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Item No. 12.1
Halifax Regional Council
August 17, 2021
August 31, 2021
October 5, 2021

TO: Mayor Savage and Members of Halifax Regional Council

Original Signed by



SUBMITTED BY:

Jacques Dubé, Chief Administrative Officer

DATE: June 21, 2021

SUBJECT: **Case 22227: The Keeping of Egg-Laying Fowl Accessory to a Residential Use**

ORIGIN

On July 30, 2019, the following motion of Regional Council was put and passed:

THAT Halifax Regional Council direct the Chief Administrative Officer to:

- 1. Initiate a process to consider amendments to the Regional Municipal Planning Strategy and all applicable Secondary Municipal Planning Strategies and Land Use By-laws as necessary to permit the keeping and raising of all egg-laying fowl consistent with the proposed policy direction outlined within the Discussion section of the staff report dated June 12, 2019; and*
- 2. Follow the public participation program as set out in the Community Engagement section of the staff report dated June 12, 2019.*

LEGISLATIVE AUTHORITY

Halifax Regional Municipality Charter, Part VIII, Planning & Development.

RECOMMENDATION

It is recommended that Halifax Regional Council:

1. Give First Reading to the proposed amendments to the Regional Municipal Planning Strategy and all land use by-laws, with the exception of the Regional Centre Land Use By-law (Package A), the Downtown Dartmouth Land Use By-law and the Halifax Peninsula Land Use By-Law, as set out in Attachments A and B, to allow the keeping of hens as an accessory residential use, and schedule a public hearing;

RECOMMENDATIONS CONTINUED ON PAGE 2

2. Adopt the proposed amendments to the Regional Municipal Planning Strategy and all land use by-laws, with the exception of the Regional Centre Land Use By-law (Package A), the Downtown Dartmouth Land Use By-law and the Halifax Peninsula Land Use By-Law, as set out in Attachments A and B, to allow the keeping of hens as an accessory residential use; and
3. Direct the Chief Administrative Officer to incorporate the proposed Regional Municipal Planning Strategy and land use by-law amendments concerning the keeping of hens within the Regional Centre Secondary Municipal Planning Strategy and Land Use By-law through the Package B planning process.

BACKGROUND

In recent years, Regional Council has considered household food security and supported policy changes, partnerships, and community-based solutions to food security challenges. On July 30, 2019 Regional Council considered a staff report dated June 12, 2019, entitled, [Case 22227: Keeping Egg-laying Hens in Residential Zones](#) and initiated a process to consider amendments to the Regional Municipal Planning Strategy (RMPS) and all applicable secondary municipal planning strategies and land use by-laws as necessary to permit the keeping and raising of egg-laying fowl in residential zones based on the following policy directions:

1. Allow a limited number of egg-laying fowl as an accessory use on residentially zoned properties, based on best practices research across Canada and the United States.
2. Ensure egg-laying fowl are only used for personal use.
3. Use existing accessory structure regulations for fowl enclosures with added limitations on size and setbacks.
4. Use, and amend where necessary, the existing Animal Control By-law to ensure nuisance, cleanliness, and animal-at-large concerns are addressed.
5. Consider registration or licensing requirements based on the practices of several municipalities in Canada with careful consideration of costs and effectiveness.
6. Ensure concerns regarding health and safety are carefully considered.

The June 12, 2019 staff report provided an overview of current land use policies and regulations related to community food security, which indicated that the existing planning documents generally do not contemplate the keeping of chickens for personal use in residential areas. The report's [Attachment A](#) provided a detailed summary of land use provisions for the keeping of chickens, including uses in rural agricultural and mixed-use zones. The changes proposed in this report will not affect any currently permitted agricultural uses.

The following background sections outline the types of egg-laying fowl reviewed, existing regulations approved as part of Centre Plan Package A, the results of a jurisdictional scan and the existing municipal and provincial regulatory framework.

What are “egg-laying fowl”?

Egg-laying fowl include land-based *Galliformes*, an order of heavy-bodied ground-feeding birds that includes turkeys, grouse, chickens, guinea fowl, quail, pea fowl, partridges and pheasants, and also waterfowl such as ducks and geese. Grouse, partridges and pheasants are typically hunted rather than domesticated and are valued for their meat. Turkeys, chickens, guinea fowl and quail are domesticated and valued for their eggs, as well as for meat. Waterfowl such as ducks and geese fall under the biological family known as *Anatidae* and are valued for both meat and eggs.

Given the context of residential backyards and generally small lot sizes, wild breeds are not considered within the scope of this report due to risk of escape and animal well-being. The report focuses on domesticated egg-laying fowl, which includes ducks, geese, guineas, chickens, quail and turkeys. Detailed

information on the characteristics of each of these types of egg-laying fowl are contained within Attachment D.

Domesticated doves and pigeons, which fall under the *Columbidae* biological family, are known to be kept on residential properties for meat, breeding, racing, showing, or homing. Although pigeon eggs are edible, obtaining a satisfactory number of eggs from these birds can be at the expense of their health unless a calcium-rich diet is provided and/or decoy eggs are placed in the nest to limit egg-laying hormones. Pigeons and doves are therefore excluded from the scope of this report.

Centre Plan (Package A)

Centre Plan Package A, which applies to portions of the Halifax Peninsula and Dartmouth between Highway 111 and the Halifax Harbour, was adopted by Regional Council on September 18, 2019 and took effect on November 30, 2019. Low-density residential zones were not a part of the adoption of Package A, but are part of Package B, which is under development.

Policy 9.6 of Centre Plan Package A directs the Regional Centre Land Use By-law (LUB) to permit and regulate land use impacts related to the production, processing and distribution of food at a scale appropriate to the surrounding land uses, including the accessory keeping of hens in the Downtown (D), Centre 2 (CEN-2), Centre 1 (CEN-1), Corridor (COR), Higher Order Residential 2 (HR-2) and Higher Order Residential 1 (HR-1) zones. The LUB allows a maximum of **10** hens per lot and requires that they be kept within a fenced area or structure and that any structure meet the accessory structure size and location requirements. No setbacks are required for fenced areas from side or rear property lines and the hens must be kept within a rear yard. The Package A provisions do not prohibit the sale or slaughter of hens, or the sale of meat and eggs.

Jurisdictional Scan

Canadian Regulatory Landscape

The June 12, 2019 staff report outlines the land use policies and regulations of selected Canadian communities that allow hens for personal use in residential zones. At the time that the report was written, Gatineau, Toronto, and Edmonton were carrying out pilot projects. Since then, Gatineau and Edmonton have permanently amended their by-laws to allow hens in residential neighbourhoods, while Toronto's pilot project was extended until March 2022. In contrast, Hamilton City Council has not proceeded with an urban chicken pilot, citing concerns related to potential odour, neighbourhood complaints and the cost and effort required to regulate hens.

Additional research into accessory egg-laying fowl requirements in 8 Canadian jurisdictions indicates the following:

- in all reviewed cities only female chickens (hens) are allowed and roosters are not permitted;
- on-site slaughtering and the sale of eggs or meat are prohibited;
- the limit on the number of chickens is typically between 4 and 6 birds;
- chickens must generally be kept in enclosures such as a coop or a fence and be setback from property boundaries;
- mandatory annual licenses for hens are required in Kingston, Quinte West, and Kitchener, Ontario as well as in Digby, Nova Scotia;
- a one-time free registration is required in Kamloops, Surrey and Vancouver, British Columbia as well as Guelph, Ontario;
- requirements for coop design, waste disposal and animal welfare vary across the country;
- some municipalities permit waste to be disposed of in green carts or placed in the garbage;
- some municipalities require that any dead hen must be disposed of immediately at a livestock disposal facility, or through a veterinarian (e.g. City of Toronto), while others permit them to be disposed in the garbage collection (e.g. City of Edmonton).

In the Canadian context, licensing and one-time free registration are evenly split in their application. However, Canadian jurisdictions that emphasize the advantage of hens for household food security usually do not require a license or a fee and tend to require registration only, which provides information on the uptake of backyard hens and can be useful in the event of a disease outbreak. Experience from other cities indicates that online registration has a reasonable uptake among chicken owners.

The approach to requirements for coop design, waste disposal and animal welfare varies across the country. Certain jurisdictions have detailed requirements in chicken-specific by-laws while others instead support public education and encouraging responsible chicken ownership.

United States Regulatory Landscape

Regulations for urban fowl vary widely in U.S. jurisdictions, but generally include the following:

- not allowing roosters, mixing of breeds, slaughtering, sale of eggs, meat and/or manure;
- limits on the number of birds per lot or household, and on the type birds;
- requirements for enclosures (such as coops, runs, or yards), and for setbacks from lot lines, dwellings, businesses, or residential windows/doors;
- specifications for coop and enclosure design and construction, storage and disposal of waste, feed storage, and cleaning; and
- education on hygiene, disease transmission, and animal welfare.

Several U.S. jurisdictions also require licensing or registration of birds, or in some instances of their keepers. In some jurisdictions neighbours must be notified or provide written consent before fowl can be kept in yards.

Municipal and Provincial Regulatory Framework in Nova Scotia

In the Halifax Regional Municipality, three types of by-laws guide the keeping of egg-laying fowl in residential zones:

1. *Land Use By-laws (LUBs)* can govern the types and number of fowl that can be kept, locations on a lot in respect to yards, setback distances from property lines and watercourses and size of fowl enclosures and runs. These permissions and requirements vary widely in each of the current Land Use By-laws as discussed in the June 12, 2019 staff report.
2. *The Animal By-law (A-700)* governs the licensing, restraint, behavior, capture and impoundment of animals, and places responsibility upon animal owners or guardians. This general application by-law also prohibits the feeding of waterfowl on lands abutting or adjacent to lakes and the feeding of any type of bird on lands abutting or adjacent to other specific bodies of water. The purpose of the Animal By-law is to protect human health and safety from animals.
3. *The Solid Waste Resource Collection and Disposal By-law (S-600)* regulates the disposal of waste materials from a property. Feed waste and soiled bedding from the keeping of egg-laying fowl could be composted on-site or placed in the green cart for collection and manure would be permitted in a garbage bag, similar to cat or dog waste. However, an animal carcass is considered "non-collectable waste" and would not be permitted by any of the three streams of garbage disposal (garbage bag, green cart, nor blue bag). An animal carcass should be removed immediately and taken to a veterinarian, a farm, or an abattoir for disposal to prevent the spread of bacteria or pathogens.

The Nova Scotia Animal Protection Act regulates the welfare of animals by prohibiting abuse or neglect, and provides the Society for the Prevention of Cruelty to Animals (SPCA) inspectors with powers under the Act. Municipal by-law enforcement would address land use compliance and fowl escaping from lots, while the SPCA would investigate animal welfare complaints concerning domestic animals. The Nova Scotia Department of Environment investigates animal welfare of livestock.

DISCUSSION

The Regional Municipal Planning Strategy (RMPS) sets out the goals, objectives and policy direction for the long-term growth and development of the Municipality. Amendments to the RMPS represent significant changes in policy and Council is under no obligation to amend its regional policy direction. In this case, to support food security, staff recommend that the RMPS and all land use by-laws be amended to enable the keeping of hens as an accessory residential use. While other types of fowl are considered, only hens are recommended given the greater impacts of other types of egg-laying fowl. The following sections discuss the rationale and content of the proposed amendments, which are largely consistent with the policies and regulations approved under Centre Plan Package A. However, given the parallel adoption processes anticipated for this project and Centre Plan Package B, proposed amendments to land use by-laws which will be repealed as a result of Package B approval (the Regional Centre LUB, the Halifax Peninsula LUB, and Downtown Dartmouth LUB) are not included in this report and are instead proposed to be coordinated with the Centre Plan Package B adoption process.

Proposed Approach

Considering the impacts of egg-laying fowl, external sources, jurisdictional scans of other municipalities, community feedback and the existing regulatory framework as described in the Background section, staff propose the following approach to permitting egg-laying fowl as an accessory residential use on all lots containing a residential use.

1. Create a Consistent Regulatory Approach Across the Municipality – consistent with the Plan and By-law Simplification program and given that current land use by-laws do not clearly delineate urban, suburban and rural context, a consistent approach is proposed to the keeping of egg laying fowl. This includes:

- allowing the keeping of up to **6** adult hens per lot as an accessory use to all permitted residential uses (both low-density and multi-unit residential uses) for the purpose of household food supply;
- continuing to allow a greater number of hens, other types fowl, and livestock in rural mixed-use and agricultural zones, subject to applicable existing land use controls, which will not be impacted by the changes proposed in this report (see discussion of these uses below);
- prohibiting on-site slaughtering and sale of eggs or meat;
- requiring fowl to be kept in an accessory building or fenced area;
- requiring that the accessory building or fenced area housing the fowl be in a rear yard;
- requiring the accessory building for fowl to align with accessory building size and location requirements in the applicable zone of the land use by-law;
- requiring the accessory building or fenced area be setback a minimum of 1 metre from any side or rear lot line;
- requiring an accessory building or fenced area containing fowl to be set back the same minimum distance as a main building from a watercourse (as per Regional Plan policy); and
- exempting the accessory keeping of egg laying fowl from the need to acquire a development permit.

During the adoption of Centre Plan Package A, Regional Council set the maximum number of permitted hens at 10 with no required setbacks from property lines. However, based on further feedback received from the Nova Scotia Department of Agriculture, survey results, and additional research, staff advise that **4-6 egg-laying fowl are more appropriate** as an accessory use in residential settings. Hens require adequate space in order to not become overly stressed and hens with too little space may respond with aggressive behaviors such as egg eating, pecking each other and cannibalism. Lowering the permitted number of hens to 6 would lower the amount of waste produced and assist in mitigating impacts on neighbouring properties. This number would still provide for a generous household food supply of approximately 6 eggs per day, and roughly 42 eggs per week.

Staff also recommend a minimum setback of 1 metre from property lines to reduce potential nuisance impacts. The minimal recommended setback is intended to keep waste from entering a neighbouring yard. Given the existing controls approved under Centre Plan Package A, Council may choose to consider Alternative 3, to increase the maximum number of egg-laying fowl permitted per lot from 6 to 10, and to eliminate setbacks.

2. Public Education – The health and safety risks to both humans and fowl can be minimized by providing access to education for prospective fowl keepers. If adopted by Council, the implementation of the proposed regulations will require public education, which may include information on the basics of keeping of egg-laying fowl, animal welfare, cleanliness and health safety, disease risk mitigation, contact information for government agencies that could provide additional guidance and background, and an overview of the applicable land use regulations. Developing a public communication campaign, including Municipal webpage and other information channels, would likely take several weeks to implement. This effort could also be supplemented by partnerships with non-profit organizations active in food security issues. Jurisdictions permitting egg laying fowl across Canada have taken a similar approach.

3. Enforcement – Municipal compliance staff enforce the requirements of a land use by-law based on complaints and would also address issues with fowl escaping from a property. Noise from hens would be investigated under the Noise By-law, mess and smell, however, are challenging to enforce unless they are severe and could reasonably constitute a “dangerous and unsightly” premises. However, clear and enforceable limits on the number and location of fowl are intended to mitigate impacts. Any animal welfare issues in this case would fall under the jurisdiction of the Nova Scotia Department of Environment.

4. Registration – Staff are recommending a voluntary property owner registration approach in lieu of a licensing program or a development permit. Kamloops, Surrey, Toronto, Guelph, and Vancouver have a form of voluntary registration, while Edmonton has a mandatory registration. A development permit is not suited to track hens since the animals themselves are not “development” and are therefore proposed to be exempted from development permit to reduce administrative costs and regulatory barriers. Accessory structures, however, will still require a development permit where required by a land use by-law.

A licensing program is also not recommended due to staff and financial resources required and because such a program may not have any significant benefit compared to a voluntary registration and education approach. Registration would provide data on the location and number of hens, which would be helpful in the case of public health concerns or when animals escape the property. Registration could take place through a dedicated municipal webpage and would be free to reduce barriers. This approach is common across Canada, especially by municipalities recognizing the benefits of hens for household food security. However, given its voluntary approach it is likely that not all birds would be registered. The registration platform can be developed using existing Municipal webpage tools and will primarily be used support education and communication rather than by-law enforcement efforts.

Impacts and Risks of Egg-laying Fowl

Domesticated fowl differ greatly regarding noise, odour, potential to damage property, risk of escaping their enclosures, susceptibility to disease, aggressive behavior, spatial needs and other considerations. Certain types of fowl may not be suitable in conjunction with a residential use in any context. An overview of potential impacts and risks for the most relevant kinds of domesticated egg-laying (i.e., female) fowl are provided in Attachments E and F.

Egg-laying Fowl that are Compatible with Residential Uses

Egg-laying chickens (hens) are considered compatible for a residential setting, based on lower noise levels, less aggressive dispositions, less potential for property damage and needing less space than other types of fowl. Male birds (roosters) are typically noisier and more aggressive, so are less suited for residential areas, therefore staff are recommending that only female, or egg-laying hens be permitted as an accessory use to a permitted residential use. The characteristics of egg laying fowl are outlined in detail in Attachment D.

Waterfowl

On July 30, 2019, Regional Council directed that waterfowl, in particular ducks, be considered by staff as part of this report. After reviewing the pros and cons of permitting waterfowl in conjunction with a residential use, staff advise that waterfowl are not suitable for a residential context. Ducks require more space to live than other types of egg-laying fowl, create more noise than chickens, generate wet waste and are hard on landscaping, often creating mud. Additionally and likely most importantly, ducks must have continuous access to a pool of clean water and cannot be located within an accessory building or a fenced area. Certain breeds of domesticated ducks are also an escape risk due to their ability to fly. The regulation of waterfowl would be extremely challenging to enforce and the health and wellness of the animals and surrounding community would be difficult to manage. Geese present similar challenges including their high level of noise, their escape risk and their level of aggression towards people and other animals. Therefore, geese are also not considered suitable for keeping in a residential context.

Other Types of Fowl

Staff also investigated Guinea Fowl, Quail and Turkeys for their potential suitability. Guinea fowl are loud, creating a frequent squawking noise and are prone to escape due to their ability to fly. Quail are also an escape risk because of their ability to fly. Quail can become injured when their enclosures are not properly built to the correct dimensions and they attempt to take flight. They cannot be kept together with chickens because of their different feed and care needs and chickens tend to bully quail, leading to animal welfare concerns. Turkeys create a foul odour with their waste and can be aggressive towards chickens and people. Therefore, Guinea Fowl, Quail and Turkeys are not considered suitable for keeping in a residential context.

Agricultural Uses in Current Land Use By-laws

Certain land use by-laws, particularly in rural areas, permit "agricultural uses". Agricultural uses include the keeping of a variety of fowl and permit greater numbers of fowl than the proposed amendments. These uses must meet requirements such as large lot sizes and large setbacks from wells, property lines and watercourses. Staff advise that these existing provisions for agricultural uses support the appropriate locations and controls for residents wishing to keep a greater number of fowl, or fowl species not permitted under the proposed amendments.

Environmental and Human Health Risks

There are health and environmental risks associated with the keeping of birds. Attachment F of this report discusses these risks in detail and describes some risk mitigation practices.

The proposed watercourse setback is consistent with Regional Plan policies and applies to all land use by-laws and is intended to protect watercourses and associated flora and fauna from pollution and contamination.

As noted in Attachment F, there are risks of zoonotic disease spread associated with the keeping of egg laying fowl in a residential context. Some stakeholders indicated concern with the potential for backyard flocks spreading disease to commercial flocks, or to people. In 2004, 19 million fowl were euthanized in British Columbia to halt the spread of an avian influenza outbreak¹. The United States Centre for Disease Control detected cases of avian influenza (H7N9) in a commercial flock in 2017². Although avian flu is rare in Canada at this time, future outbreaks could occur, and could spread from chickens to people. While the provincial government is responsible for health and controlling the spread of such a disease outbreak, the Municipality is responsible for land use planning, thereby choosing the appropriate contexts where the keeping of fowl is permitted. Other human health risks include salmonella and campylobacter bacteria, both of which are discussed in attachment F.

¹ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC390237/>

² <https://www.cdc.gov/media/releases/2017/s0308-H7N9.html>

Based on the experiences from other jurisdictions, the risk of disease can be mitigated by limiting the number of hens, the proper cleaning of coops and runs, proper removal of manure, and proper animal handling. All of the necessary information to achieve this can be shared through the proposed education approach and would be made available on the municipality's website should the proposed amendments be approved.

Animal Disposal, Slaughter or Surrender

As previously mentioned, animal carcasses are considered "non-collectable waste" and will not be collected through HRM's solid waste services. If a chicken dies or must be euthanized, its carcass must be disposed of by a licensed veterinarian or an animal crematorium.

The proposed amendments do not permit on-site slaughtering to take place. Chickens that are to be slaughtered must be taken to a licensed abattoir.

Animal welfare is a provincial responsibility. If chickens are being mistreated, the Nova Scotia SPCA is empowered by law to investigate and, if necessary, remove the animals. If an owner is no longer able or willing to care for the animal, the SPCA does not accept surrendered chickens. Certain farms may accept chickens from a backyard flock, however, there is no farm which consistently accepts unwanted chickens as a typical practice.

Conclusion

The recommendations in this staff report are in keeping with the JustFOOD vision of a Halifax Region where *"no one is hungry and everyone has access to good food that they enjoy. Food and people are celebrated, the local economy is strong and the environment is protected for generations to come."*

This report recommends that the Municipality amend its land use policies and by-laws to permit the keeping of egg laying fowl as an accessory residential use to increase access to food, food skills and connections to where food comes from. The proposed amendments to the Regional Plan and all applicable land use by-laws are intended to permit the keeping of adult egg-laying female chickens (hens) as an accessory residential use for the purposes of household food supply. The proposed regulations include standards to ensure safety and compatibility with the neighbourhood such as providing a setback from property lines and a limit on the number of egg-laying fowl permitted.

If approved, the new regulations will be accompanied by public education and enforcement will be complaint driven. A voluntary registration program will support municipal tracking on the keeping of backyard hens and provide information in case of a public health issue. Therefore, staff recommend that Regional Council approve that the proposed amendments to the RMPS and all applicable LUBs to permit the keeping of hens as an accessory residential use in all areas of the Municipality.

FINANCIAL IMPLICATIONS

The HRM costs associated with the proposed amendments, education resources and voluntary registration can be accommodated within the approved 2021-2022 operating budget. At this time, there are no additional staff resources required to implement the recommendations in this report. However, should enforcement activity increase, any associated cost implications may be considered through future business planning processes.

RISK CONSIDERATION

The risks associated with the recommendations contained within this report are considered to be low. The proposed amendments involve RMPS and LUB amendments. Such amendments are at the discretion of

Regional Council and are not subject to appeal to the Nova Scotia Utility and Review Board. Information concerning risks and other implications of adopting the proposed amendments are contained within the Discussion section of this report and Attachment F, including consideration to human health, animal well-being and potential for nuisance. These potential risks are proposed to be mitigated through the proposed regulations and public education materials.

COMMUNITY ENGAGEMENT

The community engagement process completed as part of this project was consistent with the intent of the HRM Community Engagement Strategy. The level of community engagement was through consultation, achieved by providing information and seeking comments through the Shape Your City website via a questionnaire. Additional correspondence from residents was received through letters and e-mails. Staff also contacted external organizations, including the *Nova Scotia Health Authority*, the *Nova Scotia Department of Agriculture*, the *Nova Scotia Department of Environment*, the *Nova Scotia Federation of Agriculture*, *Egg Farmers of Nova Scotia*, *Chicken Farmers of Nova Scotia*, the *Nova Scotia Veterinary Members Association* and the *Food Team at the Ecology Action Centre*, many of whom also provided correspondence.

Online Questionnaire

An online questionnaire, using the Shape Your City website, was open from late November 2019 to mid-January 2020 and solicited over 2,400 responses. The aim of the questionnaire was to explore the respondents' interest, support, or opposition toward:

- keeping egg-laying fowl in conjunction with a residential use;
- the issues and opportunities of keeping egg-laying fowl;
- understanding the reasons for and against the keeping of egg-laying fowl.

In addition to multiple-choice answers within the questionnaire, written comments were received from respondents. Opinions ranged greatly, with many strong expressions for and against the keeping of fowl in conjunction with a residential use. Recurring themes were:

- the importance of responsible flock and coop/run management;
- control of odour;
- control of noise;
- animal welfare;
- concern over the attraction of mice or rats;
- adequate enforcement; and
- required training of potential fowl keepers.

The questions and a summary of responses are provided in Attachment C. In general, the results showed that the strongest interest was in the rural areas, followed by the urban core. The interest was somewhat lower in the suburban areas, which also showed the most opposition to the keeping of fowl in conjunction with a residential use. Overall, 79% of respondents indicated that it would be acceptable if their neighbour kept chickens, compared to 60% for ducks and 59% for quail.

A wider range of fowl species was favoured in rural areas compared with urban and suburban neighbourhoods. Not surprisingly, chickens were by far the most popular species across the region. The most common range of existing flock size was 1 to 6, whether in urban, suburban or rural areas. This flock size was also the most commonly envisioned by those who might be interested in keeping fowl on their properties in the future.

Correspondence

Feedback from residents was also received through e-mail, letters and phone calls, resulting in 24 additional pieces of correspondence received beyond the on-line survey. The feedback gained from this correspondence generally followed the same themes as those received through the online survey.

External Organizations

The following is a summary of the feedback received from the various external organizations who were contacted about the keeping of egg-laying fowl in residential zones.

The **Nova Scotia Health Authority** indicated support for the principle of local food security, including the keeping of egg-laying fowl as an accessory residential use, but urged caution about the risks of disease transmission between fowl and people. The agency indicated that it is important to register fowl keepers so they can receive educational materials and be contacted quickly in the event of a disease outbreak.

The **Nova Scotia Department of Agriculture** emphasized the importance of education. The Department indicated that both the Municipality and residential fowl keepers should be aware of the risk of disease transmission to commercial flocks. The Department also indicated that prior to someone deciding to keep fowl, they should ask themselves how they will dispose of the manure, soiled bedding and other waste, and what happens if a bird dies. Improperly managed manure, bedding, or feed attracts flies and rodents. It was noted that the acceptable number of fowl per property is related to property size. Ten fowl per lot was suggested to be too high for urban neighbourhoods. Further, the Department noted that setbacks from property lines are important, even in rural locations and especially in urban areas, and that fowl should also be set back from wells to prevent contamination.

The **Nova Scotia Department of Environment** enforces the *Animal Protection Act* insofar as it relates to farm animals, which include fowl kept for egg-laying. The Department also establishes setbacks from wells for potential sources of contamination.

The **Nova Scotia Federation of Agriculture** had no substantive concerns with the Municipality allowing residents to keep fowl in residential yards, as long as animal welfare is ensured. They stated that it is important to make sure there is enough space per animal. They also offer online information about poultry, including guidelines for small-flock biosecurity.

Egg Farmers of Nova Scotia does not encourage backyard flocks, out of concern for the health of the birds, including any potential spread of disease to commercial fowl.

Chicken Farmers of Nova Scotia deals with chickens raised for meat rather than for eggs and most of its affiliated producers are located outside the municipality. The agency indicated that, when dealing with a proposal for backyard fowl, it is important to consider animal welfare and potential disease outbreaks. The agency asked whether the municipal proposal envisions inspections or some other measure to ensure proper fowl care and noted that there is no existing mechanism for monitoring backyard flocks, other than general animal welfare provisions for Nova Scotia, which are mainly complaint driven. They also noted that prospective fowl keepers should be directed to provincial and other agency regulations in addition to those adopted by the Municipality.

The **Nova Scotia Veterinary Members Association** oversees the accreditation of veterinarians and veterinary technologists under the *Nova Scotia Veterinary Medical Act*. Veterinarians in the metro area of HRM focus on pets (small animal practice), typically oriented to cats and dogs. Some treat pet birds, but veterinarians familiar with poultry are located in agricultural areas such as the Annapolis Valley. Ideally, fowl keepers establish a "Veterinary Client-Patient Relationship" (VCPR) when acquiring flocks, beginning with a "house call" to verify the adequacy of facilities and health of the fowl. For small, non-commercial flocks, this could incur a significant cost especially if a veterinarian must travel from another region of the province. As the Municipality opens up more opportunities for backyard fowl keeping, some veterinarians

in the metro area may be interested in supplemental training focused on fowl to meet new demand.

The **Halifax Food Policy Alliance** (HFPA) is working to build a healthy, just, and sustainable food system for the Halifax Region. In 2019 Halifax Regional Council committed to the development of JustFOOD: an action plan for Halifax, in partnership with the HFPA. A key objective of JustFOOD is to increase urban agriculture, build food skills and promote food sovereignty³. The Ecology Action Centre, a founding member of the HFPA and past sponsor of chicken-keeper training, has endorsed the keeping of egg-laying fowl as an accessory use to a permitted residential use. They offered the advice that animal well-being, consultation with Nova Scotia Department of the Environment and best practices of other regions be considered.

ENVIRONMENTAL IMPLICATIONS

Environmental implications are identified in the Background and Discussion sections of this staff report. Environmental risks associated with the keeping of egg-laying hens are further outlined in Attachment F. The proposed recommended setback distances from property lines and watercourses are aligned with the existing requirements in many of the current land use by-laws and the Regional Plan. Public education materials will also suggest setbacks from wells and potable water sources.

ALTERNATIVES

Halifax Regional Council may choose to:

1. Modify the proposed amendments to the RMPS and applicable LUBs regarding the keeping of hens as an accessory residential use, as set out in Attachments A and B of this report. If this alternative is chosen, specific direction regarding the requested modifications is required. Such modifications may require a supplementary report. Substantive amendments may require another public hearing to be held before approval is granted. A decision of Council to approve or refuse the proposed amendments is not appealable to the Nova Scotia Utility & Review Board as per Section 262 of the *HRM Charter*.
2. Refuse the proposed amendments to the RMPS and applicable LUBs regarding the keeping of hens as an accessory residential use. A decision of Council to approve or refuse the proposed amendments is not appealable to the N.S. Utility & Review Board as per Section 262 of the *HRM Charter*.
3. Modify the proposed amendments to all applicable land use by-laws, as set out in Attachment B, to increase the maximum number of hens permitted per lot from 6 to 10 and eliminate the proposed required setback from lot lines.

ATTACHMENTS

Attachment A:	Proposed RMPS Amendments
Attachment B:	Proposed LUB Amendments
Attachment C:	Summary of Comments Received from the On-Line Engagement
Attachment D:	Fowl Characteristics
Attachment E:	Fowl Impacts
Attachment F:	Potential Risks of Keeping Fowl and Risk Mitigation

³ *Dig In! Some Common Food Terms Food Action Research Centre and Ecology Action Centre (2018). Accessed from <https://foodarc.ca/>.*

A copy of this report can be obtained online at halifax.ca or by contacting the Office of the Municipal Clerk at 902.490.4210.

Report Prepared by: Ross Grant, Planner II, 902-717-5524

**Attachment A
Regional Municipal Planning Strategy Amendments**

BE IT ENACTED by the Halifax Regional Council of the Halifax Regional Municipality that the Regional Municipal Planning Strategy is hereby amended as follows:

1. Amend the "TABLE OF CONTENTS", by inserting the text shown below in **bold** immediately after "3.6 HOUSING DIVERSITY AND AFFORDABILITY" and prior to "CHAPTER 4: TRANSPORTATION AND MOBILITY":

3.7 FOOD SECURITY - KEEPING OF HENS AS AN ACCESSORY USE TO A RESIDENTIAL USE

2. Within Chapter 3, Settlement and Housing, add a new Section 3.7 and a new Policy S-37, as shown below in **bold**, immediately following Section 3.6:

3.7 FOOD SECURITY - ACCESSORY HENS IN RESIDENTIAL AREAS

The keeping of adult hens is compatible with residential uses and can help support local food security. Hens will therefore be permitted as an accessory use to all residential uses for personal use and household food supply.

S-37 HRM shall, through the applicable land use by-laws, permit the keeping of adult hens as an accessory use to all residential uses for personal use and household food supply.

THIS IS TO CERTIFY that the by-law of which this is a true copy
was duly passed at a duly called meeting of the Council of
Halifax Regional Municipality held on the ____ day of
_____, A.D., 20_____.

GIVEN under the hand of the Municipal Clerk and under the
Corporate Seal of the said Municipality this ____ day of
_____, A.D., 20_____.

Municipal Clerk

ATTACHMENT C – SUMMARY OF COMMENTS RECEIVED FROM THE ONLINE COMMUNITY ENGAGEMENT REGARDING EGG-LAYING FOWL

Summary:

From late November 2019 to mid-January 2020 Halifax Regional Municipality posted an online questionnaire to the *Shape Your City* web page in regards to the topic of allowing egg-laying fowl in residential zones. Participation in the questionnaire did not require registration with *Shape Your City*, and there was no intent to obtain a statistically representative sample. The intent was to explore people's interest, support or opposition toward keeping egg-laying fowl in residential zones, raise awareness of the issues and opportunities, understand the reasons for and against keeping fowl, and learn from people's insights and experiences.

The responses were received from Nov. 22, 2019 through Jan. 13, 2020. Results showed that 3559 people visited at least one page online, 2842 people visited the questionnaire itself, and over 2400 participants provided responses. Approximately one third of the respondents resided in the Regional Centre, another third in suburban communities, and the remaining third in rural areas. Over 80% of respondents owned their dwelling, followed by 18% who rented. 76% lived in a single detached house, while 7% lived in apartment or condominium buildings. In general:

- Nearly 8% of respondents indicated that they already keep egg-laying fowl on the properties where they reside and 64% indicated interest in keeping hens.
- Chickens were by far the most popular type of fowl for residential lots, in terms of existing keepers and people expressing an interest. This preference applied across all settlement areas (urban, suburban and rural).
- The overwhelming purpose for keeping chickens was for their eggs, though other purposes were also cited, including educating children about food production and responsibility, enhancing food security, and providing companionship.
- The suburban areas reported fewer fowl keepers, fewer people interested in keeping fowl, and more people in opposition to allowing fowl, than did the Regional Centre. Not surprisingly, the largest number of respondents who reported keeping fowl resided in the rural portions of the municipality. The most common range of flock size was 1 to 6, whether in urban, suburban or rural areas for those who currently keep fowl and those who were interested in keeping fowl.
- 17% of respondents indicated they were opposed to allowing any kind of fowl in residential areas.
- 79% indicated it would be acceptable if their neighbour kept chickens, compared to 60% for ducks and 59% for quail.
- 55% felt that guinea fowl would be acceptable if kept by neighbours.
- 46% felt that turkeys would be acceptable on a neighbouring property, and 43% felt that geese would be acceptable.
- Control of odour as "important" or "very important" issue was cited as the most important concern, followed by control of noise, required training, and containment within a coop and run.
- 25% of respondents indicated that it was important or very important that the coop and run not be visible from the street.

Many respondents provided written comments in addition to their multiple-choice answers. Several questions prompted for additional comments around that particular question, and there was an invitation for general comments near the end. Opinions varied, with many strong expressions for and against the keeping of fowl in residential zones. Recurring themes included:

- the importance of responsible flock, coop and run management;
- animal welfare;
- adequate enforcement without pitting neighbours against one another by relying only on complaints;

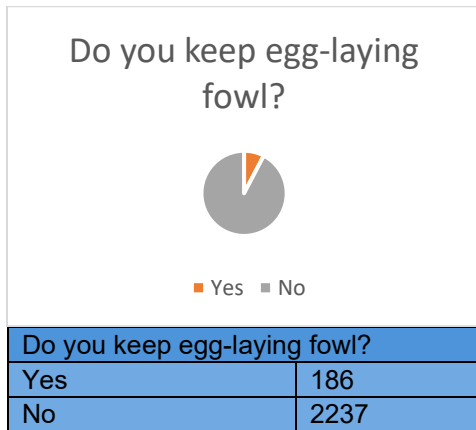
- roosters were generally seen as inappropriate for urban and suburban areas;
- other than egg production, control of ticks was cited as a frequent reason for wanting to keep fowl; and
- concerns were also expressed about the fate of fowl after they cease to lay eggs.

More detailed responses to each question contained within the questionnaire are noted below.

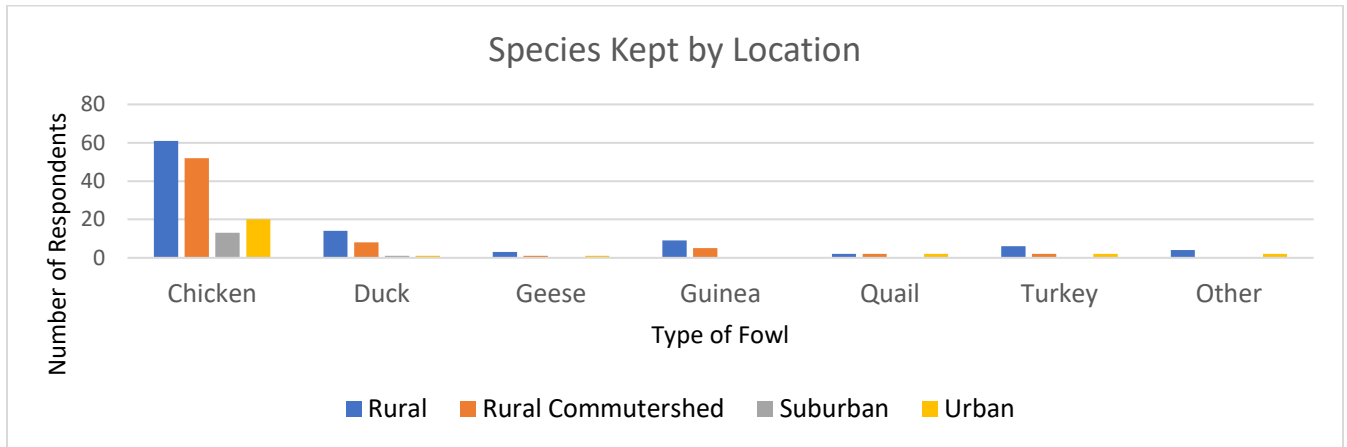
Questionnaire:

Question #1 Do You Keep Egg-Laying Fowl?

Nearly 8% of respondents indicated that they already keep egg-laying fowl:

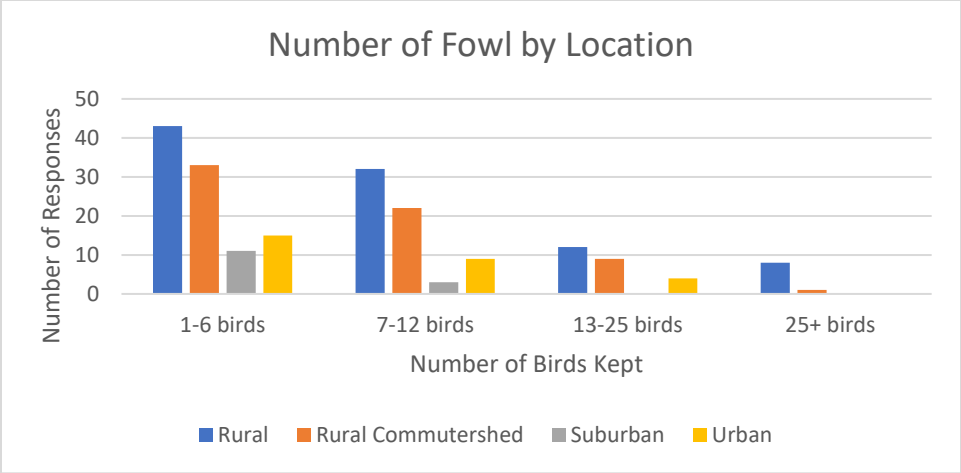


Question #2: If you already keep egg-laying fowl, please indicate how many you have.



Chickens were the most popular type of fowl in all settlement areas (rural, suburban and rural). Ducks and guinea fowl were the second most popular for rural areas. Quail and turkeys were a distant third most popular species for urban residential areas. Guinea fowl were least popular for urban areas. Geese, guinea fowl, quail and turkeys were least popular for suburban areas.

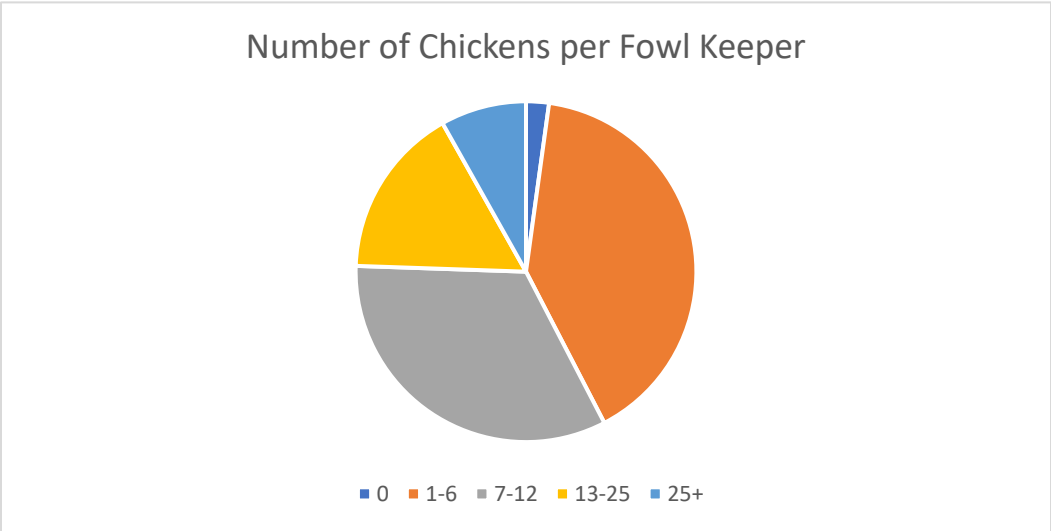
The most popular range of flock size was 1 to 6 for all types of fowl, whether in urban, suburban or rural areas.



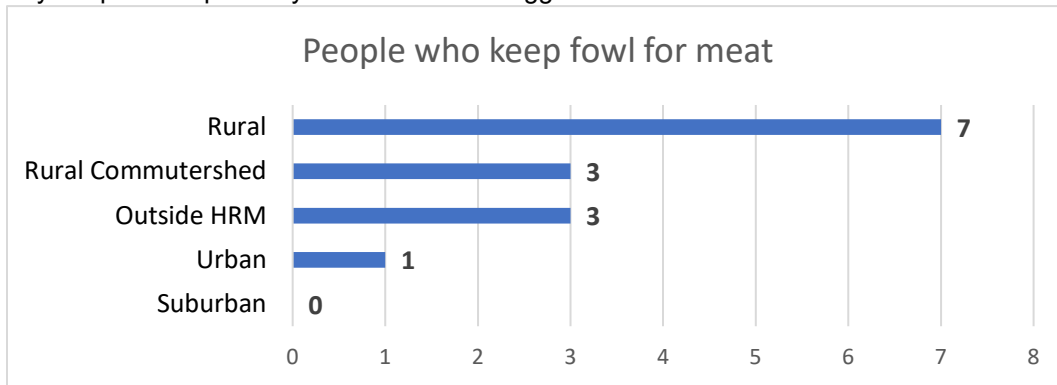
Looking more closely at chicken keepers, as a close 2nd many respondents had 7 to 12 hens as kept 1 to 6.

Question #3: If you already keep egg-laying fowl, please select the main purpose you keep them.

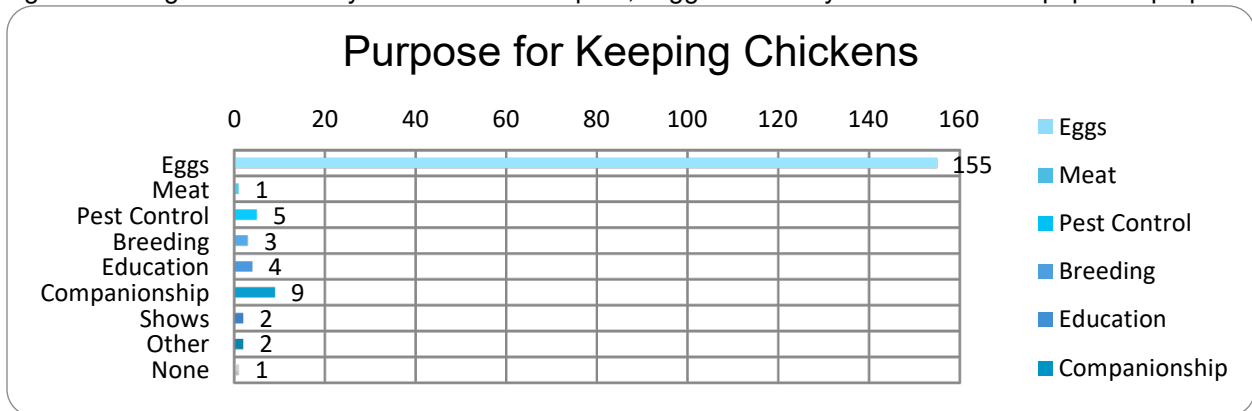
Of particular interest was whether existing fowl keepers included meat among their purposes for keeping egg-laying fowl and, if so, whether this purpose was more popular in rural areas than in the suburbs or urban neighbourhoods. The findings helped confirm this, and suggested that very few keepers were interested in meat, though the survey’s focus on egg-laying fowl may have skewed the results away from



any keepers not primarily interested in the eggs.



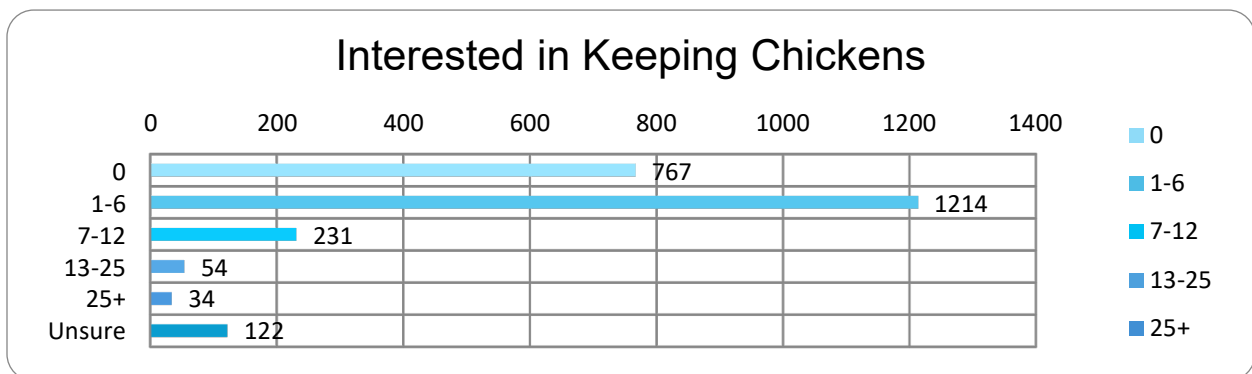
Again looking more closely at chicken keepers, eggs were by far the most popular purpose:



Question #4: How many egg-laying fowl would you be interested in keeping on the property where you live?

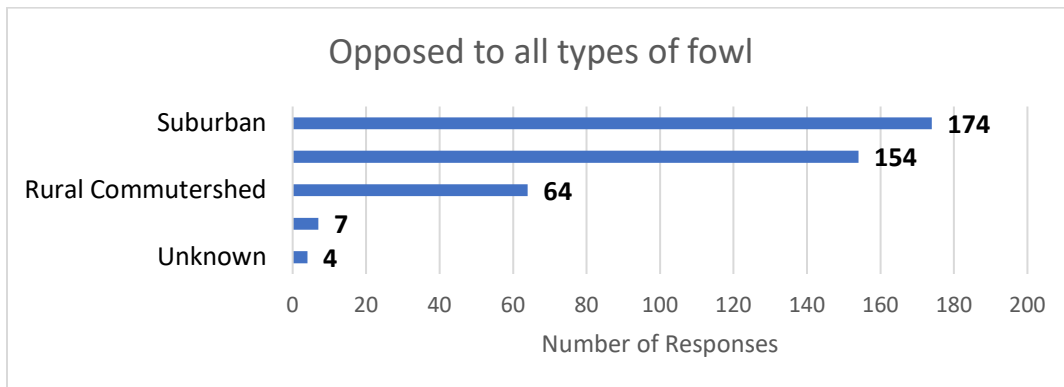
The most desired range of flock size was 1 to 6 for all types of fowl.

64% of respondents indicated an interest in keeping chickens, mostly from 1 to 6 birds:



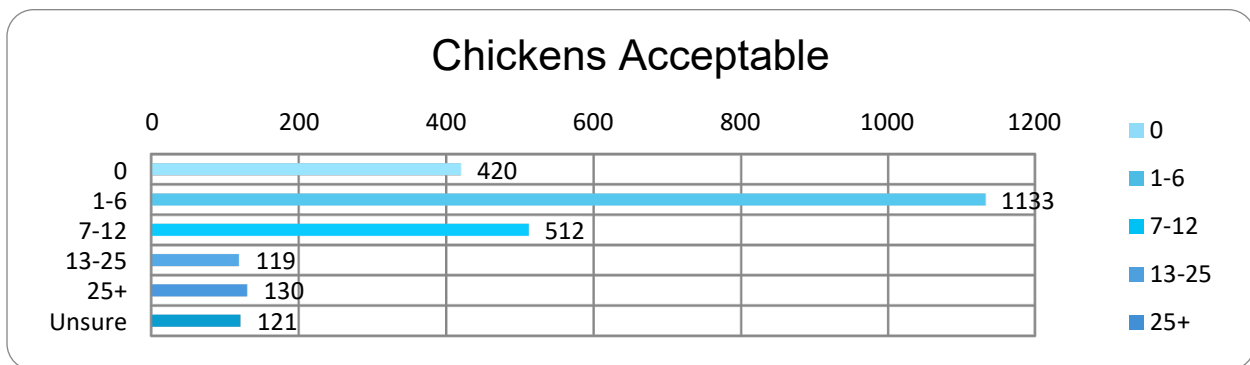
16% indicated they are interested in keeping ducks, 13% indicated an interest in keeping guinea fowl, 11% indicated an interest in keeping turkeys, and 11% were interested in keeping quail. Only 6% indicated an interest in keeping geese, and just 3% indicated an interest in keeping some other type of fowl.

Question #5: If your neighbour(s) were to keep any egg-laying fowl, how many of each kind would be acceptable to you?



403 (17%) were opposed to their neighbours keeping any type of fowl. 79% indicated it would be acceptable if their neighbour kept chickens, compared to 60% for ducks and 59% for quail. Despite their reputation for noise, 55% felt that guinea fowl would be acceptable if kept by neighbours, possibly because these fowl are also known for eating ticks. In contrast, only 46% felt that turkeys would be acceptable on a neighbouring property, and 43% for geese.

Looking closer at chickens, the 79% of respondents who felt that chickens would be acceptable (79%) in a neighbouring yard, the majority indicated the flock size should be kept at 6 or fewer:



60% felt that ducks would be acceptable in a neighbouring yard, while almost as many (59%) felt that quail would be so. 55% cited guinea fowl as acceptable, while 46% cited turkeys as acceptable. 43% felt that geese would be acceptable, while only 24% saw Other Fowl as acceptable, though this undefined category had a larger proportion of "unsure" responses than for any choice of flock size.

Question #6: If the municipality were to permit and regulate the keeping of egg-laying fowl in residential areas, what considerations would be important to you? Please indicate the importance of each consideration.

In terms of regulatory priorities, the largest number of respondents (69%) cited control of odour as “important” or “very important”, followed by control of noise (63%), requiring training (59%) and containment within a coop and run (56%). About half felt that as many households as possible should be able to keep fowl. Only 25% of respondents indicated that it was important or very important that the coop and run not be visible from the street.

Question #7: Do you have any additional thoughts about the keeping of egg-laying fowl?

Many respondents provided written comments in addition to their multiple-choice answers. Several questions provided opportunity for this, together with an invitation for general comments near the end.

A small number of respondents indicated that they believed the questionnaire was biased or ambiguous. In many cases, however, ambiguities were clarified through the written comments. For example, the question asking how many of each type of fowl people would be willing for their neighbours to keep, did not indicate whether the numbers were cumulative or alternative. Several respondents noted that any maximum numbers should be a total for all types of fowl on a property, not for each type.

Opinions varied, with strong expressions either for or against the keeping of fowl in residential areas. Both positions asked why the issue was even being debated, because it was either an obviously beneficial or foolish idea. Those in favour tended to cite getting back to nature, local food, and food security in support of their position. Those against tended to cite urban and suburban expectations, enforcement challenges, and unwanted pests, especially rats. A recurring phrase was, “If you want farm animals, move to the country!”

Both sides appealed to basic rights and fairness, in terms of the right to produce one’s own food or the right to enjoy one’s own property without nuisance from neighbours. Some participants from both sides referred to their own experience, either positive or negative. Animal welfare was also mentioned on both sides of the issue, either in opposition to industrial-scale practices or in opposition to fowl being confined in an urban enclosure. Participants on both sides pointed to other, existing neighbourhood nuisances, suggesting that keeping fowl would impose no more than these, or that it would add to these. Children were also mentioned by many, either in connection with opportunities to educate them on food sources and animal stewardship, or in connection with risks.

Recurring concerns were odour control, potential for noise, attraction of pests such as rats, raccoons, predators, flies and mosquitoes and disposal of waste. A few participants were concerned about the risk of transmitting disease to humans or between fowl. It was noted the importance of responsible flock and coop/run management, animal welfare and adequate enforcement without pitting neighbours against one another by relying only on complaints. Roosters were generally seen as inappropriate for urban and suburban areas. Concerns were also expressed about the fate of fowl after they cease to lay eggs. Allergies to feathers or dust were mentioned by a couple of respondents. Some people mentioned that they like the sounds made by fowl.

Respondents also provided many helpful insights based on personal experiences or knowledge, such as:

- rats are attracted not only to feed but also to eggs,
- odours are not only offensive but also draw predators,
- waste runoff can contaminate stormwater and wells if coops and runs are not adequately separated,
- feathers, dried waste and dust can blow onto adjacent property and some people are allergic,

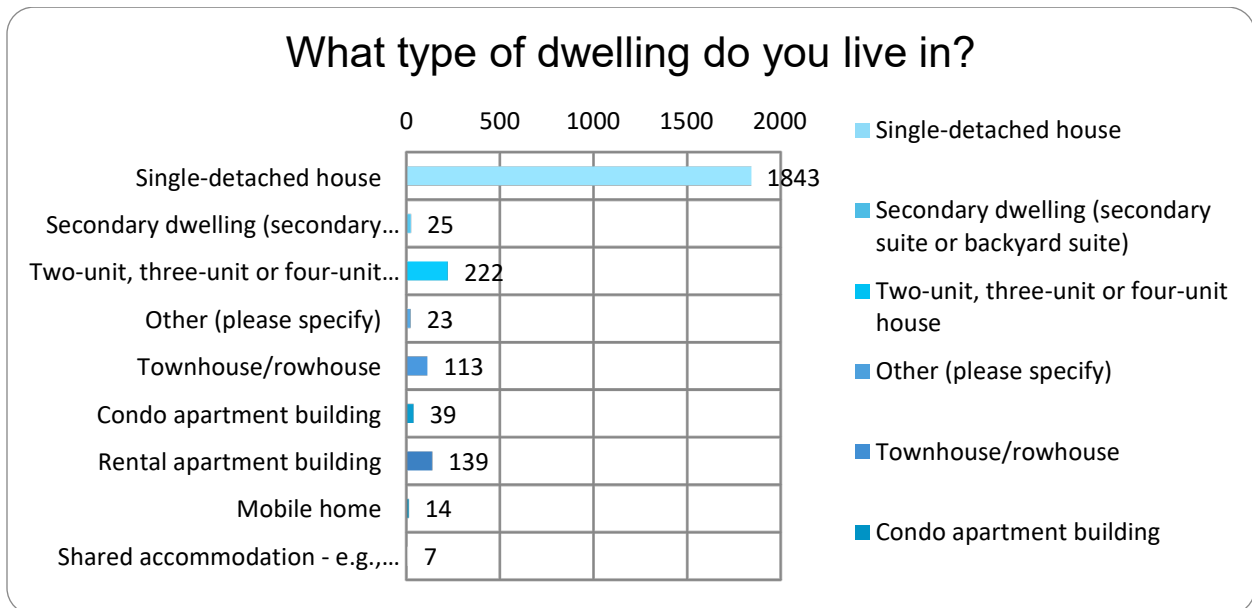
- noise, which is acceptable in the daytime for most residents can deprive shift workers of sleep,
- moveable runs known as “chicken tractors” may fertilize lawns and dissipate impacts, and
- potential for partnerships with institutions, community gardens and keepers’ associations.

Many thoughtful comments suggested possible solutions and these tended to fall under either of two approaches. A minimalist approach would rely on public education, partnerships with organizations offering expertise in residential fowl keeping and complaint-driven enforcement based on nuisance by-laws. A regulatory approach, on the other hand, would provide detailed, clear requirements on the number of fowl allowed, minimum lot sizes, setbacks, and specifications for coops and runs and could also require certification of keepers based on a test or compulsory course. Different limits could apply to different contexts, with more scope in rural areas. Enforcement would be done through random inspections. As a counterpoint to this approach, a few respondents were concerned about adding to bureaucracy and municipal costs.

Question #8: Tell us a bit about yourself.

Over 80% of respondents owned their dwelling, followed by 18% who rented.

Question #9: What type of dwelling do you currently live in?



76% of respondents lived in a single detached house. 7% lived in apartment or condominium buildings.

Question #10: What are the first three digits of your postal code?

Approximately one third of the respondents reside in the Regional Centre, another third in suburban communities, and the remaining third in the rural areas. The suburbs reported fewer fowl keepers, fewer people interested in keeping fowl, and more people in opposition to allowing fowl, than did the Regional Centre. The largest number of respondents who reported keeping fowl reside in the rural portions of the municipality.

ATTACHMENT D: FOWL CHARACTERISTICS, IMPACTS, RISKS, AND FORMS OF RISK MITIGATION

- **Chickens** are a well-known fowl and so provide a useful benchmark for comparing other types. Hens produce a clucking or soft croaking sound unlikely to disturb neighbours but may squawk for up to five minutes when laying eggs. In the U.S., the city of Pleasanton, California, recorded a squawking hen at a distance of two feet at a sound level of 63 dBA (decibels). By comparison, dogs are typically considered a noise disturbance when barking exceeds 100 dBA (Coopala et al., 2006).¹ Chickens' relatively dry waste enables odours to be controlled by composting the manure and cleaning coops and runs frequently. Hens' limited flight minimizes risk of escape, and their spatial needs are moderate. Being social animals, however, enough space must be provided for at least two, and preferably three hens. Solitary hens can be self-destructive, and care must also be taken when introducing new birds to a flock. Hens can be highly aggressive toward new or smaller birds, including quail. Over time, hens scratch away all vegetation and create dust baths to keep cool. To avoid damage to lawns, hens are typically confined to a run adjacent to the coop. On large lots they may be rotated around a meadow using a wheeled "chicken tractor" which acts as a portable coop and run to spread out foraging.
- **Ducks** require a comparable amount of space to chickens, but also need a tub of water or splash pool, as they like to bathe and cannot eat without a large amount of water. Like geese, they produce wet waste. Unlike chickens, ducks do not scratch away vegetation, though they can create mud. Some breeds of domesticated ducks do not fly, however some breeds are still able to fly. Ducks tend to imitate one another in a group and are considered egalitarian rather than hierarchical. They can, however, be aggressive toward chickens. Ducks can be noisy, so are unlikely to be accepted in urban or suburban residential neighbourhoods, though they are common in large urban parks. Their waste can produce strong odor. Due to their flight risk, noise, and odor, they are unsuitable for small-scale backyard keeping.
- **Geese** can be aggressive and are very loud when disturbed or excited. They require a large amount of space, can de-bark young trees, and produce wet waste. As a result, they are not suited for urban or suburban residential yards but are commonly associated with rural areas and even with large urban parks. They can be trained to remain in or around a particular location. Escape is unlikely where lots are large and adequately fenced.
- **Guinea fowl** are sometimes suggested as candidates for backyard egg-layers and can help reduce pests such as ticks. Guinea fowl may require less space and do less damage to vegetation than hens, but unfortunately their noise is shrill, loud and persistent. They are also prone to wandering and flying, so have a greater risk of escape. They tend to be domineering and aggressive to other poultry, dislike newcomers, and resist human handling. For these reasons, they are best suited to large rural lots or farms.
- **Quail** are usually associated with their meat, but also produce small eggs which are valued for gourmet cooking and pickling. These small birds require very little space and are quiet, though their waste has a stronger concentration of ammonia, and they will fly away unless kept under wire mesh. There is also a risk of self-injury when attempting to escape if the mesh is too high. Quail tend to be nervous and can be aggressive toward new birds. Quail and chickens cannot be kept together due to the risk of chickens bullying the Quail, chickens eating Quail eggs, and different feed and housing requirements.

¹ Jacob, Jacquie. Developing Regulations for Keeping Urban Chickens - Small and Backyard Flocks. (University of Kentucky, May 05, 2015) citing Coopala et al., 2006.

- **Turkeys** are usually valued for their meat but can also be raised for egg laying. Domesticated turkeys are generally considered docile. They may be able to fly over a six-foot fence, and they are larger than chickens so require more space. Like chickens, turkeys are highly social, and should never be kept alone. They should not be located near chicken coops and runs, as some diseases and parasites can be transmitted between these two types of fowl. Because of their size, ability to fly, and potential for odour, turkeys would be difficult to accommodate on urban or suburban residential lots. They may be appropriate, however, for urban farms or large rural lots.

ATTACHMENT E: POTENTIAL IMPACTS BY SPECIES OF FOWL

(compiled from several online sources for comparison purposes only. Refer to experts for fowl care and safety.)

IMPACT:	CHICKENS	DUCKS	GEESE	GUINEA FOWL	QUAIL	TURKEYS
NOISE	Females cluck or make a soft croak; males (roosters) crow loudly, and not only at daybreak.	Can be loud, especially when excited by water, other birds.	Loud whenever disturbed or frightened. Males (Ganders) are loudest.	Loud and frequent squawking; squeal at unfamiliar arrivals.	Females make a soft croak; males make a shrill call, but more melodic than roosters.	Male turkeys gobble in reaction to any sound; hen turkeys can make many sounds.
ODOUR	Frequent coop cleaning is very important. Waste dries out, reducing odour. Proper cleaning and waste removal reduces odor.	Keep themselves clean if provided with a large water source, but droppings are messy and can produce odor and is harder to clean and remove than hens.	Messy, low-odour droppings.	Comparable to hens, but may smell stronger when stressed.	Droppings produce more ammonia than other poultry.	Can be high.
DAMAGE	Scratching removes all vegetation, including lawn. Create dust baths. Self-destructive if kept alone.	Do not scratch at vegetation nor take dust baths; can create mud; dig in puddles which become shallow pits when dry.	Do not scratch at vegetation nor create mud. May strip bark off young trees.	Lower than chickens, but may peck at garden plants and create dust baths. Known for eating garden pests and ticks.	Will eat leafy garden vegetables. Will harm themselves if pen is too high as they will try to fly away and hit the pen at high speed.	Will eat grass, apples, sunflower seeds, cabbages and berries.
ESCAPE RISK	Very limited flight. Will wander if able; return to coop at dusk.	Some breeds of domesticated ducks cannot fly; most are a flight risk.	Can be trained to stay in one area. Flight risk.	Like to wander and fly.	High – will fly away unless pen is covered.	High – some can fly over a 6-ft fence.
DISEASE	Risk of internal and external parasites, pests and pathogens. Zoonotic disease risk. See attachment F.	Lower risk of pests, parasites and pathogens than chickens. Zoonotic disease risk. See attachment F.	Lower risk of pests and pathogens than chickens. Zoonotic disease risk. See attachment F.	Lower risk of pathogens than chickens. Zoonotic disease risk. See attachment F.	Risk of pests. Zoonotic disease risk. See attachment F.	Risk of internal parasites and disease transmission to/from chickens. Zoonotic disease risk. See attachment F.
AGGRESSION	Aggressive toward new hens. Some breeds are more sociable with people.	Not strongly hierarchical, but act in groups and may be aggressive toward chickens.	Aggressive toward new geese and strangers. Gander may chase a running child.	Domineering. Very aggressive toward other poultry. Dislike newcomers and handling.	More nervous than other poultry. May be aggressive to new birds.	Generally docile; males can be aggressive in mating season.
SPATIAL AND OTHER NEEDS	Highly social, and should never be kept alone. Need 3-5 sf of coop per hen; 10+ sf run per hen.	Lower maintenance than chickens; eat garden pests. Must have water to dip food when eating. Need 4-5 sf of coop floor and 10+ sf of run per duck, plus splash pool.	Low maintenance relative to chickens; eat grass. Need 10 sf of coop and at least 20 sf of run per goose, plus water tub. Prefer to free-range.	Need 2-3 sf of coop per fowl, or roost in trees if free range.	Some breeds are vulnerable to cold. All are vulnerable to predators. Run should include places to nest and hide, plus dust bath, with low roof to avoid injury. Need 1 sf of coop and 2 sf pen per quail.	Highly social, and should never be kept alone. Must not be located near chicken coops, to minimize disease/parasite transmission. Need 4+ sf of coop and 50 sf pasture per turkey.

ATTACHMENT F: POTENTIAL RISKS OF KEEPING FOWL AND RISK MITIGATION

Managing Health Risks

Human Disease Transmission

Physical Contact

“Zoonotic diseases” are those which can be transmitted from animals to humans.¹ Unlike farmers, backyard fowl owners may have less experience with animal husbandry and biosecurity and may be more inclined to treat the birds like pets, resulting in closer contact. According to the Association of Avian Veterinarians, for most healthy people, backyard poultry can be safely cared for as long as common sense and proper hygiene are applied, but older adults, pregnant women, young children and immune-compromised people should be extra careful around chickens.² Concerns have been voiced in some U.S. communities about whether backyard chickens could spread avian flu, but evidence of this is difficult to establish. Bird owners are legally responsible to notify authorities of serious bird diseases such as avian influenza.

A more significant risk is associated with *Salmonella* and *Campylobacter* bacteria, which are carried on live, healthy poultry including both hens and chicks, and can get on coops, feed and water dishes, as well as plants and soil. The bacteria can also be transmitted via hands, shoes and clothes when people put hands or equipment in or near their mouths. According to *Forbes.com*, the first five months of 2017 in the U.S. recorded over 370 *Salmonella* cases associated with handling ducks, chickens and geese, with eight multi-state outbreaks and over 70 hospitalizations.³

Outreach and education on proper housing and hygiene when handling fowl and eggs is critically important to minimize the risk of zoonotic disease. For example, people should not eat or drink around poultry, fowl should never be kissed or snuggled, chicks and hens should not be taken inside the home, children should be supervised while handling poultry and people should avoid touching their face or mouth after handling the birds. Hand washing is very important and separate clothing and footwear should be used when cleaning coops and runs. Equipment and materials should be cleaned outside the home. Any dead birds, soiled litter and unused eggs should be disposed of promptly and protected from rodents or scavengers. Care must be taken in the disposal of any dead fowl in case they harbour disease.

Indirect Contact and Allergies

The Association of Avian Veterinarians cautions that backyard poultry can attract rodents and mosquitoes, which in turn introduce further disease risks to humans. Rodents may also carry a pathogen which can affect dogs as well as people. In addition, some pathogens, including fungal organisms, can grow in bird droppings. For these reasons, coops, runs, dispensers and containers should be designed and managed to prevent access by rodents and mosquitoes. Eggs, litter and organic material should be removed frequently and coop interiors should be

¹ See Jacob, Jacquie. *Developing Regulations for Keeping Urban Chickens - Small and Backyard Flocks*. (University of Kentucky, May 05, 2015); Ontario Public Health Authority. *Evidence Brief - Reducing health risks associated with backyard chickens*. <https://www.publichealthontario.ca/-/media/documents/eb-backyard-chickens.pdf?la=en>

² Association of Avian Veterinarians. *Zoonotic Diseases in Backyard Poultry*. <https://www.aav.org/page/poultryzoonotic>

³ Lee, Bruce Y. “CDC Warns: Don't Get Too Close To Your Chickens, Ducks And Geese”, *Forbes* (June 3, 2017) <https://www.forbes.com/sites/brucelee/2017/06/03/cdc-warns-dont-get-too-close-to-your-chickens-ducks-and-geese/#3d9703242b93>

routinely washed with a disinfectant approved for use around poultry. If fowl are improperly housed, ammonia levels can become a human health hazard. Some people develop an allergic reaction to feather dander, which can be controlled by removing feathers from the coop and ensuring appropriate airflow.⁴

There is also a risk that eggs may be contaminated by bacteria from fowl or their waste. Public education should advise owners how to design and manage coops and runs to encourage egg laying away from waste, to wash eggs only with soap and water that is warmer than the eggs to avoid drawing in bacteria through the shell, and to refrigerate clean eggs until needed.

Wells

A further consideration arises in situations where residents rely on wells for their water supply. Waste from fowl is likely to carry bacteria and viruses, as well as other contaminants such as nitrates and phosphates. Care must be taken to avoid contaminating well water intended for human consumption. In general, potential contaminants should not be located uphill from a well. In the United States, the Centers for Disease Control and Prevention of the Department of Health Services has recommended a minimum separation of 50 feet (roughly 15 metres) between livestock areas and private wells.⁵ Prospective fowl keepers in Halifax Regional Municipality should be pointed to guidelines and regulations of the Nova Scotia Department of the Environment when determining where coops and enclosures should be sited. Dug wells are more susceptible to contamination than drilled wells, so a larger setback is recommended for dug wells.

Although there are no specific provincial rules for separating backyard fowl from wells, the septic field separation of 15 metres from drilled wells and 30.5 m from dug wells could serve as a minimum guide, assuming that the soil filtration/adsorption is adequate at filtering most, if not all runoff, assuming that any surface drainage is not towards the well, and assuming that everything else meets the well construction regulations (e.g., wells have graded slope away from them, and no surface water can enter the well). One must, however, keep in mind that the provincial well setbacks from septic fields are based on treated effluent traveling through soil. Typical yard soils and drainage are not the same as having properly designed on-site septic systems, so setbacks may need to increase depending on the local situation, soil conditions, drainage directions and other factors. Setbacks also need to include safe distances from off-site surface drainage from sites where fowl are kept. This could be a major issue for neighbouring down-gradient properties. Essentially, chicken manure at the surface during a major rainstorm could act like a failed on-site system, with breakout to the land surface.⁶

Pests, Parasites and Animal Disease

Prospective keepers of fowl must be informed about diseases, symptoms, risks, care and prevention for the animals themselves.⁷ Although small backyard flocks are less likely to suffer

⁴ Dr. Andrew Morrison, Farm Animal Welfare Veterinarian, Nova Scotia Dept. of Environment, email to Laurie Pike, May 19, 2020.

⁵ See Centers for Disease Control and Prevention, US Dept. of Health Services (2009), <https://www.cdc.gov/healthywater/drinking/private/wells/location.html>

⁶ Email from Stefan Furey, P.Eng., Nova Scotia Environment, July 6, 2020

⁷ Linares, Jose and J. Bruce Nixon, "Urban Chickens", *AVMA Welfare Focus Newsletter*, (AVMA Animal Welfare Committee, April 2011) <https://www.avma.org/KB/Resources/Reference/AnimalWelfare/Pages/AVMA-Welfare-Focus-Featured-Article-April-2011.aspx?PF=1> ; Canadian Food Inspection Agency. *How to Prevent and Detect Diseases in Backyard Flocks and Pet Birds*. <http://inspection.gc.ca/animals/terrestrial-animals/diseases/bird-health-basics/eng/1323643634523/1323644740109> ; University of Guelph. *U of G Research Finds Many Backyard Flock Owners Not Following Proper Hygiene*. (August 29, 2019); Government of

from epidemics associated with large numbers, there may be less awareness and prevention than with commercial operations. Even after fowl recover from a disease, they may continue to be carriers and there is a risk that inexperienced people may acquire such birds.

Typical parasites for fowl include lice, fleas and mites, as well as internal organisms such as worms. Flies and other insects that need moisture for larvae can be controlled by ensuring good ventilation to keep coops and other areas dry. Worms can be controlled by adding natural ingredients to feed, and through veterinary care in cases of outbreaks. Fowl, feed and bedding should be acquired only from reputable suppliers and fowl and equipment should not be shared between coops. Birds, feed and water must be isolated from wild animals, including pests and predators, as these may carry pathogens. Spilled feed and litter should be promptly cleaned up to avoid attracting cats, rodents and other wildlife. Fresh feed should be sealed in containers, and the immediate surroundings of the coop should be free of weeds and grass. Coop design and enclosures should prevent rodents from hiding underneath, inside, or within the walls.

Animal Well-Being

Public education is also important to ensure that the basic needs of fowl are provided for. These include appropriate space, ventilation to limit bacteria and moisture, good quality litter, regular cleaning, provision and positioning of perches, dust baths and nesting boxes in the case of hens, provision of sufficient water for ducks and geese, protection from predators and separation from wild birds and their waste. Coops must be designed to protect fowl from temperature extremes. Ventilation is important, especially in the summer. Coops should have an outdoor run, and both should be secure so the birds can move between areas at will. The bottom of any cage or fencing must be anchored in such a way as to keep predators and pests out. Secure storage of feed and manure is also important to minimize rodents and flies.

Domesticated fowl can suffer from behavioural problems such as pecking and cannibalism. The risk of this varies between species. Chickens and turkeys are highly social and if kept alone may exhibit self-destructive behaviour. Most types of fowl may be aggressive to newly introduced birds or other species. Quail may injure themselves trying to fly out of an enclosure if the ceiling is too high. Some species, including hens, may try to roost in trees, putting themselves at risk from predators. Care must be taken not only in the size and design of enclosures, but also in the daily management of both the facilities and the birds themselves.

Animal well-being is also affected by the availability of people to care for fowl on any given property. Prospective fowl keepers should consider whether their lifestyles are conducive to the responsibilities inherent to animal care.

Unwanted Fowl

To reduce the risk of unintentionally acquiring roosters, both Toronto and Edmonton specify that birds must be a minimum age, as their gender can be difficult to discern when very young. This also helps avoid the “cute factor” whereby some people may be tempted to acquire baby chicks but are not sufficiently committed to care for the birds once they reach adulthood.

The risk of bird abandonment was a significant issue when Edmonton was considering whether to expand the number of fowl keeper permits beyond an initial pilot project. This is related to the question of what happens after a hen ceases to lay eggs. Animal shelters are already hard pressed to deal with stray cats and dogs and humane societies may not accept what some consider farm animals. Edmonton requires that each bird be banded and prohibits slaughtering. Unwanted birds may be dispatched through humane euthanasia by a veterinarian, taken to a licensed abattoir, or relocated to a farm.