Abstract: The project participants researched, developed, tested and implemented technologies for year-round growing seasons designed to be viable under the growing conditions in southwest Iowa. High tunnels, alternative crops, vermiculture and collaborative producer groups were among the options tested.

What was done and why?
Permaculture (Permanent Culture) is the conscious design and co-creative evolution of agriculturally productive ecosystems and economically just social systems that have the diversity, stability and resilience of “natural” systems. Educators in southwest Iowa have been gathering information and providing training to farmers and stakeholders to prepare them to implement systemic changes to better support the local foodshed using some of these principles. This project had three objectives:

1. Conduct demonstration projects for year-round growing, aquaculture and vermicomposting, all using permaculture design elements to promote maximum resiliency.
2. Establish a formal growers’ association/network for local food producers in southwest Iowa and the greater Omaha metropolitan area. The association would be a separate entity, member-based, to serve the day-to-day needs of local producers.
3. Start-up assistance for a rural collaborative Community Supported Agriculture (cCSA) operation to sell fresh produce shares within the rural area of southwest Iowa and the Omaha metropolitan area.

What did we learn?
Despite the challenges involved in creating a true, year-round permaculture growing environment, much was learned. In addition to teaching new growing methods, the project worked to expand partnership opportunities for producers to support each other in the future. Lone Tree Foods and Loess Hills cCSA have evolved into strong, operator-led enterprises with solid business plans. Prior to this project there were no grower cooperatives of any kind in southwest Iowa. The high-tunnel, vermiculture and aquaponics equipment will continue to be used to encourage innovation among local producers. They offer farmers a means of testing new methods before adopting permaculture in their own agricultural practices.