

**TO:** Planning Commission

**FROM:** Paul Patterson, Zoning Administrator 

**RE:** Zoning Ordinance Amendment #41/Ordinance 1888  
An ordinance amending Zoning Ordinance Section 2103 and adding a new Town Code Section 5-118 to permit the keeping of chickens in residential areas.

**DATE:** February 15, 2019

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## **BACKGROUND**

On January 8, 2019, the Town Council adopted Resolution 1-A-19 (Attachment A) referring to the Planning Commission a proposed amendment to Zoning Ordinance Section 2103 and adding Section 5-118 to the Town Code to permit the keeping of chickens in certain residential areas.

The Town Council's referral resolution included:

- ✓ Modify the definition of the term "Agriculture";
- ✓ Establish criteria for keeping chickens in certain residential districts; and
- ✓ Direction to Planning Commission to propose other amendments related to the zoning ordinance required for consistency with the keeping of chickens.

The Agriculture Use and Design section of the Zoning Ordinance, Section 4101 (b) requires a minimum lot size of two (2) acres for agriculture use. Keeping chickens is considered to be an agriculture use and is currently allowed in both the RR-1 and RR-2 Rural Residential Zoning Districts when the property contains a minimum lot size of 2 acres or more. The existing keeping of chickens will not change for RR-1 and RR-2 Rural Residential zoned properties with lot sizes of 2 acres or more.

The proposed amendment to the Zoning Ordinance will add to the definition of the term "Agriculture" to provide that keeping of four (4) hens or less in accordance with the provisions of the Town Code would not be considered to be an agricultural use. The amendments to the Town Code would establish criteria (setbacks, living area, sanitary requirements, etc.) for keeping Urban Chickens on residential property containing only single-family detached dwellings in the R-4 Low Density Residential, RR-1 Rural Residential and RR-2 Rural Residential Zoning Districts. Urban chickens would also be permitted as a one-year pilot program in the Bennett-Hill/Progress Street Neighborhood. The Planning Commission may also develop other amendments related to the zoning ordinance needed for consistency with the keeping of chickens.

### **Amendment Considerations/Process**

The Zoning Ordinance Review Committee (ZORC), a sub-committee composed of six members of the Planning Commission plus two citizens, reviews proposed Zoning Ordinance Amendments and makes recommendations to the full Planning Commission. The ZORC met on January 28, 2019, to review and discuss Zoning Ordinance Amendment #41/Ordinance 1888 Urban Chickens.

Per Section 1151 of the Zoning Ordinance, the Planning Commission is tasked to study the zoning amendment proposal and hold a public hearing to determine:

- 1. Whether the proposed amendment conforms to the general guidelines and policies contained in the Town's Comprehensive Plan.*
- 2. The relationship of the proposed amendment to the purposes of the general planning program of the Town, with appropriate consideration as to whether the change will further the purposes of the zoning ordinance and the general welfare of the entire community.*
- 3. The need and justification for the change; and*
- 4. When pertaining to a change in the district classification of property, the effect of the change, if any on the property, surrounding property, and on public services and facilities. In addition, the Commission shall consider the appropriateness of the property for the proposed change as related to the purposes set forth at the beginning of each district classification.*

The Planning Commission is tasked with reviewing the proposed amendment and reporting its findings and recommendations to the Town Council along with any appropriate explanatory materials within one hundred (100) days after the first Planning Commission meeting following the proposed Zoning Ordinance amendment being referred to the Commission. Failure of the Commission to report to the Town Council would be a recommendation of approval. If the Commission does not report within the prescribed time, the Town Council may act on the amendment without the recommendation of the Commission.

Any recommendation on the Zoning Ordinance Amendment by the Planning Commission is advisory in nature, and is not binding on the Town Council.

### **Background Research**

Information gathered from several websites on the keeping of Urban Chickens can be found in the attachments. This information contains both reasons to allow chickens and concerns with the keeping of chickens in one's backyard in a town setting.

Reasons to allow backyard Urban Chickens

- Family tradition
- Companion animal, hobby, fun
- Source of local food production, eggs
- Yard insect control, portable chicken coop/pen

Concerns with Urban Chickens

- Chickens are a prey animal, killing of chickens by predators can take place
- Potential health concerns, H5N1 Avian Influenza, Salmonella
- Odor of chicken manure if not properly managed
- What happens at end of egg production span and end of chicken life span

**Ordinance Amendment Text**

A draft copy of the proposed zoning ordinance is attached (Attachment B).

The following section outlines some of the considerations and reasoning on the zoning ordinance amendment wording.

**ARTICLE II, DEFINITIONS AND USE TYPES**

The underlined section is proposed to be added to the current definition of agriculture.

*Section 2103 Definitions, "AGRICULTURE – The use of land for the production of food and fibre, including farming, dairying, pasturage, agriculture, horticulture, viticulture, and animal and poultry husbandry. A garden accessory to a residence shall not be considered agriculture. The keeping of a horse, cow, pig, sheep, goat, or chicken shall constitute agriculture regardless of the size of the animal and regardless of the purpose for which it is kept. Notwithstanding the foregoing, keeping four hens or less in accordance with the provisions of Town Code Section 5-118 shall not be considered to be "agriculture."*

**ARTICLE III, DISTRICT STANDARDS**

Properties containing single family dwellings located within three zoning districts, the **RR-1 Rural Residential**, **RR-2 Rural Residential** and the **R-4 Low Density Residential District**, are proposed to allow for Urban Chickens at this time, thus the amendment is limited in scope.

A one-year pilot project for the R-5 Transitional Zoning District properties with single family dwellings located within the Bennett-Hill/Progress Street Neighborhood is also a part of the proposed draft Ordinance 1888.

## **EXISTING REGULATIONS**

There are a number of existing site plan development standards, town code requirements, and other regulations already in place that would relate to the keeping of chickens and therefore do not need to be separately addressed in the zoning ordinance amendment. These include the following:

Zoning Permit Application: A \$30 zoning permit application is required for an accessory structure, small shed or a new driveway is to be added to a property. Planning reviews the submitted zoning permit application and site sketch to determine that the size, height, and proposed location meets the zoning requirements of the zoning district. [Note: the application for Urban Chickens would take the place of the zoning permit application for a chicken coop/pen.] The draft Ordinance 1888 indicates a \$25 application fee. Staff is proposing the same \$30 fee amount as a zoning permit application and that no additional fee be required for the annual re-registration of Urban Chickens.

Exterior Lighting: (Zoning Ordinance, Section 5600). Any proposed exterior lighting would be required to meet our exterior lighting standard. If electricity is provided to the chicken coop/pen for lighting or heating, then a building permit from Planning and Building for the electrical work would also be required.

Noise: (Town Code, Chapter 13, Section 13-103 (10)). The Town Code contains a noise ordinance, under which chickens would be required to comply. The noise ordinance generally prohibits sound from an animal that is plainly audible at least once a minute for ten (10) consecutive minutes inside the confines of one's dwelling unit at a distance of fifty (50) feet or more from the source of the animal's noise. As part of the proposed zoning amendment, roosters would not be allowed. Chickens are fairly quiet, but will tend to squawk when they are laying an egg.

Dogs, Cats and other potential predators (Town Code, Chapter 5, Section 5-204). Chickens are a prey animal. As such, it is recommended that the zoning ordinance amendment include a provision that a dog or cat will not be considered to be a dangerous or vicious animal solely on the basis of killing of chicken(s) in the Town of Blacksburg.

Historic or Design Review Overlay District (Zoning Ordinance, Section 3270) - An additional review may be required for construction of a proposed structure (chicken coop/pen) if it is located within the Historic Overlay District.

### **Bennett-Hill/Progress Street Pilot Program**

The direction from the Town Council is to include a one-year pilot program for an area of the Bennett-Hill/Progress Street Neighborhood. The draft of proposed Ordinance 1888 currently includes, *"Be it further ordained that, as a pilot program, urban chickens may also be kept in the*

*areas of Bennett Hill/Progress Street area depicted on the attached map labeled "Pilot Program Area for Urban Chickens." This pilot program shall be re-evaluated one year after the adoption of this ordinance, which shall be effective on and after the date of its adoption."*

Staff recommends the pilot program be limited to single family dwellings within the R-5 Transitional Residential zoning district of the Bennett Hill/Progress Street neighborhood. The single family dwellings that are zoned R-4 Low Density Residential in this neighborhood would already fall under the proposed Ordinance 1888 for the keeping of Urban Chickens. Staff further recommends that the small General Commercial, RM-27 Multi-family, Office, and Old Town Residential zoned portions of the Bennett Hill/Progress Street would not be a part of the pilot program.

### **Public Information Meeting**

A public information meeting is held for all amendments to Zoning Ordinances prior to public hearings. The public meeting for ZOA #41/Ordinance 1888 was held on Wednesday, February 6<sup>th</sup>. A copy of the sign-in sheet and items discussed for this meeting can be found in the attachments.

### **MODIFICATIONS TO PROPOSED ORDINANCE 1888**

The draft Ordinance 1888 can be found in the attachment and also on the public hearing portion of the Town's website for Zoning Ordinance #41 Urban Chickens.

Modifications to the draft Ordinance, that the Planning Commission and staff may wish to consider are:

- ❖ Size of chicken coop – minimum of 4 square feet per hen, rather than 2 square feet per hen. Additional space in the coop is recommended, as most chicken breeds require more room in the coop.
- ❖ Codify that dogs and cats should not be considered to be a dangerous or vicious animal in Blacksburg due solely to killing of chicken(s).
- ❖ Additional information on how a one-year pilot program for Bennett-Hill/Progress Street area would work. A pilot program can be designed to be more flexible and respond to the specific environment and situation of the area under study with input and feedback from the Bennett Hill/Progress Street neighborhood.

### **Attachments:**

- A - Town Council referral resolution
- B – Draft of proposed Urban Chickens Ordinance 1888
- C – Bennett Hill/Progress Street Zoning
- D – Public Information Meeting sign-in Sheet
- E – Chart showing draft Ordinance No. 1888 requirements
- F – 3 Articles from the internet on Keeping of Chickens

Resolution 1-A-19

**A RESOLUTION REFERRING PROPOSED AMENDMENTS TO ZONING ORDINANCE SECTION 2103 AND ADDING SECTION 5-118 TO PERMIT THE KEEPING OF CHICKENS IN CERTAIN RESIDENTIAL AREAS**

**WHEREAS**, the Comprehensive Plan supports partnership with the community to promote sustainable practices throughout Blacksburg;

**WHEREAS**, the Comprehensive Plan promotes the value of local food production and the positive impact of having access to healthy foods;

**WHEREAS**, the Town endorses the "eat local" and "buy local" movements;

**WHEREAS**, the Town currently limits the keeping of chickens to the rural area on parcels of 2 acres or greater, which does not support national trend of urban chicken keeping;

**WHEREAS**, the Town of Blacksburg supports an increased awareness of the environmental impacts of large scale commercial farming techniques;

**WHEREAS**, in recognition of the above, the Town Council wants to consider ordinance changes that would permit citizens to keep chickens within the corporate limits of the Town in certain single family residential areas; and

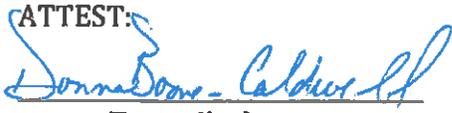
**WHEREAS**, the public necessity, convenience, general welfare and good zoning practice so require.

**NOW, THEREFORE, BE IT RESOLVED** by the Council of the Town of Blacksburg:

1. That the Planning Commission is hereby requested to review the Zoning Ordinance and the Town Code to consider potential changes that would permit keeping chickens in certain residential neighborhoods.
2. That the following specific changes to the Zoning Ordinance are proposed:
  - a. Amendments to Zoning Ordinance § 2103 to modify the definition of the term "Agriculture"; and,
  - b. A new provision in the Town Code (§ 5-118) that would establish criteria for keeping chickens in certain residential districts.

3. That the Planning Commission is further requested to propose other amendments to related sections of the Zoning Ordinance or The Town Code as necessary for consistency with the amendments described in the preceding paragraphs.

  
\_\_\_\_\_  
Mayor

ATTEST:  
  
\_\_\_\_\_  
Town Clerk

Date of Adoption:   
\_\_\_\_\_

(B)

*(Draft)* *as of*  
1/15/2019.

**Ordinance 18--**

**AN ORDINANCE AMENDING ZONING ORDINANCE SECTION 2103 AND ADDING A NEW TOWN CODE SECTION 5-118 TO PERMIT THE KEEPING OF CHICKENS IN RESIDENTIAL AREAS**

**BE IT ORDAINED** by the Council of the Town of Blacksburg:

That Section 2103 of the Zoning Ordinance is amended and re-ordained, and a new Section, 5-118, is added to the Town Code as follows:

**Sec. 2103 - Definitions of terms and use types.**

For the purposes of this ordinance, the words and phrases listed below in this section shall have the meanings described below:

**AGRICULTURE**—The use of land for the production of food and fibre, including farming, dairying, pasturage, agriculture, horticulture, viticulture, and animal and poultry husbandry. A garden accessory to a residence shall not be considered agriculture. The keeping of a horse, cow, pig, sheep, goat, or chicken shall constitute agriculture regardless of the size of the animal and regardless of the purpose for which it is kept. *Notwithstanding the foregoing, keeping four hens or less in accordance with the provisions of Town Code § 5-118 shall not be considered to be "agriculture."*

**Chapter 5 - ANIMALS AND FOWL**

**ARTICLE I - IN GENERAL**

**Section 5-118. – Urban chickens.**

*(a) Subject to the provisions of this section, it shall be lawful for a person to keep chickens within the corporate limits of the town on residential property, containing only single-family detached dwellings, in the R-4, RR-1 and RR-2 zoning districts. No chickens shall be allowed on townhouse, duplex, apartment, or manufactured housing park properties. Keeping chickens in these areas, which may be described as keeping "urban chickens," is subject to the following terms and conditions:*

- (1) No more than four (4) hens shall be allowed for each single-family dwelling.*
- (2) No roosters shall be permitted at any time.*
- (3) Chickens shall be kept in an enclosed area not to exceed a total of 128 square feet hereinafter known as a "pen." Pens shall include a coop, an enclosed structure containing a minimum of two square foot per hen and an open run area containing a minimum of eight square feet per hen.*

*(4) Pens shall be located in the rear yard and shall be situated at least fifteen (15) feet from all property lines and fifty (50) feet from dwellings on adjacent properties. In addition, all pens shall be located at least twenty (20) feet from streams, tributaries, ditches, swales, stormwater management facilities, drop-inlets, or other storm drainage areas that would allow fecal matter to enter any storm drainage system or stream.*

*(5) All pens must be kept in a neat and sanitary condition at all times, and must be cleaned on a regular basis so as to prevent offensive odors.*

*(6) All feed for the hens shall be kept in a secure container in a garage, shed or the residence to prevent the attraction of rodents and other animals.*

*(7) Adequate shelter, care and control of the hens is required. Any person permitted to keep urban chickens pursuant to this section shall comply with all the provisions and requirements of the town and state code regarding care, shelter, sanitation, health, rodent control, cruelty, neglect, noise, and any other requirements pertaining to, but not limited to, the adequate care and control of animals.*

*(8) Application submission requirements and registration.*

*a. Persons wishing to keep hens pursuant to this subsection must file an application with the town's department of planning and building development, which application shall include:*

*i. A sketch showing the area where the chickens will be housed and the types and size of pens in which the chickens shall be housed. The sketch must show all dimensions and setbacks.*

*ii. A twenty-five dollar (\$25.00) application fee.*

*iii. Applicants are encouraged but not required to give notice to adjacent property owners. For purposes of this section, "adjacent property" means all parcels of privately owned land that the applicant's property comes into contact with at one or more points, except for parcels that are legally adjacent to but are separated from the applicant's property by a public or private street.*

*b. Once the application has been reviewed and approved, the department of planning and building development shall issue a registration, which shall be valid for one (1) year.*

*c. Each existing registration will be renewed on an annual basis by procedures developed by the town's department of planning and building.*

*(c) Hens currently existing in the R-4, RR-1 and RR-2 residential zoning districts in violation of the zoning ordinance shall not be "grandfathered" or permitted to remain after the effective date of this section without registering. Owners of such hens will have forty-five (45) days from the effective date of this section to come into compliance with this section.*

*(d) It shall be unlawful to keep hens in town except as permitted by this section or as permitted as an "Agriculture" use in the Zoning Ordinance. Any person found guilty of violating this section shall be guilty of a Class 3 misdemeanor and subsequent violations of this section by the same person shall constitute a Class 2 misdemeanor.*

**BE IT FURTHER ORDAINED** that, as pilot program, urban chickens may also be kept in the areas of Bennett Hill/Progress Street area depicted on the attached map labeled "Pilot Program Area for Urban Chickens." This pilot program shall be re-evaluated one year after the adoption of this ordinance, which shall be effective on and after the date of its adoption.

\_\_\_\_\_  
Mayor

ATTEST:

\_\_\_\_\_  
Town Clerk

1st Approval: \_\_\_\_\_

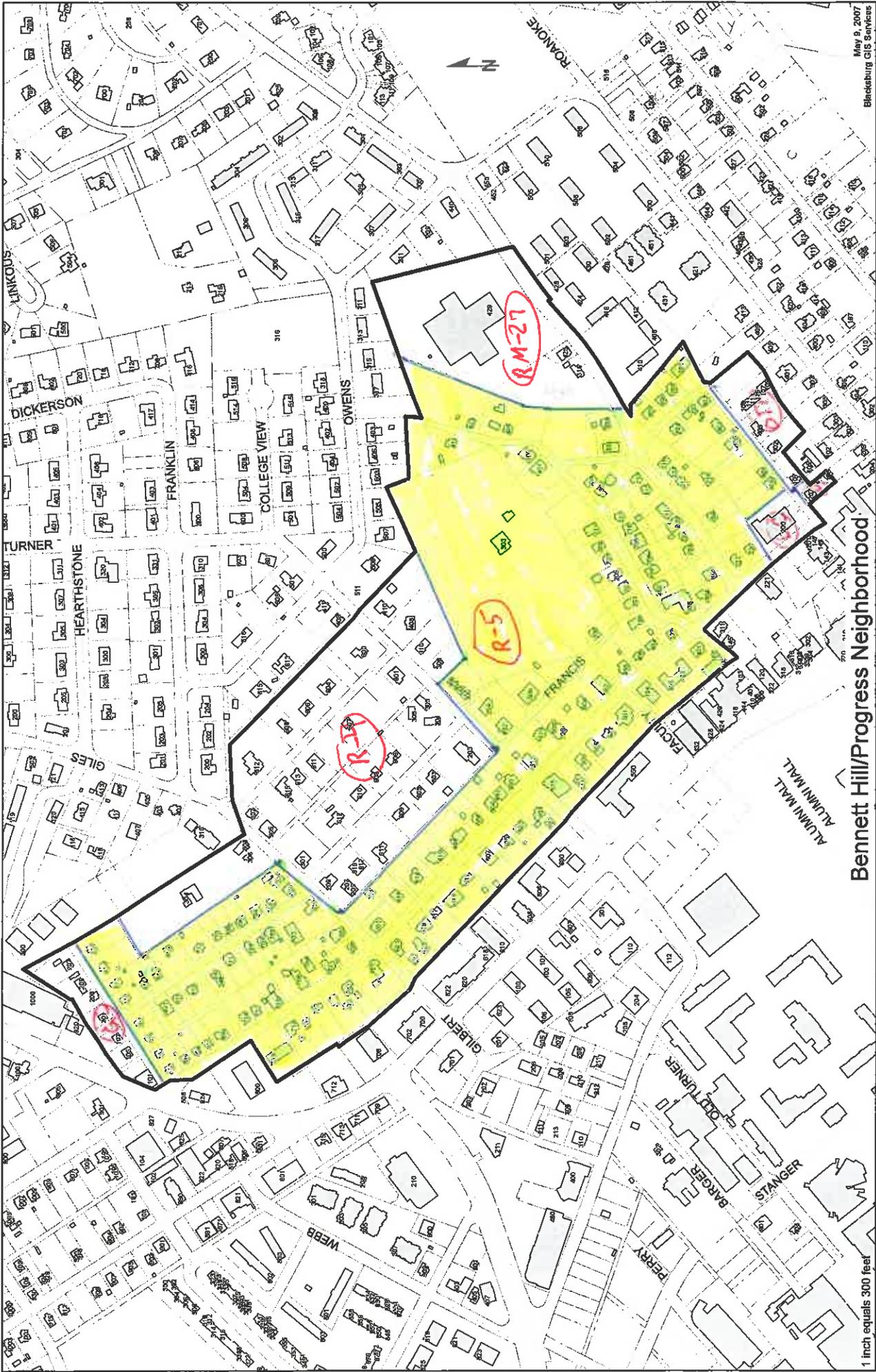
Public Hearing & Adoption: \_\_\_\_\_

APPROVED AS TO CONTENT:

\_\_\_\_\_  
Town Manager

APPROVED AS TO LEGAL SUFFICIENCY:

\_\_\_\_\_  
Town Attorney



**Bennett Hill/Progress Neighborhood**

# TOWN OF Blacksburg

a special place

Public Information Meeting/ZOA #41  
February 6, 2019  
Urban Chickens, Sign-In Sheet

Name - Printed	Email Address
PAUL PATERSON	ppaterson@blacksburg.gov
EMILIO SANTINI	SANTINIEMILIO@comcast.com
Paul Ruszler	28th Wrights Way
Dan McKeague	604 Sunrise Drive
Jared Torabinejad	Jtorabinejad@yahoo.com
Nancy Vogelgar	N.Vogelgar@verizon.net
Jennie Vance	jks12@yahoo.com

Please Print Legibly

## Public Information Meeting Notes Urban Chickens

The public information meeting for Urban Chickens ZOA #41/Ordinance 1888 was held at 5:30 PM on Wednesday, February 6<sup>th</sup> at the large conference room of the Blacksburg Motor Company Building, 400 South Main Street, Blacksburg.

7 persons attended this meeting (see sign-in sheet) along with children from 2 of the families.

An invitation was given to Dr. Paul Ruzsler, Ph.D. Poultry Production, Management and Environmental Physiology – Emeritus Faculty Member of Virginia Tech Department Animal and Poultry Science. Mr. Ruzsler attended the meeting and provided valuable insight and discussion on the raising and keeping of chickens in a backyard setting.

Planning staff presented a power point presentation on the proposed aspects of the draft ordinance for keeping of Urban Chickens and how a zoning ordinance is processed.

Discussions during and following the presentation included, but was not limited to:

- © Question on the number of hens to allow? As 6 hens rather than 4 hens would produce a critical amount of body heat which may be needed during the winter months in the chicken coop if it is not properly insulated. Also, if more hens are allowed by owners who have prior experience with a larger flock, this could result in better care of the chickens.
- © If you have a large number of children in the family, could additional hens, such as one hen per child be allowed? Draft Ordinance 1884 proposes a maximum of 4 hens.
- © Number of chicks to be allowed to start with, as not all of the chicks will make it into adult hens. Also some of the chicks may turn out to be roosters, that would need to be removed. Chickens general start producing eggs at 6 months of age. Production of eggs start to diminish after 2 years and is dependent upon the breed of the chicken. Chickens may live to be more than ten years old.
- © Whether chickens would be allowed to roam loose in a yard under supervision of the chicken owner. Chickens would need to be kept within the chicken coop/pen enclosure. Chicken coop/pen could be portable, but would need to adhere to the minimum distances of 15 feet from the property line and 50 feet from adjacent dwellings.
- © Chicken manure, makes an ideal garden/yard fertilizer and how to best manage it and rake it into the garden/yard.
- © An allowance for smaller distance from adjacent dwellings in the Bennett-Hill/Progress Street pilot program due to the narrower width and smaller size of the lots in this neighborhood.

Meeting ended at 7:00 PM.

	<b>Urban Chickens</b>	January 28, 2019	
1	Zoning Districts	RR-1, RR-2, R-4, (Bennett Hill 1 year trial)	
2	# Hens	Maximum of 4	6 hens produce too many eggs - Christiansburg
3	Roosters	None allowed	
4	Pen/Coop	Maximum of 128 Square Feet	
5	Enclosed Structure	Minimum of 2 Square Feet per Hen	Needs to be Larger - 3 to 4 SF per Hen - Christiansburg
6	Open Run Area	Minimum of 8 Square Feet per Hen	
7	Pens	Minimum of 15 feet from property line	
8	Pens	Minimum of 50 feet from adjacent dwellings	
9	Pens	kept clean, no offensive odors	
10	Feed	secured inside	
11	Care of hens	adequate shelter, care and control	
12	Application	Site sketch	
13	Application fee	\$30, same as for Zoning Permit for Shed	
14	Application	1 year, annual renewal required	
15	Existing Hens	Not grandfathered, 45 day grace period	
16	Enforcement	Class 3 misdemeanor	

# Developing Regulations for Keeping Urban Chickens



Small and Backyard Flocks - May 05, 2015 (20150505)  Print (http://www.printfriendly.com)

*Written by: Dr. Jacquie Jacob, University of Kentucky*

There is growing interest in keeping chickens in urban areas in North America. Whether a family can keep poultry in the backyard depends on state, county, and city ordinances. Community regulations might also come into play—current regulations vary from city to city. The main benefit of a backyard flock stems from the human-animal bond, as well as the production of a food item, primarily eggs. However, many individuals have concerns related to public health and community well-being. These include the spread of disease, waste management, poultry pests, predators, noise, and odor. The validity of the proposed benefits and negative effects are not currently supported by any published research. Pollock et al. (2012) suggest that the issue be approached much like concerns over keeping dogs.

## Proposed Benefits

Raising chickens in an urban backyard is not much different from having a companion animal such as a cat or dog. In a recent USDA survey, Garber et al. (2007) note that the most common reason for having backyard flocks was for fun or as a hobby. Additional reasons included family tradition, lifestyle, and food production, as well as the desire to expose children to food production, general affection for birds, and insect control.

There is research to support the idea that improved emotional well-being results from keeping companion animals (Wells, 2009). Emotional benefits include increased social interaction and reduced feelings of loneliness, isolation, and depression. If backyard chickens are considered companion animals, keeping them will likely have the same positive effects.

Eggs are the main food item produced in backyard flocks. The local production allows families to have some control over their food production. Given the economies of scale, however, it is rarely possible for the keeper of a backyard flock to produce eggs at a lower cost than those available in the grocery store. Chickens can eat some kitchen scraps, but it is still necessary to feed them a complete feed in order to sustain egg production. When chickens are fed household waste, there is an environmental benefit to raising backyard chickens. An additional environmental effect is the supply of chicken manure, which, when properly handled, is a good garden fertilizer, reducing the need for commercial fertilizers.

When the chickens are allowed to roam in the yard, they may eat garden pests and weeds, serving as a biological control. Unfortunately, chicken foraging behavior can have negative impacts on the plants themselves.

Some believe that eggs produced at home are more nutritious than store-bought eggs, but the research does not support this belief (Anderson, 2011; Kasrten et al., 2010). Eggs, whatever the source, are an excellent source of protein.

## Fact or Fiction

### Source of Disease Transmission to Commercial Poultry Operations

Smith and Dunipace (2011) reviewed the literature on the role of backyard poultry flocks in past avian influenza outbreaks and concluded that the role is very small. They indicate that the small flock size and limited contact with commercial operations reduced the likelihood that backyard flocks are a risk to transmit disease to commercial poultry operations. They back up this opinion with several case studies. For example, in the 2004 outbreak of avian influenza (H7N3) in British Columbia, Canada, the odds of infection were 5.6 greater for commercial flocks (>1,000 birds) than for backyard flocks. In addition, backyard flocks were always discovered by surveillance of nearby backyard flocks after nearby commercial flocks had been infected. Similarly, in the 2002 avian influenza (H7N2) outbreak in Virginia, not a single backyard flock was reported to be infected.

## Public Health Issues

1/7/2019 The public health issues of concern are the spread of influenza disease from the birds to humans and food poisoning from consumption of food items produced (meat or eggs). There are a number of hypothetical means through which people can be exposed to poultry disease from backyard flocks. These include direct contact, waste handling, and egg consumption. There are a number of avian diseases that are zoonotic. The spread of these diseases, however, is primarily associated with other poultry and wild birds rather than with chickens. Avian influenza and salmonellosis are two exceptions. Avian influenza has received a lot of attention because of the outbreaks of avian influenza among humans in Asia, but the concerns are restricted to Asian backyard flocks. There has not been a single case of H5N1 (the strain of Asian avian influenza) anywhere in the the United States.

Salmonellosis and campylobacteriosis can pose an ongoing threat to human health in North America. A New Zealand study (Anderson et al., 2012) reported that campylobacter is common in backyard chicken flocks. However, because backyard poultry had campylobacter genotypes for the strains found in commercially produced poultry, it is not possible to distinguish the source of infection in human cases. As a result, backyard poultry, or their fecal material, are a potential source of campylobacter exposure in people. When dogs are kept in the same area as chickens, the dog may eat the fecal material and could hypothetically transmit salmonellosis to household members. While there have been a few cases of salmonellosis in humans keeping backyard flocks (<http://www.extension.org/pages/69059/human-salmonella-infections-linked-to-backyard-chickens#.UmfFl1NbwWQ>), salmonellosis is not typically a problem in properly maintained flocks.

On August 15, 2013, the Centers for Disease Control (CDC) reported 316 people from 37 states (<http://www.cdc.gov/salmonella/typhimurium-live-poultry-04-13/index.html>) were infected with *Salmonella typhimurium*, believed to be related to backyard poultry flocks. Of the 119 people with available information, 51% had been hospitalized. The majority of the sick were children 10 years of age or younger. Of those that got ill, 97% reported contact with live poultry in the week before their illness began. The majority purchased live poultry from agricultural feed stores. The CDC stressed the importance of hand washing after handling poultry. Again, salmonellosis is not a concern in well-maintained flocks. If bringing in a new flock of hens, it is best to raise the chicks yourself, after having purchased them from a clean flock.

## Waste Management

Proper manure management is essential in controlling disease risk, odors, and flies. Most concerns regarding poultry waste are related to the quantities produced on large-scale farms. Small-scale operations, as well as backyard flocks, can also contribute to environmental pollution if they have high bird density and poor manure management. Most city ordinances restrict the number of birds allowed in a backyard flock. It is also rare for urban centers to be situated near important water reservoirs. This dramatically reduces the risk of environmental pollution from backyard flocks. The weight of fresh manure output is about 115% of the total dry feed intake. So, to estimate the amount of manure a flock will produce, you can multiply the flock's total feed consumption and multiply by 1.15. (A hen typically eats a quarter pound of feed a day.) Fresh manure is 75% water, and some of the moisture will evaporate from manure accumulating in a poultry house. It is important to keep the manure dry. By keeping the litter dry, only about one-third of the calculated weight of the fresh manure will remain. Composting the used bedding produces an excellent fertilizer for vegetable or flower gardens.

## Pest Populations

The main pests of concern for poultry include external parasites such as mites, lice, bedbugs, fleas, and soft ticks. Additional pests of concern include darkling beetles, flies, moths, cockroaches, and rodents. There is very little research to reach any conclusions about the effects of pests on backyard flocks. Rodents, especially mice, will eat feed and contaminate it with salmonella. In addition to transmitting disease, rodents can also spread lice, fleas, and mites. Health risks from backyard flocks depend on the cleanliness and security of the chicken coop, as well as the nature of waste management and feed storage.

## Predators

Some areas have problems with raptors. The main land predators of concern include raccoons and coyotes, although neighborhood dogs can be a problem in some areas. If birds are housed in a coop, this will usually protect them from predators. Raccoons can be a problem, however, because they can reach into pens.

## Noise

1/2019 city ordinances do not allow roosters because of the noise. Keeping Urban Chickens extension rooster from crowing, and roosters will crow throughout the day. Some city ordinances allow for temporary keeping of roosters for breeding purposes, but that is rare.

Hens have also been accused of being a noise nuisance. A hen will squawk during egg-laying. The squawking can continue for up to five minutes, but varies considerably. The city of Pleasanton, California, recorded the noises from a squawking hen at a distance of two feet and obtained a 63 dBA. By comparison, dogs are considered a noise disturbance when barking exceeds 100 dBA (Coopala et al., 2006). Minimizing the number of hens allowed in a backyard flock will minimize the nuisance.

## Odor

Keeping chicken coops clean and properly disposing of waste will minimize any odors from a backyard poultry flock. Composting of used poultry bedding dramatically reduces any risks of odors. For more information on composting, view the University of Wyoming article "Backyard Composting: Simple, Small-Scale Methods (<http://www.wyomingextension.org/agpubs/pubs/b974R.pdf>)".

## Points to Consider

A large portion of the urban population has very little contact with food animals, purchasing their meat, eggs, and milk from the grocery store. This disconnection results in limited knowledge about how to care for livestock such as poultry. A survey by Madsen et al. (2013) identifies gaps in the disease prevention and biosecurity practices of backyard flocks.

Per a review of some of the current city ordinances related to backyard poultry flocks, the following questions need to be addressed in the establishment of new city ordinances.

- **What species of poultry will be allowed?** Most urban areas allow only chickens, though some do not restrict the kind of poultry that can be raised. Waterfowl can produce a lot of wet manure and tend to be more of an odor problem.
- **What is the maximum number of adult birds that a backyard can have?** Most ordinances allow between five and six.
  - What factors should you consider to limit the number of birds? Factors could include land size, for example.
  - Will there be exceptions for community flocks?
- **Are roosters allowed?** Most urban areas do not allow roosters because of the noise. Some city ordinances do allow roosters because roosters are required for breeding a poultry flock. Some allow roosters to be kept temporarily for breeding purposes.
- **Will a permit be required?** Several cities require flock owners to get a permit in order to keep chickens in the backyard, but permit requirements are rare. In communities that do require a permit, requirements differ on several key points.
  - Will there be a fee for a permit?
  - What does the application involve?
  - Do prospective flock owners have to get neighbor approval?
  - Will prospective owners be required to take a course before they can get a permit?
  - Will there be inspections of the facilities to verify correct application of the rules? And, if so, what are the consequences of violations?
  - How often does the permit need to be renewed?
- **Will there be coop restrictions?** These could include requirements that a coop be set back from neighboring properties. "Setback" regulations are very common, but not universal.
- **Will the chickens have to be tagged for identification?** This is rare, and in some places strongly opposed.

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# Five Reasons Why Owning Backyard Chickens Is For The Birds



**James McWilliams** Contributor   
 Food & Drink  
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Somehow or other, it has become the mark of twenty-first century urban hipness to keep a bunch of birds out back. We're mostly talking hens. Exact numbers are unavailable, but the trend has become popular enough for dozens of major cities to revise their animal ordinances, thereby opening the legal floodgates for the emergence of urban animal agriculture, an endeavor that most American cities legislated out of existence (primarily for health reasons) back in the nineteenth century.



This renaissance of foodie affection for the uber-local egg has also inspired its share of outlandish rhetoric. **Says** the mayor of Madison, Wisconsin: “Chickens are really bringing us together as a community.” Says my Austin neighbor and co-owner of Boggy Creek **Farm**, Carol-Ann Sayle: “Everyone should have their own henhouse in their own backyard.”

It's doubtful that the incoming mayor of New York City will agree with either of these sentiments. But no matter. Thousands of other urbanites nationwide—many of them so committed to keeping chickens that they do **so** surreptitiously—are suddenly giving a major cluck about backyard eggs.

Lost in all the enthusiasm are the drawbacks. According to Ian Elwood, of **Animal Legal Defense Fund**, “the solutions backyard chicken farming seeks to

create—food security, local foodsheds, healthful eating—are all better served by encouraging more plant based farming.” His bottom line regarding urban agriculture is simple: “Let’s leave animals out of it.”

What follows are five reasons why, when it comes to chickens, Elwood is onto something.

**1) Diminishing Production.** Hens start laying eggs after about five months. Production, however, wanes at the age of two. Hens can live for well over a decade. Many backyard hen owners are as reluctant to keep a non-productive hen as they are to turn her into chicken soup. The upshot has been a sharp rise in abandoned birds. In 2001, according to the Associated Press, Minneapolis’ Chicken Run Rescue fielded six calls from individuals looking to find homes for forsaken chickens. By 2012, that number reached almost 500.

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**2) Commercial Hatcheries.** Raising hens in the backyard seems like an obviously humane alternative to factory farming. In some ways, it is. However, on this point, two closely related facts should be considered. First, the majority of hens fortunate enough to escape the factory’s battery cage hail from the same industrial hatcheries that supply factory farms with millions of birds. This commonality not only undermines any pretense of thinking that backyard birds challenge the industrialized status quo, but it leads to a second problem, namely the fact that the male chicks born in those industrial hatcheries were likely either tossed **alive** into a grinder or gassed. Male birds are worthless to a hatchery supplying egg farms. Household hens might be glorified, but their cute chicken brothers are treated like trash.

3) **Predation.** Backyard hens are especially vulnerable to predation. Try this experiment: when you learn that a friend gets backyard hens, check in two months later and ask how things are going. Chances are good that the answer will go something like, “great, but . . .” Dogs, cats, snakes, coyotes, possum, hawks, raccoons, raccoons, raccoons. These predators are prevalent and persistent and your poor hens, the ones you have come to love as pets, cannot indulge their natural defense mechanisms (such as finding a low tree limb hidden in dense foliage). They often find themselves trapped in some Ritz-Carleton of a coop that turned out to be less secure than advertised and, in their plush safe havens, are killed in a way that makes the slaughterhouse seem like a day spa by comparison. “What killed my chickens?” It’s an all too common question. And there are currently 23,900 answers being [offered](#) on [Google](#) [GOOG](#) [-0.46%](#) .

4) **Roosters.** There’s about a 5 percent chance that your hen will turn out to be a rooster. There are a couple of reasons for this mistake. For one, the sex of a chicken is hard to identify upon birth, even for experts. Many roosters are accidentally identified as hens and shipped to feed stores, the place where urban farmer/hipsters flock to buy their stock. Less innocently, many male birds are tossed into shipping containers as a form of packing [material](#), deployed to prevent the hens from banging into the side of the crate and having their retail value lowered. In any case, urban ordinances that do allow hens are markedly less accepting of roosters, who are more often than not considered poultry non-grata in urban settings.

5) **Cost.** First-time backyard hen owners are enchanted by the idea of free eggs. Don’t be fooled. Build the coop, buy the feed, pay the vet, count the hours spent maintaining the coop and administering care, compensate the neighbor’s kid for feeding the hens when you go to the Hamptons for the weekend, and then grab a calculator. The results? As one backyard farmer from Merced, California [told](#) an online chicken forum: “Don’t tell my wife, but I think my eggs are costing about \$40 a dozen.”

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## THE CONVERSATION

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# A chicken in every backyard: Urban poultry needs more regulation to protect human and animal health

April 3, 2018 8:45am EDT

Ranging free in the yard. thedabblist, CC BY

## A chicken in every backyard: Urban poultry needs more regulation to protect human and animal health

April 3, 2018 8:45am EDT

Colorado has received a lot of attention recently as one of the first states to allow recreational marijuana, but it's also legalizing other things. Denver, one of the nation's hottest urban real estate markets, is surrounded by municipalities that allow backyard chicken flocks.

This isn't just happening in Colorado. Backyard chickens are cropping up everywhere. Nearly 1 percent of all U.S. households surveyed by the U.S. Department of Agriculture reported owning backyard fowl in 2013, and 4 percent more planned to start in the next five years. That's over 13 million Americans flocking to the backyard poultry scene. Ownership is spread evenly between rural, urban and suburban households and is similar across racial and ethnic groups. A 2015 review of 150 of the most-populated U.S. cities found that nearly all (93 percent) allowed backyard poultry flocks.

Our lab group analyzes health issues that connect humans, animals and the environment. In a recent study with University of California, Davis animal scientist Joy Mench, we examined urban poultry regulations in Colorado – the only state that collects and makes public animal shelter surrender data. Our findings suggest that as backyard chicken farming spreads, states need to develop regulations to better protect animal welfare and human health.

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### Chickens in the city



Chicken owners in cities like Los Angeles are seeking a closer connection with their food.

### When animals roamed the streets

U.S. cities once were powered by animals. Horses provided transport through the early 1900s. Pigs and hens fed on household garbage before municipal trash collection became routine. Thousands of cattle were driven up Fifth Avenue in New York City daily in the late 19th century, occasionally trampling children and pedestrians.

To reduce accidents, disease and nuisances, such as piles of smelly manure and dead animals, early public health and planning agencies wrote the first ordinances banning urban livestock. By the 1920s, farm animals and related facilities such as dairies, piggeries and slaughterhouses were barred from most U.S. cities. Exceptions were made during World War I and World War II, when meat was rationed, encouraging city dwellers to raise backyard birds.

### Locavores and animal lovers

The local food movement has helped drive interest in raising backyard birds. People want to grow their own food. In response, cities across the country are modifying regulations and overturning long-standing bans to legally accommodate backyard chickens.

Surveys show that backyard chicken owners are concerned about where their food comes from, how it was produced and possible risks associated with eating industrially produced meat and eggs. They believe their birds have a better quality of life and produce safer and more nutritious eggs and meat than commercially raised versions.

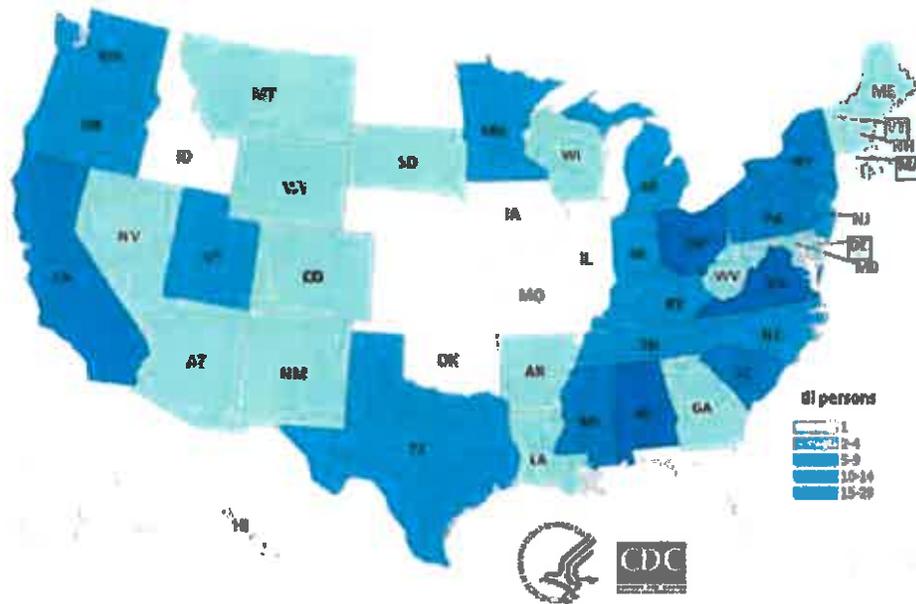
### Risks to humans and chickens

However, raising backyard chickens is not risk-free. As one example, an outbreak of highly infectious H5N1 avian influenza in Egypt resulted in 183 confirmed cases and 56 deaths between 2014 and 2016. The majority of clinically confirmed cases were linked to close contact with diseased backyard birds.



How civilians could help during World War I. USDA

In the United States, contact with backyard poultry is associated with hundreds of multistate salmonella outbreaks every year. A 2016 USDA survey of backyard poultry owners found that 25 percent of respondents did not wash their hands after handling birds or eggs. In another study, the majority of backyard owners knew little about identifying or preventing poultry diseases.



Number of people infected with salmonella in four 2015 multistate outbreaks linked to backyard poultry. CDC

Commercial poultry facilities protect birds against a variety of diseases by injecting vaccines into growing chicks while they are still in the egg. Many backyard growers do not know to request vaccinated birds when they purchase chicks or eggs. In 2002 an outbreak of exotic Newcastle disease in California originated in backyard flocks and spread into commercial poultry operations. Operators had to euthanize more than 3 million birds. They received compensation from USDA for doing so, which cost taxpayers US\$161 million. USDA also had to restrict poultry exports, which caused economic losses for commercial poultry producers.

Many animal control and welfare agencies around the country oppose allowing urban livestock. Some activists argue that it can foster abuse, inhumane conditions and the development of backyard “factory farms,” and increase burdens on thinly stretched animal shelters and rescue groups.

### Few rules for backyard flocks

We began our study by reviewing every local law in the state of Colorado pertaining to livestock. Then we looked at Colorado animal shelter and rescue data for 2014 and 2015. We wanted to see whether counties with large commercial operations were likely to prohibit raising backyard birds; when most ordinances originated; and what animal care standards were written into local laws.

We found that 61 of 78 Colorado municipalities allowed backyard chickens, and only 13 municipalities explicitly banned the practice. Local laws most commonly controlled for coop design and placement, prohibited owning roosters and limited the total number of birds allowed. Unlike commercial

guidelines or typical standards for domestic cats and dogs, most ordinances did not require vaccination or veterinary care.

Very few regulations required humane slaughter or disease reporting. Only four municipalities required owners to provide birds with food; 16 required water, and two mandated veterinary care as warranted. Many owners understand that water and food are basic necessities, but when cities do not codify these requirements, animals have little legal protection and are not officially entitled to veterinary care even when they are sick, injured or dying.

On the positive side, we found that most shelters had not yet experienced an increase in chicken intake, and reported that people were interested in taking in stray chickens. But several organizations were concerned that they would receive more chickens in the future as the number of homes with space for stray birds decreased.

### Setting higher standards

We found several cities with model ordinances that safeguarded avian and human health. Fort Collins, home to Colorado State University's College of Veterinary Medicine, requires annual permitting fees that are collected by the nonprofit Larimer Humane Society. The agency educates owners about disease prevention and husbandry and connects them with veterinarians and agricultural extension agents.

Nonprofit animal welfare agencies often depend heavily on donations to run animal shelters and care for strays. Fee systems such as that required in Fort Collins can help them cover costs of managing unwanted and stray animals. And streamlined permitting overseen by animal welfare agencies and veterinarians can prevent many backyard diseases or catch them early.

Based on our survey of Colorado, we believe cities need to carefully consider their backyard chicken regulations and develop strong legal frameworks that protect animal and human health and welfare. In particular, they should develop rules that require food and water, mandate veterinary care and connect owners with animal welfare agencies.



Stray chickens can be killed by domestic dogs or wild predators. Mark Brynsky, CC BY

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