

TOWNSHIP OF ADMASTON/BROMLEY
PLANNING AND DEVELOPMENT COMMITTEE

AGENDA

June 15, 2023

At 6:00 pm

1. Call meeting to order
2. Declaration of Pecuniary Interest
3. Approval of Agenda
4. Minutes
 - I. February 16, 2023
5. Keeping of Backyard Hens Draft By-Law review
 - I. Backyard Hens Draft By-Law Report
 - II. Draft By-Law
 - a) Bird Health Basics
 - b) Small Flock Poultry – Raising Healthy Birds – OMAFRA
 - c) OMAFRA Rodent Control
 - d) Keeping Your Family Healthy with Backyard Poultry
6. Next meeting – to be determined
7. Adjournment

TOWNSHIP OF ADMASTON/BROMLEY

Planning Committee

Date: Thursday, February 16th, 2023 – 6:30 pm

Present: Committee members present were Keith Gourley, Michael Donohue, and Brian Hamilton, present via electronic participation was Kevin LeGris, staff members present were CAO/Clerk Jennifer Charkavi, Finance Clerks Andrea Leclair and Meagan Jessup

1. Keith Gourley called the meeting to order at 6:31 pm.
2. Disclosure of Pecuniary Interest – None.
3. Approval of Agenda

Moved by: Brian Hamilton **Seconded by:** Michael Donohue

BE IT RESOLVED that the Committee approve the agenda for the February 16th, 2023, Planning & Economic Development Committee meeting as presented this date.

“Carried”

4. Keeping of Backyard Hens

Moved by: Michael Donohue **Seconded by:** Brian Hamilton

BE IT RESOLVED THAT the Planning and Economic Development Committee direct staff to create a survey for public comment on the keeping of Backyard Chickens;

AND BE IT FURTHER RESOLVED THAT the Planning and Economic Development Committee direct staff to summarize the surveys and bring the information back to a future committee meeting.

“Carried”

CAO/Clerk Charkavi read the report and noted that the Township Staff and Councillors receive a number of calls from ratepayers inquiring on the rules and by-laws in place for keeping of chickens.

It was noted that staff is currently working on a by-law, which is being reviewed by MLES, By-Law Officer Jim McBain.

Committee member LeGris had said that this By-Law needs to be kept simple and should not be complicated.

Committee member Donohue brought up the concerns of Public Health with avian flu and diseases. There were also concerns with lot sizes, requirements, composting, the increase of predators if ratepayers in smaller communities in the Township were to allow chickens.

Committee agreed that a survey should be conducted of the ratepayers of Admaston/Bromley with questions for those who would like or would not like backyard chickens. A draft survey will be circulated to Committee members for comment once completed.

Committee Member Gourley had said that this is a sustainable way to raise food, lowering the bill at the grocery store for many ratepayers who have seen a substantial increase in groceries. There should also be a fee for community members having chickens, this ensures accountability and shows the ratepayer is invested.

6. Next Meeting

At the call of the Chair.

7. Adjournment

Moved by: Brian Hamilton **Seconded by:** Michael Donohue

BE IT RESOLVED that the Thursday, February 16th, 2023, Planning and Economic Development Committee meeting be adjourned at 7:02 p.m.

“Carried”

Chair

Clerk

Township of Admaston/Bromley
477 Stone Road, R.R. #2
Renfrew, ON
K7V 3Z5
E-Mail Address – info@admastonbromley.com

613-432-2885 Stone Road Office
613-432-4052 Fax

613-432-3175 Stone Road Garage
613-646-7918 Cobden Road Garage

REPORT

Date: June 1, 2023
To: Council
From: Jennifer Charkavi
Re: Keeping of Backyard Hens – Draft By-Law

Background:

Staff drafted a by-law for review and the Planning and Economic Development Committee provided comments. Staff conducted a survey, results which were shared with Council on April 20, 2023. Staff have reviewed the comments as well as researching more on permitting backyard chickens.

Discussion:

Backyard Chickens:

Staff have reviewed the Draft Backyard Chickens By-Law and have made some changes. Staff would like to bring the by-law back to Council for adoption before the end of 2023.

Staff are seeking comments on the draft as well as a confirmation on cost for a permit and if the permit should be an annual renewal. Staff are completing this in conjunction with the review of the current Fees & Charges By-Law.

Staff feel that a fee for a Backyard Chicken Permit would help with administration as well covering the extra costs associated with inspections by By-Law Enforcement. Dogs require a tag, and these must be paid for annually. Staff are suggesting an initial Permit fee of \$50 with an annual renewal fee of \$15.

Township of McNab/Braeside has a permit, but no fee associated.

Town of Petawawa has no permit (Zoning By-Law) and no fee associated.

Township of Whitewater Region has a permit with a \$150 fee paid annually.

Fees & Charges:

Staff have researched neighbouring municipal fees and charges by-law and have had Department Heads review the charges with the by-law for updating.

At this time there is no recommendation to change the fees associated with Planning as the changes to the Planning Act have not been finalized and the fees for those services will be looked at once all of the Planning Act changes are in place.

Staff are reviewing the other charges within the by-law.

Financial Implications:

There will be costs associated with inspections and by-law contraventions for Backyard Chickens.

People Consulted:

MLES – By-Law Enforcement
Treasurer-Deputy CAO/Clerk

Recommendation:

BE IT RESOLVED THAT Council receive the draft Backyard Chickens By-law for review;

AND BE IT RESOLVED THAT Council receive the draft Amended Fees & Charges By-Law for review;

AND BE IT FURTHER RESOLVED THAT Council direct staff to bring the two by-laws identified to a future council meeting for adoption.

CORPORATION OF THE TOWNSHIP OF ADMASTON/BROMLEY

BY-LAW No. 2023-xx

A BY-LAW TO REGULATE BACKYARD CHICKENS.

WHEREAS Section 11 of the Municipal Act 2001, S.O. 2001, c. 25, permits a municipality to enact a by-law respecting matters within the animal sphere of jurisdiction;

AND WHEREAS Township of Admaston/Bromley Council considers it advisable to pass such a by-law;

THEREFORE the Council of The Corporation of the Township of Admaston/Bromley enacts as follows:

1. Definitions:

1.1 In this by-law,

"Administration Department" means the Building and Licensing Department, or another unit designated by Council to fulfill the Department's responsibilities for the administration and enforcement of this by-law and includes the Manager.

"Agricultural property" means a property that is zoned for agricultural use in the zoning by-law that applies to the property;

"Animal" means any member of the animal kingdom, other than a human;

"Animal Control Officer" means an authorized employee or agent of the Township of McNab/Braeside who is responsible for the enforcement of the provisions of this by-law;

"At large" in the case of a chicken, means being outside a coop or run.

"Chicken" means a domestic fowl kept for its eggs or meat;

"Chicken run" means covered secure enclosure that allows backyard chickens' access to outdoors

"Coop" means a fully enclosed weatherproof building where backyard chickens are kept and which the interior of includes nest boxes for egg laying, perches for the chickens to sleep on and food and water containers;

"Council" and "Township Council" mean the Council of the Township of Admaston/Bromley;

"Dwelling" means a self-contained residential unit;

"Highway" includes all land between the lateral boundaries of every provincial and municipal highway within the Township;

"Home occupation" has the same meaning as in the zoning by-law that applies to the property;

"Keep" means to have temporary or permanent custody or control of an animal, and "keeps" and "Kept" have corresponding meanings;

"Minor" means a person who has not attained the age of eighteen years;

"Owner" includes any person who possesses, harbours, or keeps an animal or chicken and, where an owner is a minor, includes the person who is responsible for the custody of the minor;

"Property" means a parcel of land and any buildings or other structures on the land;

"Residential property" means a property that is zoned for residential use in the zoning by-law that applies to the property;

"Rural area" means the areas that are designated in the Township's Zoning By-law as rural use.

"Under the control of its owner" means being physically restrained by some other effective method by its owner or by another person acting on the owner's behalf;

"Veterinarian" means a person licensed under the Veterinarians Act;

"Veterinary hospital or clinic" means premises operated under the supervision of a veterinarian for the medical treatment of animals; and

"Zoning by-law" means a by-law passed under Section 34 of the Planning Act that restricts the use of land.

2. Application:

- 2.1 Except as otherwise provided, the regulations established by this by-law apply to all backyard chickens within the boundaries of the Township and to the owners of such backyard chickens.
- 2.2 Applicant Declaration that they have read and understood all information provided by the following agencies:
 - a) Bird Health Basics – Canadian Food Inspection Agency
 - b) Small Flock Poultry: Raising Healthy Birds – OMAFRA
 - c) Rodent Control in Livestock and Poultry Facilities – Ministry of Health
 - d) Keeping your Family healthy with backyard poultry, including chicks and ducklings – Ministry of Health Factsheet
- 2.3 Provide a Site Plan of the placement of the coop and run on the property.

3. Administration:

- 3.1 The Township Office Staff is responsible for the administration of this by-law.
- 3.2 Municipal Law Enforcement Services (MLES) is responsible for the enforcement of this by-law.
- 3.2 Every application (attached as Schedule 'A') for a chicken coop permit or for the renewal of such a permit shall be submitted to the Township Office in the form provided.
- 3.3 Every application for a permit will be reviewed by MLES to determine whether it meets the requirements of this by-law and, as part of this review, will be circulated to the Chief Building Official, County of Renfrew Planning Division, and the County of Renfrew Health Unit.
- 3.4 These agencies and individuals, as part of their review, may require an inspection of the property, other than a room or place used as a dwelling.
- 3.5 If it is determined that an application meets the requirements of this by-law, the Township Office will issue the permit.
- 3.6 There is a fee to obtain a permit. Fees & Charges By-Law.

- 3.7 If, at any time, the MLES or their designate determines, as a result of evidence that is provided, that the operation of a chicken coop does not conform to the requirements of this by-law, it may suspend or revoke the permit.

4. Regulations for the Keeping of Chickens:

- 4.1 (a) No person shall keep backyard chickens anywhere within the Township unless they have first obtained a Backyard Chicken Permit (attached as Schedule 'B').

(b) Every person who holds a Backyard Chicken Permit shall allow, at any reasonable time, allow a By-Law Enforcement Officer or other authorized employee or agent of the Township to inspect the property, (other than any room or place used as a dwelling) to determine whether all requirements of this by-law are being complied with.

(c) There is no limit to the size of a chicken coop or a chicken run, the chicken coop cannot be more than 10 feet in height, and it shall meet the lot line parameters of 4.1 (d), (e) and (f).

(d) The Backyard Chicken Coop shall:

- i. Provide at least 0.37 m² of floor area for each hen;
- ii. Be enclosed on all sides and have a roof and doors;
- iii. Include a perch for each hen;
- iv. Include nest boxes;
- v. Be maintained in good repair, in a clean, dry, odour free, and sanitary condition, free from vermin;
- vi. Be constructed and maintained to prevent any wildlife from harbouring underneath or within it or within its wall, and to prevent entrance by any other animal;
- vii. Backyard Hens must be provided with food, water shelter, light, ventilation, veterinary care, and opportunities for essential behaviours such as scratching, dustbathing, and roosting, all sufficient to maintain the hens in good health;
- viii. All manure must be disposed of properly and in accordance with all regulations;

(e) Chicken coops and runs are not permitted in any front or side yard.

(f) Chicken coops and chicken runs shall be a distance of at least 3.0 metres from the rear lot line and at least 3.0 metres from any side lot line of the dwelling lot on which the chicken coop is located.

(g) Chicken coops and chicken runs shall be located at least 30 metres from any school, church, or business.

(h) The keeping of backyard chickens shall be permitted as an accessory use to a dwelling unit.

(i) A maximum amount of Backyard chickens shall be by property size and is as follows:

1. .25 acre – maximum of 4 Backyard Chickens
2. .50 acre – maximum of 6 Backyard Chickens
3. 1 acre – maximum of 8 Backyard Chickens
4. 2 acres – maximum of 10 Backyard Chickens
5. 11 acres – maximum of 12 Backyard Chickens

(j) Tenants must obtain written permission from the property owner to keep backyard chickens on the owner's property and to be submitted at the time of applying for the permit.

(k) The owner of the backyard chickens must reside on the property where the backyard chickens are kept.

(l) Backyard chickens shall be kept in their coops between 9:00 p.m. and 6:00 a.m.

(l) Backyard chickens shall always be secured by a fence on properties that are less than 5 hectares in area.

(m) Chicken coops and chicken runs shall be maintained in a clean condition and the coop shall be kept free of obnoxious odors, substances, and vermin.

(n) Stored manure shall be kept in an enclosed structure such as a compost bin, and no more than three cubic feet shall be stored at any one time.

(o) No owner shall cause or permit their chickens to become a public nuisance by persistently clucking.

(p) No owner shall cause or permit their chickens to be at large.

(q) The Backyard Chicken Permit is non-transferable.

(r) The Backyard Chicken Permit is for the property identified on the application.

(s) The Backyard Chicken Permit shall be renewed annually.

4.2 The regulations set out in section 4.1 do not apply to an agricultural property or to a property of 5 or more hectares.

S. Offence and Penalty Provisions:

5.1 Every person who contravenes any provision of this by-law and any person who fails to comply with an order issued under this by-law is guilty of an offence and, upon conviction, is liable to a penalty as provided for in the Provincial Offences Act and to any other applicable penalties.

5.2 Every owner of an animal who contravenes any provision of this by-law or whose animal contravenes any provision of this by-law is guilty of an offence and, upon conviction, is liable to a penalty as provided for in the Provincial Offences Act and to any other applicable penalties.

5.3 If this by-law is contravened and a conviction entered, the court in which the conviction was entered or any Court of competent jurisdiction may, in addition to any other remedy and to any penalty that is imposed, make an order prohibiting the

continuation or repetition of the offence by the person convicted.

6. Validity:

- 6.1 If a court of competent jurisdiction declares any provision, or any part of a provision, of this by-law to be invalid, or to be of no force and effect, it is the intention of Council in enacting this by-law that each and every provision of this by-law authorized by law be applied and enforced in accordance with its terms to the extent possible according to law.

7. Commencement:

- 7.1 This by-law comes into force on the final day of passing

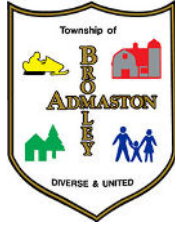
READ a first and second time this XX day of XXXX, 2023.

READ a third time and finally passed this XX day of XXXX, 2023.

Mayor

CAO/Clerk

BY-LAW 2023-XX – SCHEDULE “A”



TOWNSHIP OF ADMASTON/BROMLEY

APPLICATION FOR THE KEEPING OF BACKYARD CHICKENS

APPLICANT INFORMATION:

Name of Applicant	
Name of Property Owner (If other than Applicant)	
Address of Property (Where chickens to be kept)	
Mailing Address (If different than above)	
Telephone Number	
Email	

APPLICANT’S DECLARATION:

I _____ (name of Applicant(s))
hereby declare:

1. That I have read and understood the following documents:
 - a. Bird Health Basics – Canadian Food Inspection Agency
 - b. Small Flock Poultry: Raising Healthy Birds – Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA)
 - c. Rodent Control in Livestock and Poultry Facilities - Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA)
 - d. Keeping your family healthy with backyard poultry, including chicks and ducklings – Ministry of Health
2. That I will provide for suitable housing and shelter of the chickens in my care and will maintain such housing in a clean and wholesome state having regard for Biosecurity Recommendations for Small Flock Owners.
3. That I will provide the chickens in my care with appropriate food, water, space, and environmental conditions to good health and the opportunity to socialize and engage in fundamental behaviours such as scratching, roosting and dust bathing.
4. That I have read and understood the Backyard Chickens By-Law and will abide by the provisions within it.

Dated this _____ day of _____, 20_____

Signature of Applicant

Signature of Witness

Where the applicant is a tenant, the signature of the landowner is required below confirming that they are aware of and support the application for keeping of Backyard Chickens on the property indicated.

Signature of Property Owner

Signature of Witness

BY-LAW 2023-XX – SCHEDULE “B”

SAMPLE PERMIT



REFRESHMENT VEHICLE OPERATION LICENSE
LICENSE NUMBER: 2021-01

Licensors

Township of Admaston Bromley 477 Stone Road, Renfrew, ON K7V 3Z5

Name of License Holder

Chicken Little

Property Address for Backyard Chickens

5226 Queen Street, Douglas, ON K0J 1S0

Mailing Address

5226 Queen Street, Douglas, ON K0J 1S0

Category/Descriptive

Backyard Chicken Permit

**This license has been issued in accordance with the requirements of the Township of Admaston/Bromley
BY-LAW 2023-xx and is subject to revocation or suspension for cause and is not transferable.**

This license shall expire on

Jennifer Charkavi, CAO/Clerk

Date

Bird Health Basics

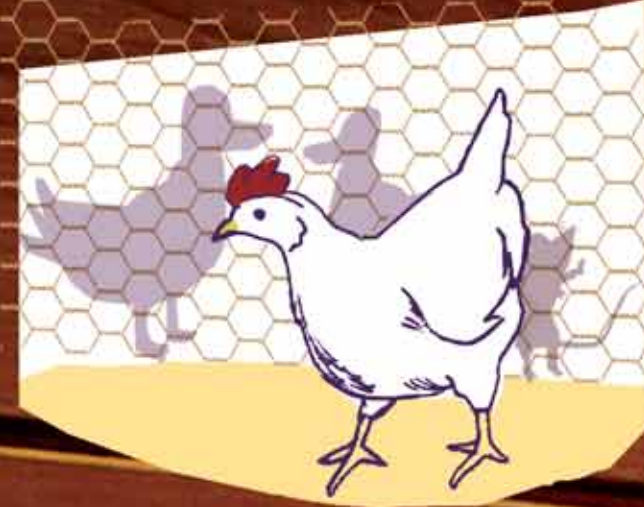
How to Prevent and Detect Disease

in Backyard Flocks and Pet Birds



1

Prevent contact with wild birds and other animals



2

Clean, clean, clean



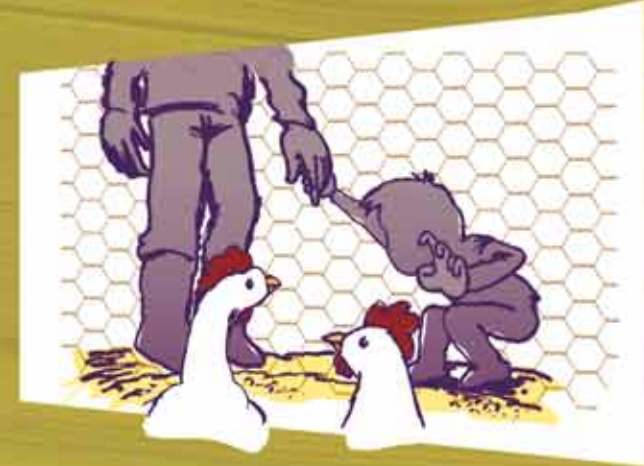
3

Spot the signs and report early



4

Limit exposure to visitors



5

Keep new birds separate when entering your flock



For more information, visit
www.inspection.gc.ca
or call 1-800-442-2342

PO463-06

Raise healthy small flock poultry

As a bird owner, learn how to prevent disease and improve the health and well-being of your birds.

Introduction

Many people in Ontario own small flocks of poultry, such as:

- backyard chickens or other birds raised for meat and/or eggs
- hobby birds
- show/ornamental birds
- sport birds
- pet birds

Learning how to care for your birds is critical to their health and well-being. Disease prevention is one of the most important ways that you can help your birds.

Prevent and spot disease

Avian influenza and other diseases are an ongoing concern for the entire poultry industry, and the risk of disease transmission and outbreak is constantly present. As a small flock owner, it is important for you to use biosecurity measures to keep your birds healthy and to help stop the spread of disease. Biosecurity can be as simple as:

- learning how to spot the signs of disease
- keeping barns, cages, egg trays, feed and water dishes and all other equipment clean and disinfected
- separating new and returning birds from your other birds until you are sure they are disease-free
- keeping wild birds and other animals away from your birds, and away from your birds' feed and drinking water as wild migratory birds can carry disease and are a big risk to your birds

If you think a serious disease is present you should discuss it with your veterinarian, the Canada Food Inspection Agency or the Ministry of Agriculture, Food and Rural Affairs (OMAFRA). Reporting a disease will help authorities track diseases and help protect the whole poultry population.

Ways to limit the spread of disease

As a bird owner, you can help stop the spread of disease to other birds. Here are some ways you can do that:

- don't transport birds showing signs of disease
- have dedicated clothing and footwear meant only for being around your birds, and wear these clothes when you tend your flock
- don't take diseased birds to auctions, shows or fairs, or to any other place with other birds
- don't transport birds across provincial boundaries if they might be sick and/or when disease events are reported in Ontario
- print the ["Is Your Bird Sick" postcard](#) or the ["Stop! Is Your Bird Showing Signs of Disease" poster](#) and share at your next meeting or event

In addition to disease prevention, the health and well being of your birds can also be improved through better biosecurity practices. The following simple, inexpensive biosecurity recommendations can be very effective in preventing a serious disease outbreak and enhance overall bird health.

Restrict visitors and observe proper hygiene

Contaminated equipment and people can introduce many disease-causing agents, such as bacteria and viruses, to your flock. These microscopic organisms can be carried on boots, clothing and vehicles, even if they appear clean.

Good practices include:

- Restrict contact with your birds to those people caring for them. If you allow visitors, provide them with clean coveralls and boots.
- Do not allow people who own their own birds, or who have recently been in contact with other birds (for example, those who have visited another flock or attending a bird show) near your birds. To reduce the risk of introducing diseases to your flock, ensure that people caring for your birds (staff or volunteers) do not have birds of their own or attend events where birds are present.
- Wear separate clothing and footwear when dealing with your birds. Keep them at the entrance to the structure or enclosure.
- Wash and disinfect boots and any equipment that comes in contact with the birds or their droppings, such as shovels, scoops and brooms. Clean cages, food and water surfaces daily.
- Wash your hands thoroughly before and after dealing with your birds.

Prevent contact with wild birds

Wild birds carry many diseases, including avian influenza. Minimizing contact with wild species and their droppings will help protect your birds from these diseases.

Keep your birds in a screened-in area or preferably an enclosed structure where they do not have contact with wild birds. Screen all doors, windows and vents, and keep them in good repair.

Do not use water that may be contaminated with wild bird droppings, such as pond water, for your birds. Test your water at least once a year and use appropriate water sanitation such as chlorine. Keep feed in a tightly sealed container, protected from wild birds.

Practice proper rodent control

Rats and mice can spread disease to your birds, spoil feed, cause property damage and kill chicks, poults and other young birds. Mice can enter an enclosure through a hole the size of your little finger, and rats through a hole the size of your thumb.

Ways to control rodents include:

- Monitor your enclosure regularly for signs of rodents, such as droppings or chewed equipment. Mice will live in buildings once they gain entry, while rats live outside and enter looking for food.
- Clean up all garbage and debris surrounding your birds' enclosure, and keep tall grass and weeds mowed.
- Store feed in tightly sealed containers that a rodent cannot chew through, such as a steel garbage can with a tight-fitting lid or an old freezer.
- Place bait stations around the exterior of your poultry house to help control rodent populations.

Don't bring disease back to your flock

Mixing birds of different species and from different sources increases the risk of introducing disease to your flock. It is preferable to keep only birds of similar age and species together (all in/all out).

Try to:

- Minimize contact between groups by keeping them in separate locations if multiple ages and/or species are kept.
- Get complete background information, including a history of any diseases and vaccinations, for new birds added to your flock. Some vaccines, including some of those used to control infectious laryngotracheitis (ILT), can cause disease in unvaccinated birds. Consult your veterinarian regarding proper vaccination procedures.
- Keep new or returning birds separate (quarantined) for at least 2-4 weeks after returning home, and monitor them for signs of illness. Clean and disinfect cages and equipment used for these birds. Use separate clothing, footwear and equipment for quarantined birds, and handle them last. If the same equipment and clothing must be used, clean and disinfect them before and after handling the birds.
- Avoid sharing equipment and supplies with other bird owners. If this cannot be avoided, clean and disinfect the equipment before and after each use.

Practice proper deadstock management

Poor management of deadstock (of any species) draws scavengers like turkey vultures, coyotes and foxes to your farm. Diseases including High Pathogenic Avian Influenza (HPAI) can be brought onto your farm by both avian and other scavengers.

Proper deadstock management and biosecurity practices reduce the risk of disease spreading to your farm, spreading to wildlife or disease spreading to your neighbour's farms.

Things to remember:

- Do not cross contaminate clothing or equipment when handling deadstock.
- Do not leave any deadstock directly outside your barn. Move deadstock directly to your deadstock disposal site to prevent scavengers from accessing it and potentially spreading the virus.
- If you see scavengers on your property, your disposal site is not being managed properly.

Recognize and report any illness

Early detection is critical to successfully dealing with a disease outbreak.

If your birds show signs of disease, such as depression, abnormal egg production or feed consumption, sneezing, gasping, a discharge from the nose or eyes, diarrhea or sudden death, call your local veterinarian immediately.

Dispose of dead birds quickly using an approved method, such as burial or composting. Consult your veterinarian first, as he or she may wish to collect samples for laboratory diagnosis.

Raising poultry species, either for food or as a hobby, is part of Ontario's agricultural heritage. However, to minimize the risks this poses to food safety and to the commercial poultry industry, bird owners should recognize and follow good biosecurity practices.

Rodent Control in Livestock and Poultry Facilities

B. Lang, A. Dam and K. Taylor

Factsheet

ORDER NO. 13-057 AGDEX 400/680 SEPTEMBER 2013
(replaces OMAF Factsheet of the same name, Order No. 10-077)

Rats and mice have long been a problem on farms where food and nesting sites are plentiful. These animals consume and contaminate food destined for livestock and other animals, as well as humans. Each rat on a farm will eat, spoil or damage approximately \$25 worth of grain per year. The adaptability and agility of these animals make getting rid of them particularly difficult. Mice are capable of running up a vertical surface, negotiating a wire like the finest circus performer and can easily jump to a height of 30 cm (12 in.) from a flat surface.

WHY CONTROL RODENTS?

Damage comes in many forms:

- **Damage to buildings.** Mice and rats will damage wood and electrical wiring, which can be a fire hazard.
- **Destruction of insulation.** Many livestock and poultry facilities show serious deterioration within 5 years. Associated with this damage are costs for re-insulation, increased energy costs and poorer feed conversions by animals.
- **Feed consumed.** A colony of 100 rats will consume over 1 tonne of feed in 1 year.
- **Feed contaminated.** A rat can contaminate ten times the amount of feed it eats with its droppings, urine and hair. A rat produces 25,000 droppings per year, a mouse 17,000. The U.S. Department of Agriculture estimates that the equivalent of more than \$2 billion in feed is destroyed by rodents each year.
- **Biosecurity.** Rodents are recognized as carriers of at least 45 diseases, including salmonellosis, pasteurellosis, leptospirosis, swine dysentery, trichinosis, toxoplasmosis and rabies. Mice and rats can carry disease-causing organisms on their feet, increasing the spread of disease.

UNDERSTANDING RODENTS

Mice and rats have tremendous breeding potential. One female mouse can give birth to 5–10 litters per year, yielding five to six young per litter. The gestation period is a mere 19–21 days. These babies are sexually mature in 6–10 weeks. The average female mouse lives to 9 months of age.

Under ideal situations, a pair of rats and their offspring can produce 20,000,000 young in 3 years. One female rat is capable of producing another 22 breeding females in 1 year (assuming a 50:50 male/female ratio of offspring), which mature within 3 months.

Rats and mice have poor eyesight but excellent senses of smell, taste, touch and hearing. They do not like open areas and prefer contact with walls and other objects. They do not range far from the nest. The range for rats is up to 45 m (148 ft), for mice 9 m (30 ft). Rats are extremely apprehensive about new objects and will avoid them for several days. Leaving a trap or bait station out for about 5 days is necessary to ensure acceptance. Mice quickly accept new objects. These tendencies become very important when designing baiting or trapping programs.

DOES YOUR FARM HAVE A PROBLEM?

Producers should not be embarrassed to admit they have a rodent problem. Surveys in Ontario indicate that 80% of poultry producers and 89% of swine producers have rodent problems. Chances are, rats and mice are a problem on your farm. The embarrassment and costs occur if something is not done to confront the problem.

Monitoring your barns is an important step in preventing and/or controlling rodent populations. Traditional rodent control methods such as baiting and trapping can also be used as a monitoring tool. Thorough record-keeping of bait disappearance can warn farmers if their rodent population is increasing. This is especially important in the fall, when rodents start to look for suitable wintering sites. Be aware that bait can become stale and mouldy, and must be refreshed often to prevent bait aversion and maintain the effectiveness of your monitoring program.

The following are signs of rodent infestation:

- **Sounds:** Gnawing, climbing noises in walls, squeaks.
- **Droppings:** Found along walls, behind objects and near food supplies.
- **Burrows:** Rat burrows are indicated by fresh diggings along foundations, through floorboards into wall spaces.
- **Runs:** Look for dust-free areas along walls and behind storage material.
- **Gnawing marks:** Look for wood chips around boards, bins and crates. Fresh gnawing marks will be pale in colour.
- **Rodent odours:** Persistent musky odours are a positive sign of infestation.
- **Visual sighting:** Daylight sighting of mice is common. Rats are seen in daylight only if populations are high. Quietly enter your barn at night, wait in silence for 5 minutes and listen for the sound of rodent activity. Look around with a powerful flashlight; rat eyes will reflect the light.
- **Smudge marks:** These may be found on pipes or rafters where dirt and oil from their fur leave a greasy film.

It is a generally accepted rule of thumb that there are approximately 25 mice or rats for every one that is seen. If you see rats and mice during daylight hours, it may indicate a severe infestation, as the population and feeding pressures are so high that juveniles are forced to forage during the day.

IS IT A RAT OR A MOUSE PROBLEM?

Since rats and mice require different control strategies, determine whether the problem is rats or mice (Table 1). The simplest way to differentiate between the types of infestation is by examining the droppings. Mouse droppings are black and rice-kernel sized, whereas rat droppings are black and bean-sized.

Table 1. Physical and behavioural characteristics of adult rats and mice

Characteristic	Norway Rat	Mouse
Size (including tail)	42 cm (16.5 in.)	16 cm (6 in.)
Average weight (adult)	500 g (18 oz)	20 gm (0.7 oz)
When active	nocturnal	nocturnal
Sight	poor: 1.5 m (4.9 ft)	poor: 1 m (3 ft)
Smell, touch, taste	excellent	excellent
Hearing	highly accurate	highly accurate
Range from nest	45 m (148 ft)	9 m (30 ft)
Fear of new objects	3–7 days	3 min–5 hr
Water requirements	daily	2–4 days without
Food per day	28 g (1 oz)	3 g (0.1 oz)
Water	57 g (2 oz)	3 g (0.1 oz)
Favourite foods	rolled oats, meat, fish, vegetable oil	grains, rolled oats, sugar, raisins
Droppings	bean size	rice size
Minimum width for entrance (hole diameter)	12 mm (0.5 in.)	6 mm (0.2 in.)
Can chew through (given edge to gnaw on)	rubber, aluminum, cinder blocks, plastic, wool	same as rats

WHAT DO MICE AND RATS LIKE TO EAT?

Rats and mice can be considered to be omnivorous. Given a choice, they prefer cereal grains. Rats eat meat when available. However, when food supplies are scarce, they will eat almost anything, including plaster and even soap or animal carcasses.

Rats and mice eat every day and prefer a water supply. Rats usually drink every day, but mice can survive several days without water. A water source for mice can be as small as the condensation formed on cold water pipes.

RODENT CONTROL (THE PRINCIPLES)

Rodent control requires an integrated pest-management strategy involving many techniques. The producer's first objective should be to prevent, or at least greatly reduce, rodent numbers through management programs that eliminate entrance to the facility, nesting sites for the rodents, food supplies and water. Populations build when food, water and nesting sites are readily available.

Habits and Biology

To control mice and rats, we have to understand their habits and biology first. See Table 1.

- Both are highly reproductive and extremely capable of surviving in all kinds of conditions.
- On farms, mice and rats will be near a food source such as barns, granaries, livestock buildings and silos.
- Rats and mice can climb and jump. Rats can jump vertically as high as 91 cm (36 in.) and horizontally as far as 122 cm (48 in.).
- Mice and rats can climb brick and other rough walls, and travel along utility wires.
- Rats can squeeze through an opening as small as 1 cm (½ in.) and mice as small as 0.6 cm (¼ in.), or less, in diameter.
- Both mice and rats are active at night, particularly right after dusk.
- Rats are smart and tend to avoid new objects. Therefore, it may take a few days for traps and baits to work. In contrast, mice are fairly inquisitive and will accept new baits and traps readily.

Rodent-Proofing Farm Buildings

Proper construction and maintenance of buildings helps prevent rodents from entering your barn. Initial construction footings should extend 0.5 m (19 in.) into the ground, with an apron that extends 0.2 m (8 in.) outward. This prevents rodents from burrowing into your building. To prevent frost damage, footings may have to be deeper. Examine your building at least once a year for possible entryways for rodents. Remember, a mouse needs only a 0.6 cm (¼ in.) opening to gain access; rats need a 1 cm (½ in.) opening. As a general guideline, mice can enter an enclosure through a hole the size of your little finger, and rats through a hole the size of your thumb. Cracks around door frames, under doors, broken windows, water and utility hook-ups, vents and holes surrounding feed augers are potential points of entry. Use coarse steel wool, hardware cloth or sheet metal to cover/fill any entrances. Do not use plastic, wood or insulation, as rodents simply gnaw their way through.

When constructing walls, ensure that sheeting lies flush to the wall studs rather than on strapping. This keeps nesting sites confined to a single section between studs rather than allowing complete access to all wall spaces. For further information, see

Plan No. M 9451 of the Canada Plan Service Series, *Rodent and Bird Control in Farm Buildings*.

A well-maintained structure is your first defence against rodents. Most rodents enter your barn directly from the fields and then the population builds. It is important to maintain good sanitation outside the barn. Eliminate vegetation 1 m (3 ft) around buildings and replace with crushed rock as rodents cannot tunnel through this material. Clean up spilled feed, remove loose wood, garbage, etc. Do not attract rodents from fields to your operation.

Eliminating Hiding Places and Nesting Sites

Rodents do not like to be exposed. Maintain sound housekeeping, eliminate loosely piled building materials, old feed bags, trash or anything else that a rodent can hide in or under. Keep piles of lumber and miscellaneous equipment 24–30 cm (9–12 in.) off the floor and at least 24 cm (9 in.) out from a wall. Look for entrances into double wall construction. Most rodents nest in the insulation of double walls. Block off all entrances into walls and destroy all nesting material.

Remove Food and Water

Eliminate water sources such as leaky taps, open water troughs, sweating pipes and open drains. Keep all feeds in rodent-proof bins, covered cans or metal hoppers. Reduce feed spillage and immediately dispose of dead animals. Without readily available food and water, populations cannot build.

CONTROL OF EXISTING POPULATION

If there is already a rodent problem inside the barns, prevention alone won't solve the problem. In this case, consider a population-reduction program.

Snap Traps

For small populations, snap traps or box traps are very useful for eliminating rodents. Rats prefer fresh bacon, fish and meat, while mice favour cheese, peanut butter or seeds. Try several baits to find out which your rodents prefer. Rats are distrustful of anything new in their environment, so leave baited non-set traps out for 4–5 days to allow them to get used to the traps. Ensure that previous baits have been taken before actually setting the traps. If rats are the problem, use rat traps. If mice are the problem, use a mouse trap. Locate traps close to walls, behind objects, in dark corners, where you see droppings or gnaw marks. When trapping next to a

wall, set the trap at right angles to the wall with the trigger and bait closest to the wall. Orient multiple-catch traps with the entrance hole parallel to the wall. Live traps can work very well near runways used by mice and rats.

Glue Boards

Glue boards are very effective against mice and are the method of choice in locations where toxic baits are a concern. Glue boards will not work well if there is too much dust. Check glue boards and traps daily and remove and dispose of dead mice and rats. Abundant food supplies make baited traps less effective. Eliminate as many sources of food as possible before starting a program. For barns and poultry houses with moderate infestations, set 50–100 traps. The trapping program should be short and decisive to prevent trap shyness.

Wear rubber gloves when handling bait, bait stations, traps or dead rodents to prevent human scent transfer, accidental poisoning or disease transmission. Place the rodents in tightly sealed plastic bags.

Predators

Cats may limit low-level mouse or rat populations. However, if conditions are ideal for rodents, cats cannot eliminate a problem. Cats may introduce disease into a facility by bringing in rodents caught in fields. Cats will not be able to catch mice as quickly as they multiply.

Sound and Ultrasound Devices

These two methods may not be effective. Rodents may be frightened by strange noises in the first few days but then quickly become used to them. Sound devices may cause distress among commercial poultry flocks, as well as decreased production and increased injury/mortality.

Rodenticides (Toxic Baits)

All rodenticide products are poisonous to other animals. Always observe label precautions regarding use, handling and storage.

The Ontario Ministry of the Environment is responsible for regulating pesticide sale, use, transportation, storage and disposal in Ontario. Ontario regulates pesticides by placing appropriate education, licensing, and/or permit requirements on their use, under the *Pesticides Act* and Regulation 63/09.

Table 2. List of approved active ingredients for rodent control in Ontario*, August 2013

Active Ingredient	Ontario Approved Class(es)
brodifacoum	4, 6
bromadiolone	4, 5, 6
bromethalin	3
cellulose from powdered corn cobs	4, 5, 6
chlorophacinone	4, 5, 6
difethialone	4, 6
diphacinone	4, 5, 6
warfarin	3, 4, 5, 6
zinc phosphide	3

*excludes Class 1 products used by manufacturers
Source: Ministry of the Environment website, 2013

All pesticides must be used in accordance with requirements under the *Pesticides Act* and Regulation 63/09 (available at www.ontario.ca/e-laws or call the ServiceOntario Publications toll-free number 1-800-668-9938 or 416-326-5300).

Ontario farmers, as defined by the *Pesticides Act* and Regulation 63/09, may purchase and use Class 4, 5 and 6 pesticides for rodent control. Under Regulation 63/09 of the *Pesticides Act*, Ontario farmers must be certified to purchase and use Class 3 pesticides for rodent control on their farms. To be certified, a farmer must successfully complete the Grower Pesticide Safety Course. Certified farmers may also purchase Class 4, 5, and 6 products. Class 5 and 6 pesticides for rodent control can be used by homeowners.

Use rodenticides (Table 2) as both a control and preventative measure. There are two basic types of rodenticides: acute poisons and anti-coagulants. These can come in a variety of forms, such as pelleted, powdered and liquid. Anti-coagulants can be further classified into first and second generation. First generation anti-coagulants require rodents to feed over several days in order to acquire a lethal dose of the active ingredient, such as warfarin, diphacinone and chlorophacinone. Second-generation anti-coagulants may only require a single feeding to acquire a lethal dose, though animals may not die for several days. Second-generation active ingredients include brodifacoum, bromadiolone and difethialone. The active ingredient can be found beneath “guarantee” on the product’s label.

Rodenticide labels will provide the applicator with appropriate usage instructions. Rodenticides registered to be used in and around agricultural buildings must be within 15 m (49 ft) of the building, or 100 m (328 ft) if placed along a fence-line. Outdoor bait stations are mandatory if the rodenticide is “above ground” (i.e., accessible by children and non-target species such as pets, livestock and wildlife).

Both outdoor and indoor bait stations must be tamper-resistant. For example, they must have an access panel that can be closed securely and locked, in addition to other strict requirements. Requirements for bait stations are divided into different tiers depending on indoor vs. outdoor use and varying accessibility by children and/or non-target species. Additionally, if the bait station is placed along a fence-line, it must be securely fastened (e.g., nailed to a fence post or to the ground). More information about bait station tiers and their requirements can be found online at the Pesticide Management Regulatory Agency’s website (Pest Management Regulatory Agency, www.hc-sc.gc.ca/ahc-asc/branch-dirgen/pmra-arla/index-eng.php).

Farmers should be aware that it is prohibited to use commercial class, concentrated rodenticides (often mixed with solid or liquid bait) outdoors, with or without a bait station.

REFERENCES

Factsheet: Rodent Control. Solvay Animal Health, Inc.

The Veterinarian’s Guide to Managing Poisoning by Anticoagulant Rodenticides. Liphatech. 2001.

Ontario Ministry of the Environment. Pesticides.
www.ontario.ca/environment

Ontario Ministry of the Environment. Pesticide Product Information System.
www.ontario.ca/environment

Health Canada, Consumer Product Safety
www.hc-sc.gc.ca/cps-spc/pubs/pest/_fact-fiche/restriction-rodenticides/faq-eng.php

Pest Management Regulatory Agency.
<http://pr-rp.hc-sc.gc.ca/ls-re/index-eng>

This Factsheet was updated by Brian Lang, Dairy Cattle Production Systems Specialist, OMAF, Woodstock; Al Dam, Poultry Specialist, OMAF, Guelph; and Kathleen Taylor, Poultry Specialist Assistant, OMAF, Guelph.

Occasionally, rodents may develop bait shyness after being made sick but not killed by a rodenticide. The shyness develops to the bait carrier, e.g., grain, and not to the rodenticide. Simply use another formulated product or different attractant if bait shyness develops. For rats, pre-bait using baits without the poison for about 1 week to get them accustomed to the bait. Place baits in areas of high rodent activity. Many people under-bait in their control program. Baits should be 1–2 m (3–6 ft) apart for mice and 7–10 m (23–33 ft) for rats. Remove all uneaten baits and properly dispose of them after the poisoning program.

CONCLUSION

Elimination of rats and mice from livestock and poultry barns is extremely difficult. It is preferable for producers to prevent infestations from occurring. If a problem does exist, the options described in this Factsheet should be useful in limiting rat and mice populations. If problems persist, farmers may find advice from professional pest control personnel helpful. These professionals can assist with identifying entry/nesting sites. They can also provide advice on placement of bait stations, traps, baiting and bait monitoring.

Keeping your family healthy with backyard poultry, including chicks and ducklings

This fact sheet provides basic information only. It must not be used in the place of medical advice, diagnosis or treatment. Always talk to a health care professional about any health concerns you have, and before you make any changes to your diet, lifestyle or treatment.

- Live poultry, such as chickens, ducks, geese, and turkeys and their young (e.g. chicks and ducklings) often carry harmful germs such as *Campylobacter* and *Salmonella*. While they usually do not make the birds sick, *Campylobacter* and *Salmonella* can cause serious illness when passed to people. Symptoms can include diarrhea (sometimes bloody), stomach pain and vomiting.
- These germs are in the bird's droppings (poop) which can then get on their bodies and surfaces and objects around them.
- Children younger than 5 years of age, adults older than 65 years, pregnant women, and people with weakened immune systems are at higher risk of serious infection from these germs, so they should not handle or touch chicks, ducklings, or other live poultry, or any surfaces or objects in contact with these birds.
- Should you or your family become sick with symptoms of *Campylobacter* or *Salmonella*, let your health care provider know that you have had exposure to live poultry.
- Any change to the birds' health, should be discussed with a veterinarian or the store, farm, or hatchery where you got the birds.

How to keep you and your family from getting sick

There is always a risk of illness when interacting with live poultry, including chicks and ducklings. By following the DOs and DO NOTs listed next, you can decrease the chance of you or your family becoming ill.

DOs:

- Always **wash your hands** thoroughly with soap and water immediately after touching any live poultry or their droppings or touching any surfaces or items in the area where they live or have spent time.
- Adults should supervise children around live poultry and when hand washing.
- Change any clothes that were in contact with the birds during handling.

- Keep the birds in an enclosed area that is easy to clean and disinfect.
- Regularly clean and then disinfect the birds' enclosure/habitat and any equipment used in their care. Only put the birds back in the area once it is clean and dry.
- Clean and then disinfect any surfaces live poultry have contacted.
- Wipe up droppings using a disposable towel and clean and disinfect the area.
- Wear gloves when cleaning and disinfecting and when wiping up droppings. Always wash your hands after removing your gloves.
- Follow manufacturer's instructions for proper use of the disinfectant (e.g. should it be diluted, how long to leave it before wiping dry). **It is important to note that disinfectants only work properly on surfaces that have been cleaned first.**
- If you bathe the birds or let them swim, use a plastic tub or bin that is solely for the birds' use only.

DO NOTs:

- Do not bring chicks, ducklings, or other live poultry into households or settings with children younger than 5 years of age, adults older than 65 years, pregnant women or people with weakened immune systems.
- Do not kiss or snuggle the birds, touch your face or eat or drink when handling live poultry.
- Do not feed the birds directly from your hands.
- Do not allow live poultry to be on surfaces that cannot be cleaned and disinfected, such as carpeting or cloth furniture. Do not allow birds to wander around inside your home.
- Do not allow live poultry in areas where people's food or drinks are prepared, served, eaten, or stored.
- Do not bathe or swim the birds or clean their habitats in a sink, bathtub or pool that is also used by people.

This fact sheet was prepared by the Ministry of Health, Office of the Chief Medical Officer of Health – Public Health in collaboration with Public Health Ontario and the Office of the Chief Veterinarian for Ontario.