



MEMORANDUM

TO: Mayor Lawlor and Members of Council

FROM: Lee Puddephatt, Manager of Community Engagement

DATE: May 31, 2024

MEMO NO.: LIB-2024-001

SUBJECT: HHPL 2024 Summer Programming: Ingenium – Canada's Museums of Science and Innovation “Space to Spoon” Exhibit

PURPOSE OF THE MEMORANDUM:

The purpose of this memorandum is to provide Members of Council an update regarding the Ingenium – Canada's Museums of Science and Innovation “Space to Spoon” Exhibit that will be on display at the Halton Hills Library and Cultural Centre as part of Halton Hills Public Library’s 2024 Summer Programming.

BACKGROUND:

The Halton Hills Public Library works closely with the Town of Halton Hills’ Community Services Department and their Climate Change and Asset Management division to implement community environmental activities and corporate improvement to conserve water and energy, reduce carbon emissions, and improve air quality in our buildings. The library supports the [Town of Halton Hills’ Strategic Plan 2023-2026](#) and its commitment to responsible stewardship of the Town’s resources and natural environment in response to unprecedented future growth while maintaining a welcoming and inclusive municipality.

The library also endorses the [Ontario Library Association’s Climate Action Committee’s](#) mandate to support Ontario public libraries in responding collectively to the climate crisis, in alignment with Goal #13 of the [United Nations Sustainable Development Goals](#): “Take urgent action to combat climate change and its impacts.” The library provides access to a diverse selection of environmental literacy programs, resources, and collections for community members in support of lifelong learning, emphasizing local food sustainability and security.

Each year, HHPL participates in the TD Summer Reading Club. The program encourages kids to read over their summer break from school and is adaptable to kids of all ages, interests, and abilities. It provides an opportunity to learn and grow while helping to motivate and inspire reluctant readers and those facing socioeconomic barriers to maintain or even improve the reading skills attained during the previous school year. The program is targeted at addressing the known loss in reading, math, and literacy skills during the summer months.

This summer, the TD Summer Reading Club theme is “To the Stars”, which capitalizes on the astonishing level of interest in the total solar eclipse that moved across the province on April 8, 2024. HHPL is leveraging this theme in conjunction with the library’s sustainability mandate by developing youth and early literacy programs that explore the STEAM-based intersection of sustainable food systems and outer space exploration as part of the summer reading program to support school readiness and foster a love of reading.

COMMENTS:

As part of the 2024 TD Summer Reading Club program, HHPL has secured a travelling museum exhibit highlighting the relationship between space technology and local farming practices provided by Ingenium – Canada's Museums of Science and Innovation, in partnership with the Canada Agriculture and Food Museum, the Canada Aviation and Space Museum, and the Canada Science and Technology Museum.

The "Space to Spoon" exhibit illustrates how space technology aids Canadian farmers and promotes sustainable agriculture. It features the Canadian Space Agency’s RADARSAT-2, one of the world's most advanced commercially available Earth observation radar image providers, and its cutting-edge successor RADARSAT Constellation observation satellites. It provides a hands-on experience with interactive elements and comprehensive graphics suitable for all ages. It showcases the transformation of satellite images into agricultural applications, demonstrating the connection between satellites orbiting 798 km above Earth and our daily food supply. Library patrons of all ages will learn how applying science, technology, engineering, art, and math (the STEAM subjects) can enhance sustainable agriculture.

The exhibit will be revealed during the TD Summer Reading Club launch at the Georgetown Branch on June 15 and will remain on display in the Halton Hills Public Library and Cultural Centre atrium until the end of August for all ages to explore during open hours. This is the busiest time for the library, with 56,931 visitors to the space and 3,653 children registered for the TD Summer Reading Club during the summer months of 2023.

The exhibit is an experiential and innovative addition to the space, as HHPL is only the second library in Canada to host this exhibit, with the first being the Jasper Library and

Cultural Centre in Alberta. This initiative is generously sponsored by the Friends of the Halton Hills Public Library.

Feature Programs in Support of the “Space to Spoon” Exhibit

HHPL, like all public institutions across the province, faces a challenge due to the adaptations required as climate change and local food security issues continue to evolve in our community. As such, it’s important to continue providing community-led, environmental literacy programming opportunities for lifelong learning that align with resident needs and support our mission, vision, and values. Features programs in support of the “Space to Spoon” exhibit include:

- **Tomatosphere™ Seed Investigation:** The Tomatosphere™ project involves children in the research processes associated with growing plants in space and on extraterrestrial surfaces such as Mars, using space exploration to teach scientific inquiry. As space travel advances and local food security diminishes, expanding agricultural systems is crucial. The consortium of partners who oversee Tomatosphere™ include the Canadian Space Agency, HeinzSeed, Let’s Talk Science, Stokes Seeds, and the University of Guelph
- **Summer Special Halton Hills Lecture Series:** Dr. Mike Dixon, co-creator of the Tomatosphere™ project and director of the University of Guelph’s Controlled Environment Systems Research Facility (CESRF), will host a lecture for patrons of all ages in the John Elliott Theatre on August 19 about his participation in the Canadian Space Agency’s (CSA) Deep Space Food Challenge. Dr. Dixon led the team of University of Guelph student scientists working on ways to grow food in space, dubbed Canada GOOSE (Growth Options for Outer Space Environments), to encourage new sustainable technologies of food production for both future space missions and harsh or remote environments on Earth.
- **Seed Library:** Launched in 2018 with the support of the Downtown Georgetown BIA and Farmers’ Market and the Town of Halton Hills Office of Sustainability, the Seed Library was created to promote biodiversity and sustainable food choices to residents. Packets of seeds are available year-round to anyone who would like to plant them, free of charge. Seeds from the collection are used to grow food in the Acton Garden Bed, and all vegetables harvested go to the Acton Food Share and the community fridges at both library branches and are used in the community Youth Centre kitchens.

HHPL is also working closely with the Community Services Department and community partners to provide educational support for those interested in integrating the exhibit into their summer program plans.

CONCLUSION:

The Halton Hills Public Library's Summer Reading Program and the "Space to Spoon" exhibit provided by Ingenium – Canada's Museums of Science and Innovation supports the Town's Strategic Plan as it relates to the priority areas of a thriving economy and a safe and welcoming community.

Reviewed and approved by,

Beverley King, Chief Librarian and CEO

Chris Mills, Chief Administrative Officer