PollinateTO: Best Practices for Pollinator Education

Here are some best practices for educational initiatives funded by the **PollinateTO Program**.

1. Incorporate the following key messages:

- Toronto is home to a wide range of pollinators, including bees, wasps, flies, butterflies, moths, beetles, and birds.
- Threats to Toronto's pollinators include habitat loss, pesticides, invasive species, diseases/pests, extreme weather and climate change.
- Habitat loss is the greatest threat to pollinators. Habitat creation is key to supporting pollinators.
- 2. Raise awareness about the differences between native bees & non-native honey bees:
 - Toronto's diverse bee community consists of over 360 species of native bees and one species of managed bee, the European Honey Bee, which is not native to North America.
 - Native bees are primarily solitary, don't make honey, live underground or cavities, come in a wide range of colours and sizes.
 - Honey bees are not native to North America, managed by beekeepers, and they can be reestablished when beekeepers experience a loss.
 - Native bee species are more threatened than honey bees.
 - Toronto has an Official Bee Agapostemon virescens

3. Discuss alternatives to beekeeping:

- Many well-meaning individuals may wish to pursue hobby beekeeping in the belief that this is how they can help pollinators. Adding more honey bee colonies to the city without the habitat to support them, adds to the problem.
- Evidence suggests that native bees may be negatively impacted by urban beekeeping activities. Studies have shown that honey bees may act as an additional stressor on native bees, due to competition for food and the spread of diseases and pests. One honey bee colony can potentially out-compete thousands of native bees for food.
- Establishing a pollinator garden, or adding pollinator-friendly plants to an existing garden is a much more significant way to help pollinators, including honey bees.

4. How can we help? Pollinators need:

- Food native flowering plants rich in pollen and nectar
- Places to lay their eggs butterflies only lay their eggs on specific plants called larval host plants (eg. Monarchs and milkweed)
- Places to nest and overwinter bare sandy soil, hollow stems, dead wood, leaf litter, etc
- A chemical free environment insecticides (especially neonicotinoids) are the most harmful.

5. Acknowledge funding support from the City of Toronto:

- On your website, direct participants to <u>www.livegreentoronto.ca</u> for more resources
- On all project-related communications and marketing materials, including garden signage, posters, brochures, signage, your newsletter, presentations, videos, etc and at project-related events