-to-table initiatives
Thank you!

- Dr. Kay Snyder, ICG Volunteer Coordinator
- ICG Community Garden members and volunteers
- Appalachian Regional Commission and the organizers of the Appalachian Teaching Project
- Lisa McCann for her fabulous photos and helping to kick start our involvement with the ICG
- ATP participants from the North Georgia College and State University for inspiring the first seed swap and a new seed bank in Indiana, PA