

**Boone County Agriculture & Natural Resources** 





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Boone County Extension Office Closed for Juneteenth June 19, 2024

#### Pasture Walk

June 20, 2024 · 6:00pm Boone County Environmental & Nature Center 9101 Camp Ernst Rd., Union -CAIP Approved

Boone County Fair June 24—June 29, 2024

Boone County Extension Office Closed for July 4th July 4, 2024



## Why City Ordinances Should Allow **Backyard Chickens**

As urban farming gains popularity, a growing number of city dwellers are advocating for the right to raise chickens in their backyards. This trend is not just a nostalgic nod to simpler times but a practical and beneficial movement that cities should embrace. Allowing backyard chickens can offer numerous advantages, including fresh and healthy food, environmental benefits, educational opportunities, and community building. Here's why city ordinances should be updated to permit backyard chickens.

One of the most compelling reasons to allow backyard chickens is the access to fresh, healthy eggs. Unlike store-bought eggs, which can be weeks old by the time they reach the consumer, backyard eggs are typically consumed soon after they are laid.

This means they are fresher and often more nutritious, with higher levels of omega-3 fatty acids, vitamins A and E, and lower cholesterol and saturated fat content. Additionally,



knowing the source of your eggs provides assurance about the chickens' diet and living conditions, often leading to healthier and more ethically produced food.

(Continued on next page)

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Lexington, KY 40506

- Backyard chickens contribute positively to the environment in several ways. Firstly, they help reduce household waste by consuming kitchen scraps that would otherwise end up in landfills. Chickens are natural composters, turning food waste into nutrient-rich manure that can be used to fertilize gardens, thus enhancing soil health and reducing the need for chemical fertilizers. Furthermore, keeping chickens can reduce the carbon footprint associated with the transportation and packaging of storebought eggs.
- Chickens are effective pest controllers, feeding on insects, ticks, and other small pests. This natural form of pest control can reduce the need for chemical pesticides, benefiting both human health and the environment. By managing pests in this way, chickens can also contribute to the overall health of gardens and green spaces.
- Raising chickens offers valuable educational experiences for children and adults alike. It teaches responsibility, as chickens require regular feeding, cleaning, and care. It also provides insights into animal behavior, biology, and the food production process. Many urban schools and community programs use chicken keeping as a hands-on learning tool, helping to reconnect people with where their food comes from and fostering a sense of stewardship towards animals and the environment.
- Backyard chicken keeping can strengthen community bonds. Sharing excess eggs with neighbors, participating in local chicken-keeping groups, or engaging in city-wide initiatives to support urban farming can foster a sense of community and mutual support. Moreover, urban farms and gardens often become communal spaces where people gather, share knowledge, and collaborate on projects, enhancing social cohesion.

Common concerns about backyard chickens include noise, odors, and the potential for attracting pests. However, these issues can be effectively managed with proper care and city regulations. For instance, hens (which are typically quiet) can be kept instead of roosters (which are noisy). Regular cleaning of coops and appropriate waste management practices can mitigate odors and health risks. Furthermore, ordinances can include guidelines on the number of chickens allowed, coop design, and maintenance standards to ensure that chicken keeping is done responsibly and hygienically.

The movement to allow backyard chickens in urban areas is more than a trend; it is a practical approach to enhancing urban living. By providing fresh food, environmental benefits, educational opportunities, and fostering community, backyard chickens can play a vital role in sustainable urban development. Updating city ordinances to allow for responsible backyard chicken keeping is a step towards a healthier, more connected, and environmentally friendly urban future. Cities that embrace this movement stand to benefit from a richer, more self-sufficient, and vibrant community life.



## **Rotational Grazing**

Rotational grazing is a method of managing pastureland by dividing it into smaller paddocks and rotating livestock through them. This approach provides several benefits, such as improved forage quality and quantity, reduced soil erosion, and increased animal performance. Here is a step-by-step guide on how to do rotational grazing:

#### Step 1: Plan your grazing system

Before implementing rotational grazing, it is crucial to plan the grazing system. Factors to consider include the type and number of animals, pasture size and quality, soil type and fertility, and climate. Create a grazing plan that accounts for the seasonal variations in forage growth and animal nutritional requirements.

# Step 2: Divide the pasture into paddocks

Divide the pasture into smaller paddocks using electric fencing or permanent fencing. The size of the paddocks will depend on the number and size of the animals and the forage growth rate. As a general rule, the paddocks should be large enough to provide sufficient forage for the animals for a few days, but not so large that they can overgraze the area.

# Step 3: Implement the grazing rotation



Rotate the animals through the paddocks according to the grazing plan. The length of time the animals spend in each paddock will depend on the forage growth rate and the nutritional requirements of the animals. Ideally, the animals should graze the paddock down to around 50% before being moved to the next paddock. This allows the forage to recover before the animals return to the area.

#### Step 4: Monitor forage growth and animal performance

Regularly monitor forage growth and animal performance to ensure that the grazing system is working effectively. Adjust the grazing rotation as needed based on the amount of forage available and the nutritional requirements of the animals. Keep detailed records of the grazing system to evaluate its effectiveness and make informed management decisions in the future.

#### Step 5: Maintain the pastureland

Proper pastureland management is essential for a successful rotational grazing system. This includes regular soil testing and fertilization, weed control, and proper grazing management. Rest the pastureland periodically to allow forage regrowth and prevent soil erosion.

Rotational grazing is a beneficial method of pastureland management that can improve forage quality and quantity, reduce soil erosion, and increase animal performance. By following the steps outlined above, you can implement a successful rotational grazing system on your farm or ranch. Remember to plan the grazing system, divide the pasture into paddocks, implement the grazing rotation, monitor forage growth and animal performance, and maintain the pastureland for long-term success.

## **Maintaining Farm Ponds**

Ponds are a critical part of many farms in Kentucky and proper maintenance can ensure they will perform well for many years after construction.

Constructing ponds in the appropriate sites is the first step to ensuring a useful pond. A good supply of clean drinking water for livestock must be located within an adequate forage area to produce healthy animals. The volume of water required for livestock depends on the size of the animal, size of the herd and amount of time the water supply will be in use.

Most livestock ponds should be entirely fenced with gravity feed water supplied to a watering tank keeping animals out of the pond. This prevents soil erosion and protects stabilizing vegetation on the dam, spillway and pond banks. Keeping the animals out of ponds reduces the amount of sediment going into the pond from an eroding bank. It also improves water quality by reducing turbidity (muddiness) caused by eroded clay soils.

Nutrients provided from manure and fertilizer in the watershed will fertilize pond vegetation. However, aquatic plants will receive these nutrients directly where the livestock are allowed to wade into ponds. A poorly managed pond will fill quickly with debris and sediment due to increased loading of organic matter from manure and decaying aquatic plants, combined with erosion. These can reduce the life of a pond and pollute the water possibly contributing to poor animal health.

Many farm ponds in Kentucky serve the dual purpose of a place to relax and catch a few fish or swim. They also may be used for irrigation or rural fire control. Managing ponds for multiple purposes can be difficult. Pond volume, watershed size and number of animals kept in the watershed, will affect nutrient run-off into the pond. When properly applied, to the watershed, little of the nitrogen and phosphorus contained in inorganic fertilizers should be lost in runoff into the pond.

Fish populations may benefit from the minimal nutrient runoff of well managed pastures. However, excessive nutrients from livestock waste will create water quality problems. Aquatic plants and algae will thrive on excessive nutrients and may become difficult to control.

The weedy appearance can be unattractive as well as cause largemouth bass to have a more difficult time preying on bluegill. This may result in an overpopulation of bluegill. Chemical controls can be time consuming and costly and in some instances, may not be legal, safe or practical in livestock watering ponds.

Ponds used for fishing must be stocked properly, limed and harvested correctly. For Kentuckians interested in maintaining fish ponds, a monthly management calendar is available from the Boone County Extension Office. Before using any fertilizers or chemicals, be sure to check that they are safe for livestock if the pond is serving this dual purpose.

Livestock ponds less than 1/2 acre in surface area may provide little opportunity for managing sport fish populations due to their small size, and possible water quality problems. If a pond is constructed in acid soils it should be limed before filling. The pond lime requirement would be similar to the amount of lime used to raise the soil pH to that used for planting alfalfa. Fulfilling the soil's lime requirements is especially important before beginning a pond fertilization program.

Weed control is an essential part of pond management. Preventive measures include proper design. Banks should be sloped steeply so that very little water is less than two to three feet deep. To help prevent serious weed infestations you can do the following things:

- Most waters in Kentucky are sufficiently rich in plankton and other food organisms to support large fish without the need for supplemental fertilization.
- Maintain a good sod and grass cover around your pond. This will help prevent runoff and erosion. Do not fertilize the turf directly around the pond.
- If the water is used for livestock, fence the pond and water the animals from a stock tank below the dam and outside the fence. Animals will increase turbidity and fertility and erode the banks. Do not allow livestock access to a pond unless a gravity flow tank cannot be installed. In this

case, fence the pond to allow limited access to a few locations around the shoreline. Consider providing a source of shade in pastures so animals can avoid extreme heat.

- Check septic tanks for possible leaching into the pond. Locate new septic drainage fields so that the nutrient-rich effluent will not reach your pond.
- Do not permit runoff from chicken coops, feedlots and other areas to enter your pond. If this kind of runoff is occurring upstream from your pond, you should check with your county Board of Health to see if anything can be done about it.

If you have a weed problem mechanical controls can be used. Mechanical controls include hand removal, dredging of shallow pond areas or winter draw down may be effective in freezing and killing shoreline vegetation. Using rakes with ropes attached can work for removing some floating plants. But these methods can be impractical or uneconomical.

A biological control that can be used is triploid grass carp to control soft-stemmed vascular plants and branched algae. These fish are plant eaters and can help control pond vegetation. They need to be stocked at a rate of 5 to 20 fish or more per surface acre of water depending on the severity of the plant problem.

Chemical control methods also can be used. Weed identification is essential in determining which herbicide to use. When used properly, aquatic herbicides are effective in controlling vegetation without harming fish. There may be restrictions on water usage for a period of time after treating with a particular herbicide. Always check the herbicide label for possible restrictions.

For more information on pond construction and maintenance, contact the Boone Cooperative Extension Service.

Source: Forrest Wynne, KSU Extension aquaculture specialist; UK Cooperative Extension Service Pesticide Applicator Training Program



## **Effective Weed Control Strategies** for Kentucky Pastures in June

Weed control in pastures is a crucial aspect of maintaining a healthy and productive grazing environment, especially during the growing season in Kentucky. June marks a critical period for managing weeds due to the warm temperatures and ample rainfall, which can cause weeds to proliferate rapidly. Implementing a comprehensive weed management strategy during this month can significantly improve pasture quality and ensure the health of livestock.

Before implementing control measures, it is essential to identify the types of weeds commonly found in Kentucky pastures. Some prevalent weeds include:

► Thistles (Cirsium spp.): These invasive species can spread quickly and outcompete desirable forage plants.

► Johnson grass (Sorghum halepense): Known for its aggressive growth, Johnson grass can dominate pastures if not controlled.

**Buttercup (Ranunculus spp.)**: These plants can be toxic to livestock and tend to thrive in overgrazed or poorly drained areas.

**Ragweed (Ambrosia spp.)**: Common in disturbed soils, ragweed can cause significant issues for both pasture quality and livestock health.

#### Integrated Weed Management Strategies

Effective weed control in June involves a combination of mechanical, chemical, and cultural practices. Here are some strategies to consider:

#### Mechanical Control:

• **Mowing**: Regular mowing can prevent weeds from setting seeds and spreading. It is particularly effective against annual weeds and can also help manage perennial species by depleting their energy reserves.

► Hand-pulling: For smaller infestations or in sensitive areas, hand-pulling weeds can be an effective, albeit labor-intensive, method. Ensure complete removal of the root systems to prevent regrowth.

#### **Chemical Control**:

► Herbicides: Selective herbicides can target specific weed species without harming desirable forage plants. It is essential to choose the appropriate herbicide based on the types of weeds present and to follow label instructions carefully. Commonly used herbicides in Kentucky pastures include 2,4-D, dicamba, and glyphosate.

**Timing**: Applying herbicides in June can be particularly effective as many weeds are actively growing. Early morning or late afternoon applications can minimize volatilization and drift, ensuring better efficacy.

#### **Cultural Practices:**

• **Pasture Rotation**: Rotating grazing areas can prevent overgrazing, which often leads to weed invasion. This practice allows desirable forage plants to recover and outcompete weeds.

**Soil Health Management**: Maintaining proper soil fertility and pH levels can promote healthy forage growth, which in turn suppresses weed establishment. Soil testing and appropriate fertilization are key components of this strategy.

#### **Biological Control**:

• **Grazing Management**: Introducing livestock that preferentially graze on certain weed species can help control those weeds. For instance, goats are known to eat many broadleaf weeds, which can be beneficial in mixed grazing systems.

#### Monitoring and Follow-Up

Continuous monitoring of pasture conditions is crucial for effective weed management. Regularly inspect pastures for new weed infestations and take prompt action to control them. Keeping records of weed control measures and their outcomes can help refine strategies over time.

#### **Environmental Considerations**

When implementing weed control measures, it is important to consider the potential impact on the environment. Avoiding excessive use of herbicides and opting for more sustainable practices can help protect local ecosystems. Additionally, preserving beneficial insects and other wildlife by maintaining habitat diversity is essential.

#### Conclusion

Controlling weeds in Kentucky pastures during June requires a multifaceted approach that includes mechanical, chemical, cultural, and biological strategies. By understanding the types of weeds present and implementing integrated weed management practices, pasture quality can be significantly improved, leading to healthier livestock and more productive grazing lands. Regular monitoring and adaptation of strategies are key to long-term success in weed control efforts.





## **Ingredients:**

- 5 medium apples, peeled and sliced (about 4 cups)
- 1 (14.5 ounce) can sliced carrots (may use 2 cups fresh or frozen steamed carrots)
- <sup>1</sup>/<sub>4</sub> cup light brown sugar
- 1 tablespoon flour
- 1 teaspoon cinnamon
- 2 tablespoons unsalted butter
- ½ cup orange juice

## **Directions:**

- 1. Preheat oven to 350 degrees F.
- 2. Arrange apples and carrots in a  $1\frac{1}{2}$  quart greased casserole dish.
- 3. In a small bowl, combine brown sugar, flour and cinnamon; sprinkle over carrots and apples.
- 4. Dot carrot and apple mixture with butter and cover with orange juice.

Bake uncovered for one hour or until sugar mixture caramelizes.

**Nutrition facts per serving:** 120 calories; 3g total fat; 2g saturated fat; 0g trans fat; 10mg cholesterol; 125mg sodium; 24g carbohydrate; 2g fiber; 19g sugar; 1g protein; 120% Daily Value of vitamin A; 20% Daily Value of vitamin C; 2% Daily Value of calcium; 2% Daily Value of iron.

Source: Rita May, Senior Extension Associate for Kentucky Nutrition Education Program, University of Kentucky Cooperative Extension Service Gary Stockton, Boone County Extension Agent for Agriculture gary.stockton@uky.edu

Lacey Kessell, Boone County Extension Agent for Natural Resource & Environmental Education lacey.laudick@uky.edu



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November 25

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Animal & Food Sciences

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#### Kevin Laurent

November 11

Senior Agriculture Extenson Specialist

Marketing & Profitability

### December 2

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Facilities & Winter Feeding November 18

Darrh Bullock Extension Professor Animal & Food Sciences

Genetics

**December 9** 

Dr. Michelle Arnold

**UK Ruminant Extension** 

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all meals, class materials and a farm sign.

**Registration fee:** 

\$125 includes

**BOONE COUNTY EXTENSION OFFICE | AGRICULTURE** 





**Discussion Topics:** 

Forage/Weed ID, Weed Control, Fertility/Fertilizer Efficiency & Nutritional Value of Pastures



JUNE 20 2024 AT 6:00PM Boone County Environmental and Nature Center 9101 Camp Ernst Road Union, KY 41091

> Register online or by phone 859.586.6101 www.boone.ca.uky.edu

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