

MEMORANDUM

The Corporation of Delta Climate Action & Environment

To:	Mayor and Council
From:	Mike Brotherston, Manager of Climate Action & Environment
Date:	May 15, 2012
Subject:	Delta's mason bee box program
CC:	Ken Kuntz, Director of Parks, Recreation & Culture

In spring 2010, staff were asked to investigate opportunities to improve pollination through the use of bees in Delta. In response, a mason bee demonstration project was implemented at the Delta Municipal Hall in May 2010. In spring 2011, three mason bee boxes were put up at Rotary Park, Ernie Burnett Park and Diefenbaker Park. This year, a new mason bee box was added to the Delta Nature Reserve.

Bees are in decline throughout North America for reasons unknown. Some research attributes this decline to the introduction of foreign pests and fungi. Whatever the reason, there is cause for concern as we rely on bees and other pollinators for food production and natural processes.

Mason bees can be found all over Delta. They are solitary bees that do not produce honey or beeswax but contribute towards improved pollination. The purpose of Delta's mason bee box program is to improve the ecological health of the community and to provide an educational opportunity for the public to safely observe mason bees and their benefits. The life cycle of a mason bee takes approximately three months, May -August. The mason bee boxes will be cleaned out in early August. Delta's bee boxes are maintained by a volunteer bee keeper.

Male mason bees do not have stingers and in a typical bee box there are only two females for every ten males. Delta's mason bee boxes will house 40-100 bees each. As such, the risk of being stung by a mason bee is very low to non-existent.

In August 2011, Delta's mason bee boxes experienced 100-200% mason bee replacement. This meant there were enough cocoons in the bee boxes to start a healthy 2012 mason bee cohort. Based on 2011's success another bee box was installed in the Delta Nature Reserve adjacent to the sunken tractor (Photograph 1). Like the other locations, the Delta Nature Reserve location was selected based on mason bee suitability, public access and Parks Operations advice.



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Photograph 1. Mason bee box in the Delta Nature Reserve.

Information about Delta's mason bee box program, Delta's hobby beekeeping bylaw and general bee information is available on the Corporation of Delta's website. Information about other bee programs in the community like the Earthwise Society and Delta Chamber of Commerce's "Feed the Bees" program is also available on Delta mason bee box webpage.

Mike Brotherston, Manager of Climate Action & Environment

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