

Control of municipal pest problems encountered in and around the City of Saskatoon will continue with the strategies of an Integrated Pest Management (IPM) program. Such a program incorporates various techniques to reduce pest populations and can include the following components:

- Planning – having an effective proactive approach by taking advantage of all possible management opportunities
- Setting threshold levels based on values, health, economics and environmental stresses to determine when action is necessary
- Monitoring and detection to minimize losses and safeguard against human health and environmental losses
- Proper identification of pest concerns to ensure proper management strategies are utilised
- Evaluation of the effectiveness of procedures put in place to manage pest problems

The City of Saskatoon is committed to the use of least toxic control methods. Utilization of chemicals to control pests will be minimal and only put into action when no other effective alternatives are available. The Pest Management Regulatory Agency (PMRA) of Health Canada has the mandate to protect human health, safety and the environment by minimizing risks associated with pesticides, while providing Canadians access to the pest management tools they require for agriculture, forestry, industry and personal use<sup>1</sup>. The PMRA evaluates the results of a wide variety of tests to determine whether a pesticide has the potential to cause adverse effects on humans, animals, plants and non-target organisms. Only products that have been reviewed and found to be effective and safe for use with minimal risk to human health and the environment are registered by the PMRA. The Pest Management program only recommends and uses PMRA registered products. Activities undertaken by the City of Saskatoon pest management team are regulated by legislation at federal, provincial and municipal levels.

## **Applicable Legislation**

Activities undertaken by the Pest Management department are regulated at federal, provincial and municipal levels. Appendix I lists the legislative acts that we are to abide by to complete our duties.

---

<sup>1</sup> “Fact Sheet on The Regulation of Pesticides in Canada” published by the Pest Management Regulatory Agency

# MOSQUITO CONTROL

## Justification

The City of Saskatoon mosquito control program actively controls mosquitoes from April through September. While the focus is principally nuisance mosquitoes, the presence of vector species that may transmit West Nile Virus (WNV) or Western Equine Encephalitis (WEE) has increased the need for controlling mosquitoes. The strategy utilized by the City of Saskatoon incorporates the following components:

- Surveillance
- Larviciding
- Habitat reduction
- Public awareness and education

## Surveillance

Surveillance occurs at two levels. The first is monitoring of adult mosquito populations through live trapping and the second is ground crews systematically recognizing and locating mosquito habitat that can be favorable to larval development. Monitoring of adult mosquito populations is important for determining when and where nuisance mosquitoes and potential vectors of WNV (*Culex tarsalis* and *C. restuans*) are appearing enabling control strategies to be focused on areas that may become public health concerns. It is also an effective tool in assessing the effectiveness of the mosquito control program. The two collection tools utilized for the collection of live mosquitoes are *CDC (Centre for Disease Control) CO<sub>2</sub> traps* and "*New Jersey*" *Light Traps*. Locating mosquito breeding habitat goes hand in hand with controlling mosquito numbers through larviciding water bodies.

## CO<sub>2</sub> BAITED CDC TRAP COLLECTION

### Timing

Collections occur from June 01 to August 31.

## NEW JERSEY LIGHT TRAP (NJLT) MOSQUITO COLLECTION

### Methods

New Jersey Light Traps will be distributed across the City of Saskatoon. Locations are based upon where seasonal or full time employees live, then distributed geographically throughout the city. A total of eight (8) traps will be allocated to staff to run and maintain during the season.

## **Mapping**

### **Timing**

Mapping and site analysis is regularly updated as environmental conditions changes occur throughout the year. This activity will typically begin in March and carry on through October but is subject to environmental conditions.

### **Larviciding**

Controlling mosquito populations while they are in their larval stage is the safest and most effective means of nuisance and vector mosquito control. Mosquitoes in the larval stage are confined to specific areas making them easy to locate and control. The advantages of using biological larvicides include:

### **Timing**

Larviciding activity typically occurs from April to September when mosquito larva is present, although environmental conditions may occur that can extend or shorten this time frame.

### **Habitat Reduction**

Source reduction is continually evaluated on all public property and recommended on private property to minimize potential breeding habitat for mosquitoes.

### **Public Awareness and Education**

During the season when mosquitoes are active, the citizens of Saskatoon are kept informed regarding our activities through public service announcements, informative pamphlets and the City of Saskatoon web page.

## **DUTCH ELM DISEASE CONTROL**

### **Justification**

Dutch elm disease (DED) is a serious disease of American elm (*Ulmus americana*) caused by the introduced plant pathogen *Ophiostoma (novi) ulmi*. At present, the City of Saskatoon has never had a confirmed case of DED. However, pest management crews actively monitor for the presence of trees that may be symptomatic of DED. As part of this monitoring process, crews also actively search for violations of the Provincial DED regulations put in place in 2005. The final activity is monitoring populations of native elm bark beetle, *Hylurgopinus rufipes*, the principle vector of DED in Saskatchewan.

### **Surveillance**

#### **Timing**

Sampling for DED occurs primarily between late June and September.

# RICHARDSON GROUND SQUIRREL CONTROL

## Justification

Living in Saskatchewan, we are subject to damage to parks buffers and sports fields by Richardson ground squirrels. In response to complaints from the public, pest management crews work to reduce populations of Richardson ground squirrel in all locations throughout the city. This includes sporting fields and occurs as outlined below.

- Class I, Class II, and (Charge) Soccer Pitches will have ground squirrel control on a weekly basis. This service is paid for by the Sportsfield users as part of the “**Above Basic Service Levels**” Agreement
- Class II and Class III (Charge) Ball Diamonds will have regular ground squirrel control on a weekly basis. This service is paid for by the Sportsfield uses as part of the “**Above Basic Service Levels**” Agreement.

## Control Methods

### Timing

This response program for public property operates on a complaint basis from March to October.

# NUISANCE WILDLIFE MANAGEMENT RESPONSE CALL-OUT LIST

## Justification

We are frequently visited by nuisance wildlife that includes anything from skunks to moose. For the safety and well being of the animals and the general public, we do our best to remove said animals from the city limits.

## Protocol

### Timing

Nuisance wildlife management response is a year around program and is based on complaint calls from the public.

**APPENDIX II**  
**Nuisance Wildlife Managed by the City of Saskatoon**

<b>PEST</b>	<b>RESPONSIBILITY</b>	<b>RESPONSE</b>	<b>PRIVATE PROPERTY (Y/N)</b>	<b>CONTACT</b>
<i>Skunks, Porcupines, Raccoons, Badgers</i>	IS Parks - Pest Management	On properties maintained by the City of Saskatoon.	Yes	975-3300 After hours and weekends: 975-2476
<i>Crows, Magpies</i>	IS Parks - Pest Management	Will pick up dead birds as directed by Saskatoon Health.  Nests will be removed if accessible (must be less than 20 feet off the ground).	Yes – but only for WNV surveillance.  No - nests will not be removed from trees on private property	975-3300
	IS Parks - Parks Maintenance	Dead birds in parks.	No	975-3300
	IS Public Works - Roadways	Dead birds on roads and sidewalks.	No	975-2476
<i>Hornets, Wasps, &amp; Bees</i>	IS Parks - Pest Management	On properties maintained by the City of Saskatoon.	Yes – but only if the nest is located in a tree that overhangs onto public property.	975-3300
<i>Muskrats</i>	IS Parks – Parks Maintenance	On properties maintained by the City of Saskatoon.	No	975-3300
<i>Beaver</i>	IS Parks – Parks Maintenance	Beaver found in storm retention ponds.	No	975-3300
	Water Treatment Plant (WTP)	Beaver, Muskrat found on the river.	No	WTP Operations Manager at 975-3545 or WTP Maintenance Manager at 975-2569
<i>Richardson Ground Squirrel, Northern Pocket Gopher</i>	IS Parks - Pest Management	On properties maintained by the City of Saskatoon.	No	975-3300

<i>Coyotes, Foxes</i>	IS Parks – Parks Maintenance	Information only	Yes	975-3300
<i>Pigeons</i>	IS Parks - Pest Management	On properties maintained by the City of Saskatoon.	No	975-3300
<i>Bats, mice, snakes, turtles, and rabbits</i>	IS Parks - Pest Management	Information only; no other action taken.	No	975-3300
<i>Rats</i>	IS Parks - Pest Management	On properties maintained by the City of Saskatoon.	No	975-3300
<i>All protected big game animals including Elk, Pronghorn Antelope, Deer, Moose, Caribou and large carnivores</i>	Saskatchewan Ministry of Environment	Information only	Yes	933-6240
	City of Saskatoon Police Service	To be contacted only when control is feasible	Yes	975-8300 and ask
	City of Saskatoon Police Service	Only when control is required	Yes	975-8300 and ask for the animal dispatcher
<i>Birds of Prey including owls, hawks, falcons and eagles</i>	Saskatchewan Ministry of Environment	Information only	Yes	933-6240
<i>Migratory Birds</i>	Canadian Wildlife Service	Information only	Yes	975-4087
	IS Parks – Parks Maintenance	On properties maintained by the City of Saskatoon.	Yes	975-3300
<i>Dead animals</i>	IS Parks – Parks Maintenance	Dead animals in parks	No	975-3300
	IS Public Works -Roadways	Dead animals on roads and sidewalks.	No	975-2476