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SEASON EXTENSION ACTIVITIES IN KANSAS:

Legal Issues and Local Policy Options




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kchealthykids

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About KC Healthy Kids

KC Healthy Kids rallies the people in our communities to improve access to affordable fresh food and safe places to walk and play. When our neighborhoods support healthy habits, we are less likely to suffer from obesity, which is linked to Type 2 diabetes, heart disease, and poor mental health. To make a lasting impact, we shape policies that improve our food system and physical surroundings, and, ultimately, the places where we live, work, learn, and play.

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Overview of Resource

The climate in Kansas presents challenges to growing and supplying produce during much of the year. However, season extension activities (SEAs) can help those growing local produce overcome challenges and extend the growing season. Season extension activities range from common agricultural practices, such as selecting cold-weather hearty plants, to sophisticated growing techniques that require infrastructure, like hydroponic growing methods within permanent greenhouses.

There are many good reasons to support SEAS throughout urban and rural areas. These benefits extend to farmers and gardeners as well as to their communities. However, local zoning regulations and other local and state laws can stand in the way of SEAs, especially in urban settings. Often times, these laws were developed during a period in which food production in cities was discouraged and do not reflect the current needs of local communities to increase access to healthy food.

An unintended consequence of this shift away from food production in cities was that people became increasingly disconnected from their food and the ability to grow it for themselves and their communities. Fortunately, in recent years many local governments have started to reevaluate how their regulations may be unnecessarily restricting food production in their jurisdictions. Some have also found ways to use their general regulatory and land-use powers to support SEAs and—in turn—health and equity in their communities. This is an extremely positive development because local policy changes can have enormous impacts on food access. Local governments are often able to be more flexible and innovative than larger state and federal governments and are equipped to make decisions that directly reflect the needs of their individual communities.

This resource identifies regulatory and other legal issues that affect SEAs and discusses local policy options to support their use in Kansas. Recognizing that each community will need to evaluate how best to support SEAs based on the unique local and legal context of their community, the information provided in this resource is meant as a general guide. Community members and policymakers should evaluate the policy areas discussed below and determine what is appropriate for their specific local context.¹

Season Extension 101

Season extension activities are methods of protecting crops from weather conditions. They include a wide variety of growing techniques and structures that allow crops to be produced beyond the typical outdoor growing season, such as:

- Growing practices, including transplanting techniques and selective cultivation;
- Use of windbreaks, non-structural coverings, and small protective enclosures; and
- The use of semi-permanent and permanent protective structures.

Why are SEAs used?

Season extension activities can provide a wide range of benefits to both producers and community members. Farmers and gardeners can benefit from higher yields and better quality crops.² Many SEAs also provide additional agricultural benefits, including moisture retention and weed protection.

From an economic standpoint, the use of SEAs allows farmers and gardeners to sell products both earlier and later in the season when prices are higher, resulting in higher profits. This marketing advantage can help develop customer loyalty by bringing in new customers as well as retaining current customers.

In addition to benefits for producers, SEAs also offer many community benefits, such as:

- Increased access to healthy, wholesome food;
- Economic prosperity from new jobs and industries;
- Environmental benefits, including less fossil fuel use for food transportation, water conservation, and less packing waste; and
- Improved esthetics as a result of returning green landscapes to urban neighborhoods.



Types of SEAs

Growing Practices

Season extension activities include growing practices such as the following:

- **Cultivar selection³**

Cultivar selection involves intentionally choosing plants with specific attributes. Options for season extension include, for example, choosing heartier, early-maturing plants for spring planting and heat-tolerant plants for summer planting.

- **Transplanting⁴**

Transplanting is the process of germinating seeds in a warm place, potting them, and then transferring them to the field once the weather becomes warmer. Transplanting adds three to four weeks to the start of the growing season and allows early control of weeds.



- **Hydroponic and aquaponics systems⁵**

Hydroponic and aquaponic systems eliminate the need for planting crops in the ground and allow crops to be grown year-round. Plants are protected indoors from soil-borne pests and diseases and optimal growing conditions can be created.

- **Hydroponic systems** involve growing plants in nutrient solutions without soil to provide support.
- **Aquaponic systems** involve growing plants, usually hydroponically, in water that has been used to cultivate organisms such as fish.

Key Policy Considerations

These growing practices usually do not encounter a lot of local legal restrictions impacting *where* they can take place if they are conducted on land where agricultural activity is allowed. However, if protective structures such as green houses and hoop houses, are used, zoning standards and construction regulations may apply. In addition, if SEAs involve the use of a municipal utility, such as the use of the municipal water, sewer system, or electricity, there may be some restrictions on connecting certain SEA operations to utilities. To the extent a growing

practice may be considered harmful or bothersome, nuisance issues may arise. See discussion in Section 3, below.

Wind-Breaks, Non-Structural Coverings, and Small Protective Enclosures

Some SEAs involve basic coverings and barriers to guard against wind, hail, evaporation and other elements. These can include:

- **Organic and plastic mulches⁶**

Organic mulch includes things such as bark, clippings, straw and hay that are placed over the ground to protect against weeds and excessive moisture evaporation from the soil. Organic mulches can also help keep the soil warm.

Plastic mulch includes sheets of plastic held close to the soil surface by mounded soil or stakes driven into the ground. The sheeting is used to capture solar energy, and to retain heat and soil moisture. Using plastic mulch can extend the growing season by up to one or two weeks.

- **Floating row covers⁷**

Floating row covers are sheets or strips of fabric or greenhouse plastic placed over rows of crops. They are unsupported by wiring or other framing.

- **Cloches and hot caps⁸**

Cloches are generally small dome-shaped transparent coverings that cover a single plant. They can come in a variety of forms including—for example—a clear glass bell, or an old juice or milk container with the bottom cut out.

Hot caps are similar to cloches, but tend to be conical in shape.



Cloches and hot caps should be ventilated to allow hot air to escape on sunny days.

- **Cold frames and hotbeds⁹**

Cold frames generally consist of a rectangular box with a glass or other transparent top built close to or on the ground. While they do not use artificial heat sources, the temperature inside the cold frame can be five to ten degrees warmer than the outside air temperature.

Cold frames tend to be small home-garden structures, and can provide shelter for tender perennials and other delicate seedling plants and for overwintering of some plants.

Hotbeds are essentially heated cold frames and function like miniature greenhouses. Heat sources include manure, light bulbs, hot water, steam and electric cables. Hotbeds are most often used to give an early start to warm-season vegetables and also for some overwintering.

- **Windbreaks¹⁰**

Windbreaks can be an effective way to protect early plants that are more sensitive to high winds and other severe weather conditions. For example, trees, fences, and trellises can reduce wind and keep warmer air near crops. However, placement of windbreaks should be chosen carefully to avoid too much shading and competition for nutrients.

Key Policy Considerations

As with growing practices, the main regulatory and legal considerations for windbreaks, non-structural coverings, and small protective structures include verifying agricultural use is allowed for the land where the activity is planned, ensuring the activity does not create any nuisance issues, and complying with water usage rules and regulations. (See below for more discussion on these issues.)

One practice that can run into some additional issues is the use of fences as windbreaks. As with the use of permanent and semi-permanent protective structures (discussed below), fences may run into height and placement requirements. For example, local laws may require that fences not be constructed in a way that would block a driver's view of traffic.¹¹ Additionally, property owners are usually responsible for locating all property lines before constructing a fence.

Permanent and Semi-Permanent Protective Structures

Finally, some SEAs involve the use of medium to large permanent or semi-permanent protective structures. Hybrid options exist and definitions are not fixed, but examples of these types of structures include:

- **Hoop tunnels**

In general, **hoop tunnels** can be grouped into three categories: low tunnels, high tunnels and caterpillar tunnels. According to the Kansas Rural Center, "tunnels help 37% of surveyed

tunnel farmers grow year round. Another 36% gain four to eight weeks extra production on each end of the season.”¹²

Low tunnels¹³ are used to cover plants for the purpose of protecting them from the cold. They can also be used as an insect barrier.

Unlike row covers, which are simply placed lightly over the plants, low tunnels have a support structure, which is usually made of electrical conduit, wire or PVC pipe. The plastic covering is not attached to the structure, but is weighted down to the ground or buried. Low tunnels can be removed at the end of the season and are portable. They are typically less than three feet high.



High Tunnels

High tunnels¹⁴, also known as hoop houses, are simple greenhouse-like structures that rely on passive solar heat and ventilation. Watering is often facilitated with drip tape or sprinklers, or done by hand. They are generally tall enough to walk inside.

In addition to size, high tunnels differ from low tunnels in that they are generally constructed with steel hoop supports or PVC, which is then covered with one or two layers of

greenhouse grade plastic. Unlike low tunnels, the plastic is also attached to the frame—generally with wire or wood lath.

Compared to low tunnels, high tunnels require a higher monetary investment and are less portable, but are more durable.

Caterpillar Tunnels¹⁵ were cross between high tunnels and low tunnels. They are three-season structures that are easy to construct from readily-available hardware store materials. Like high tunnels, they are high enough to walk through (usually about six to eight feet high and 10 to 20 feet wide), but like low tunnels, the plastic is not attached to the structure. Instead, ropes and weights keep the structure tethered to the ground.

- **Greenhouses**¹⁶

Greenhouses are usually permanent structures that are similar in size to hoop houses. Design of these structures can vary widely from a simple-lean to structure to a standalone geodesic



Greenhouses

dome. They all have frames, which can be covered with variety of materials including plastic sheeting, fiberglass or glass. They also typically have some type of floor, which can range from a solid foundation, such as concrete, to a crushed stone or simple gravel floor.

Because they typically include venting, heating and watering systems, greenhouses usually provide more climate control than other season extension structures. In turn, full electrical service is usually required for their operation. However, there is overlap in terminology between high tunnels and greenhouses—especially for structures that follow a typical high tunnel construction design but also rely on electricity .

- **Walipinis¹⁷**

Walipinis are another type of protective structure. The term “walipini” comes from the Aymara Indian language and means “place of warmth.” Walipinis are essentially large underground hotbeds that do not require external heat sources. Instead, they leverage the consistent ambient geothermal heat from the surrounding ground to keep them warm. They are typically built about six feet underground and earth is used for the walls, so costs of construction tend to be lower than for above-ground greenhouses. The roof is made of plastic sheeting, which also allows for



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sunlight to enter and provides another source of heat. The sheeting across the top of the dug-out area is held up by poles. Stone and gravel dug up during the excavation of the main area of the structure can be recycled for drainage systems .

Key Policy Considerations

Permanent and semi-permanent protective structures, like those discussed above, typically face the most zoning challenges and will often require compliance with building and other construction codes. Activities occurring within them can also encounter the same nuisance and utility use issues as SEAs occurring in the open air. These issues are addressed below.

Laws and Policies Affecting Season Extension Activities

Zoning and Land-Use Laws

Zoning and land-use regulations control how property can be used in different areas of a municipality. With respect to SEAs, these controls can include growing techniques, built structures supporting crops, and other types of agricultural activities. Zoning and land-use regulations can help to establish and protect SEAs, but also have the potential to unintentionally discourage or prohibit them.

SEAs that require permanent or temporary structures generally raise more zoning and land-use regulatory concerns than other activities. However, other SEAs may be prohibited by local zoning or land-use regulations if they do not meet performance standards or if they are otherwise considered undesirable. This is discussed in further detail below in the Nuisance Claims and Anti-Nuisance Laws section.

GET GROWING TIP

Depending on where your garden or farm is located in Kansas, you will want to look to your local city or county to determine what zoning regulations apply to the property. This is an important step before making any changes to the land. If you build something or start an activity that is not allowed by the zoning regulations that apply, you may be forced to remove your improvements and may even be fined.



Local Agricultural Zoning and Land-Use Regulations Outside of Incorporated Cities

In Kansas, there are usually significant differences between zoning and land-use restrictions for land and buildings used for agricultural purposes inside incorporated cities and those outside of incorporated areas. Outside of incorporated areas, Kansas law generally prohibits zoning regulations for agricultural uses except in flood plains.¹⁸ This is sometimes referred to as the "agricultural use exception".

This means that greenhouses and other agricultural structures and SEAs on land in unincorporated areas will normally be free from zoning regulations. Some examples recognized by Kansas courts include growing crops in a green house, raising livestock, raising other animals for non-gambling purposes, growing turf grass, and even quarrying to construct a pond for agricultural purposes.¹⁹ However, other zoning and land-use restrictions may apply to nonagricultural activities and structures in unincorporated areas. To avoid any misunderstandings, gardeners and farmers who are growing in unincorporated areas should check with their county to verify that the agricultural use exception applies to their SEAs.

Zoning Districts and Allowed Uses

In incorporated areas, zoning regulations divide land into districts such as residential, commercial, industrial, and agricultural areas. There are often additional subcategories for each district classification. Local municipalities typically have zoning maps available for the public to review, often at city or county planning offices, or online.

In each zoning district certain uses of the land will be allowed and others will be prohibited. The particular land uses allowed in each zoning district are usually identified in the local zoning code, which may also be called a land-use code.

Some land uses will be allowed without a permit and others will require a permit, usually called either a special use or conditional use permit depending on the community. Permit applications usually allow land uses and structures on a case-by-case basis and typically require site plan approval, public meetings, and permit fees.

Land uses include both development and maintenance of structures and activities on the land. For example, permitted uses in a specific zoning district may include single family homes with accessory buildings such as sheds, garages, and greenhouses, as well as activities such as gardening, beekeeping, and raising chickens.

Among the types of allowed structures in a zoning district, some are allowed as principal structures and others as accessory structures. Accessory structures are usually structures that complement the primary structure. For example, in a single-family residential zone, a single-family home will typically be permitted as a primary structure, but a shed or greenhouse will likely be an accessory structure. To the extent they are allowed in residential zoning areas, SEA structures will typically be regulated as accessory structures.

GET GROWING TIP

In some communities the zoning provisions do not specifically discuss or identify some or all SEAs in their list of permitted uses in various zoning districts. If that is the case in the community where your garden or farm is located, you may be able to demonstrate the SEA you intend to use is similar to another type of use that is contemplated in your local jurisdiction. However, keep in mind that in some jurisdictions, if an activity or structure is not specifically allowed, it is prohibited.



KANSAS EXAMPLE - CITY OF SALINA

The City of Salina, Kansas, has a zoning ordinance that allows accessory structures, such as greenhouses, in all zoning districts so long as they do not exceed 360 square feet and are not taller than the primary structure or 16 feet in height, whichever is less. Accessory structures must also comply with additional regulations and limitations that are specific to the zoning district in which they are located.²¹

At the same time, some activities may only be allowed as accessory uses to another allowed primary structure or activity on the property. For example, in some zoning districts on-site agricultural sales may only be allowed as an accessory use to the primary permitted use of crop agriculture.²⁰

Design, Density and Placement Standards

Even where an SEA is allowed either with or without a permit as a primary or—more likely—an accessory use, it must also meet the design, density and placement standards for the zoning district. These standards can include things such as:

- Setback restrictions (from front, rear and side yard boundaries);
- Minimum lot size and lot coverage restrictions;
- Placement restrictions (front, rear and side yard);
- Height restrictions;
- Limitations on the number of buildings permitted on a lot;
- Parking requirements;
- Design standards; and
- Drainage requirements.

Setback restrictions will ordinarily require a structure to be a minimum distance away from other structures, property lines, side streets, and alleys.²² In addition, area coverage restrictions typically limit the portion of the lot that a structure can cover, while height restrictions limit how tall structures can be. The number of season extension structures allowed on a property may also be limited.²³ For example, a zoning code may only allow one accessory structure per lot in a residential zoning district.

VariANCES

If an SEA structure does not meet zoning requirements, a zoning variance may be an option. In Kansas, variances may only be used where the size or number of structures exceeds the dimensions, number of buildings, or other similar limitations on what is normally allowed.²⁴ Variances are not allowed to conduct a land use that is not permitted in the zoning district.²⁵ To demonstrate a need for a variance the applicant will need to show:

- 1 That the variance request arises from conditions, not created by the owner's actions, that are unique to the parcel of land and are not commonly found on land parcels used in similar ways in the same zoning district;

- 2 The proposed development will not adversely affect the rights of adjacent property owners or residents;
- 3 The strict enforcement of zoning regulations would result in unnecessary hardships for the property owner;
- 4 The granting of a variance will not adversely affect the public health, safety, morals, order, convenience, prosperity or general welfare; and
- 5 Granting a variance would not be contrary to the general spirit and intent of the zoning regulations.²⁶

GET GROWING TIP

The legal elements required to demonstrate the need for a variance have a fair amount of subjectivity built into them. Therefore, how they are interpreted can vary greatly depending on the current political climate and the perspectives of the specific government officials that are interpreting them. Gardeners and farmers who need a variance to conduct their SEA should check with their local jurisdiction to understand how the legal elements required to obtain a variance have been interpreted for other projects in their area.



Depending on the type of SEA desired, gardeners and farmers seeking variances may encounter significant community pushback. Although the variance criteria do not specifically contemplate community opinion as a factor, subjective concerns can certainly affect how some of the criteria are decided.

Construction Regulations and Other Building Rules

Construction and Safety Codes

Building permits may also be required for season extension structures to ensure construction and other standards are met.

Construction codes—such as electrical, mechanical, plumbing and building codes—often overlap with zoning codes. Along with health, sanitation, and fire codes, they also lay out minimum standards to ensure health and safety.²⁷ A few examples, of construction and safety code issues that may affect SEA structures in Kansas include:

- Plumbing code requirements that buildings with plumbing fixtures and/or drainage piping be connected to a public sewer or an approved private sewage disposal system;²⁸
- Building code requirements that address climactic concerns such as roof snow loads, flooding and wind speeds;²⁹
- Fire code requirements mandating minimum distances between membrane structures and other structures and buildings,³⁰ and
- Building code requirements that dictate appropriate materials, and specify area and height limitations.³¹

GET GROWING TIP

To be sure any SEA structure you plan to build satisfies building and other construction permit requirements in your jurisdiction, be sure to work with your local planning office before beginning construction.



Building permit applications and any required project plans are typically reviewed by municipal staff for compliance with locally adopted construction codes, including building and fire codes.³² Local governments usually rely on model international codes, such as the International Building Code, Uniform Building Code, National Electrical Code, International Fire Code, and International Plumbing Code, etc. A chart outlining the various codes that apply in 61 different Kansas cities and counties is online on the Kansas Corporation Commission website.³³

Other Local Building Standards

In addition to zoning laws and construction code standards, there are other potential building rules and regulations that can affect SEAs including those set by historic preservation councils, architectural review boards,³⁴ and neighborhood groups that set covenants and restrictions. SEA farmers and gardeners that operate in areas where those types of bodies exist will need to be aware any esthetic and other standards that they may require.

Nuisance Claims and Anti-Nuisance Laws

General Nuisance Claims

SEAs can run into legal problems even when they fit within or are exempt from construction code requirements, zoning laws, and other building rules and regulations. For example, activities that diminish the rights of others to use and enjoy their property or that cause harm to the general public health or safety of a community are considered nuisances. Nuisances can be addressed through common law court claims even if there are no specific laws prohibiting them.³⁵

Some SEAs that might be considered nuisances include:

- Maintenance of compost piles that attract rodents;
- Use of pesticides or herbicides that emit strong fumes or odors;
- Use of hydroponic or aquaponic systems that cause pools of stagnant water and attract insects or create odors;
- Installation of large SEA structures or windbreaks that block sunlight from neighboring properties; and
- Use of loud gardening equipment.



KANSAS EXAMPLE – CITY OF HUGOTON

In Hugoton, the zoning regulations include an anti-nuisance law, which could affect SEA activities:

No equipment or process shall be used in [home occupation in single family residential districts] which creates noise, vibration, glare, fumes, odor, or electrical interference detectable to the normal senses of a person off the lot if the occupation is conducted in a residence, or outside the individual dwelling unit if conducted in other than a residence.³⁶

Anti-Nuisance Laws

Anti-nuisance laws are sometimes used to specifically address activities that are hazardous or even just considered annoying or unappealing. Some local anti-nuisance laws are included in local zoning codes and some are found in other sections of local ordinances.

Landscaping ordinances, which may specify grass heights and other lawn manicure standards, can be an area of particular concern for SEAs. Fortunately, agricultural activities are often exempt from landscaping requirements that otherwise apply in Kansas cities.³⁷

Nuisance Concerns on Farmland

Nuisance concerns will generally come up in residential areas more often than in agricultural or industrial areas due to the closer proximity neighbors are to each other. Also, in Kansas, most agricultural activity on farmland is presumed to be reasonable and does not constitute a nuisance unless the activity has a “substantial effect on the public health and safety.”³⁸ Therefore, if SEAs are located on farmland, it is likely the use will be considered reasonable.³⁹

Water Usage & Water-Related Regulations

State and local laws affect water usage rights. At a state level, the Kansas State Water Appropriation Act protects people’s right to use water as well as the state’s supply of groundwater and surface water for the future.⁴⁰ Among other things, the Act provides that it is illegal for individuals in Kansas to use water without holding a water right or applying for a permit.⁴¹ An exception is carved out for water used solely for domestic purposes, which includes watering up to two acres of lawn and gardens.⁴²

Additionally, the Kansas Department of Health has set guidance standards for how graywater (non-toxic/hazardous single-family residential wastewater) should be used in agricultural and other activities.⁴³ Local governments may also have additional water regulations that affect SEAs, such as water emergency restrictions, graywater usage rules and water service fees.



KANSAS EXAMPLE – CITY OF HUTCHINSON

The City of Hutchinson, Kansas charges less for water service inside city limits than outside of them.⁴⁴ This rate difference may encourage some SEA farmers and gardeners to consider conducting their activities inside city limits.

Other Local Regulations, Policies and Community Programs

The legal issues discussed above are just some of those you may encounter in your community, because every community has its own unique legal landscape. In addition, other regulations,

policies, and community programs that may enhance or inhibit SEAs may include, but are not limited to, local government resolutions, policies regarding pesticide and herbicide use, programs to promote compost accessibility, and establishment of community gardening equipment lending libraries.

Proactive Policy Options

As this resource guide has highlighted, there are many regulatory and other policy issues that can affect SEAs. To the extent you may find that the policy landscape in your community unduly hinders or simply does not encourage SEAs, there are things you can do. Specifically, individuals, groups, and organizations can support better laws and policies to support season extension efforts in their communities by raising awareness and providing education. In addition, they can work with policymakers to take the following steps.

Review Comprehensive Plans

Comprehensive plans (also called general, master, or community plans) allow local governments to establish long-term guidelines for land use and development. Among other things, they are used to guide re-zoning and to evaluate variance requests. Including season extension goals and strategies in a local government's comprehensive plan can help to ensure that future community development and planning efforts accommodate them.⁴⁵ Best practices to encourage your policymakers to undertake include:

- Incorporating language that recognizes, encourages and supports SEAs.
- Encouraging the use of SEAs as a long-term use of land rather than an interim use.
- Creating policies that generally promote agriculture throughout the community (farmers' markets, community gardens, and other small-scale local food production efforts).

Conduct a Municipal Code Audit

Municipal codes and ordinances govern many types of activities in a community. When reviewing these local laws:

- Consider how the following provision types may unnecessarily impede SEAs, especially on small urban lots:
 - Setback restrictions;

- Lot coverage restrictions;
- Placement restrictions (side, front, rear yard);
- Limitations on the number of accessory structures; and
- Height restrictions
- Amend any zoning provisions that ban fruit trees so as not to impede orchards.⁴⁶
- Make sure any grass-height regulations, weed regulations and other requirements regarding the neatness or condition of landscaping exclude crops.
- Ensure local zoning codes allow semi-permanent and permanent gardening structures, including raised beds, tool sheds, fences, high tunnels, green houses and other structures associated with season extension. Consider the impact permanent structures may have on adjacent residences, businesses and park use, as well as compatibility with existing architecture.
- Evaluate water regulations to ensure SEAs are regulated wisely and fairly.

In general, ideal development and land regulation tools that create requirements for season extension should eliminate unnecessary barriers while ensuring safe practices and adequate protection for gardeners, farmers, and neighboring landowners. Clear definitions of season extension structures and growing techniques are a good way to guide decisions about what types of SEAs are appropriate within different areas of the community. Creating clear rules regarding the use of property for agricultural purposes also provides a framework for the community to follow to ensure successful use of SEAs.⁴⁷ As with all good policymaking, input from stakeholders is critical to ensure laws and policies have the intended impact and that unintended consequences are mitigated.



KANSAS EXAMPLE - CITY OF LAWRENCE

Lawrence, Kansas amended its land development code to permit urban agriculture, easing some restrictions on the use of season extension structures. In making these changes, the City of Lawrence Planning Department collaborated with the Douglas County Food Policy Council (DCFPC), an advisory body to the City of Lawrence. In this process, the DCFPC created a way for the public to participate in discussions regarding current policy barriers and opportunities to support local, healthy food production.

Establish Resources and Funding Streams

Policymakers and community members can also demonstrate the value of SEAs as part of the food infrastructure and culture of their communities by establishing funding streams to support and encourage SEAs. Examples of funding opportunities include grant programs for starting and maintaining SEAs, funding for a community gardening equipment lending library, and appropriations for community education programs to support new SEA gardeners and farmers.

TIPS FOR FOSTERING POLICY CHANGE

As a community member, you have a voice in how local policy decisions that affect SEAs are made. As you move forward with policy change in your community, here are few pointers to facilitate the process:

- 1 **Build coalitions.** Not only is broad support powerful in demonstrating a need for policy change, drawing on experts with a range of vantage points can be helpful in dispelling myths and concerns around SEAs.
- 2 **Provide examples from other peer communities.** In addition to other communities in Kansas, look for concrete examples in other peer communities from around the country. If your local policymakers can see that policies similar to what you are proposing have been successfully enacted elsewhere, they are more likely to feel comfortable with making changes
- 3 **Ask for preliminary meetings with planning staff.** Discuss your ideas and the potential challenges to implementation that staff is able to identify before approaching policy makers.
- 4 **Encourage policymakers to visit sites where SEAs are used.** Invite them to meet the farmers and other community members who benefit from increased ability to grow and access produce.

Endnotes

- 1 *Growing Under Cover: A Guide to Polyunnel Options for Kansas Growers*, KAN. RURAL CTR. (2014), <http://kansasruralcenter.org/wp-content/uploads/2014/12/Growing-Under-Cover-0-FULL.pdf>; Joshua Yellin, *The Intersection Between Urban Agriculture and Form-Based Zoning: A Return to Traditional Planning Techniques*, 19 HASTINGS W.-N.W. J. ENVTL. L. & POL'Y 83, 89 (2013); Matthew J. Parlow, *Healthy Zoning*, 44 FORDHAM URB. L.J. 33, 34-36 (2017); Kathryn A. Peters, *Current and Emerging Issues in the New Urban Agriculture: A Case Study*, 7 J. FOOD L. & POL'Y 297, 314 (2011).
- 2 *Season Extension Techniques for Market Gardeners*, NAT'L CTR. FOR APPROPRIATE TECH. (2005), <https://attra.ncat.org/attra-pub/viewhtml.php?id=366>; *A Guide to Season Extension*, THE LAND CONNECTION 6, http://thelandconnection.org/sites/default/files/TLCSeasonExtensionGuide-forweb_0.pdf (last visited May 18, 2017); Kate A. Voigt, *Pigs in the Backyard or the Barnyard: Removing Zoning Impediments to Urban Agriculture*, 38 B.C. ENVTL. AFF. L. REV. 537, 544 (2011); John E. Mogk et al., *Promoting Urban Agriculture As an Alternative Land Use for Vacant Properties in the City of Detroit: Benefits, Problems and Proposals for A Regulatory Framework for Successful Land Use Integration*, 56 WAYNE L. REV. 1521, 1530 (2010).
- 3 *Season Extension Tools & Techniques*, UNIV. OF KY. COOP. EXTENSION SERV. (2011), <https://www.uky.edu/Ag/CCD/introsheets/extension.pdf>.
- 4 *Season Extension Techniques for Market Gardeners*, NAT'L CTR. FOR APPROPRIATE TECH. (2005), <https://attra.ncat.org/attra-pub/viewhtml.php?id=366>.
- 5 *Hydroponics*, MERRIAM-WEBSTER, <https://www.merriam-webster.com/dictionary/hydroponics> (last visited May 1, 2017); *Aquaponics*, MERRIAM-WEBSTER, <https://www.merriam-webster.com/dictionary/aquaponics> (last visited May 1, 2017).
- 6 *Mulches*, UNIV. OF MO. EXTENSION, <http://extension.missouri.edu/p/G6960> (last visited July 18, 2017); *A Guide to Season Extension*, THE LAND CONNECTION 12, http://thelandconnection.org/sites/default/files/TLCSeasonExtensionGuide-forweb_0.pdf (last visited May 5, 2017).
- 7 *High Tunnels and Other Season Extension Techniques*, SUSTAINABLE AGRIC. RESEARCH & EDUC. (2015), <http://www.sare.org/Learning-Center/Topic-Rooms/High-Tunnels-and-Other-Season-Extension-Techniques>.
- 8 *Extending the Garden Season Wis.* HORTICULTURE (2009), <http://hort.uwex.edu/articles/extending-garden-season; Extending the Season!>, CORNELL UNIV. COOP. EXTENSION 3, <https://gardening.cals.cornell.edu/files/2016/07/newlogoExtending-the-Season-1zc6nw01-ud7xmv.pdf> (last visited Sept. 5, 2017).
- 9 *Building and Using Hotbeds and Coldframes*, UNIV. OF MO. EXTENSION, <http://extension.missouri.edu/p/g6965> (last visited July 18, 2017); *Coldframes and Hotbeds*, KAN. HEALTHY YARDS, <http://kansashealthyyards.org/component/allvideoshare/video/coldframes-and-hotbeds?Itemid=337> (last visited July 18, 2017).
- 10 *A Guide to Season Extension*, THE LAND CONNECTION 10, http://thelandconnection.org/sites/default/files/TLCSeasonExtensionGuide-forweb_0.pdf (last visited May 8, 2017); *Season Extension Techniques for Market Gardeners*, NAT'L CTR. FOR APPROPRIATE TECH. (2005), <https://attra.ncat.org/attra-pub/viewhtml.php?id=366>.
- 11 See HUTCHINSON, KAN., CODE § 27-907(A)(6) (2016), available at <http://www.hutchgov.com/DocumentCenter/Home/View/131>.
- 12 *Growing Under Cover: A Guide to Polyunnel Options for Kansas Growers*, KAN. RURAL CTR. 10-16 (2014), <http://kansasruralcenter.org/wp-content/uploads/2014/12/Growing-Under-Cover-0-FULL.pdf>.

- 13 *High Tunnels and Other Season Extension Techniques*, SUSTAINABLE AGRIC. RESEARCH & EDUC. (2015), <http://www.sare.org/Learning-Center/Topic-Rooms/High-Tunnels-and-Other-Season-Extension-Techniques>; *February 15-16, 2014 Show Notes*, OKLA. GARDENING (2014), <http://www.oklahomagardening.okstate.edu/show-notes/2014/021514-notes>; *Growing Under Cover: A Guide to Polytunnel Options for Kansas Growers*, KAN. RURAL CTR. 17-18 (2014), <http://kansasruralcenter.org/wp-content/uploads/2014/12/Growing-Under-Cover-0-FULL.pdf>.
- 14 *High Tunnels and Other Season Extension Techniques*, SUSTAINABLE AGRIC. RESEARCH & EDUC. (2015), <http://www.sare.org/Learning-Center/Topic-Rooms/High-Tunnels-and-Other-Season-Extension-Techniques>; *Growing Under Cover: A Guide to Polytunnel Options for Kansas Growers*, KAN. RURAL CTR. 3-16 (2014), <http://kansasruralcenter.org/wp-content/uploads/2014/12/Growing-Under-Cover-0-FULL.pdf>.
- 15 *Growing Under Cover: A Guide to Polytunnel Options for Kansas Growers*, KAN. RURAL CTR. 3 (2014), <http://kansasruralcenter.org/wp-content/uploads/2014/12/Growing-Under-Cover-0-FULL.pdf>; *High Tunnels and Other Season Extension Techniques*, SUSTAINABLE AGRIC. RESEARCH & EDUC. (2015), <http://www.sare.org/Learning-Center/Topic-Rooms/High-Tunnels-and-Other-Season-Extension-Techniques>.
- 16 *High Tunnels and Other Season Extension Techniques*, SUSTAINABLE AGRIC. RESEARCH & EDUC. (2015), <http://www.sare.org/Learning-Center/Topic-Rooms/High-Tunnels-and-Other-Season-Extension-Techniques>; *Municipal Zoning for Local Foods in Iowa*, IOWA STATE UNIV. EXTENSION AND OUTREACH 41, <https://blogs.extension.iastate.edu/planningBLUZ/files/2012/01/ZONING-FOR-LOCAL-FOODS-GUIDEBOOK.pdf> (last visited July 18, 2017); *Hobby Greenhouses*, UNIV. OF GA. COOP. EXTENSION (2015) <http://extension.uga.edu/publications/detail.cfm?number=B910>; *Cold-Climate Greenhouse Resource*, UNIV. OF MINN. CTR. FOR URBAN AND REG'L AFFAIRS 24 (2013), <https://www.extension.umn.edu/rsdp/community-and-local-food/production-resources/docs/cold-climate-greenhouse-resource.pdf> at 24.
- 17 *Digging a Green House: Walipini*, FOODTANK 1, <https://foodtank.com/news/2014/04/digging-a-green-house-walipini> (last visited July 18, 2017); *Walipini Construction (The Underground Greenhouse)*, BENSON AGRIC. AND FOOD INST. 1-3 (2002), <http://opensourceecology.org/w/images/1/1c/Walipini.pdf>.
- 18 There is some authority that notes that counties could exempt themselves from this law by charter resolution. See Michael R. Heim, *Kansas Local Government Law*, LEAGUE OF KAN. MUN. § 4.56 (5TH ED. 2014); *But see* 97 Op. Att'y Gen. 72 (1997), available at <http://ksag.washburnlaw.edu/opinions/1997/1997-072.htm>; *But see* 2016 Op. Att'y Gen. 10 (2016), available at <http://ksag.washburnlaw.edu/opinions/2016/2016-010.pdf>.
- 19 *Land Use Controls and Zoning*, KAN. BAR ASS'N § 1.3.2(D)(2), <http://www.barberemerson.com/pdfs/land-use-controls-and-zoning.pdf> (last visited July 18, 2017).
- 20 See LAWRENCE, KAN. CODE §20-402 (2017), available at https://lawrenceks.org/attorney/city_code.
- 21 SALINA, KAN., CODE § 42-58 (2017), available at https://www.municode.com/library/ks/salina/codes/code_of_ordinances?nodel=Chapter%2042%20-%20Zoning%20Regulations.
- 22 See *Municipal Zoning for Local Foods in Iowa*, IOWA STATE UNIV. EXTENSION AND OUTREACH 46-56, <https://blogs.extension.iastate.edu/planningBLUZ/files/2012/01/ZONING-FOR-LOCAL-FOODS-GUIDEBOOK.pdf> (last visited July 18, 2017).
- 23 See *Municipal Zoning for Local Foods in Iowa*, IOWA STATE UNIV. EXTENSION AND OUTREACH 46-56, <https://blogs.extension.iastate.edu/planningBLUZ/files/2012/01/ZONING-FOR-LOCAL-FOODS-GUIDEBOOK.pdf> (last visited July 18, 2017).
- 24 *Land Use Controls and Zoning*, KAN. BAR ASS'N § 1.7.2(B)(1), <http://www.barberemerson.com/pdfs/land-use-controls-and-zoning.pdf> (last visited July 18, 2017).
- 25 KAN. STAT. § 12-759(E) (2016).
- 26 KAN. STAT. § 12-759(E) (2016).

- 27 See *Municipal Zoning for Local Foods in Iowa*, IOWA STATE UNIV. EXTENSION AND OUTREACH 42-45, <https://blogs.extension.iastate.edu/planningBLUZ/files/2012/01/ZONING-FOR-LOCAL-FOODS-GUIDEBOOK.pdf> (last visited July 18, 2017).
- 28 See, e.g., INT'L PLUMBING CODE §701.3 (2015), available at <https://www.iccsafe.org/codes-tech-support/topics/plumbing-mechanical-and-fuel-gas/international-plumbing-code-ipc-home-page> (adopted by LAWRENCE, KAN., CODE § 5-501 (2015), available at https://lawrenceks.org/attorney/city_code).
- 29 See, e.g., INT'L BLDG. CODE § 1605.3 (2006), available at <https://codes.iccsafe.org/public/document/details/toc/732> (specifying maximum load combinations for allowable stress designs that contemplate weather issues such as snow, rain and wind); See also INT'L BLDG. CODE §§ 3102.1, 3102.7 (2006), available at <https://codes.iccsafe.org/public/document/details/toc/732> (specifically noting the load standards in chapter 16 of the 2006 IBC apply to membrane-covered greenhouses and similar structures); See also TOPEKA, KAN. CODE §14.20.010 (2017), available at <http://www.codepublishing.com/KS/Topeka/?Topeka10/Topeka1015.html&?f> (adopting the 2006 International Building Code, with amendments).
- 30 See SALINA, KAN. CODE. § 14-41 (2017) available at http://www.salina-ks.gov/filestorage/18160/18386/25263/Code_Book.pdf (adopting the 2006 International Fire Code); See also INT'L FIRE CODE § 2403.8.2 (2006) (requiring minimum distances between membrane structures and other structures and buildings, and providing exceptions where certain criteria are met).
- 31 See TOPEKA, KAN. CODE §14.20.010 (2017), available at <http://www.codepublishing.com/KS/Topeka/?Topeka10/Topeka1015.html&?f>, (adopting the 2006 International Building Code, with amendments); See also INT'L BLDG. CODE, APPENDIX C (2006), available at <https://codes.iccsafe.org/public/document/details/toc/732> (specifying allowable areas and heights for horticultural structures, including greenhouses).
- 32 See, e.g., *Building Codes and Permitting Process*, LAWRENCE, KAN., https://lawrenceks.org/pds/building_permits (last visited July 18, 2017); *Building Codes*, EUDORA, KAN., <http://www.cityofeudoraks.gov/157/Building-Codes> (last visited July 18, 2017).
- 33 *Summary of Kansas Building Codes in 61 Jurisdictions*, KAN. COOP. COMM'N (2013), http://www.kcc.state.ks.us/energy/codes/ee_building_codes_summary_2013.pdf.
- 34 Some communities have minimum esthetic standards for construction projects that are reviewed by a board or committee. See, e.g., *Architectural Review Board*, MISSION HILLS, KAN., <http://www.missionhillsks.gov/30/Architectural-Review-Board> (last visited July 18, 2017).
- 35 See 58 Am. Jur. 2d Nuisances § 24 (2017); Restatement (Second) of Torts § 821B (1979).
- 36 See Hugoton, Kan., Code § 16-211(14)(d) (2011), available at <http://cityofhugoton.com/Zoning%20and%20Planning.htm>.
- 37 See, e.g., LAWRENCE, KAN., CODE § 21-1001(C)(3) (2015), available at https://lawrenceks.org/attorney/city_code; HUTCHINSON, KAN., CODE § 27-908(C)(2)(B) (2016), available at <http://www.hutchgov.com/DocumentCenter/Home/View/131>.
- 38 KAN. STAT. § 2-3202(A) (2016); *But see* Finlay v. Finlay, 856 P.2d 183 (Kan. Ct. App. 1993), *review denied* ("Right to farm" statute, protecting farmland and agricultural activities from being crowded out by suburban or industrial expansion, does not prohibit nuisance actions; it does, however, protect against nuisance actions where operator has been conducting agricultural activities on farmland, operation conforms with all federal, state and local laws, and operation has been established prior to inception of conflicting nonagricultural activities).
- 39 This may be the case even with respect to anti-nuisance ordinances as well as common law nuisance claims. Jacqueline P. Hand, *Right-to-Farm Laws: Breaking New Ground in the Preservation of Farmland*, 45 U. PITT. L. REV. 289, 323 (1984) ("Where no specific provision addresses the statute's relationship to local ordinances it is a reasonable conclusion, although by no means a certain one, that the state has fully occupied the field of public nuisance with respect to agricultural operations, thereby preempting local anti-nuisance statutes.")

- 40 *Water Law Basics*, KAN. DEP'T OF AGRIC., <http://agriculture.ks.gov/divisions-programs/dwr/water-appropriation/water-law-basics> (last visited July 18, 2017).
- 41 KAN. STAT. § 82A-705A (2016); See also *Water Law Basics*, KAN. DEP'T OF AGRIC., <http://agriculture.ks.gov/divisions-programs/dwr/water-appropriation/water-law-basics> (last visited July 18, 2017).
- 42 KAN. STAT. § 82A-705A (2016); See also *Water Law Basics*, KAN. DEP'T OF AGRIC., <http://agriculture.ks.gov/divisions-programs/dwr/water-appropriation/water-law-basics> (last visited July 18, 2017).
- 43 *Greywater System Specification*, KAN. DEP'T OF HEALTH AND ENV'T (2014), http://www.kdheks.gov/nps/lepp/download/Graywater_System_Specification_FINAL.pdf.
- 44 *2017 Utility Rates*, HUTCHINSON, KAN., <http://www.hutchgov.com/713/Utility-Rates> (last visited May 18, 2017).
- 45 *Seeding the City*, CHANGLAB SOLUTIONS 17-18 (2011), http://www.changelabsolutions.org/sites/default/files/Urban_Ag_SeedingTheCity_FINAL_%28CLS_20120530%29_20111021_0.pdf.
- 46 John E. Mogk et. al., *Promoting Urban Agriculture As an Alternative Land Use for Vacant Properties in the City of Detroit: Benefits, Problems and Proposals for A Regulatory Framework for Successful Land Use Integration*, 56 WAYNE L. REV. 1521, 1547 (2010).
- 47 *Seeding the City*, CHANGLAB SOLUTIONS 20 (2011), http://www.changelabsolutions.org/sites/default/files/Urban_Ag_SeedingTheCity_FINAL_%28CLS_20120530%29_20111021_0.pdf.

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