BUILDING COMMUNITIES WITH FARMS

Insights from developers, architects and farmers on integrating agriculture and development

Vicky Ranney, Keith Kirley and Michael Sands

THE LIBERTY PRAIRIE FOUNDATION
Interest in healthy local food has spread across the country, fed by concerns about obesity, food-related diseases like diabetes, and the methods of industrial farming and food production. Michelle Obama’s White House garden and prominent writers such as Michael Pollan have put these issues into the national spotlight.

The strong public appeal of local and sustainably grown food has not been lost upon residential developers. A group of practitioners from around the country – developers, architects and farmers – recently gathered in the historic Byron Colby Barn at Prairie Crossing in Illinois to talk about their designs for incorporating agriculture into new communities and how they have worked. They discussed various models and the benefits and challenges of this type of development, which is sometimes referred to as agricultural urbanism. The two-day session began with a tour of Prairie Crossing, one of the first modern developments in the country planned with a working organic farm, and included five instructive presentations of new communities organized around farming. These examples provide useful ideas for future development.

This topic is particularly relevant at a time when global issues like climate change and the demand for local food coincide. The worst depression since the 1930’s has brought the housing industry to its knees, and virtually no new communities are being built, let alone ones with farms. But developers are wondering what form recovery will take and reviewing how to re-enter the market. On the assumption that the ground under our economy may be shifting, and that the future of development lies with community designs that take into account climate change, public health concerns and new forms of agriculture, it is appropriate to consider the best innovative farm-based communities.

This report summarizes findings from the workshop and reviews practices and issues that landowners, developers, design consultants and public officials might find useful as they consider building or encouraging communities with farms.

Labor Day, September 6, 2010
“Just hire a farmer.” I wish it were that easy to create a viable farm within a new or existing community. What are some of the practical considerations in turning the desire for a farm in a new community to reality? I will draw from our experience at Prairie Crossing over the past 15 years.

If there is any market for new development in the near future, evidence indicates communities that distinguish themselves with integrated farms are gaining momentum in the marketplace.

### Potential Benefits and Challenges

What are the potential benefits and challenges in the incorporation of food production into a community? It is important to evaluate these issues from the perspectives of the different stakeholders, as they may well have different interests. To succeed, a project will often need to satisfy these disparate interests. Below are examples of potential benefits and challenges for stakeholders.

#### For Developers, Design Consultants & Landowners

<table>
<thead>
<tr>
<th>Potential Benefits</th>
<th>Potential Challenges</th>
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<tbody>
<tr>
<td>Creates identity for project and community</td>
<td>Loses land for competing profitable uses such as more houses</td>
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<tr>
<td>Enhances marketing potential for the community</td>
<td>Adds complexity to design, financing, permitting, management</td>
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<td>Creates civic space for community interaction</td>
<td>Requires nontraditional development team capacity</td>
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<td>Enhances potential for entitlements</td>
<td>Requires a suitable farm entrepreneur</td>
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<tr>
<td>Provides fresh and healthy food locally</td>
<td>May increase commercial traffic through community</td>
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<td>Provides opportunity for education programs</td>
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#### For Farmers

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<tr>
<th>Potential Benefits</th>
<th>Potential Challenges</th>
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<tr>
<td>Creates affordable access to farmland and favorable lease terms</td>
<td>Involves close proximity of nonfarm neighbors</td>
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<tr>
<td>Provides high-value customer base at farm gate</td>
<td>Increases potential neighbor complaints of farm nuisances</td>
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<tr>
<td>Makes farmers members of a community</td>
<td>May increase distance to farm colleagues</td>
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<tr>
<td>Gives access to urban or suburban amenities</td>
<td>Reduces privacy</td>
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<td>Developer may subsidize infrastructure</td>
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#### For Public Officials

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<th>Potential Benefits</th>
<th>Potential Challenges</th>
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<tr>
<td>Adds jobs and commercial activity</td>
<td>Doesn’t fit conventional zoning regulations</td>
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<td>Adds taxable economic activity on open space</td>
<td>Adds complexity to permitting</td>
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<tr>
<td>Protects open land without use of public funds</td>
<td>Invites potential future complaints of farm nuisances</td>
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<tr>
<td>Requires relatively few municipal services</td>
<td>May require health department inspections</td>
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<tr>
<td>Provides an alternative development model</td>
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<tr>
<td>Enhances status and property values outside the develop</td>
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<tr>
<td>Provides local source of healthy food (food security)</td>
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**How can communities with farms help planners and communities preserve farmland?**
Defining Clear Goals & Objectives

A number of objectives must be considered when incorporating food production into a new community. Understanding these options and making a clear decision about which objectives are a priority for each project will make the subsequent design and planning more efficient. There are several common reasons why project teams become interested in incorporating food production components:

Marketing the project. For the developer, the opportunity to distinguish the project and enhance the marketing efforts is often critical. This requires that the food production component be developed early in the project. Additionally, the farm should be reasonably prominent and visually appealing. The farm staff should be able to communicate with potential homebuyers, as the developer will want to hold events at the farm to attract potential buyers and the press. The developer may be willing to invest resources from the marketing budget to support the early success of the farm. The corollary is that the developer may not have a long-term commitment to the farm after home sales are complete.

Opportunity for residents to grow food. Providing residents an enhanced opportunity to grow a portion of their own food provides a valuable amenity to a new community, particularly one trying to develop along New Urbanism standards of small lots and higher densities. A series of distributed community gardens near the residences will probably accomplish this objective best. To be effective, the gardens will need some infrastructure; at a minimum, water, a composting system, trash collection, and occasional access for trucks and tractors. Each location should contain enough plots (20-25) to create a sense of the “garden community.”

Opportunity for residents to buy local food. Traditional neighborhood developments appropriately mix uses to provide walking access to the necessities of daily life. Integrating business and office space provides jobs and local shopping. Providing fresh, local, high-quality produce would strengthen this model by locating sources of food near the community.

Production for local restaurants. Some chefs such as Dan Barber of Blue Hill Restaurant in Pocantico Hills, New York, are going beyond a general commitment to local sourcing and establishing either a shared or exclusive ownership in a farm. This may range from a larger farm able to provide meat products to smaller diverse vegetable production plots. The opportunity to locate a restaurant next to a farm gives a direct visual connection to its source of food, and can be a very powerful marketing opportunity. Imagine each dinner reservation starting in the garden with diners picking fresh produce for their meals. Such a restaurant is a distinctive amenity with the ability to attract potential homebuyers.

What is Community Supported Agriculture (CSA)?

Over the past 25 years, Community Supported Agriculture has become a popular way for consumers to buy seasonal food directly from a farmer, thereby supporting their local farms. The consumer purchases a share or membership in the farm and in return receives a weekly box of freshly harvested produce throughout the growing season. Besides vegetables, other farm products such as fruits, herbs, eggs, meat, cheese and flowers may be included.

Community members at the South Village farm participate in the fall harvest

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Views for the community. Farmland can provide aesthetically pleasing pastoral views for community members. If this is the primary objective, the developer might want to consider the visual impacts of the following different farming systems:

- **Commodity crops** (e.g., corn, soybeans, wheat, rice) provide large vistas of soothing monoculture, but often require seasonal herbicide and pesticide spraying from industrial-sized equipment or nighttime harvesting from lighted combines. Vegetable systems are more diverse and labor-intensive, with much more activity. They have greater requirements for buildings and field storage of equipment.
- **Orchards** provide attractive, symmetrical three-dimensional vistas, but usually require spraying significant amounts of pesticides.
- **Grazing animals** in well-maintained pastures can provide extremely attractive views. Prairie Crossing’s residents paid lot premiums for views of the horse pastures.

Farm-based educational programs. Educational programs for the public and community members are another amenity that will enhance marketing efforts. However, an attractive experience requires attention to high-quality programming and staffing. The long-term business plan and appropriate institutional arrangements need to be addressed early, as educational programs will probably not be supported wholly from homeowner association dues. A percentage of the sale price of each home can be directed to a non-profit that helps support educational programs.

Connection to regional food initiatives. If the farm plays a role in a larger local food movement, it will provide a broader brand for the community beyond the typical real estate development. These efforts will also require an institutional home that outlasts developer buildout.

Design and Capital Implications

The design and development team will want to address a number of design and capital implications when setting specific objectives for their project’s farm or food production efforts.

Scale. How big can the effort be? How much land is available for the initiative and what buyers do you hope to attract? Developing a 100-acre certified organic vegetable farm (Prairie Crossing Farm) says something very different than a 100-acre equestrian operation. Likewise, 4 acres of greenhouse or hoop-house production is a different initiative than 4 acres of community gardens. These have significantly different associated project costs and income streams.

Front & center versus back-forty. Typically the farm is on the edge or the “back-forty” of a new community. At Prairie Crossing, the farm is along the western border, and serves as a buffer for a potential new road and an existing landfill. However, because of this location, its connection to the daily pedestrian traffic of Prairie Crossing is limited. Alternatively, South Village’s farm is right at the entrance to the community. Another consideration is that not all of the farm activities lend themselves to daily public exposure. Where does the compost production pad or the pig paddock go?

Connectivity to retail (restaurant & food store) and civic spaces. In most projects, the farm and retail are developed as separate areas. However, there may be opportunities to integrate these operations and gain a synergy that enhances the viability of both. Imagine the farm having a physical and visual connection to a restaurant at one end of a community’s retail street.

Not all of the farm activities lend themselves to daily public exposure. Where does the compost production pad or the pig paddock go?
At Prairie Crossing, we started the project by hiring a couple as farm managers. They did a great job developing a successful working farm and hosting a large number of events that were critical in marketing the Prairie Crossing community and house sales.

**Land and soil suitability.** In the same way that certain portions of a site are more appropriate for certain types of development, not all soil and land conditions are conducive to a successful farm operation. What is the quality of the land for farming? What are the soil types, topography and pH? What is the drainage like? Different crops or production systems can utilize different land conditions. Some non-ideal conditions can be addressed with restoration technologies, others cannot.

**Access.** How is the farm or garden site accessed? Most farms will need to enable large trucks to get in and out of the farm. Some deliveries may be very frequent during specified periods of time (e.g. fall deliveries of municipal leaves for composting). Accessibility within the farm is also an important issue, particularly during inclement weather.

**Land ownership and control.** Perhaps one of the most important questions to be addressed is the long-term ownership and control of the farmland. Options might include the development company or a local proxy, the homeowner association, a non-profit organization, or a farmer. Whatever the ownership, it is important to ensure sufficient protection against inappropriate future development (e.g. through a conservation easement). A long-term lease for the farmer will help stimulate investments in soil quality and farm infrastructure. The conditions of the lease should provide sufficient independence for the farmer to make on-the-ground management decisions, and adapt to changing market conditions and emerging technologies.

**Financing Capital Development**

Most farm projects will require initial capital investments. Depending on the existing facilities, there may well be $250,000 to $300,000 in initial investments required. These may include wells and irrigation, buildings, greenhouses, wash stations, coolers, tractors and other equipment. Much of this investment may be needed in the first year or two.

While this is a significant investment for a beginning farmer, it should be feasible for the developer with the creative allocation of a project’s marketing funds. At Prairie Crossing, we realized the potential of the farm early; feature articles about the new local food farm helped to drive sales more effectively than ads in the real estate section of the Chicago Tribune. We were eventually able to recoup a portion of this investment by selling the equipment to the farm operation as the business reached a level of profitability.

**Long-Term Financial Viability**

What does the long-term business model for a farm in a new community look like? There are two major paths to choose from: to maintain close control by hiring a farmer as an employee, or to reduce control and facilitate the success of an independent farm entrepreneur.

Michael Sands, Ph.D.

With over 30 years of experience in sustainable agriculture, environmental conservation and community-based economic development, Mike has worked on a broad range of innovative projects. As Environmental Team Leader at Prairie Crossing, Mike provided leadership in the design and management of natural resources and farm lands. He coordinated the project’s ecological programs for residents and the general public. Mike also serves as the Executive Director of the Liberty Prairie Foundation. This small, private operating foundation is dedicated to providing local and regional leadership for natural resource and land management, and conservation in northern Illinois. Current programs are focused on the integration of economically thriving, ecologically sensitive farms and the expansion of the Farm Business Development Center at Prairie Crossing Farm.
Hire a farmer. By hiring a farmer (farm manager) as an employee, the developer ensures access to the farm facility for visits, developer-generated events and other initiatives aimed at marketing the community or project. As most of these activities will compete with traditional farm production, marketing and management and will not generate much revenue for the farm, there should be limited expectations on the profitability of the farm enterprise as a stand-alone business during the initial home sales phase.

The challenge to this approach comes later in the project life, when the homes are sold out, no marketing dollars remain, and there is little justification for the developer to manage an ongoing business unit with limited or no profits.

Facilitate an entrepreneurial farmer. By identifying and facilitating the initial start-up of a bright, committed farmer-entrepreneur, the developer creates a potentially self-sustaining business. Now an individual (or a couple) has “ownership” of the project and all the incentive in making the farm successful. This model requires developers to sacrifice control over the daily operations of the farm in exchange for a better prospect for a financially viable long-term business. The challenge is finding the right entrepreneur, and developing a business plan that builds on the synergies available.

Today’s developers have access to a small but growing body of knowledge and professionals experienced in the structuring and operation of master-planned communities with farms.

Successful farmer-entrepreneurs must possess or have access to a number of important skill sets. Obviously they have to be good at raising crops or livestock, but a number of other skills go beyond what you might have been looking for in a good farm manager. They must be able sell whatever they produce at the best possible price. They need to be skilled at marketing. They have to be good financial managers. That means managing not only the short-term cash flow, but also the issues of growth, debt and long-term planning. They also need to be good at labor management. As they grow, they will have to hire and motivate a great productive team. Finally they must be able to communicate well and directly with their customers. No single person is likely good at all these unique skills. Often a farm couple will have complementary skills to contribute. Agri-entrepreneurs must be able identify how they will access the capacities that they do not have.

At Prairie Crossing, we started the project by hiring a couple as farm managers. They did a great job developing a successful working farm and hosting a large number of events that were critical in marketing the Prairie Crossing community and house sales. As the development neared buildout, we made a transition to an independent family farm operation. Sandhill Organics has a long-term market rate lease for a significant portion of the farmland and operates as a very successful independent business. They sell fresh organic produce to the general public as well as community members. The education activities at the farm are now the purview of the Liberty Prairie Foundation, an independent non-profit that supports itself with a .5% transfer fee from Prairie Crossing home sales, grants and fee-for-service contracts.

Summary

The experiences at Prairie Crossing, Hidden Springs, Serenbe and others demonstrate that incorporating farms into new communities can be a significant addition to the marketing and ongoing quality of new communities. Regardless of scale, all these projects experienced challenges in structuring and nurturing their farm operations to reach a model capable of long-term success. As a pioneer in the creation of this development model, Prairie Crossing learned through trial and error and succeeded largely through the continued commitment of the developer and community to the farming operation.

Today’s developers have access to a small but growing body of knowledge and professionals experienced in the structuring and operation of master-planned communities with farms. These resources address perhaps the most common challenge I hear of: the lack of experienced team members and existing projects to learn from. We encourage folks to use and build upon these resources.

The Liberty Prairie Foundation is an independent non-profit that supports itself with a .5% transfer fee from Prairie Crossing home sales, grants and fee-for-service contracts.
Part II: Case Studies

Overview

Five noteworthy new communities with farms are summarized by their developers in reports delivered on October 27-28, 2009, with updates and additional information added since.

I. Prairie Crossing
Grayslake, Illinois
Vicky Ranney, Co-Developer

Prairie Crossing is a master-planned green community located 40 miles north of Chicago in the town of Grayslake, Illinois. George and Vicky Ranney began developing the conservation community in 1992, based on ten guiding principles. The master plan includes 360 Midwest vernacular homes; large areas of restored prairie; a charter school and community center; a mixed-use town center with 36 condominiums, shops and a restaurant next to two commuter rail stations; and a 100-acre certified organic farm. Prairie Crossing has been a leader in the conservation development movement and was one of the first planned developments in America to incorporate food production.

The Ranneys assembled a planning team and built less than a quarter of the 1,600 units allowed by local zoning, while preserving 60% of the site as open land. One hundred acres of this land were reserved for the community’s organic farm.

History

The initial vision for the community was generated from principles of conservation and the efforts of a group of neighboring landowners to preserve the rural character of the area east of Prairie Crossing, which included wetlands, woods, rolling farmland, and farmhouses. After lengthy lawsuits against a very dense proposed development on the Prairie Crossing site were settled, conservationists Gaylord and Dorothy Donnelley bought the property in 1987. They formed Prairie Holdings Corporation with a group of their neighbors and asked George and Vicky Ranney to develop it, hoping to provide an alternative to the prevailing pattern of suburban sprawl. In response, the Ranneys assembled a planning team and built less than a quarter of the 1,600 units allowed by local zoning, while preserving 60% of the site as open land. One hundred acres of this land were reserved for the community’s organic farm.

Landscaping and Sustainability

Nature conservation and farmland preservation played key roles in the design process of Prairie Crossing. The land, which had been

Prairie Crossing: Community Facts

- 668 acres
- 40 miles north of Chicago
- 60% open land
- 360 single family homes
- 36 condos
- Mixed-use commercial core
- Community center & fitness center
- 2 train stations
- 100-acre organic farm protected by conservation easement
- Horse pastures and stable
- Farm business incubator
- Learning farm
- 3 on-site schools: nursery, charter elementary, and Montessori adolescent program

Matt Sheaffer of Sandhill Organics at the Prairie Crossing Farm works with members of the Prairie Crossing Farm Business Development Center

www.prairiecrossing.com

Photo by Maryanne Natarajan
farmed for corn and soybeans prior to development, was replanted to the original native prairie and wetland plant species that covered the Midwest prior to nineteenth century cultivation.

Native landscaping at Prairie Crossing is one of its defining features. Prairie vegetation on the common land has been a cherished aspect of the community, leading to the adoption of prairie landscaping by many of the residents in their own private yards. Volunteer work crews who remove invasive plants and burn the prairie in spring and fall generate an active sense of community.

Through careful planning by an expert ecologist, Prairie Crossing achieved an innovative solution for stormwater disposition and simultaneously created an attractive habitat for wildlife and human beings. The stormwater collection system uses long-rooted native prairie plants to slow and purify rainwater and snowmelt on their way to the large centrally located Lake Aldo Leopold. This lake not only serves as a detention basin; it is also a popular amenity used for swimming, boating, fishing and skating by the community’s residents.

The Farm

The Prairie Crossing Farm is home to three separate organic farming operations: Sandhill Organics at Prairie Crossing, a for-profit commercial family farm; the Prairie Crossing Farm Business Development Center, an incubator program for new farmers; and the Prairie Crossing Learning Farm, which serves three local schools, the residents, and the general public. These organizations work together under the oversight of Michael Sands, Executive Director of the Liberty Prairie Foundation, which owns and leases out the farmland. Although the Prairie Crossing Homeowners’ Association does not own the farm or manage its operations, it contributes $10,000 per year in recognition of the services the farm provides the community.

Funding the Farm Operations

The original budget for the farm operations was included as part of the marketing expense for the residential development. The farm generated a great deal of free press, and some families attracted by farm events purchased homes at Prairie Crossing. Cash flow generated from residential sales provided the funding required to operate the farm from start-up through the development’s buildout. At that point, ownership of the farmland was transferred from the development company, Prairie Holdings Corporation, to the Liberty Prairie Foundation, which is based at Prairie Crossing and supported in part by a transfer fee of .5% of the sale price of each home. The Foundation leases out the land and provides partial operating support to the nonprofit Learning Farm and the Farm Business Development Center. The for-profit family farm, Sandhill Organics, leases 40 acres and is the largest farm operation at Prairie Crossing. Fully self-sufficient, it provides important mentoring to the newer farmers in the community.

The Farm Business Development Center at Prairie Crossing Farm (www.prairiecrossingfarms.com) supports the development of successful family farm enterprises that produce and market organic foods locally and regionally. Also known as an “incubator,” it works by recruiting beginning farmers with some experience, leasing them up to 5 acres of land with farm infrastructure, renting them equipment, facilitating education programs and providing the informal support of other farmers. Thus it helps beginning farmers develop the entrepreneurial skills, farming knowledge and market networks needed to become successful professional farmers. The incubator provides

The Prairie Crossing Learning Farm coordinates several educational programs with schools in the community and beyond to promote farming and healthy eating habits for children.
The Prairie Crossing Homeowners’ Association does not own the farm or manage its operations; it contributes $10,000 per year in recognition of the services the farm provides the community.

these resources to its farmers using a market-based fee structure wherever possible. Farmers are a part of the incubator for up to 5 years, at which time they are expected to move to land they own or lease elsewhere. There are four incubator farmers in the program as of 2010.

The Liberty Prairie Reserve is a 5,800-acre conservation area that includes Prairie Crossing as its western anchor. The desire to preserve most of the Reserve as open land was the impetus for developing Prairie Crossing.

The Liberty Prairie Foundation, Reserve & Conservancy

Three entities established by the developers are important to farming at Prairie Crossing. One is the Liberty Prairie Foundation (see above).

The Liberty Prairie Reserve is a 5,800-acre conservation area that includes Prairie Crossing as its western anchor. The desire to preserve most of the Reserve as open land was the impetus for developing Prairie Crossing. 3,200 acres of this public and private land have been permanently protected from further development, thanks to parcel-by-parcel negotiation with landowners by George Ranney and the Liberty Prairie Conservancy (www.libertyprairie.org).

The Conservancy is a non-profit organization founded to promote the preservation of natural areas and farmland in the Liberty Prairie Reserve. Now a county-wide land trust, the Conservancy is making farmland available for lease to new organic farmers, including those progressing through the incubator program at the Prairie Crossing Farm.

Prairie Crossing’s Ten Guiding Principles

1. Environmental protection and enhancement
2. A healthy lifestyle
3. A sense of place
4. A sense of community
5. Economic and racial diversity
6. Convenient and efficient transportation
7. Energy conservation
8. Lifelong learning and education
9. Aesthetic design and high-quality construction
10. Economic viability

Vicky and George Ranney

Vicky and George Ranney came to their positions as their developers of Prairie Crossing via unlikely paths. Vicky grew up across from a farm near Boston, and became an associate editor of the papers of Frederick Law Olmsted, the American landscape architect and planner. She was a member of the taskforce that passed the Illinois Food Farms and Jobs Act in 2009.

George, who grew up on a farm east of Prairie Crossing, is an attorney, former steel company executive, and CEO of Chicago Metropolis 2020, a regional planning organization of the Chicago business community.
Matt and Peg Sheaffer own and operate Sandhill Organics, the largest farm business at Prairie Crossing. They have a long-term lease on 40 acres of land and are currently producing on 20+ acres. Here they provide an inside perspective of a farmer’s role in the community and their successes and challenges at Prairie Crossing.

Matt and Peg identify the freedom of choice as a key element in the success of their farm. Their lease and contract with the Liberty Prairie Foundation gives them independence from the Homeowners’ Association, allowing them to operate with the flexibility required to achieve profitability. A berm between the community and the farm helpfully separates the agricultural land from the residential portions of the development.

The Sheaffers believe strongly in the importance of the farm incubator program at Prairie Crossing, and cited this program as an essential element to

Matt Sheaffer of Sandhill Organics speaks to community members during an event. Sandhill is one of five separate farm operations that share facilities and lease land at the Prairie Crossing Farm. Frequent interaction among farmers creates a community of sharing.

The success of Sandhill Organics and its growth since 2004 was achieved through hard work and dedication on the part of the farmers and their support system at the Prairie Crossing Farm. When they first came to Prairie Crossing, they struggled with the isolation of being virtually the only organic farming operation in the area. The unique integration of the farm into the development resulted in a re-creation of the traditional farming community that historically played a vital role in the lives of nineteenth and early twentieth century farmers. The Sheaffers created a new dynamic interaction between the typically separate residential and agricultural zones. Today they embrace this new level of interaction and continue to play an active role in the community, a stipulation that is required in a general way by their contract and welcomed by them.

Next Step

Strengthening the distribution channels for Sandhill Organics produce is identified as the logical next step for the future growth of the farm.

In total, the five farms at Prairie Crossing currently serve over 450 members with their yearly Community Supported Agriculture (CSA) programs.
The development of Serenbe in the newly created city of Chattahoochee Hills, Georgia, on the edge of Atlanta is a model for the successful integration of farming and development in a master-planned community. Steve, who began his career as a successful restaurateur in the Atlanta region, became concerned about the effects of urban sprawl and led a group of landowners in a 40,000-acre area to change the land use plan, which now calls for 70% of the land to be preserved for trees and greenspace, conservation and agriculture. He realized that a community based on principles of farming, conservation and sustainability would be the most appropriate model for future growth.

Nygren’s incorporation of farming into the original master plan of Serenbe, and his use of restaurants within the community to promote both the farm and the overall community, has proven to be a successful example of the benefits of local food production and its effectiveness in promoting home sales and healthy lifestyles. Chattahoochee Hill Country project. Early public design charrettes focused on creating a sustainable vision for the estimated 30,000 residential units that would eventually populate the region. These design sessions led to the realization that smaller compact villages would allow for healthier growth in the region while at the same time enabling the preservation of large areas of land. The final plan allows for 20% more dwelling units than would have occurred with traditional development, while saving the majority of the land for agriculture and preservation.

**Transfer of development rights (TDRs)** help achieve the balance of protecting the existing farms and the farming way of life.

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**Serenbe: Community Facts**

- 1,000-acre site
- 224 currently platted home sites; 800 additional home sites planned
- 5-acre organic farm with up to 25 acres available
- About 100 completed homes
- 240 current residents (98 families)
- Currently completing phase 2 of 4
- Each phase emphasizes one of four key elements: arts, agriculture, wellness and education
- Amenities:
  - Local boutiques
  - Inn at Serenbe
  - Farm and barn, stables
  - Dog park & green space
  - Fishing ponds & forests
  - Pedestrian path network
- 3 critically-acclaimed restaurants focused on the farm-to-table concept
- 1% transfer fee on homes and 3% on open lots fund community institute for the arts and environment
- Natural, indigenous and edible landscaping — no toxins or chemicals used
- 160 acres of protected open land, including farmland, with 700 acres to be protected at buildout
- 120-member CSA program & weekly farmers market
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**Land Preservation:**

**The Chattahoochee Hill Country**

Nygren’s vision for preservation in the Atlanta region encompasses roughly 65,000 acres (the 40,000 listed above plus additional acreage) of open land in the Chattahoochee Hill Country, which now has a green space and trail plan approved by four counties for their respective land. The vision was so compelling that 33,000 acres have now been incorporated into a new city, Chattahoochee Hills, to further protect the principles of land preservation. His efforts began with a two-year campaign aimed at garnering public support for the
The presence of the farm and restaurants allowed the developer to reduce the advertising budget to zero while sustaining home sales on the stream of press covering the community and the farm. As Nygren likes to say, “People come for a cupcake and end up buying a house.”

while accommodating and controlling growth. A land bank was established within a conservancy organization to oversee the process of purchasing the development rights and to provide the ongoing management of the newly established TDR system.

The Serenbe Farm Business Model

Nygren amortized the initial investment in the farming operation as part of the amenities budget for the development. This method provided the start-up capital necessary for the farmer to begin operations and to grow the business during the initial four years required to reach a level of profitability. The farm sells its produce direct through the Serenbe Farmers Market (Saturdays, May through October), Community Supported Agriculture shares and wholesale to the restaurants within the community, plus a few Atlanta restaurants.

Food and the Community

Building a sense of community around food and farming was a goal of the developer from the earliest phases of the design process. Nygren set out to achieve this goal by creating a local food production center in coordination with the restaurants and bakery located within the community. His simple equation for success was, “food equals community, which in turn creates value.”

In a bold move, Nygren chose to build the town bakeshop, The Blue Eyed Daisy, when only four homes had been completed. His experience in the restaurant industry gave him the confidence that this early investment would be a key element in the future success of Serenbe. Nygren found the combination of the farm and bakeshop created a unique marketing tool that helped to differentiate the development from others in the region. The eventual expansion of the community led to the inclusion of two additional restaurants, The Hil and The Farmhouse at Serenbe. Nygren estimates more than 1000 people visit the restaurants each weekend.

Landscaping and Sustainability

Areas of local food production are integrated throughout the community in the landscaped areas and open spaces. Almost 70% of the landscaping incorporated into the community’s path system consists of edible species, including blueberry bushes, fig bushes, peach trees and spotted apple trees. This unique feature, in combination with restrictions on lawns, stringent water conservation programs, and sustainable Leadership in Energy and Environmental Design (LEED) and Earth Craft certified construction, makes Serenbe a holistic model for sustainable development.

Lessons Learned

The inclusion of organic farming, and its coordination with restaurants within the community, continues to be a winning combination for Nygren in his efforts to publicize and market the community. The presence of the farm and restaurants allowed the developer to reduce the advertising budget to zero while sustaining home sales on the stream of press covering the community and the farm. As Nygren likes to say, “People come for a cupcake and end up buying a house.”

Serenbe has three restaurants within the community, and plans to add four more. The restaurants use produce from Serenbe’s farm, and focus on farm-to-table dining.
The master planning process for the community of South Village began in 2001 with an initial design charrette focused on principles of agriculture and New Urbanism. The design team identified alternative development models to conventional sprawl that would allow for the continued operation of the farm that existed on the site. This early focus was guided by developer David Scheuer and Will Raap, the CEO of Gardener’s Supply Company and founder of the Intervale Farm Center. Their ideas eventually expanded to include preservation of open space and restoration of the site’s ecosystem.

The Farm

The farm at South Village currently has three of its 13 acres of land under production. Two part-time employees lease and operate the business using a Community Supported Agriculture program (CSA) as their primary distribution channel. The CSA program started in 2008 with 30 members and expanded to 65 members during the 2010 season.

The process of starting and operating the farm at South Village required both determination and skill on the part of the developers. Early obstacles included difficult soils, bad drainage, high winds and inadequate irrigation. Raap’s network in the Burlington region proved to be a valuable asset, helping the farm to procure free manure from University of Vermont to build the soil. Nonetheless, Raap emphasizes the challenges of overcoming the major expenses of infrastructure and the ongoing cost of operations in establishing a profitable working farm at South Village.

Raap estimates the CSA will require approximately 130 members to reach a level of sales capable of supporting one part-time farmer. Despite these challenges, the developers are still enthusiastic about the farm.

Will Raap

Will is the founder and past Chairman of the Board for the Intervale Center (www.intervale.org). The mission of the Intervale Center is to develop farm and land-based enterprises that generate economic and social opportunity while protecting natural resources. The Intervale family of businesses includes Intervale Compost Products, Intervale Conservation Nursery, Intervale Agricultural Development Consulting Services, and Intervale Food Enterprise Center, plus 13 private farms developed in the Center’s farm incubator program.

Raap is also the founder and chairman of the Gardener’s Supply (GS) family of companies. Founded in 1983 in Burlington, Vermont, GS employs more than 250 people and is one of the largest online and catalog gardening companies in the country.

South Village: Community Facts

- 220-acre site
- New Urban master plan
- 334 proposed units including affordable housing
- 13-acre farm
- Storm water swale system
- Effort to eradicate non-native species
- Currently completing phase I

A view of South Village homes from the community’s organic farm, which occupies 13 acres within the community
In hindsight, the only regret that Scheuer identifies was their failure to implement the farm earlier in the development process, as their early projections underestimated the power that the farm would have on establishing and promoting the community.

Sustained efforts and resources will be required for the farm to reach a level of profitability. Raap estimates the CSA will require approximately 130 members to reach a level of sales capable of supporting just one part-time farmer. Despite these challenges, the developers are still enthusiastic about the farm and the potential it holds for the community. Scheuer is clear in his belief in the farm and its power to generate interest in the development. He also identifies the essential role of the CSA program and its ability to strengthen the connection between South Village and the surrounding communities. These benefits provided the developers with the incentive to continue expanding the farm business regardless of the early capital and time expenditures. In hindsight, the only regret that Scheuer identifies was their failure to implement the farm earlier in the development process, as their early projections underestimated the power that the farm would have on establishing and promoting the community.

The Farm Business Development Center at Prairie Crossing was modeled after Will Raap’s Program at Intervale Center in Burlington, Vermont.
Bundoran Farm integrates residential development with existing farmland and pastures, permanently securing working lands within a flexible, privately funded structure that allows for changes to agricultural practices. The master plan combines traditional single-family, large-lot residences with a high percentage of permanently protected and professionally managed orchards, forests and pasture land. It is a suburban model of agriculture-based development that preserves farmland, ecological assets and the farming way of life while accommodating high-value, single-use residential development and a sustainable, healthy lifestyle.

**Bundoran Farm is a suburban model of agriculture-based development that preserves farmland, ecological assets and the farming way of life while accommodating high-value, single-use residential development and a sustainable, healthy lifestyle.**

### Background

Robert Baldwin, Jr. is the managing principal of Qroe Farm (pronounced “crow”), which specializes in the integration of conservation land and residential development. Qroe has honed its approach over more than ten conservation development projects, mostly in New England. For Bundoran Farm, Qroe partnered with Celebration Associates, developers of Traditional Neighborhood Developments and resort-oriented Conservation Developments in the Southeast.

Bundoran Farm is located on a historic property most associated with its owners since World War II, the Scott Family. When the time came to sell Bundoran Farm, owner Fred Scott sought a solution which would meet the family’s economic objectives, while maintaining most farm operations. As a result, the project has received support from neighbors, public officials and the environmental and farming communities. Mr. Scott has remained a resident of the farm throughout its development.

### Community Design

The Qroe model typically does not rely on government or charitable easement programs. Instead, all land is divided into lots of 2 to 98 acres for sale. Within each lot, a 1 to 2-acre homesite is reserved and permitted for a home, subject to design review. The remaining acreage, totaling over 90% of the property, is reserved by easement for agriculture, forestry, ecological functions or recreational uses.
The Baldwin Center at Bundoran Farm

In an effort to educate other developers and design professionals, the company established the Baldwin Center at Bundoran Farm. This non-profit foundation was created to showcase innovative practices in agricultural preservation, environmental stewardship and sustainable growth. A facility within the Bundoran Farm development provides a gathering place for conferences and educational programs directed by the foundation, as well as a center for farm operations and community gatherings. The Center’s inaugural symposium, “Residential Development and the Working Landscape,” attracted fifty participants from around the country to a two-day program on farmland economics, conservation programs and regulation, and the practical integration of increasing residential use in rural areas.

Easement areas of Bundoran Farm are managed by a committee empowered by the Community Association, with a community-sponsored environmental quality monitoring program.
Hidden Springs, a planned community of 850 homes, rests on 1,756 acres in the Dry Creek Valley 20 minutes north of downtown Boise, Idaho. Conceived as a model for sustainable development in the West, Hidden Springs was built around the site of a 145-year-old farmstead, integrating the rural character of the area with an environmentally responsible land plan and organic farming. More than 1,000 acres of open space give expansive views of the foothills. Paths within the community connect to regional trails. Homes emphasize resource efficiency and aesthetic designs and vary in size and price to foster a diverse community. In the semi-arid high desert, an innovative wastewater system utilizes reclaimed water for irrigation on the farm, playfields, and landscaped common areas. The wastewater system is owned by the Town Association (HOA) thereby ensuring a cost effective supply of irrigation water for these facilities.

Conceived as a model for sustainable development in the West, Hidden Springs was built around the site of a 145-year-old farmstead, integrating the rural character of the area with an environmentally responsible land plan and organic farming.

Frank Martin

Frank Martin is the managing principal of Martin Community Development, LLC in Boise, Idaho, and a senior advisor to Greenstreet Ltd. For more than 35 years, Frank has been a community developer and home builder, known nationally as one of the pioneers in conservation-based approaches to community development. As the president of Shaw Homes, Frank provided leadership to the Prairie Crossing development team prior to the Hidden Springs project.

A long-time member of the Urban Land Institute, Frank was a founding member of the Institute’s Environmental Committee in the mid-1990’s and served as chairman of ULI’s Sustainable Development Council and chairman of ULI’s Idaho District Council. He has been an advisor to nine communities in the United States through ULI’s Advisory Services program.
The farm at Hidden Springs is currently producing on 4 of its 19 acres of agricultural land. Its farmstead is listed on the National Register of Historic Places.

**The Farm**

The farm at Hidden Springs is currently producing on 4 of its 19 acres of agricultural land. Its 145-year-old farmstead is listed on the National Register of Historic Places. Residents established the Dry Creek Historical Society to restore the farmstead and operate it as a living history museum. The property was donated to Ada County by the developer, and the County leases it to the Dry Creek Historical Society. Its land is permanently protected by a conservation easement.

The Hidden Springs Community Farm Inc. was organized by residents with support from the developer and the Town Association, and was structured as a 501(c)(3) not-for-profit.

Martin discussed the challenges associated with finding farmers for their operation. The community has hosted a number of different farmers on the land while seeing a steady rate of turnover since the farm’s founding in 1997.

The farmers distribute and sell their produce primarily through a CSA program. This business model allows them to sustain their operations with a $1 per year land lease from the Hidden Springs Town Association (HOA).

The Hidden Springs Community Farm Inc. was organized by residents with support from the developer and the Town Association, and was structured as a 501(c)(3) not-for-profit. This structure gave the farmers a level of independence not available through HOA governance.

Some of the expenses incurred for the maintenance of the community and farm are subsidized by a .25% transfer fee on all home sales and resales. This fee provides the funding necessary for the HOA’s continued support of the community and farm. Martin identifies the farm as a key community builder and believes it will be sustained by the community.

A .25% transfer fee on all home sales and resales provides the funding necessary for the HOA’s continued support of the community and farm at Hidden Springs.

**The Benefits of Organic Farming to Developers**

- Well-known federal (USDA) standard
- 3rd-party certifier takes burden of quality assurance off the developer
- Produces healthy food, attracting health-conscious homeowners
- Appropriate form of farming next to high-quality natural areas
- Does not release toxins into environment
- Promotes healthy soils, clean water and air

Hidden Springs master plan
Part III: Round Table Discussion

Communities with Farms Workshop
Prairie Crossing, Grayslake, Illinois

Overview

Developers speak about the future of building communities with agriculture

The round table focused on the future of communities with farms and ways in which the concept could grow in the development marketplace.

Robert Baldwin framed the conversation with a list of big-picture questions:

- What are possible objectives?
  - Food?
  - Aesthetic amenities?
  - Profit?
- What do you need for the farms to work?
  - Land – How much?
  - Does it need to be legally protected?
  - Knowledgeable farmers – How do you get them and keep them?
  - Capital and profitable business plans
- What type of farming will it be?
  - Organic?
  - Food or livestock production?
- What is the potential of the market?

Will Raap pointed to the growing movement behind conservation-based development and communities with farms. He explored the macro issues that promote this concept, such as environmental change and the importance of effectively using soils to sequester greenhouse gases. He asked whether local agriculture can sustain our population, and suggested that government subsidies might expand local food production programs. He cited the Vermont public school system’s program for purchasing local food for their cafeterias, in which two-thirds of the schools in the state participate. Other examples include several universities that are introducing local food production systems into their campuses. Raap said government policies are currently encouraging local food farming, providing positive reinforcement for communities with farms. In response, Vicky Ranney cited the Illinois Local Food, Farms, and Jobs Act of 2009, which established a goal for State institutions to procure 20% of all food and food products from local farms or manufacturers by

Frank Starkey, Developer, Longleaf, Odessa, Florida

Frank Starkey identified communities currently operating with farms, including Hammond's Ferry in North Augusta, South Carolina, developed by Steve J. Maun. He also spoke of the design by Duany Plater-Zyberk for the proposed community of Southlands, outside Vancouver, British Columbia, which incorporates a spectrum of agricultural features. He addressed the role of local food production in establishing strong food security systems in the United States.

As the chair of the National Town Builders Association (NTBA) and the Seaside Institute, Starkey is in a key position to collaborate with other developers around the country who are interested in New Urbanism, Traditional Neighborhood Development, and communities with farms. As landowners and co-developers, he and his brother Trey are researching opportunities to incorporate food farming into Longleaf, their 568-acre traditional neighborhood development begun in 1999, and potentially into Starkey Ranch, the 2,500-acre remainder of their family's holdings, where a number of "farmstead" lots are contemplated. They are seriously exploring agriculture as a long-term, if not permanent activity on their land. One option is a commercial blueberry operation, which could be very profitable because Florida's blueberries are high-quality in sweetness and size, and are ready for market about six weeks before those in Georgia. He also explained how agriculture might help developers in stalled projects to minimize their taxes by rezoning their land for temporary agricultural use.
Raap felt the interest in local food production was poised to grow in popularity as negative economic and environmental factors increased. These factors would provide advantages to communities capable of feeding themselves.

2020, as an example of state-led policy.

Raap addressed the importance of developing farm operations beyond subsidies to a level of self-sufficiency. He felt the interest in local food production was poised to grow in popularity as negative economic and environmental factors increased. These factors would provide advantages to communities capable of feeding themselves as well as those located in proximity to navigable waterways and rail networks. For Raap, it is essential to find the correct business model that will allow for the growth of the local food movement and its inclusion in new and existing communities. He suggested that marketing should be focused on those concerned about the issues of sustainability while being careful to create a sense of hope in the efforts of the movement. His vision includes a marriage of agriculture and design that encourages forms of farming that can be successfully used in modern planning.

Robert Davis, the founder of Seaside, Florida, stressed the significant global changes that lie ahead. He believes that rising oil prices are an inevitable fact and that society has to change for future generations to flourish. He posed the question: How do we stay ahead of this curve? His answer involved the Florida master-planned community known as “Sky,” designed by Duany Plater-Zyberk upon principles of agriculture and energy efficiency. He also asked: How can one promote hope rather than fear of changes that lie ahead? He identified the current support of the ideas of local food production and sustainability by younger generations as a key element for success and a tool to shape the future of the movement. He stated that it is essential to take advantage of this energy while it exists. He pointed to Serenbe as a model for future growth and cited Cuba as an example of what happens when oil runs out: every quarter acre becomes a plot for food. For Davis, the workshop was reminiscent of the early meetings of the Congress for New Urbanism and the organization of efforts to rediscover what was once second nature to societies.

Davis also discussed the importance of a long-term vision and low carrying costs for the successful development of any master-planned community. This was the process by which he successfully built Seaside, and a model for surviving the fluctuating real estate market. As a final piece of advice, he suggested that all the participants assume that oil prices will one day reach $200+ per barrel, and to use this assumption as a basis for future development and progressive, forward-thinking design.

Allies and Progress

Important recent work on building communities with farms has been done by several new or established organizations: the Baldwin Center for Preservation Development, the Congress for New Urbanism and the Urban Land Institute (ULI). The ULI recently published an excellent book, Conservation Communities: Creating Value with Nature, Open Space, and Agriculture, by Edward T. McMahon.

In May of 2010, the Congress for New Urbanism featured “Agricultural Urbanism” in a well-attended two-day track at its annual Congress in Atlanta. Andres Duany, Steve Nygren, Vicky Ranney and James Kunstler were among the speakers. Next year’s CNU Congress, entitled “Growing Local” will be held on June 1-4, 2011 in Madison, Wisconsin, a city known for its well-developed local food system.

A few of the other organizations that have natural

**Vicky Ranney cited the Illinois Local Food, Farms, and Jobs Act of 2009, which established a goal for State institutions to procure 20% of all food and food products from local farms or manufacturers by 2020, as an example of state-led policy.**

**Davis cited the current support of the ideas of local food production and sustainability by younger generations as a key element for success and a tool to shape future progress.**
affinities with this subject include the American Farmland Trust (AFT) with its focus on “new ruralism,” the National Town Builders Association (NTBA) and the American Planning Association (APA).

We are optimistic that the future growth of these ideas will lead to a fundamental shift in the way America views agriculture and development. As interest continues to grow, we hope that together we can shape our future landscape upon the principles of sustainable agriculture and responsible development.

In May 2010, the Congress for New Urbanism featured “Agricultural Urbanism” in a two-day track at its annual Congress in Atlanta. Andres Duany, Steve Nygren, Vicky Ranney and James Kunstler spoke at the conference.

The following list of resources and contacts is not intended to be comprehensive, but rather is an attempt to stimulate further research and exploration.

**Organizations:**
- The American Planning Association
- The Baldwin Center for Preservation Development
- The Congress for New Urbanism
- The Hampstead Institute
- The Liberty Prairie Foundation
- The Liberty Prairie Conservancy
- The National Town Builders Association
- The Seaside Institute
- The Serenbe Institute
- The Urban Land Institute

**Related Websites:**
- www.agriculturalurbanism.com
- www.breakingthroughconcrete.com

**Regional Master Plans:**
- Chicago Metropolitan Agency for Planning (CMAP) GO TO 2040: Metropolitan Chicago’s Official Comprehensive Regional Plan (2010)

**Farm Business Development Centers:**
- Intervale Center
- Prairie Crossing Farm Business Development Center

**University Research:**
- Ryerson University, Toronto, Ontario
- Kwantlen Polytechnic University, Surrey, B.C.

**New Books:**

Workshop & Report Organizers

The Building Communities with Farms workshop was organized by the co-developers of Prairie Crossing, Vicky and George Ranney, in collaboration with Linda Wiens, Executive Director of the Prairie Crossing Institute, and Michael Sands, the Environmental Team Leader of Prairie Crossing and Executive Director of the Liberty Prairie Foundation. Keith Kirley of the University of Notre Dame School of Architecture assembled the minutes and coordinated this report.

Organizers & Participants

Robert Baldwin, Jr.
Developer, Bundoran Farm
Charlottesville, Virginia
bbaldwin@qroefarm.com

Robert Davis
Partner, Arcadia Land Company
Co-founder and Developer, Seaside
Seaside, Florida
rdavis@arcadialand.com
rdavis@seasidefl.com

Keith Kirley
M. Arch candidate
University of Notre Dame School of Architecture
South Bend, Indiana
keithkirley@gmail.com

Bradley Leibov
Principal, Terra Firma Development
Chicago, Illinois
brad@terrafirma-co.com

Frank Martin
Developer, Hidden Springs
Boise, Idaho
frank@greenstreetltd.com

Steve Nygren
Founder and Developer, Serenbe
Chattahoochee Hills, Georgia
steve@serenbe.com

Will Raap
Founder & CEO, Gardener’s Supply Company
Founder, Intervale Center
Investor, South Village
South Burlington, Vermont
willr@gardeners.com

Ben Ranney
Principal, Terra Firma Development
Chicago, Illinois
gbenranney@terrafirma-co.com

Vicky Ranney
Co-Developer, Prairie Crossing
Chairman, Liberty Prairie Foundation
Grayslake, Illinois
vranney@prairiecrossing.com

Michael Sands, Ph.D.
Environmental Team Leader, Prairie Crossing
Executive Director, Liberty Prairie Foundation
Grayslake, Illinois
msands@prairiecrossing.com

David Scheuer
Developer, South Village
South Burlington, Vermont
ds@retrovest.com

Matt and Peg Sheaffer
Owners, Sandhill Organics at Prairie Crossing Farm
Grayslake, Illinois
sandhillorganics@prairiecrossing.com

Frank Starkey
Developer, Longleaf
Odessa, Florida
starkey.f@gmail.com

Linda Wiens
Executive Director, Prairie Crossing Institute
Grayslake, Illinois
lwiens@prairiecrossing.com
The farmers market at Serenbe in Georgia

Liberty Prairie Foundation
32400 North Harris Road
Grayslake, Illinois 60030
vranney@prairiecrossing.com
Tel (847) 548-4062 ex.21
msands@prairiecrossing.com
Tel (847) 548-4062 ex.10
www.prairiecrossing.com