



City of Richmond

Report to Committee

To: General Purposes Committee **Date:** December 14, 2021
From: Peter Russell **File:** 10-6160-06/2021-Vol
 Director, Sustainability and District Energy 01
Re: 2021 Richmond Bee City Canada Certification Application

Staff Recommendation

That the application, as described in the report titled '2021 Richmond Bee City Canada Certification Application,' from the Director, Sustainability and District Energy, dated December 14, 2021, be endorsed and submitted to Pollinator Partnership Canada.

Peter Russell
 Director, Sustainability and District Energy
 (604-276-4130)

Att. 1

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Parks Services	<input checked="" type="checkbox"/>	
SENIOR STAFF REPORT REVIEW	INITIALS:	APPROVED BY CAO

Staff Report

Origin

Pollinator Partnership Canada is a registered charity that is dedicated to the protection and promotion of pollinators and their ecosystems through conservation, education, and research. Bee City Canada is a voluntary membership program that is delivered by Pollinator Partnership Canada. The Bee City Program seeks membership, through certification, for organizations that are committed to promoting pollinator conservation.

The City has a long history of promoting pollinator conservation in the community. Many historical and existing community initiatives such as the Enhanced Pesticide Management Program, endorsed in 2009, align with the Bee City Canada program. This report outlines the program requirements, and recommends that an application to the program be endorsed and submitted to Pollinator Partnership Canada to achieve formal Bee City status.

This report supports Council's Strategic Plan 2018-2022 Strategy #1 A Safe and Resilient City:

1.4 Foster a safe, caring and resilient environment.

This report supports Council's Strategic Plan 2018-2022 Strategy #2 A Sustainable and Environmentally Conscious City:

2.4 Increase opportunities that encourage daily access to nature and open spaces and that allow the community to make more sustainable choices.

Analysis

Pollinators are paramount for a stable and thriving natural environment, which is known to improve the physical and mental health of residents. Pollinators can connect people with nature and encourage healthy, clean food consumption and support local agriculture sectors. There is growing evidence that pollinator species such as bees and butterflies are in decline globally due to the pressures of human development.

Bee City Canada Designation

Pollinator Partnership Canada's mission is to inspire organizations, including Local Governments, to take action to protect pollinators. The Bee City Partner program was launched in 2017 and currently recognizes six Bee City members in BC and a total of 57 Bee City members in Canada working to protect pollinators. Through the program, all participants commit to:

1. Creating, maintaining and/or improving pollinator habitat;
2. Educating their community, employees and/or customers about the importance of pollinators; and
3. Celebrating pollinators during National Pollinator Week or at other times.

Council has long recognized the environmental and economic benefits of pollinators through the commitments above and has endorsed a variety of initiatives aimed at protecting Richmond's biodiversity, community wellness, and economic well-being. Staff are seeking endorsement to prepare and submit an application to Pollinator Partnership Canada to become designated as the seventh Bee City in BC. Participation in the Bee City program can further highlight the City's work to promote and develop habitat suitable for our local pollinators.

A detailed list of initiatives that align with the Bee City Partner program and make Richmond an ideal candidate for certification are provided in Attachment 1. A highlight of these pollinator-focused initiatives include:

- **Enhanced Pesticide Management Program** – Council adopted the Enhanced Pesticide Management Program and the *Pesticide Use Control Bylaw No. 8514* in 2009 to reduce the use of traditional pesticides for cosmetic purposes and reduce the potential impacts to various pollinating insects.
- **Ecological Network Management Strategy** – Council adopted the Ecological Network Management Strategy in September 2015 to manage and enhance Richmond's ecological assets including encouraging many opportunities to protect and/or enhance pollinator habitat.
- **Invasive Species Action Plan** – The Invasive Species Action Plan was adopted in 2015, and outlines strategic goals and objectives to prioritize pesticide-free management of invasive species that pose threats to community safety, civil infrastructure, and the local ecosystem.
- **Bees in the Bog** – A school program for children in kindergarten through Grade 3 that explores the behaviour, lifecycle, and some of the products of bees and pollinators in the Richmond Nature Park bog habitat.
- **Bridgeport Industrial Park Pollinator Pasture** – Council endorsed a partnership with Border Free Bees and Emily Carr University of Art and Design in 2015 to convert a 10,500 m² area of industrial land, into an artistic display of wildflowers to support local pollinator species.
- **Terra Nova Public Art Pollinator Meadow** – Council endorsed another partnership with Border Free Bees in 2018 to transform 2,200 m² of underutilized land space at the Terra Nova Rural Park into habitat for Pollinators.
- **Railway Greenway** – An ecological corridor, providing a link between the Middle and South Arm riparian areas of the Fraser River. The City planted 16,600 native tree and plant species along 5 kilometres of trail to restore natural habitat.
- **Riparian Response Strategy** – Council endorsed the Riparian Response Strategy in 2006 to protect local riparian habitat areas in Richmond. Council endorsed additional changes to the City's Riparian Response strategy in 2018 to promote community stewardship of Riparian Management Areas and to enhance these areas with native riparian species, including a pollinator seed blend.
- **Richmond Nectar Trail** – Council endorsed the development of the Richmond Nectar Trail in 2019. The Nectar Trail serves as a series of 'stepping stones', bridging the Bridgeport Pollinator Pasture and Terra Nova Pollinator Meadow to one another, and allowing pollinator species stopover points throughout the community.

Next Steps

With Council endorsement, staff will prepare and submit the Bee City Canada application for Pollinator Partnership Canada's consideration, which will include the Bee City Canada application forms, a copy of this report and Council's resolution on this matter. If the application is approved by Pollinator Partnership Canada, Richmond will become a designated Bee City and commit to: celebrating the Bee City Status through public awareness activities such as signage in the community, website and social media highlights, and taking part in International Pollinator Week; continuing to support local pollinators through established and new City programs, and; submitting an annual report of pollinator related activities to Bee City Canada, as well as renewing the City's commitments to the program.

If endorsed, staff will provide regular updates to Council on this and other wildlife-related programs biannually through the Sustainability Progress Report, Ecological Network Management Strategy and the Invasive Species Action Plan updates.

Financial Impact

None.

Conclusion

Staff are seeking endorsement to prepare and submit an application to Pollinator Partnership Canada for Richmond to become designated as a Bee City. Certification in the program acknowledges Richmond's continued dedication to protect pollinators and pollinator habitat in the community. If endorsed, staff will prepare and submit the application to Pollinator Partnership Canada for their consideration and provide updates, as appropriate, when a decision is determined.



Chad Paulin, M.Sc., P.Ag.
Manager, Environment
(604-247-4672)

Att.1 – City of Richmond - Bee City Canada Application 2021

City of Richmond

Bee City Canada Application

2021





Terra Nova Pollinator Meadow apiary and pollinator education structure

BECOMING A CANADIAN BEE CITY

The City of Richmond has long recognized the environmental and economic benefits of a healthy ecological network and Council has endorsed a variety of initiatives that protect and promote Richmond’s biodiversity including pollinators and pollinator habitat. The City is pleased to submit a formal application, herein, to be officially declared a ‘Bee City’ by Bee City Canada.

This application was prepared to summarize Richmond’s community initiatives to promote and protect pollinators under two focus areas:

- 1. The protection, creation, and enhancement of pollinator habitat in Richmond; and**
- 2. Providing important information, public awareness, and promoting local learning opportunities regarding pollinators to the Community.**



Minoru Park

PROTECTION, CREATION, AND ENHANCEMENT OF POLLINATOR HABITAT

POLICIES

Ecological Network Management Strategy

Council adopted the Ecological Network Management Strategy in 2015 to provide a framework for managing and guiding decisions regarding the city-wide system of natural areas and the ecosystem services they provide. Richmond's Ecological Network encompasses the whole city, but emphasizes the importance of large natural areas such as provincial Wildlife Management Areas, regional parks, and private lands with significant natural areas such as large wetlands or old fields.

Enhanced Pesticide Management Program

The City's Enhanced Pesticide Management Program and the *Pesticide Use Control Bylaw No. 8514* were endorsed by Council in 2009 to reduce the use of traditional pesticides for cosmetic purposes. The program was a leading initiative in BC at that time, and continues to provide broad-based educational programming, support, and training to the community regarding the benefits of pesticide-free gardening techniques.



72 Pesticide Free Gardening Workshops were attended by

Richmond

1084 residents in between 2018 and 2021

Richmond residents in between 2018 and 2021

Riparian Response Strategy

Council endorsed the Riparian Response Strategy in 2006 to protect local fish and fish habitat in Richmond. Riparian Management Area setbacks were assigned on minor (5 meter) and major (15 meter) designated watercourses that are wetted the majority of the time, have a source of ground and surface water, and flow into and support fish life in the Fraser River Estuary. Council endorsed additional changes to the City's Riparian Response Strategy in 2018 to promote community stewardship of Riparian Management Areas and to enhance these areas with native riparian species.

KEY ACHIEVEMENTS

Bridgeport Industrial Park Pollinator Pasture

Council endorsed a partnership with Border Free Bees and Emily Carr University of Art and Design in 2015 to convert a 10,500 square meter area of industrial land into an artistic display of wildflowers to support local pollinator species. Border Free Bees is a long-term public art initiative with the mission to create aesthetically pleasing and scientifically viable pollinator pastures in under-utilized urban areas. An apiary was also erected to educate community members about the significance of pollinators. The Bridgeport Pollinator Pasture has received the following recognition:

- The Pollinator Advocate Award was presented to Border Free Bees for increasing awareness of the importance of pollinators and pollination following the installation of the Pasture in 2017;
- The City of Richmond and Border Free Bees were jointly awarded the British Columbia Recreation and Parks Association Award for Program Excellence for the Pasture in 2018; and
- The City received a nomination for a UBCM Community Excellence Award in Sustainability in 2018.

Railway Greenway

The Railway Greenway is an ecological corridor that provides an important link between the Middle arm and South Arm riparian areas of the Fraser River. It facilitates the movement of wildlife, water, and nutrients. Over 16,600 native trees and shrubs were planted along this 5 kilometer trail in 2016 and 2017. The majority of the tree and plant species that were planted produce flowers and berries that support local bird and pollinator species. Wildflower seeds are also added every year along the greenway, providing further support for pollinators.

Sharing Farm Apiary

Located within Terra Nova Park, The Sharing Farm is an energetic advocate for both honey bee and native pollinator populations in Richmond. The Sharing Farm opened an apiary in 2013, with grant funding from Vancity Community Projects and TD Friends of the Environment. The apiary is a site for education and public tours, as well as a summer Bee Camp for kids. The on-site hives annually produce honey, and salves, wax cloths, and lip balms are made from the beeswax. In partnership with TD Friends of the Environment, extensive and rotating forage crops have been planted, to enhance the health and nutrition of native pollinators as well as honey bees. The Sharing Farm has also conducted a baseline population study of native pollinators within Terra Nova Park.



Bumblebee basket nest woven by a volunteer at the Bridgeport Pollinator Picnic, 2018



450 species of bees have been identified in BC.

Terra Nova Pollinator Corridor

The Terra Nova Pollinator Corridor is comprised of native flowering trees and shrubs and is expanded every year by 150+ volunteers as part of TD Tree Days. The corridor is almost half way complete and, upon completion, will extend approximately 525 meters in length along the entire east edge of Terra Nova Rural Park. The tree and plant species have been carefully selected to suit existing site conditions and to support and attract pollinators to the adjacent Sharing Farm agricultural fields. The corridor will provide an important wildlife connection between the Terra Nova Natural Area and the Middle Arm riparian area of the Fraser River.

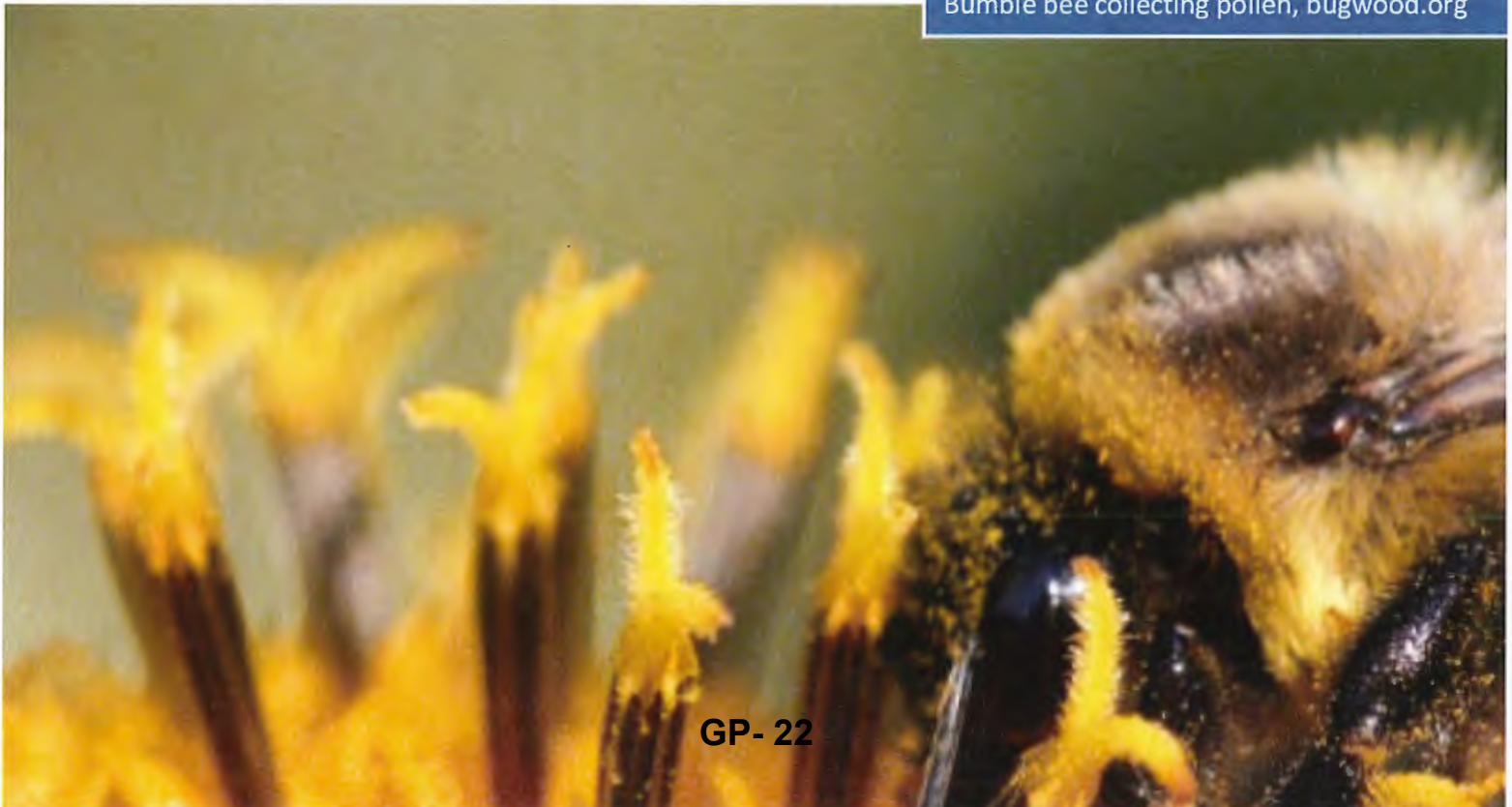
Terra Nova Public Art Pollinator Meadow

Council endorsed another ongoing partnership with Border Free Bees in 2018 to transform 2,200 square meters of underutilized land space at the Terra Nova Rural Park into habitat for pollinators. City staff prepare the site for planting, and Border Free Bees and local Master Gardeners re-seed the site with a mix of wildflowers for pollinators yearly. The project has created new opportunities for the public and students to learn about pollinators at the Terra Nova Nature School and at local events such as the Works on Wheels Tours.

Richmond Nectar Trail

The City piloted the Richmond Nectar Trail Project in 2020. In response to the positive response from the community, the program continued into 2021. Partnering once more with Border Free Bees, this project aims to promote community awareness and increase and connect habitats with a series of 'stepping stone' garden plots for insects to rest and forage while en route between isolated habitat hubs. Properties volunteering to participate along the trail including businesses, institutions and residential homes will plant and maintain a (minimum) one-square metre garden with drought-tolerant species that bloom from spring to fall and avoid the use of pesticides.

Bumble bee collecting pollen, bugwood.org





PROVIDING INFORMATION, PUBLIC AWARENESS, AND PROMOTING LEARNING OPPORTUNITIES TO THE COMMUNITY

KEY ACHIEVEMENTS

Bees in the Bog

Bees in the Bog is a school program for children in kindergarten through grade 3 that explores the behaviour, lifecycle, and some of the products of bees and pollinators in the Richmond Nature Park bog habitat. In the program, students get the opportunity to observe the inside of an active bee hive.

Richmond Earth Day Youth (REaDY) Summit

The REaDY Summit is an annual youth-led, youth-oriented event that promotes sustainability and action through inspirational speakers, interactive workshops, exhibits, and mentorship opportunities. The youth involved are also connected with many community activities throughout the year including pollinator-friendly gardening, waste diversion, and other environmental stewardship programs.

Richmond Butterflyway Project

A citizen-led movement coordinated by the David Suzuki Foundation, the Butterflyway Project is growing highways of habitat for bees and butterflies across Canada with pollinator plantings in parks, community gardens, and homeowner’s yards. Groups of “Butterflyway Rangers” are required to plant and maintain at least a dozen pollinator patches in their neighbourhood, increasing pollinator forage and habitat in the urban landscape.

Sustainability Workshops

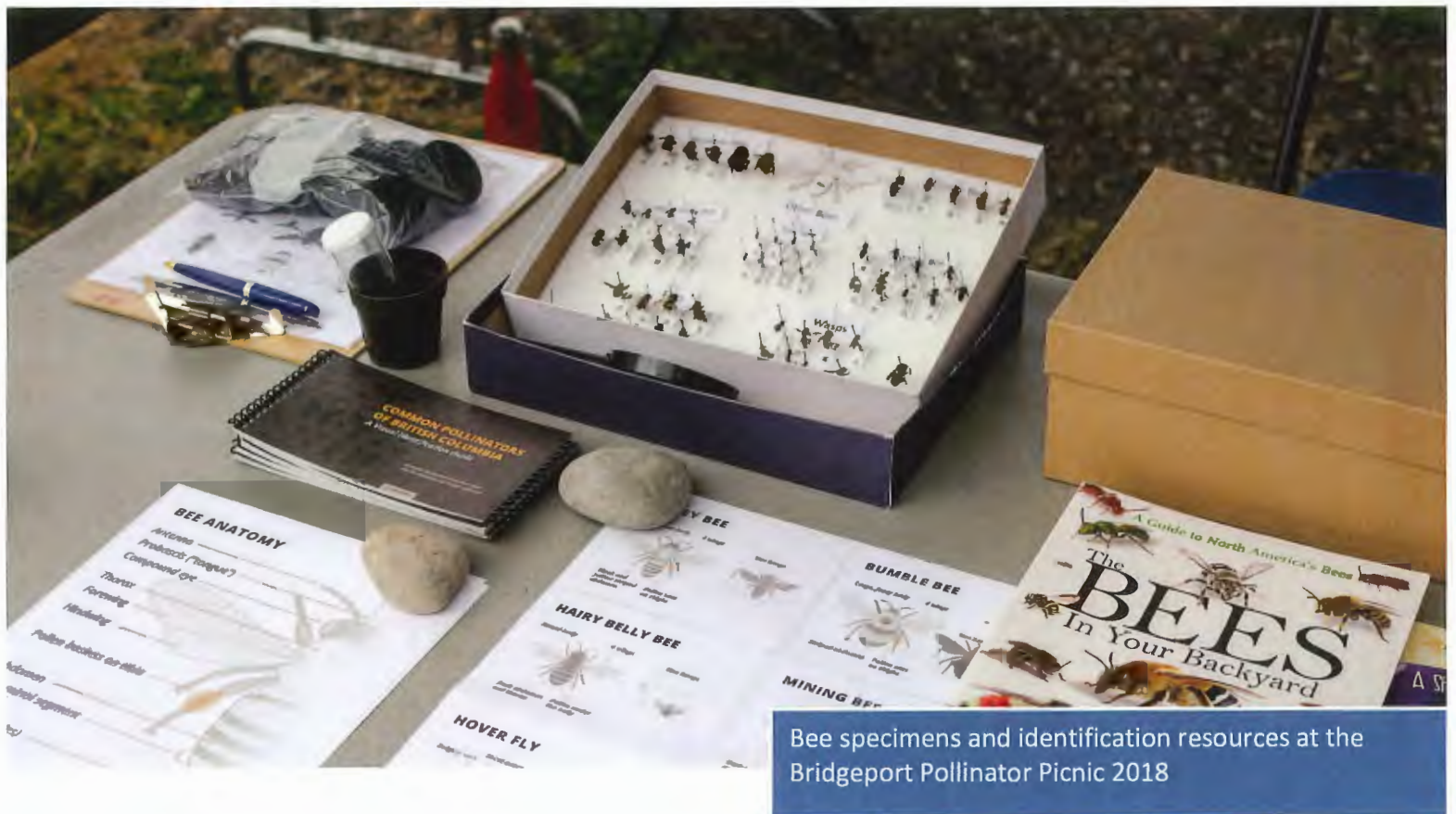
The City hosts a series of workshops throughout the year to look at ways to reduce pesticide use and create a more sustainable community. Workshops cover topics such as small scale vegetable gardening, mason bee keeping, planting gardens for pollinators, and decreasing reliance on pesticides through proper lawn care and organic planting practices. They are part of the City’s enhanced pesticides management program, sustainability, waste reduction, and water conservation initiatives.

FUTURE ACTIONS

In coming years, the City expects to take part in many events with a focus on pollinators, including but not limited to, Earth Day, Invasive Species Action Month, the Richmond Garlic Festival, and the Richmond Public Works Open House.



Mason bee house made by volunteers at the Bridgeport Pollinator Picnic, 2018



Bee specimens and identification resources at the Bridgeport Pollinator Picnic 2018

CONCLUSION

The City is proud to submit this application to Bee City Canada to become a 'Canadian Bee City'. If you require any additional information regarding this application, please contact Graham Watson at 604 276 4216 or gwatson2@richmond.ca.