



Virtual
LAND ART BIOBLITZ

**REPORT TO TD FEF
OCTOBER 2020**



PREPARED BY

**WINTERGREEN
STUDIOS**



WINTERGREEN STUDIOS

Wintergreen Studios is a year-round, environmentally-friendly educational retreat centre, located in the heart of the Frontenac Arch Biosphere Reserve. The reserve is part of a global network of UNESCO designated sites, selected for their unique geographic features and presence of communities committed to sustainable development.

Wintergreen's off-grid solar-powered facilities serve the three-fold focus on education, culture, and the environment. The property protects a richly diverse ecosystem, comprised of mixed forests, meadows, granite outcroppings, ponds, marshes, and a glacier-carved lake. This ease of access to plants and animals has traditionally made Wintergreen Studios a perfect location for the Annual Land Art BioBlitz.



Kevin Fell Teaching at the 2019 Land Art BioBlitz.
(Morgan Chin-Yee, May 2019)

LAND ART BIOBLITZ

In years past, the Annual Land Art BioBlitz has taken place over 5-days at Wintergreen Studios, where students and the public gather to experience educational workshops on natural history and healthy living. Participants are also invited to explore the 204-acre property to meet the plants, animals, and fungi on the land and contribute their observations to a citizen science database at Wintergreen Studios.

Due to the COVID-19 pandemic, the Annual Land Art BioBlitz was not able to take place at Wintergreen Studios, as originally planned. Instead, the event changed to a 3-day virtual event that encompassed the same goals of teaching participants about their relationship to the more-than-human world, with the amended invitation to meet the beings in one's own neighbourhood.

The 2020 event was a succession to last year's Annual Land Art BioBlitz; also supported by TD FEF. To reach the widest audience, the Virtual Land Art BioBlitz was a free event, open to all ages. The event included live presentations on Zoom by speakers across Canada, citizen science engagement through iNaturalist, downloadable land art activities on our website, and pre-recorded videos on various natural history topics including bees and wild edibles on our website and YouTube channel.

Cover Photo: Participant at the 2019 Land Art BioBlitz.
(Morgan Chin-Yee, May 2019)

OUR ACHIEVEMENTS

Thanks to the generous support of TD FEF, along with additional funding, in-kind contributions, and volunteer support, we hosted the Virtual Land Art BioBlitz event from Friday, June 5th, 2020 to Sunday, June 7th, 2020. The results of this event are as follows:

LIVE ZOOM WORKSHOPS

Each day of the event, we hosted live workshops on Zoom from 9:45 AM - 4 PM. During the 3 days, there were **20 live workshops** and **23 different speakers**. With travel costs eliminated, we welcomed speakers from British Columbia and Quebec, in addition to several speakers in the southern Ontario region. In comparison, the 2019 on-site BioBlitz hosted only 12 speakers, with most travelling within a 3-hour radius to Wintergreen Studios.

Of the 23 speakers, **12 were new** to the BioBlitz and **11 speakers returned** from past years. This exceeded our goal of hosting 4 new speakers and 6 returning speakers.

Increasing the number of speakers allowed us to deepen our existing community partnerships, as well as build new partnerships. An example of the latter is a new partnership with the Canadian Wildlife Federation (CWF). Leading up to the event, the CWF assisted with promotion and iNaturalist account set up. The CWF also participated in live workshops and assisted participants with iNaturalist support.



Screen Shot of a Zoom Workshop, *The House the Spirit Builds*.
(Wintergreen Studios, June 2020)

To reach participants beyond the live streams, most speakers agreed to have their 45-minute workshops recorded. These videos were edited after the event to create a series of **16 educational videos** now available on our website and YouTube channel.

Of the 20 workshops, there were **11 new topics** this year, including Confessions of a Nature Photographer, Wildlife Rehabilitation in Spring, and The Frontenac Arch. In keeping with Wintergreen's mandate of modelling balance with nature, all workshops focused on connecting participants with the natural world in a respectful and nourishing way.

**"GREAT SPEAKERS,
VIDEOS, AND USE
OF TECHNOLOGY."**

- Zoom Workshop Participant at
the Virtual Land Art BioBlitz

Live Zoom Workshop Summary

Date	Workshop Title	Speaker	Total Live Stream Attendees
Friday, June 5th	Opening Remarks	Rena Upitis <i>Wintergreen Studios</i>	22
		James Pagé <i>Canadian Wildlife Federation</i>	
	Reptiles & Amphibians of Ontario	Kenny Ruelland <i>Reptile and Amphibian Advocacy</i>	35
	Getting Started on iNaturalist	Geoff Carter Educator	19
	Backyard Foraging with Wild Foragers Society	Lee Earl & Sammy Tangir <i>Wild Foragers Society</i>	24
	The (Humming)birds and the Bees: A Teenager's Step by Step Guide to Changing the World	Jason Liao The Pollinator Project	9
	Lessons in a Backpack	Kelly McGann Frontenac Arch Biosphere Network	9
Saturday, June 6th	Saturday Morning Welcome	Rena Upitis <i>Wintergreen Studios</i>	10
	A Taste of Virtual Forest Therapy	Stana Luxford Oddie <i>Forest Therapy Guide</i>	18
	Wildlife Rehabilitation in Spring	Leah Birmingham & Sue Meech Sandy Pines Wildlife Centre	19
	Mukbang with Rena Upitis	Rena Upitis <i>Wintergreen Studios</i>	11
	Outdoor Survival Skills 101	Walt Sepic Firefly Adventures	12
	Found Sound: Making Music Using Natural Materials	Jesse Stewart <i>Musician & Educator</i>	12
	What's Buzzing at Wintergreen Studios?!	Alex Pedersen <i>Limestone Beekeepers' Guild</i>	8
Sunday, June 7th	Sunday Morning Welcome	Rena Upitis <i>Wintergreen Studios</i>	11
	The Canada-Wide BUZZ about BEE CITY CANADA	Shelly Candel Bee City Canada	11
	Confessions of a Nature Photographer	Bryan Scholes Photographer	23
	Healing the Earth – Healing Ourselves	Kevin Fell <i>HOZA! Creative Mediation</i>	16
	The Frontenac Arch	Megan Quinn <i>Nature Conservancy of Canada</i>	11
	The House the Spirit Builds	Lorna Crozier <i>Poet</i>	9
		Peter Coffman & Diane Laundry Photographers	
Closing Ceremony	Rena Upitis, Monica Capovilla, & Jess Pelow <i>Wintergreen Studios</i>	11	
TOTALS	20 Live Stream Sessions	23 Unique Speakers	300 Attendees

Summary of the Live Zoom Workshop Schedule, Speakers, and Attendees.
New topics for 2020 are highlighted in bold.
(Wintergreen Studios, June 2020).

INATURALIST AND SPECIES COUNT

iNaturalist is citizen science app, created in part by the Canadian Wildlife Federation, that allows users to track their observations of plants, animals, and fungi.

A Virtual Land Art BioBlitz 'project' was created in the app, which allowed users to sign up for our project and contribute their observations to our database. Unlike previous BioBlitz events, users were able to add observations from where they were situated across the country, rather than contributing observations from Wintergreen Studios alone. This new format showcased the vast diversity of beings across Canada and highlighted many species-at-risk who share our home.

To support participants in using iNaturalist, we offered a workshop on the first day called **Getting Started on iNaturalist**, delivered in conjunction with the Canadian Wildlife Federation. Observations were then collected from Friday, June 5th, 2020 to Friday, June 12th, 2020:

In total, there were **1,686 observations** added to our project, representing **793 species**. This marked an increase from the 2019 on-site BioBlitz, where approximately 500 species were identified.

"THANK YOU FOR SETTING UP THE PROJECT! IT'S ALWAYS FUN TO CONTRIBUTE TO BIOBLITZES!"

- Claire Moxon-Waltz, iNaturalist Participant



Eastern Cottontail Observation on iNaturalist.
(Jess Pelow, June 7, 2020)

The three most common taxa observed during the Virtual Land Art BioBlitz were:

- **Plants** (896 observations)
- **Insects** (389 observations)
- **Birds** (135 observations)

This ranking matches the top 3 taxa observed at the 2019 on-site Land Art BioBlitz.

The top five most observed species at the Virtual Land Art BioBlitz were:

- **Flooded Jellyskin** (21 observations)
- **Painted Turtle** (14 observations)
- **Common Milkweed** (13 observations)
- **American Robin** (12 observations)
- **Oxeye Daisy** (10 observations)

Species-at-risk observations, as listed by the Committee on the Status of Endangered Wildlife in Canada, included the Golden-winged Warbler (Threatened), Blanding's Turtle (Endangered), Monarch (Endangered), and Butternut (Endangered), along with the Flooded Jellyskin (Special Concern) and Painted Turtle (Special Concern).

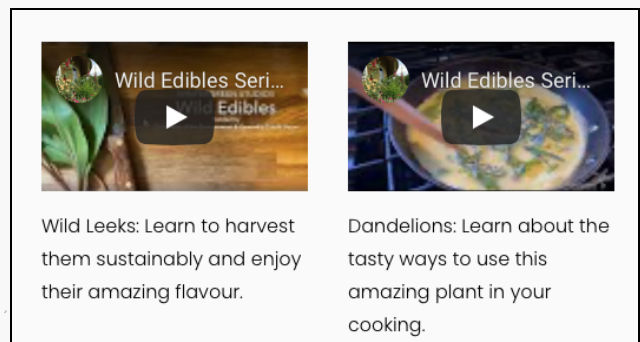
Lastly, the Virtual Land Art BioBlitz observations were nationwide, representing species from the following **7 provinces**:

- Ontario (1,286 observations)
- Nova Scotia (157 observations)
- Quebec (127 observations)
- Alberta (72 observations)
- Saskatchewan (40 observations)
- British Columbia (3 observations)
- Manitoba (1 observation)

DIGITAL RESOURCES

Our website was the hub of activity during the Virtual Land Art BioBlitz, providing Zoom links, pre-recorded videos, and land art activities. Using Facebook, we promoted these digital resources and directed participants to the BioBlitz webpage. From May-June 2020, we had **2,624 interactions** on the BioBlitz webpage and **18,966 organic engagements** with BioBlitz-related posts on Facebook. In total, there were over **20,000 interactions** with our digital content.

Our pre-recorded videos included 5 iNaturalist tutorial videos created by the Canadian Wildlife Federation, which premiered at the Virtual Land Art BioBlitz. Our video library also contained 4 videos on cooking with wild edibles created by Wintergreen Studios, 4 videos on bees and beekeeping, and several videos showcasing past BioBlitz events. A total of **18 pre-recorded videos** were available on the Virtual Land Art BioBlitz webpage.



Sample of Pre-recorded Videos on the BioBlitz Website.
(Wintergreen Studios, June 2020)

Downloadable land art activities were developed by Queen's University teacher candidates who completed their alternative practicum placement at Wintergreen Studios in March 2020. The **12 new activities** invited participants to go outside and explore their connection with the natural world in their very own neighbourhood.



A Land Art Activity on the BioBlitz Website.
(Wintergreen Studios, June 2020)

PARTICIPATION

When planning the virtual event, we reached out to local schools, Community Living and Pathways to Education, where we invited all members of the community to participate. We also promoted the event on Facebook and asked our speakers to assist in sharing the event details widely. While the BioBlitz was free and registration was optional, we asked participants to register in order to receive email updates throughout the event. These efforts yielded **255 registered participants**.

Participants were then invited to join the event in 3 ways:

1. Watch a live Zoom workshop
2. Submit observations on iNaturalist
3. Engage with our digital resources

Live Zoom Workshops

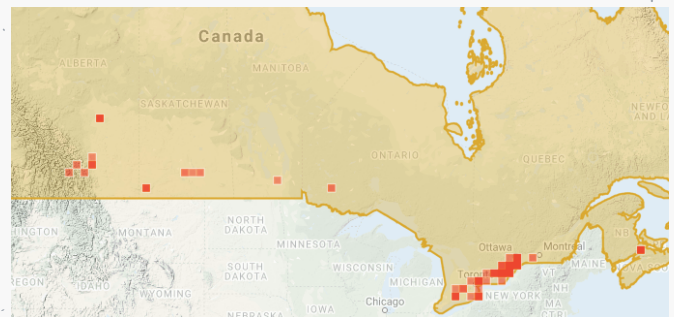
Zoom workshops saw an average of **19 participants per workshop on Friday, June 5th**. This was lower than the average weekday attendance at the 2019 on-site Land Art BioBlitz, which saw an average of 26 participants per workshop. On Saturday and Sunday, we had the **same average number of participants (13)** during our Zoom workshops as we had on Saturday and Sunday at the 2019 on-site Land Art BioBlitz. Overall, we had **300 live Zoom workshop attendees**.

While we anticipated higher numbers of attendance during the Zoom workshops, engagement will continue to increase as viewers access the videos on our website and YouTube Channel.

iNaturalist

Within the Virtual Land Art BioBlitz 'project' on iNaturalist, we had **50 project members** (those who joined the project), **38 observers** (those who contributed observations), and **309 identifiers** (those who identified species in our project).

Prior to the virtual event, we anticipated 15% of participants would be located outside of the Lennox and Addington and Frontenac Counties. In actuality, **62%** of iNaturalist participants were located outside of this area (31 out of 50 observers).



Location of iNaturalist Observations during the BioBlitz in Red. (iNaturalist.ca, July 2020)

Digital Resources

From Friday, June 5th to Sunday, June 7th, we had **1,639 views** on our pre-recorded videos. The week immediately following the BioBlitz added another 2,586 views.

For the land art activities, participants showed their use by sending us photos of their creations.

"LOVED THE LAND ART EXAMPLES THAT WERE SHARED WITH US!"

- Virtual Land Art BioBlitz Participant

COMMENTS AND SURVEY RESULTS

LIVE ZOOM WORKSHOPS

After each Zoom workshop, participants were invited to offer feedback about their experience through an online survey. Out of 52 participants surveyed, the overall workshop experience was given a **4.7 average rating out of 5**. The following summarizes the survey results.

When given the statement, *"This session gave me a new appreciation for the natural world"*, 41 participants strongly agreed (79%), 4 agreed (8%), and 7 somewhat agreed (13%).

Forty-seven participants (90%) reported learning something new about species in their region from the workshops. Specifically, participants learned:

"...that stinging nettle, what I thought was just a harmful nuisance, can actually be harvested and eaten when prepared properly!"

"...how to differentiate water snakes from rat snakes."

"...how different animals walk."

"...about how many species of herptiles live in Ontario!"



Land Art Submissions during the Virtual BioBlitz.
(Top two photos by Charlotte Smith and bottom photo by the Capovilla Family, June 2020)

Participants also indicated new understandings of how to protect the environment and species through the following comments:

"[I learned] that invasive species are the 2nd most significant threat to biodiversity."

"[I learned] that there is a place you can bring sick and injured animals where they will get medical care."

"[I was] surprised by Bryan's ethical and moral standards of respecting the land and the subjects of his photographs."

"[I learned] about how to better control garlic mustard plants while enjoying their flavours as well!"

In addition, the survey showed the excitement and engagement of participants during the Zoom workshops, through comments such as:

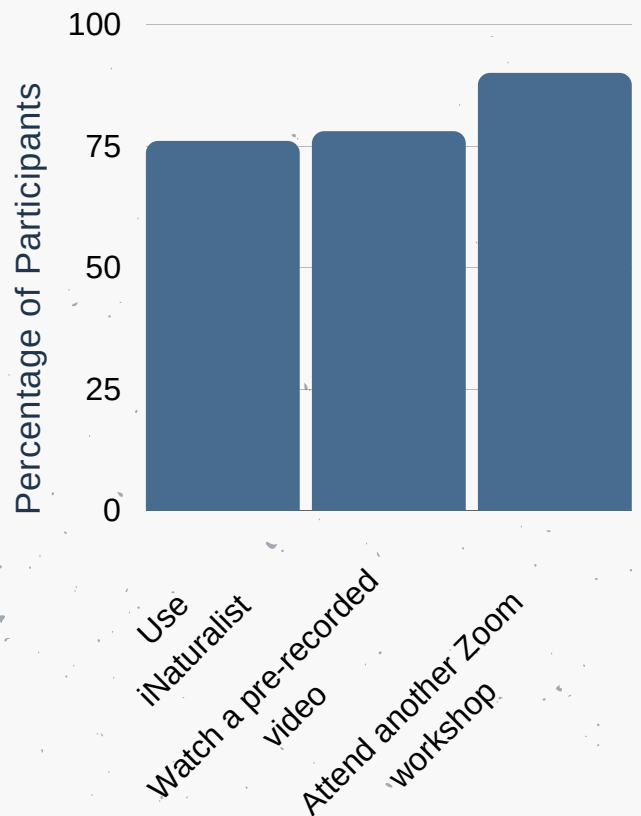
"Could listen to those facilitators for hours!"

"This was a fun way to learn!"

"All of my questions were answered beautifully."

Attendees also demonstrated the intention to participate in the BioBlitz beyond the workshops. For example, **76%** of participants indicated they would use iNaturalist to submit observations, **78%** said they would watch a pre-recorded video on our website, and **90%** indicated they would attend another Zoom workshop before the end of the event.

Intention of Participants to Engage in Another BioBlitz Activity



Virtual BioBlitz Activities

POST-EVENT SURVEY

After the event ended, participants were invited to offer feedback about their overall experience through another online survey. Out of 8 participants surveyed, the Virtual Land Art BioBlitz was given a **4.5 average rating out of 5**. The following summarizes the survey results.

When given the statement *"This event gave me a new appreciation for the natural world."*, 6 participants strongly agreed (**75%**) and 2 somewhat agreed (**15%**).

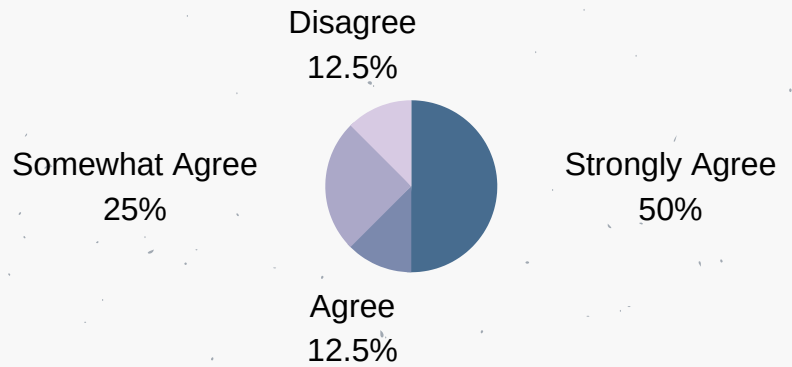
When asked whether the Virtual BioBlitz inspired participants to take action to protect species and their environment, more than half either agreed or strongly agreed.

Likewise, when asked if being part of the iNaturalist community gave participants a renewed sense of connection and belonging, more than half either agreed or strongly agreed.

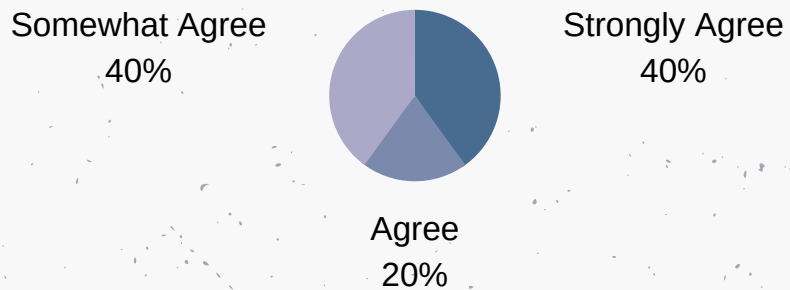
Participants were also asked how likely they were to use the activities, videos, and resources provided during the Virtual BioBlitz in the future. Seventy-five percent of participants indicated very likely or extremely likely to use the resources, which matched our expectations set prior to the event.

In thinking ahead to next year's BioBlitz, we predicted that 75% of participants would consider attending the in-person event in 2021. Five respondents said they were extremely likely to attend (62.5%), one was unlikely to attend (12.5%), and two indicated not likely at all (25%). One attendee who was unlikely to attend in the future indicated they are living in Nova Scotia. As such, these 'unlikely' responses may have been from our out-of-province and international participants, who would be unable to travel to Wintergreen Studios. In addition to participants joining us from across Canada, we also had participants join from the United States, South Africa, and Italy, where travel to Wintergreen Studios may not be feasible.

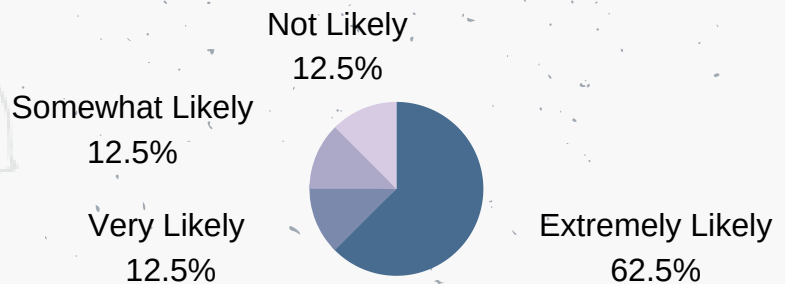
This event inspired me to take action to protect species and their environment.



Being part of the iNaturalist community gave me a renewed sense of connection and belonging.



How likely are you to use the activities, videos, and resources provided in the future?



Lastly, participants were invited to share their favourite moment, a sampling of which is included below:

"Doing the forest therapy session with my son- in different cities!"

"Spotting a family of turtles when I was out with the iNaturalist app!"

"When we went to a neighbourhood green space to look for more diverse art materials."

FINANCES & SUPPORT

FUNDING

In addition to the **\$8,500** granted from TD FEF, we received funds from other organizations totaling **\$16,900**. This included \$1,000 from the Kawartha Credit Union, \$2,400 from the Davies Charitable Foundation, and \$5,000 from Sustainable Eastern Ontario.

We also received over \$8,000 of in-kind support from various individuals and community organizations.

PARTNERS

Many corporations, not-for-profits and individuals contributed to the success of the Virtual Land Art BioBlitz in the way of funding, promotion, volunteering, and workshop facilitation.

New supporters for this year's virtual event included the Canadian Wildlife Federation, Nature Conservancy of Canada, Frontenac Arch Biosphere Network, The Pollinator Project, Sandy Pines Wildlife Centre, and Bee City Canada.

VOLUNTEERS

In March 2020, we hosted 5 teacher candidates from Queen's University who assisted with event promotion and created the land art resources used in the Virtual BioBlitz. These teacher candidates were Alyssa Scott, Sam King, Jared Hines, Michael Rusu, and Ashley Gervais-Leclair.

In addition, 7 speakers volunteered to present live on Zoom, waiving an honorarium. The Zoom sessions themselves were hosted by Wintergreen Staff or 2 volunteers: Jessica Sauve and Bryan Scholes.



Teacher Candidates from Queen's University.
Left to Right: Ashley, Alyssa, Sam, Michael, and Jared.
(Wintergreen Studios, March 2020)

This generosity exceeded our expectations, as we aimed for only 5 volunteers at the virtual event. These **14 volunteers** contributed more than **490 hours**, valued at \$7,350.

PROJECT COSTS

Two staff members coordinating the BioBlitz over an 8-month period was the largest expense at **\$18,100**, while honoraria for our workshop speakers totaled **\$2,250**. Video hosting software and post event video editing came to **\$194.31** and **\$1,000** respectfully, totaling just under **\$1,200**.

TOTAL PROJECT COST = **\$37,519.31**

TOTAL FUNDING RECEIVED = **\$16,900.00**

TOTAL IN-KIND SUPPORT = **\$8,350.00**

TOTAL COST TO WINTERGREEN = **\$12,269.31**

LOOKING AHEAD

The next Annual Land Art BioBlitz will take place from Tuesday, June 1st, 2021 to Saturday June 5th, 2021. Following the on-site model we developed over the past 5 years, we will continue to offer free programming to both the public as well as elementary and secondary school students.

For the 2021 event, we aim to engage more at-risk youth, along with those who are often under-represented at Wintergreen Studios such as black and indigenous communities.

To increase access for students in 2021, the BioBlitz will run from Tuesday-Saturday, rather than our usual on-site Wednesday-Sunday schedule. This extra day for school group visits will bring over 500 additional workshop participants to the event.

Upon seeing the success of the Zoom workshops this year, we will also offer virtual presentations and resources to compliment the in-person experience, as another way to increase access to the event.

Likewise, after the success of using iNaturalist, we will emphasize using the app to catalogue species at Wintergreen Studios in 2021. This will allow us to seamlessly contribute data to multiple organizations who track species-at-risk in Canada.

Our first Virtual Land Art BioBlitz provided an exceptional learning opportunity for both participants and our organizing team. Many lessons were learned on how to offer enriching online programming, which has increased our capacity to serve our community during the COVID-19 pandemic. We are grateful to TD FEF for recognizing our important work and look forward to celebrating the diversity of the nature again in 2021.

"THAT WAS AN INCREDIBLE EXPERIENCE. THANK YOU TO EVERYONE WHO CONTRIBUTED!"

- Virtual Land Art BioBlitz Participant

Virtual Land Art BioBlitz Supporters



TD Friends of the Environment Foundation



A summary of corporations and not-for-profits who offered financial or in-kind support at the Virtual Land Art BioBlitz 2020.
(Wintergreen Studios, June 2020).