



CITY OF PORTLAND
Sustainability Office
Troy Moon
Sustainability Director

To: Councilor Thibodeau and Members of the Sustainability and Transportation Committee

DATE: April 10, 2020

SUBJECT: 2019 Annual Pesticide Ordinance Summary Report

Overview: The City of Portland Pesticide Use Ordinance requires the Pesticide Management Advisory Committee (PMAC) to submit an annual report to the Sustainability and Transportation Committee that provides data about pesticide use in the community and summarizes the activity of the PMAC during the previous year. This report provides this information for 2019.

Educational Outreach: 2019 was the first year the Pesticide Use Ordinance was in effect for public and private property. Therefore, it was a year of building awareness and compliance across both the resident and professional audiences. To achieve this, we developed educational materials and distributed them at events, via mailings, and through social media to target both groups. These materials and events included:

Educational Materials:

1. Web pages on City website outlining ordinance, alternative land care practices, and FAQs (<http://www.portlandmaine.gov/2168/Pesticide-Use-Ordinance>)
2. Pesticide Use Ordinance postcard announcement
3. Pesticide Use Ordinance Overview brochure
4. Alternative Lawn Care Practices brochure
5. Organic product/practice solutions matrix for most common plant, insect, and animal pests (developed in 2019, to be distributed to retailers spring 2020), distribution to date:
 - a. Maine Hardware
 - b. Eldredge Hardware
 - c. Paris Farmers Union
6. Mailing to Maine Landscape and Nursery Association (MELNA) members outlining ordinance and inviting them to a January 2019 roundtable event. The event was followed-up with multiple email communications to attendees with ordinance information.
7. Social media outreach

Educational Events:

1. Hosted professional applicators roundtable to discuss ordinance and problem solve around concerns/challenges
2. Presented a session at the MELNA training workshop in the spring of 2019.
3. Presented ordinance and alternative land care practices at the Maine Flower Show in partnership with the City of South Portland, Friends of Casco Bay, Cumberland County Soil and Water Conservation District, and a professional landscaper
4. Tabled at the Green Neighbor Family Fest in partnership with the Stormwater team
5. Tabled at Portland Greenfest
6. Coordinated YardScaping event at the East End Community Center
7. Co-hosted a presentation of the Northeast Organic Farming Association's (NOFA) Organic Landcare certification program.

Enforcement: The Sustainability Office received a small number of complaints from residents about possible illegal pesticide use by neighbors. In response, the Sustainability Office contacted property owners and applicators to learn more about the potential violation. We provided educational materials to residents who may have been outside of compliance and discussed ordinance requirements with applicators. Upon investigation we found that most applications reported by the public proved to be for exempt applications to treats for ants, mosquitoes, or ticks. In two cases we were unsure about the nature of a possible application but provided information to property owners with no further contact. To better track compliance, we implemented a *SeeClickFix* report that allows residents to submit compliance complaints. The link to the service was added to the Pesticide Ordinance webpage on the City website. We did not receive any complaints via the *See, Click, Fix* report in 2019.

Waivers: The PMAC Waiver Subcommittee received two synthetic pesticide use waiver requests in 2019.

- The Waynflete School requested a waiver to utilize a phased organic approach on athletic fields similar to the exemption given to City athletic fields. Waiver request was denied in a 2:0 vote due to lack of evidence of need for synthetic pesticides to combat a specific pest issue.
- The Cushing Island Conservation Corporation requested a waiver to apply glyphosate on invasive plant stumps within the conservation area. The request was denied by the PMAC Waiver Subcommittee in a 1:1 vote. The Cushing Island Conservation Corporation appealed the decision to the City Manager designee, Lena Geraghty. The designee approved the waiver for one year, finding that the organization's application, evaluation of alternate methods and materials, and evidence of need met the City's requirements for a waiver. The applicant may apply for a further waiver in 2020. The ordinance does not require a report from unlicensed applicators regarding the amount of pesticide they apply but the applicant indicated that they would use no more than 32 ounces of 20% concentrated product.

Applicator Report Data: The Pesticide Use Ordinance requires that licensed applicators submit an annual report outlining all pesticide treatments (both synthetic and organic) within the City of Portland. To notify applicators of this requirement, we utilized the MELNA and State of Maine Board of Pesticide Control lists and sent notice via email to all licensed applicators in Cumberland County. Information about the report and a Google Form to submit a report were also added to the Sustainability Office web pages within the City's website.

Twenty two reports were submitted (including the City of Portland's Parks, Recreation, and Facilities departments). Businesses that submitted reports include:

1. Ant Man Pest Control
2. Sterling Insect - Lawn Control Inc
3. The Grounds Crew
4. Atlantic Insect & Lawn Control
5. EZ Pest Solutions
6. TruGreen
7. Bartlett Tree Experts
8. City of Portland - Parks and Recreation
9. MD Weaver Corporation
10. Protect Pest Services
11. Seabreeze Property Management
12. David Macdonald Inc DBA Whitney Tree Service
13. Snapdragon Tick and Mosquito Control
14. Modern Pest Services
15. Burnell Pest Service Inc
16. Lucas Tree Experts
17. Octagon Cleaning and Restoration
18. Turf Doctor Lawn & Pest Services
19. Bullseye Pest Services LLC
20. City of Portland - Riverside Golf Course
21. Advantage Pest Control
22. Ants Etc. Pest Control

Staff was pleased that these companies submitted reports detailing their pesticide applications during the calendar year 2019. *We do not know how many pest management and landscaping companies operate in Portland so we do not know how many firms are required to submit reports.*

Based on the reports, 96 distinct products were used in Portland in 2019 Applications occurred on:

- 350 acres of ground
 - 19 private
 - 331 public (primarily Riverside Golf Course, which is exempt from the ordinance and makes applications in accordance with its participation in the Audubon Cooperative Sanctuary Program.)
- 54 trees
 - 36 private
 - 18 public
- 176 buildings for insects or mold
- 76 rodent bait boxes

Pesticides Reported

- 26019 CHIPCO
- Acelepryn
- Advance C/A Bait
- Advion Ant Gel
- Advion Fire Ant Bait
- Advion Roach Gel
- AFFIRM
- Allectus 18-0-8 Lesco
- Apline Aerosol
- Aprehend
- Arbor Tree-Age
- Avdian Evolution
- Avenger
- Avert Dry Flowable
- Azatin O
- AZOXY 5000 DG Select
- Badge X2
- BANOL
- Bedlam Plus
- Bifen I/T
- Bifen I/T 7.9
- Bisect L
- Boractin
- CB 80
- CB 80 Aerosol
- CB 80 Extra
- Cimexa
- Clorothalonil 720
- Confirm 2F insecticide
- Contrac Blox
- Contrac Pellets
- Cueva
- Delta Dust D
- D-Fence Dust
- D-Fence SC
- DIMENSION 2EW
- Drione Dust
- Eco Via MT
- Eco Via EC
- EcoExempt D
- EcoPCO DX
- Ecovia WH
- Essentia G
- Essentria Dust
- Essentria IC3
- EZ block 18# Pail
- Fastrac Pellets
- Fendona CS
- Fiesta
- First Strike
- Grub Gone
- INSIGNIA
- Intice 10
- Lesco Cross Check Plus
- LEXICON
- Masterline B Maxx
- Masterline Bifen
- Max Force Ant Gel
- Maxforce Carpenter Ant Gel
- Mirimichi green pro weed control
- Mosquito Free
- MUSKATEER
- Niban Granule
- Nyguard
- Omni Supreme Spray
- Opti Guard Ant Gel
- Perma Guard - Zinsser Co. Rustoleum
- Propicozinde 14.3
- PROPLANT
- PT Ultracide
- QuindoRAC 75DF
- ROTATOR
- SECURE
- Shock Wave RTU - Fiberlock Tech.
- SPECTATOR
- SPEEDZONE
- Suspend Polyzone
- Suspend SC
- Talstar PL Granular
- Talstar Professional
- Taurus Fipronil
- Taurus SC
- TEBUCOZINOLE 3.6
- Tempo Dust
- Tempo SC Ultra
- Temprid FX
- Terad 3 AG
- Termidor SC
- Tick Killz
- Transport GHP
- Tree-Age
- Triact 70
- TRINITY
- T-STORM
- VELISTA
- XZEMPLAR

Summary of Target Sites, Pests, and Amounts of Pesticides Used

(We have included a table with all report data as an appendix)

<i>Ownership</i>	<i>Target Site</i>	<i>Target Pest</i>	SUM of Pounds	SUM of Undiluted Gallons	SUM of Total Area Treated
Private	Building (# of Buildings)	Insects	0.6	0.9	162.00
		Unspecified	941.4	2.6	293.00
	Building (# of Buildings) Total	Insects; Unspecified	942.1	3.5	455.00
	Building (Square Feet) Total	Mold	0.0	118.8	31014.00
	Ground Total	Unspecified	583.5	63.9	20.43
	Rodent Bait Boxes Total	Rodents	15.6	0.0	76.00
	Tree Total	Unspecified	4.1	3.2	36.15
	Wasp Nest Total	Wasp	0.4	0.1	2.00
	Public	Golf Course Total	Unspecified	54.6	73.8
Ground Total		Unspecified	2778.0	10.0	13.00
Tree Total		Unspecified	0.0	0.2	18.00
Grand Total			4378.3	273.4	31952.65

City of Portland Treatment Summary:

Riverside Municipal Golf Course

- The total quantities of synthetic pesticides used during 2019 were:
 - 74.37 gallons of liquid formulations (54% reduction compared to 2015)
 - 54.63 pounds of dry formulations (44% reduction compared to 2015)
 - These numbers include all herbicides, insecticides, fungicides, and growth regulators
 - No organic pesticides were applied.
 - The cost of all pesticide applications was about \$28,000 (\$20,000 for putting greens, \$8,000 other turf surfaces).
- Certified organic fertilizers composed of hydrolyzed feather, bone, meat, and blood meals were used on all playing surfaces.

- 1,704 bags at a cost of \$56,232 were applied.
- 41 bags of synthetic granular fertilizers at a cost of \$1,800 were applied to the putting greens.
- Total lime applied was 936 bags at a cost of \$8,280.
- It is expected to be certified as an Audubon Cooperative Sanctuary (ACSP) for golf courses this year.
- The nesting box trail continues to be very successful, 30 more boxes were built and installed around the course for a total of 79 nesting boxes.
- About 40 pounds of honey was harvested this year.

City of Portland Athletic Fields:

- Applied organic practices: Slit seeding
 - Aerification
 - Clipping reincorporation
 - Soil testing
 - Irrigation
 - Soil amendments
 - Overseeding/dormant seeding
- Synthetic pesticides applied:
 - Allectus - 2,000 undiluted pounds across 12 acres
 - Mirimichi Green Pro Weed Control - 10 gallons undiluted formula across 1 acre
- Predicted issues to transitioning to fully organic practices:
 - Cost to implement practices successfully:
 - Insufficient irrigation
 - Equipment
 - Staffing
 - Organic treatments more expensive than synthetic
 - Infrastructure
 - Soil modification and amendments
 - Playability standards
 - Public perception

Discussion:

The Sustainability Office and members of the Pesticide Management Advisory Committee were successful in their efforts to educate professional pesticide applicators, landscapers, and retailers about the requirements of Portland's pesticide ordinance. This occurred through workshops and training sessions with licensed applicators and in person contact with the managers of hardware stores and garden centers. Members of the PMAC created a very comprehensive guide to solving pest problems organically that several local retailers have agreed to make available to customers. PMAC members plan to provide this resource to other retailers when stores and garden centers reopen. We would note that a hardware store opened a Portland store recently and has chosen not to carry any synthetic pesticides in their store.

Other stores have reduced inventory of synthetic pesticides and/or noted products that comply with the ordinance. We also note that several applicators placed lawn signs on properties they maintain noting “non-pesticide application” after providing services.

The reporting provisions of the Pesticide ordinance provide Portland residents with data about the types of pesticides being applied in the City and the quantities applied. It will take time to fully analyze the information reported by the twenty two applicators who submitted reports. We would like to thank Eli Rubin, an intern for the Director of Innovation and Performance Management, for organizing the information in the submitted reports and presenting it in a useful way. This took a significant amount of work because reports arrived in a variety of formats from computer generated spreadsheets to handwritten notes. Staff and PMAC members will more fully analyse the information as time allows to understand the types of products applied. The vast majority of reported applications are for buildings and exempt pests including ants. Staff would note that we do not know how many applicators and landscapers work in Portland so we do not know how many applicator reports we should have received.

In order to track and monitor resident reports about possible non-compliance, staff created a See Click Fix category for pesticide applications. No residents used this tool to report applications. Prior to creating this reporting vehicle staff received a small number of reports about possible violations. When staff called the phone numbers listed on lawn signs reported by residents we found the applicators very responsive. In every case in which we contacted an applicator we found the application to be for an exempt purpose. Staff mailed information about the ordinance to two or three properties based on a resident complaint but did not follow up further.

During the upcoming year staff will collaborate with our colleagues in neighboring communities to better understand the data being collected by our respective offices. We will also approach the Maine Board of Pesticide Control about creating a reporting platform for applicators that will be more useful to municipalities, residents, and licensed applicators.

The City of Portland Parks, Recreation, and Facilities department continues to work toward making all of Portland’s open spaces pesticide free. They note that this approach incurs additional expense for materials and labor costs due to the hands-on nature of fully organic land care. They note that there is not currently an effective product available to treat grubs, which pose a potentially costly hazard to high use athletic fields. The staff at Riverside Golf Course anticipate achieving status as an Audubon Cooperative Sanctuary this year. They have increased their efforts to be environmental stewards by increasing the number of bee hives they manage and by creating refuges for wild birds on and near the golf course. We look forward to discussing this report and answering any questions you may have.

Respectfully submitted,

Troy Moon
Sustainability Director

Ashley Krulik
Sustainability Associate