
CITY OF KELOWNA

MEMORANDUM

Date: March 19, 2003
File No.: 6130-13
To: City Manager
From: Urban Forestry Supervisor
Subject: Integrated Pest Management Program

RECOMMENDATION

THAT Council receive for information the March 19, 2003 report from the Parks Division on the Integrated Pest Management (IPM) Program.

BACKGROUND

The Parks Division presented a report to Council on May 8, 2002, detailing the IPM program used by the Parks Division and this report provides an update on the status of IPM initiatives.

ACTIVITIES IN 2002

Reduction of pesticide use continues to be a focus of the Parks IPM program. For your information, most pesticides are used outside of urban areas and urban pesticide usage is estimated at less than 10% of total usage in Canada¹. Information from other jurisdictions indicates that pesticide use by municipal governments may be less than 1%.

The Park Division achieved a 14% reduction in pesticide use (by volume) in 2002, compared to 2001, due to on-going staff efforts as well as favourable environmental conditions. Note that the *composition* of Parks' pesticide usage has also changed significantly over the years. Some pesticides have been replaced with larger quantities of more "environmentally friendly" products such as dormant oil or soaps. However, overall usage on a per hectare basis has declined significantly as new park inventory has increased. Some highlights from 2002 include:

- ◆ **None** of the insecticides currently being reviewed by the federal Pesticide Management Regulatory Agency (PMRA), including diazinon, chlorpyrifos, malathion and carbaryl, (Fig. 1), were used in 2002.
- ◆ Use of herbicide products currently under review by the PMRA has also declined in recent years (Fig. 2).
- ◆ While all of the products used are safe if applied properly, almost 90% of the pesticide use in 2002 consisted of environmentally friendly products such as soaps, fatty acids and dormant oil (by weight of active ingredient). The provincial government is considering an exemption for these types of products from the Pesticide Control Act.

¹ Personal Communication, Debra Conlin, Urban Pest Management Council of Canada, Toronto.

- ◆ IPM educational programs were initiated (e.g. in conjunction with the Mayor's Environmental Expo and Arbour Day).
- ◆ Street tree pest problems were reduced in 2002, and staff received several compliments due to their treatment of chronic problem areas such as Maple Street. Monitoring indicated that elm leaf beetle did not require any treatment.
- ◆ In general, natural areas were healthy, although a large pine beetle infestation was discovered in the Kettle Valley area, and a new infestation appeared on Knox Mountain. These areas will be addressed this winter and monitored during the coming season.
- ◆ Turf and vegetation management programs continued to work well. A new micro-injection tool now allows treatment of sprouting stumps and brush without spraying.
- ◆ Mechanical control of knapweed was expanded to selected areas of Dilworth Mountain.

2003 GOALS

A number of municipalities are focusing attention on public education programs. Homeowners use a significant proportion of urban pesticides, and they are more likely to misuse these products than trained applicators². The City of Calgary found that homeowners purchase roughly six times as much pesticide as the City³. Public education is one of the areas that Parks intends to explore further. Some of the goals for 2003 are to:

- ◆ Develop an overall plan for educating the public about IPM and pesticide usage, and co-ordinate this plan with other local governments as much as possible.
- ◆ Continue to investigate areas where dying trees have been seen along road shoulders.
- ◆ Continue work on a tree inventory in order to improve tracking of tree health.
- ◆ Monitor forest health problems in natural areas and around the landfill. Bark beetle infested trees should be removed prior to April 2003.
- ◆ Participate in research trials for weed control in turf with reduced pesticides. Parks has been approached by Olds College to participate in a research trial involving "corn gluten meal", a natural product which acts similar to a pre-emergence herbicide. We are also planning to look at some trials comparing intensive cultural practices for weed control.
- ◆ Re-visit the use of hot water or thermal weed treatment equipment. Staff are currently investigating the feasibility of a short-term lease or loan of this equipment for conducting a trial in 2003.
- ◆ Work with the Ministry of Agriculture, Fisheries and Food to better implement biological control of noxious weeds, e.g. dalmation toadflax.
- ◆ While pesticide use is expected to show some seasonal fluctuation, Parks will continue to explore other alternatives to further reduce overall pesticide use.

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Urban Forestry Supervisor

c.c. Director of Parks and Leisure Services
Parks Manager
Parks Maintenance Supervisor

² Environment Canada website, 2001

³ Personal Communication, Simon Wilkins, IPM Co-ordinator, City of Calgary.

Figure 1. Use of four insecticides (under PMRA review) since 1998, by weight of active ingredient.

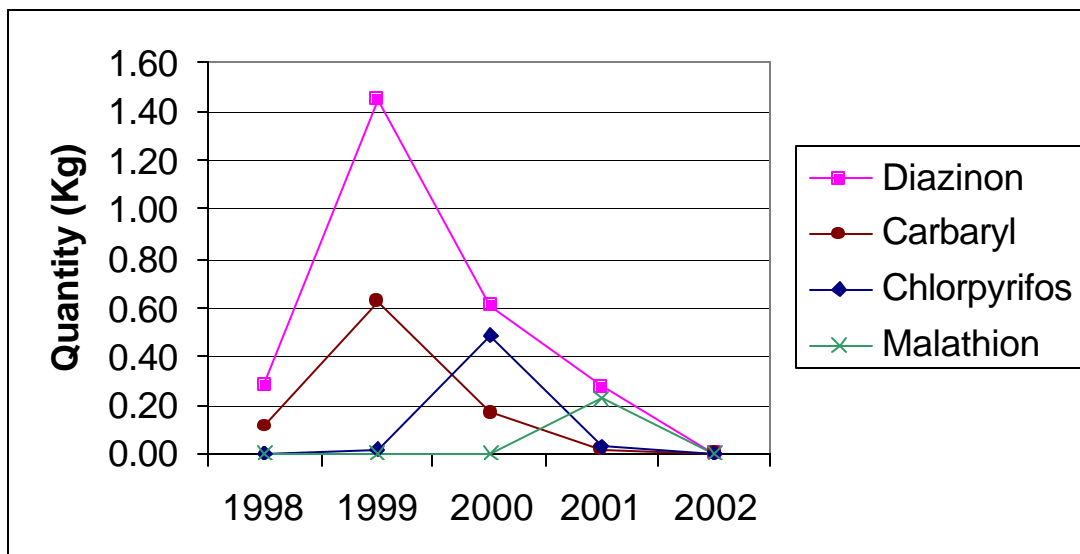


Figure 2. Use of four herbicides (under PMRA review) since 1998, by weight of active ingredient. Note: use of MCPA is zero across the board.

