

# ZONING PRACTICE

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# Preventing the Extinction of Small Farms



In this Issue: Benefits of Small Farms | Keys to Small Farm Viability |
A Supportive Zoning Framework | Complementary Procedures | Conclusions

# Preventing the Extinction of **Small Farms**

# By Sabrina Torres

Small farms are essential for environmental sustainability, economic vitality, and social cohesion. They use agricultural practices that promote healthy soils and biodiversity, create and support ancillary local businesses, and strengthen community connections to food. However, small farms face significant challenges that threaten their survival.

The rising cost of land, climate change impacts, and development on and around prime farmland represent just a few of the many challenges farmers face. While there are opportunities to counteract the loss of farms and agricultural infrastructure through zoning and other local policy initiatives, these tools can also restrict farmers' ability to diversify traditional farming operations and benefit from economic opportunities in local markets.

This issue of *Zoning Practice* explores zoning techniques that can help prevent the extinction of small farms. By examining successful case studies and innovative policies, it highlights how strategic zoning

can foster communities where small farms in rural and peri-urban contexts thrive and contribute to local food security and agricultural heritage.

#### **Benefits of Small Farms**

The benefits of small farms for local communities and society at large are multifaceted. When compared to other competing land uses, such as low-density residential development and large industrial farms, small farms offer unique advantages that can be supported or threatened by zoning decisions.

Small farms are often situated close to the communities they serve, providing fresh, locally grown produce that reduces dependence on distant food sources. In contrast, large industrial farms, while efficient in production, often contribute less to the local economy. Profits from these operations frequently benefit corporate entities located far from the communities where the farms operate (Held 2024).

A small farmstead in Lancaster County, Pennsylvania (Credit: Greg Kelton, iStock Editorial, Getty Images Plus)



Small farms are more likely to employ methods that promote soil health, conserve water, and enhance biodiversity than larger-scale operations (Hayes 2022). Conversely, low-density residential development often leads to habitat loss, increased pollution, and greater demand for resources, such as water and energy (Clark, Shaul, and Lower 2021). Large industrial farms, particularly those that rely on intensive monoculture, can also have significant environmental impacts, including soil degradation, water contamination, and reduced biodiversity.

Culturally, small farms are deeply embedded in the identity and heritage of many communities.

> Culturally, small farms are deeply embedded in the identity and heritage of many communities. They often serve as living links to the past, preserving practical farming methods and rural landscapes. In contrast, the spread of low-density residential development can erode these cultural connections, replacing rural landscapes with suburban subdivisions and diminishing the sense of place that small farms provide. Additionally, large farms don't typically offer the same level of community engagement or cultural continuity, as they are often focused on maximizing production rather than preserving heritage.

### **Keys to Small Farm Viability**

The total number of farms in the U.S. peaked at 6.8 million in 1935 and, by 2023, had fallen to 1.9 million (USDA ERS 2024). Meanwhile, the average farm size nearly tripled from 155 acres to 464 acres. Now, small farms often struggle to compete financially with larger operations that benefit from economies of scale, and this is evident when looking at the value of farm production output.

Gross cash farm income (GCFI) is the total money a farm earns from selling crops and livestock, along with any additional income from farm-related activities and government payments. In 2022, small family farms, earning less than \$350,000 in GCFI, constituted 88 percent of farms but only 19 percent of total agricultural production value (USDA ERS 2024). In contrast, large-scale farms, with GCFI of \$1 million or more, comprised about three percent of farms yet accounted for nearly 52 percent of total agricultural production value. Furthermore, most small farmer households rely on off-farm sources for the majority of their income.

This means it's no longer feasible for small farm businesses to stay afloat based on what they grow or raise (Semuels 2019). As a result, farmers are exploring creative ways to keep their operations viable through agritourism, organic or regenerative agricultural practices, niche farming, and alternative agricultural businesses that allow producers to earn more for the quality of their products and services (Krekeler 2020). According to an analysis of the U.S. Department of Agriculture's 2022 Census of Agriculture, small and medium-sized farms and ranches reported receiving an average of \$44,000 in gross revenue from agritourism ventures in 2022 (NERCRD 2024).

Growing consumer demand is driving an increase in organic food production. Between 2000 and 2021, the amount of certified organic crop and livestock land in the U.S. increased from 1.8 million to 4.9 million acres (Skorbiansky, Carlson, and Spalding 2023). Now, consumers are more likely to buy organic food from the supermarket than from specialized natural food stores. Increased demand for organic food and products with labels associated with smaller farms has enabled smaller farmers greater market access and pricing than competing directly with conventional agriculture.

There is also significant movement in financial incentives and community interest in regenerative agricultural practices that focus on improving soil health, water retention, carbon sequestration, and biodiversity. A recent study surveyed 500 farmers across the U.S. and found that specialty-crop farmers are "leading the way on adoption of most sustainability practices" (Fiocco et al. 2024). Smaller-scale agricultural operations tend to have the most specialty-crop farmers because they require more



A farm shop at a small farm near Princeton, New Jersey (Credit: Kirkisis, iStock Editorial. Gettv Images Plus)

manual labor and flexibility to meet local market demands in product variety (Hailstone 2024).

Ultimately, "changing times, more idealistic values, and plain old necessity have forced farmers to think creatively about the way they run their businesses" (Krekeler 2020). This shift is encouraging smaller farm operations to set themselves apart from conventional agriculture by inviting folks onto the farm to experience rural life, by meeting demands for healthy food, and by raising standards in practices that are both profitable and beneficial to the environment.

#### A Supportive Zoning Framework

Zoning can be a powerful tool to support the viability of small farms. The key is to make sure zoning standards provide farmers the flexibility to adapt to changing market conditions. A holistic approach must consider not only agricultural zoning designations but also the specific uses and structures permitted in association with agricultural operations.

# Create an Agricultural **Zoning Designation**

Communities that don't have an agricultural zoning designation within their zoning code often cannot stop incompatible development projects from encroaching on farmable land.

Here's a common scenario: housing demand booms in the area, which drives up the cost of land and homes, especially in desirable rural and peri-urban locations. This places agricultural land at a higher risk of being converted to residential or commercial development with no relationship to agriculture. As a result, there's a significant loss of farmable soil that can't be returned to a healthy state after construction compaction (McKenzie 2010). Farmers who survive the encroachment face disadvantages competing for access to resources like water, connected land, and relevant services.

Fundamentally, an effective agricultural zoning designation permits farm operations and related accessory uses by right and discourages all non-farm-related land uses. Ideally, the local comprehensive plan should provide clear policy support for this approach. For example, Boulder County, Colorado's Comprehensive Plan aims to "...promote and support the preservation of agricultural lands and activities within unincorporated areas of the county, and to make that position known to all constituents currently living on or intending to move in this area" (Policy AG 1.01).

The zoning district's purpose statement should reinforce that agriculture is the primary activity and that other uses will be permitted only to the extent that they do not interfere with local agriculture. Planners and local officials can calibrate minimum lot sizes or residential density limits to the specific types of farming in their communities. In peri-urban areas, limiting residential density can protect commercial farms like orchards and nurseries from development pressures (Freedgood 1997). In larger rural communities, larger maximum density considerations may be more beneficial to prevent subdivision of large rangeland. Although minimum lot sizes vary by jurisdiction throughout the country, minimum lot requirements paired with other zoning strategies can help reduce development pressures.

Many agricultural districts permit commercial agricultural activities like farm stands or events to support farm profitability and community engagement. In some cases, farmers may also be required to submit management plans, demonstrating compliance with land use and environmental standards (Freedgood 1997). These notable zoning features can help rural and peri-urban communities prioritize the conservation of agricultural resources

and encourage development that is compatible with the local agricultural economy. The American Farmland Trust provides several noteworthy examples of agricultural protection zoning through its **Farmland Information Center** 

# **Broaden Permissible Agricultural Uses**

Traditionally, many zoning codes have prohibited commercial and recreational uses in agricultural districts due to concerns about traffic, utilities, or neighbor opposition (Branan 2004). However, these prohibitions may be out of step with a growing need for small farmers to diversify their operations. The evolving nature of farming gives planners and local officials an opportunity to rethink how agricultural definitions and allowances can support the broader agricultural economy, rather than solely focusing on land preservation.

Direct marketing has evolved beyond simple roadside stands into more comprehensive agritourism experiences like festivals, farm dinners, weddings, and educational activities. Additionally, many small farms are producing value-added products such as jams, dried herbs, or wines, allowing them to stand out and capture higher prices for their goods. With clear and balanced reviews, zoning codes



A drought resilience farm tour, featuring grama grass and livestock, in Longmont, Colorado (Credit: Sabrina Torres)

can adapt to support farm diversification and strengthen the local agricultural econ-

One approach is to define and regulate agritourism as permissible accessory use to agricultural operations (APA 2024). Alternatively, zoning codes can list specific direct marketing or value-added activities as permissible primary or accessory uses in zoning districts that allow agricultural operations. In either case, planners and local officials can craft use-specific standards to mitigate potential negative effects.

For example, many zoning codes allow a limited number of special events by right but require use permits for larger or more frequent gatherings. These regulations usually include operational standards, such as a minimum parcel size and sound, lighting, and guest capacity limits, to minimize impacts on rural character and farm operations. This helps balance agritourism with preserving the agricultural landscape.

In Boulder County, zoning allows farm events by right for commercial farms as a way to showcase their farm and crops, introduce customers to the farm, and help diversify farmers' income in a low-impact way on the land. Included in the definition is that the majority of food served at the event is to be made with ingredients grown or raised in the local jurisdiction or by the host farmers (§4-516.P). In Weber County, Utah, local zoning defines agritourism as well as several specific agritourism activities (§101-2-2). And it permits agritourism, subject to a conditional use permit and compliance with use-specific standards, including a requirement that agritourism uses cannot occupy more than 20 percent of an agricultural operation's gross acreage (§108-21).

On a similar note, many jurisdictions rely on agricultural easements to protect farmland from development pressures. These legal agreements restrict land use to agricultural purposes in perpetuity, thus conserving it for future agricultural production (AFT 2016). Additionally, agricultural easements often provide financial benefits to landowners, offering them compensation for their development rights, which can make these easements a more attractive option than selling land for development.

However, if the legal agreements between farmers and municipalities or land trusts are rooted in narrow conceptions of what constitutes an agricultural use, they may inadvertently hinder farmers' ability to adapt to modern financial, social, and environmental pressures. One way around this barrier is to tie conservation easements to local zoning ordinances. Meaning, as zoning allowances adapt with the evolving needs of local agriculture, conservation easements have an opportunity to align with permitted agricultural uses.

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# Allow a Range of Housing Types

Small farms are especially dependent on agricultural workers, and those workers need homes. The widespread application of single-family-only zoning districts often means that workers who can't live on the farm are priced out of local housing markets. This can ultimately lead to a skilled labor shortage for farmers, which is a reality that has hindered many agricultural communities across the U.S. (Kandilov and Kandilov 2018).

For farmers involved in providing housing for farm employees, the housing needs vary significantly depending on the number of workers needed, the type of worker (permanent, migrant, or seasonal), and whether families will be housed with the farm worker. A potential strategy that can balance out unintended impacts of single-family-only zoning is allowing multiple residences per lot in zoning districts where agriculture is allowed. One way this has been carried out is by writing into local code a permit process that allows for agricultural worker dwelling units on parcels with agricultural uses. These regulations can vary significantly across different jurisdictions, reflecting their agricultural workforce priorities or local land use challenges.

In Blacksburg, Virginia, zoning permits one farm employee dwelling for every 25

A 32-unit residential development for farm workers operated by the **Boulder County** Housing Authority in Longmont, Colorado (Credit: Amy Golden)



acres of land dedicated to agricultural use (Appendix A §4102). This low-density approach ensures that housing doesn't overwhelm the primary agricultural function of the land. In Ventura, California, zoning allows a more flexible approach to farm employee housing, allowing up to 12 dwelling units or 36 beds on a 40-acre site, with additional units permitted as the acreage increases (§24.435.030). These regulations acknowledge the labor-intensive nature of agricultural operations in Ventura, particularly for larger farms, by accommodating a higher density of housing while still requiring that these dwellings serve farm employees exclusively.

In Boulder County, located in the peri-urban interface, zoning provisions allow for agricultural worker units as one of the three circumstances where accessory dwelling units are allowed (§4-516.H.6). This dwelling unit limitation is due to priorities to direct growth to the municipalities.

As sustainability initiatives shift farming toward more labor-intensive practices, there is a growing demand for a broader range of housing for farm workers. This demand is being addressed through a comprehensive approach that includes what jurisdictions can offer via housing authorities—such as designated agricultural worker housing—as well as local

zoning allowances for temporary units like mobile housing options (such as companies leasing modular homes), dorm-style accommodations, and small homes for farm workers and their families.

# **Establish a Planned Agricultural Development Option**

Planned agricultural developments offer a unique approach to balancing the preservation of agricultural land with the need for development, particularly in regions where agricultural land faces pressure from urbanization or other non-agricultural uses. Through a discretionary planned development process—essentially a form of rezoning—these developments can allow for innovative land use strategies that can include clustering of residential units, the integration of agricultural-related uses, and the preservation of farmland and environmentally sensitive areas.

In Broward County, Florida, *Planned* Agricultural Centers permit agricultural uses such as crop cultivation, horse ranches, and cattle ranches, while also allowing for single-family residences with a low density of one dwelling unit per two acres or more (§39-340). This planned district allows for clustering residential units, provided that density transfers are used to preserve agriculturally productive

lands, environmentally sensitive areas, or open spaces. This clustering approach can be beneficial because it consolidates residential development in specific areas, freeing up large tracts of land for continued agricultural use.

In Chattanooga, Tennessee, the special exception process for planned unit developments (PUDs) in the Urban Agricultural Zone provides flexibility for residential uses while maintaining a significant portion of land for agriculture or open space (§38-456). The minimum lot size for a PUD in this zone is five acres, with at least 50 percent of the total land area set aside for agricultural uses or open space.

While planned agricultural development options typically help in the preservation of agricultural lands, this strategy can often play out as the agricultural land being preserved while the cluster development has little to do with supporting a local agricultural economy. Fortunately, implementing agricultural land uses within PUDs is an opportunity jurisdictions can explore as well (Goodman 2019). This strategic approach can lead to a diversity of agricultural housing needs being met, such as affordable housing, tiny homes, or accessory dwelling units for agricultural workers. This approach can also encourage more compatible development, such as farm stores, restaurants

interested in sourcing local ingredients, and other ancillary services that cater to the agricultural sector (e.g., agricultural equipment dealers and mechanics and farm animal veterinarians).

It is, however, important to note that while planned unit development approaches can offer creative solutions to the community, they can also create more complicated process barriers for both farmers and regulatory staff. Meaning, it's vital for policymakers to be clear on the goals of a potential planned agricultural development. The main question is whether the goal is to support the local agricultural economy or to simply preserve agricultural lands.

#### **Allow Mixed-Use Structures**

As communities seek ways to support agritourism and viable agricultural economies, it's important to recognize that many agritourism activities take place within farm structures. Whether it's a barn temporarily converted into a farm-to-table dinner event space or farm stand for a holiday market, these buildings often provide more than just shelter from the elements—they offer the rustic charm that draws visitors to more rural settings.

However, the role of mixed-use structures in supporting farm economies extends beyond public-facing agritourism.



An outdoor event space at The Old Elm farm near Boulder, Colorado (Credit: Sabrina Torres)

There are practical needs for farmers to repurpose existing structures, such as converting a portion of a barn into office space for off-season planning or adding a lofted apartment to house an agricultural worker. These changes reduce the need for new construction, allowing farmers to make the most of their existing spaces without expanding their footprint on the land.

A key challenge arises when zoning regulations restrict the use of farm structures solely to agricultural production. Without the flexibility to repurpose these spaces for agritourism or related agricultural activities, farmers may either be discouraged from pursuing these activities or be expected to construct additional structures, which can be both costly and invasive to their limited farmable land.

To address this constraint, some communities have adopted zoning codes that explicitly support farm buildings to serve multiple purposes, at least temporarily. In Boulder County, farmers are permitted to build new floor space or repurpose existing floor space for events, such as demonstration classes or weddings, provided that when these spaces are not being used for farm events, they continue to be used for farming purposes such as spaces for storage or housing livestock (§4-516.P.5.e). Similarly, in Contra Costa, California, new agritourism zoning provisions allow for farm dinners to be hosted in existing structures and outdoor areas (§824-10.002). However, if the event takes place inside a structure, that building must comply with all relevant building and fire safety codes, based on the number of guests attending.

As independent farms face increasing economic pressure, mixed-use buildings

As independent farms face increasing economic pressure, mixed-use buildings offer a practical solution to both sustain farm operations and conserve valuable agricultural land

offer a practical solution to both sustain farm operations and conserve valuable agricultural land—an especially important factor for smaller-scale farms in rural or peri-urban communities where every acre counts.

## **Complementary Procedures**

Once a foundational framework is established to support agriculture, the next step is to create opportunities that encourage the success of beneficial farms in the community. This can be achieved through complementary procedures that make it easier for these farms to operate. For instance, local governments can offer a mix of procedural development incentives, such as streamlined permitting processes and special allowances. These tools can help farmers overcome initial barriers and allow them to explore innovative practices or new business models while staying in compliance with zoning regulations.

#### **Expedite Permit Processes**

For municipalities that require permits for most structures, streamlining the review and approval process can significantly benefit farmers. By developing waiver systems for agricultural buildings with relatively low environmental and public safety risks, local governments can reduce the time, cost, and complexity of obtaining permits. For example, Boulder County offers zoning waivers based on square footage thresholds, general setbacks, and grading limits (§4-802.C), while Grays Harbor County, Washington, allows agricultural building exemptions for structures that meet specific conditions (§15.04.020.K(17)). These expedited processes allow small farmers to build essential structures like barns and greenhouses without enduring the lengthy and expensive standard permitting steps.

# **Incentivize Beneficial Agricultural Practices**

One effective way jurisdictions can support sustainable agriculture is by using flexible use permissions and development standards, essentially allowing planning departments to adjust zoning regulations without major code changes. This flexibility encourages a broader range of farming

A hoop house at Sang Lee Farms in Peconic, New York (Credit: Preston Keres)



activities and incentivizes practices that benefit both agricultural economies and environmental sustainability.

For example, Boulder County's Verified Established Farm Use certification grants farms that meet certain criteria greater flexibility in their land use (2019). Farmers who demonstrate a significant contribution to the local agricultural economy through a for-profit business or certified nonprofit, with annual agricultural sales exceeding \$15,000, can benefit from expanded permissions. These include allowances for more attendees at farm events, higher vehicle trip limits, and the ability to host additional educational activities, all without undergoing the typical zoning restrictions that apply to other land uses.

Flexible zoning for small, temporary structures like greenhouses and hoop houses is vital for small farms, especially those in an urban or peri-urban environment. For example, in Philadelphia, accessory agricultural structures are permitted based on lot size, and no zoning permit is required for temporary structures in place for less than 180 days (§14-604(9)). This allows farmers to install protective structures for crops or livestock without facing regulatory hurdles.

By allowing farmers to quickly set up structures for seasonal needs, such as greenhouses or shelters, without going through lengthy permit processes, local governments can help them adapt to changing weather conditions, protect crops and livestock, and improve overall farm yields and efficiency (Olson 2021).

### **Support Pilot Projects**

Zoning procedures can play a pivotal role in allowing on-farm pilot projects, which often serve as the groundwork for broader, permanent zoning reforms. Across the U.S., pilot projects focused on healthy soil, climate-smart farming, and sustainable practices are being encouraged through state and federal funding, including the U.S. Department of Agriculture's Partnerships for Climate-Smart Commodities. To accommodate these innovative activities, local governments must determine how to fit them within existing zoning regulations. Instead of stifling innovation, some municipalities are leveraging temporary use permits to allow short-term, experimental projects that may inform future policy.

Temporary use permits offer flexibility by permitting activities for a set period, often with the option for extensions. These

permits support projects that test new agricultural techniques, such as biochar application for soil health and carbon storage. For instance, Okanogan County, Washington, used temporary permits to facilitate a biochar pilot project aimed at wildfire mitigation and soil improvement. The project required specialized equipment, like mobile kilns, which would typically fall outside traditional zoning. By offering temporary permits, the county supported this innovative research (Stamper 2020; 2021).

Pilot projects can also lead to valuable data collection that helps shape long-term zoning policies. In states like New York and Colorado, research and pilot projects in agrivoltaics are already shaping the future of sustainable farming by demonstrating how solar panels can coexist with crops and livestock, enhancing both energy production and agricultural productivity (Farm and Energy Initiative 2024).

Local trials on farms, like Jack's Solar Garden in Longmont, Colorado (a nationally recognized model for combining renewable energy with agriculture), helped shape a solar energy zoning update in unincorporated Boulder. The 2018 update expanded allowances for community solar gardens in agricultural districts and introduced provisional permissions for solar installations on agricultural lands of local

and state significance (Resolution 2018-118). Innovative approaches that integrate big-picture thinking, such as diversifying income streams while promoting sustainable practices, can help small farms adapt to growing energy demands and population pressures.

Another innovative approach involves in-house pilot programs designed to address farmers' practical challenges. Boulder County, for instance, recognized the difficulties small farmers faced when applying for farm stand permits. In response, the county is developing pre-approved farm stand designs that meet local regulations and come with pre-approved building permits. This is intended to eliminate many of the time and cost barriers for farmers seeking to set up direct-market relationships with consumers. A similar in-house pilot approach was Santa Cruz County, California's Limited Immunity Amnesty Program, which allowed farmers (and other property owners) to bring unpermitted structures up to code, encouraging compliance while supporting ongoing farm operations (2018).

By utilizing zoning procedures like temporary permits and developing in-house pilot programs, local governments can create a supportive framework for innovative agricultural practices. This not only builds trust between farmers and

Tomatoes grown by Sprout City Farm at Jack's Solar Garden near Longmont, Colorado (Photo by Werner Slocum, NREL 65612)



regulators but also lays the groundwork for long-term zoning changes that promote resilience and viability in the agricultural sector.

Designate an Agricultural Planner Reforming agricultural zoning standards and procedures is a complex process that must consider economic viability, environmental sustainability, and community impact. An internal agricultural advocate. who understands the intricate balance of planning principles and the unique needs of farmers, can be crucial in this effort. Although the concept of an agricultural land use planner is not new, it remains quite uncommon. In some departments, this role may guide farmers applying for permits, while in others, it may focus on identifying ways planning regulations can support sustainable and economically viable agriculture. Either way, ideally, an agricultural planner is familiar with local planning processes, triggers, and requirements, which enables them to effectively communicate current regulations and resolve barriers faced by local farmers.

This role serves as a crucial bridge between farmers and planners, who often speak "different languages." An advocate can translate the technical aspects of planning in ways that relate to farming backgrounds. However, engagement goes far beyond communicating existing allowances. Connecting with farmers through discussions about their experiences with local zoning is essential. These dialogues provide opportunities for farmers to share their challenges and suggest solutions, potentially informing policy updates that can support the larger agricultural community's well-being and success. When these conversations are initiated by a non-regulatory agricultural planner, it fosters stronger collaboration and trust between agricultural producers and the department.

Additionally, this role is pivotal in introducing planning staff to the evolving concepts from small farms. The unconventional practices discussed in this article—such as agritourism activities, sustainable agricultural practices, and adaptive on-farm operations—are trends shaping the future of small farms. An internal advocate can bring these concepts to the forefront

for local decision-makers, emphasizing their broad significance, benefits, and potential impacts. By doing so, this role can propel zoning standards and procedures forward, exploring and presenting pathways where local regulations can support the creative short- and long-term goals of these dynamic agricultural pursuits.

#### Conclusions

Small farms need to be prioritized in policy updates and planning engagement. Across the country, they represent a marginalized group, facing unique economic and regulatory challenges that larger farms may not. Their diversity, in terms of size, operations, and farmer demographics, must be recognized in planning processes, ensuring that their voices are heard and their needs are addressed in zoning and regulatory decisions.

Planners, policymakers, and agricultural advocates have the opportunity to creatively reshape processes and regulations to better serve the evolving needs of small farms. Through thoughtful zoning, flexible housing policies, and informed complementary procedures, we can help preserve the vital role that small farms play in feeding local communities, maintaining sustainable agricultural practices, and preserving cultural heritage. It is through this collaborative effort that we can help prevent the extinction of small farms and ensure their resilience for generations to come.

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