

GENERAL INFORMATION

Name of Organization Requesting Grant: <i>(Please list parent/sponsor organizations in parenthesis)</i>	Whistler Naturalists
Name of the program(s) (if applicable):	BioBlitz, Fungus Among Us, Bird Studies
Society Registration Number:	S40150
Organization Mailing Address:	Box 845 Whistler BC V0N 1B0
Contact Name & Title:	Kristina Swerhun and Bob Brett - Board members
Organization Phone Number:	
Organization Email Address:	WhistlerNaturalists@gmail.com
Organization Purpose or Mandate: <i>(Please provide this answer in one sentence)</i>	To increase the knowledge of and appreciation for the natural world in the Whistler area through education and research.
Organization Category (choose between Environment, Social Services, Community Services, Recreation and Sports, Arts and Culture)	Environment

ORGANIZATION INFORMATION

How many years has the organization existed?	26
How many active members/participants does the organization have in the current year? <i>(e.g. how many athletes have signed up for this year)</i>	Approximately 1,500 are participants at our events. Our active Facebook "Whistler Naturalists Community" has 2,170 members.
For sport organizations, how many youth (U18) participants are enrolled in your programs?	n/a
How many Whistler residents members does the organization have in the current year?	We do not ask if people are local to become a free member but we can in the future if it is important to our funders. 48 of our 61 paying members live in Whistler, Pemberton or Squamish.
How many volunteers/executive/staff are required to administer the organization in the current year?	8 Board members
Age range of participants in the organization:	1-99

Please list active website URLs and active social media accounts (Facebook, Twitter, Instagram, etc.):	www.whistlernaturalists.ca https://www.facebook.com/groups/whistlernaturalists https://www.facebook.com/whistlernaturalists
What are the membership and participation requirements?	An interest in nature. We have two membership options: a) join the WNS mailing list for free, and b) join the WNS under the umbrella of BC Nature and additionally receive the BC Nature quarterly newsletter (\$20 individual/year; \$30 family/year/
<p>Does the organization have any outstanding debts or other means of funding from the RMOW? If yes, please state the amount and reason.</p> <p><u>Note:</u> Please include any Value In Kind support that you receive from the RMOW (eg. reduced rent, utilities in RMOW buildings)</p>	No

GRANT INFORMATION

1. Purpose of Grant	<i>Explain in detail how the funding will be spent. Please refer to Council Policy A-7 Community Enrichment Program, available at www.whistler.ca/cep for funding criteria and eligibility. Please be as concise as possible using the space below.</i>
Please see attached - BioBlitz, Fungus Among Us, Bird Studies	

2. Is This a New Program or Activity?	<i>If yes, what are your targets and goals for this program/activity?</i>
No	

3. Current Year Highlights and Community Benefits:	<i>Detail the specifics of activities and community benefits your organization provides.</i>
Please see attached - BioBlitz, Fungus Among Us, Bird Studies	

4. Existing Funding and Grant Applications:	<ol style="list-style-type: none"> 1. <i>List the specific grants, funding and fundraising planned, approved or pending for the existing year, and</i> 2. <i>Please also list rejected or non-approved funding (with reasons).</i>
<p>BioBlitz -</p> <ul style="list-style-type: none"> • Resort Municipality of Whistler Community Enrichment Program: \$3,500 (pending) • Whistler Community Foundation Environmental Legacy Fund: \$16,500 (pending) • BC Nature: \$2,500 (approved) <p>Fungus Among Us -</p> <ul style="list-style-type: none"> • Resort Municipality of Whistler Community Enrichment Program: \$6,000 (pending) • Whistler Community Foundation Environmental Legacy Fund: \$6,100 (approved) • Estimated ticket sales: \$8,800 <p>Bird Studies -</p> <ul style="list-style-type: none"> • Resort Municipality of Whistler Community Enrichment Program: \$1,500 (pending) • Whistler Community Foundation Environmental Legacy Fund: \$2,200 (confirmed) 	

GRANT INFORMATION (CONTINUED):

5. Grant Request Amounts and Financial Breakdown:			
<i>Please ensure numbers provided in this table coincide with the required financial documents you provide in your application</i>			
	Annual Operating Budget	Grant Requested	<i>Provide a brief description of the specific amount requested. (Ex: Products, services, staffing roles, advertising, etc.)</i>
Salaries/contracts:			
General operations:	\$3,378	\$1,500	Costs related to the Christmas Bird Count and Breeding Bird Survey – transportation, accommodation, and meals for volunteers
One-time project / program:	\$43,862	\$9,500	School presentations, public talks, biodiversity surveys /mushroom display, fungal surveys, data collation BioBlitz - \$22,458 & Fungus Among us - \$21,404
Physical assets:			
Rent (RMOW facilities):	\$139	N/A	Room at Myrtle Philip for Christmas Bird Count wrap-up meeting
Rent (other facilities):			
Other:	\$90,404		BioBlitz & Fungus Among Us - \$64,116 In-kind (scientist & Volunteer Hours, equip and material) Bird Studies - \$26,288 In-Kind labour, material and other
Total	\$ 137,783	\$ 11,000	8 % (Grant request ÷ Annual budget amount)
Reminder: The grant amount requested cannot be more than 50% of the annual operating budget of the organization.			

6. Additional Information:	<i>Please list any additional information, details or explanations regarding your grant request that you would like to be considered by Council.</i>
See attached	

7. Attachments:	<i>Please indicate the attachments you are including with your Grant Application Form:</i>
<input checked="" type="checkbox"/> Financial Statement (audited preferred) or Organization Budget (Required) <input checked="" type="checkbox"/> Proof (copy) of registered not-for-profit society status or registered charity status (Required) <input checked="" type="checkbox"/> Other: Additional supporting document - Three programs consolidated into one	

COMMUNITY PERFORMANCE INDICATORS

<p>8. Please describe how your organization can contribute to the RMOW Strategic Plan:</p>	<p>Please visit https://www.whistler.ca/municipal-gov/strategies-and-plans/strategic-plan/ to learn about the four priority areas of RMOW 2023-2026 Strategic Plan:</p> <ol style="list-style-type: none"> 1. Housing 2. Climate Action 3. Community Engagement 4. Smart Tourism <p>Please determine how your grant (or organization) can contribute to fulfilling any priorities described in the four areas listed above. Each priority has numerous specifications to choose from while describing how your grant (or organization) may help to improve Strategic Plan.</p>
<p><i>Example: This grant addresses the priority of “Community Engagement” because it strives to connect locals to each other. Specifically, this is because...</i></p>	
<p>See attached</p>	

SUPPORT FOR TRUTH AND RECONCILIATION



The RMOW is committed to working with the Lil'wat People, known in their language as L'il'wat7úl and the Squamish People, known in their language as the Skwxwú7mesh Úxwumixw to: create an enduring relationship; establish collaborative processes for planning on unceded territories, as currently managed by the provincial government; achieve mutual objectives; and enable participation in Whistler's resort economy.

9. How has your organization considered truth and reconciliation with the Indigenous Nations?

According to the Truth and Reconciliation Committee, reconciliation is about “establishing and maintaining a mutually respectful relationship between Aboriginal and non-Aboriginal people in this country.” Our mission is to increase local knowledge of and appreciation for the natural world to inspire stewardship. Respect for nature is something we share with First Nations, and we feel this shared goal can only help while working towards reconciliation.

In past events, we have where possible involved Lil'wat Nation for welcome ceremonies and presentations at Xetólacw Community School. We have also recently established a connection with Leigh Joseph (Squamish Nation herbologist, author, and university professor) who has expressed interest in joining our event. We always strive to increase these connections, and believe a presentation by Leigh would be very popular with our community.

GRANT APPLICATION AUTHORIZATION:

Submitted by:	Bob Brett & Kristina Swerhun
Phone number:	
Email:	bob@snowlineresearch.ca, WhistlerNaturalists@gmail.com
Acknowledgement:	<input checked="" type="checkbox"/> I confirm that the information provided in this CEP Grant Application Form is true; <input checked="" type="checkbox"/> I confirm that a representative is required to present this grant request at a future Council Meeting; <input checked="" type="checkbox"/> I confirm that if any amount is granted that the Grant Reporting Form is due by December 1 of this year; <input checked="" type="checkbox"/> I confirm that if any amount is granted, it will be used only for its intended purpose unless otherwise approved by Council.
Signature:	

Funding decisions will be announced during a Regular Council Meeting in April 2025.

Please contact the Legislative Services Department at corporate@whistler.ca if you require any assistance.

Personal and third party information provided in this application form is collected under the authority of Section 26(c) of the Freedom of Information and Protection of Privacy Act. Should you have any questions regarding the collection, use and disclosure of this information please contact the Legislative and Privacy Coordinator at 604-935-8118 or at 4325 Blackcomb Way, Whistler.

1. Purpose of Grant

BioBlitz

Whistler BioBlitz is Canada's longest-running BioBlitz. Since the first event in 2007, it has contributed to biodiversity awareness, research, and community education.

The Natural Environment chapter in the RMOW OCP is about "Protecting, monitoring and restoring the natural environment in Whistler." Our events and programs work towards all these outcomes because they all have public education and research components that complement each other. Additionally, data from BioBlitz is a critical component necessary to properly implement Goal 9 in the Big Moves Climate Action Implementation Plan (Protect Local Ecosystems and Biodiversity). Overall, our annual BioBlitz events help us move toward our community's vision of a place where nature is protected.

Specifically:

1) Funding will go towards presentations on biodiversity and the wonders of nature to students in Whistler. Our intent is that nature education leads to appreciation, which in turn leads to stewardship. From all the great feedback we've gotten from the public, students and teachers alike, we know our events have helped community members of all ages learn more about the natural environment in Whistler, not to mention having a lot of fun along the way.

2) Funding will go to collecting data about the species that call Whistler home. With more data about the species that live in Whistler, better management decisions can be made to support biodiversity. In short, our school and public presentations help increase our community's interest in nature, and data generated by BioBlitz events provides an important tool to help protect nature.

3) At a time when most news is about the decline of biodiversity, new species discoveries are hopeful news to celebrate as a community. We also encourage citizen science by introducing students and residents to iNaturalist, an online social network of people sharing biodiversity information to help each other learn about nature. This

information can then be used by researchers to advance our understanding of the natural world and how best to use limited resources to protect it. When people feel they are part of the solution, it can help counter the looming environmental doom experienced by many.

Fungus Among Us

This year marks the 23rd year of our annual Fungus Among Us event that promotes biodiversity research, nature education and stewardship. This is one of the few events in Whistler that works towards realizing Whistler's vision of being a place where nature is protected.

1) FUNGI PRESENTATIONS TO STUDENTS: Funding will go towards presentations on the wonders of fungi and mushrooms and their vital roles in maintaining our ecosystems to students in Whistler and Mount Currie. Nature education leads to appreciation, which leads to stewardship. From all the great feedback we've gotten from the public, students and teachers alike, we know our events have helped community members on their journey towards stewardship/restoring the natural environment.

2) FUNGI EDUCATION FOR ALL RESIDENTS: Funding will support nature education for residents and visitors of all ages which is essential in inspiring stewardship of nature. Since we started Fungus Among Us, we have been at capacity or sold out every year at all our events including fungi talks, walks, a cooking demonstration and mushroom display. This shows how much of an appetite there is for nature education in Whistler.

3) DATA COLLECTION: Funding will go to collecting data about fungi in general and fungi species at risk. The conservation risks to fungi were first considered by the BC Conservation Data Centre in 2022. These assessments were conducted by frequent participants at our events, notably Paul Kroeger (also curator of the UBC Herbarium) as well as Andy MacKinnon and Kem Luther (frequent participants and authors of *Mushrooms of BC*).

Of the 233 fungal species ranked as at-risk (Blue or Red list), 70 are on the Whistler list. As a result of 22 years of surveys by experts, Whistler is therefore far ahead of most

jurisdictions in knowing which fungi species are at risk. One example of the usefulness of this information is regarding a species called Agarikon (*Fomitopsis officinalis*), a bracket fungus strongly associated with old Douglas-fir forests. Old forests at low elevations in Whistler that could support Agarikon have mostly been logged, but conserving this species is yet another reason to avoid further logging of old forests.

Bird Studies

Our Bird Studies program consists of three main elements:

1. **CHRISTMAS BIRD COUNT:** Occurs mid-December (usually December 14) and involves a day of intense bird observation by a large group of birders spread out in small groups throughout Whistler. Data is also collected less formally for three days before and after the Christmas Bird Count and submitted to the Christmas Bird Count International database. Funding will go towards food for hard-working volunteers after a long day of birding at a wrap-up meeting where data is tallied. Historically the wrap-up meeting is at someone's house but starting in 2023 we have been renting a room at Myrtle Philip since with increasing participation we needed more space.

2. **BREEDING BIRD SURVEY (BBS):** This occurs in early June and involves a group of long-term Whistler Breeding Bird Surveyors collecting observations along Highway 99. Data is submitted to the Breeding Bird Survey international database. Funding will go towards transportation and accommodation for the birding team that comes from out of town.

Why do birders come from out of town? The BBS started in the late 1970s and the core of that group are still involved. Three live on Vancouver Island and two live in the Greater Vancouver area. Each year they meet in Horseshoe Bay to ride in the same rental van to Whistler. Ferry and ancillary costs to get to that meeting point are not included in our funding application, nor is all the time these experts donate. Funding will go towards a rental vehicle, gas, and accommodation. No birders of their calibre reside in Whistler and are willing to donate their time. In addition, continuity from year to year improves the accuracy and consistency of the data.

3. MONTHLY BIRD COUNTS: Occur the first Saturday of each month when we walk from the bottom of Lorimer Road to Rainbow Park and back. It takes roughly 3 hours each month. We introduced a second monthly bird walk to Green Lake on the third Saturday of the month in 2023 to highlight the wonderful diversity of birds in the area, and in response to the unauthorized cutting of bird habitat (riparian vegetation) and off-leash dogs disturbing nesting shorebirds on the Fitzsimmons Creek Delta. The Green Lake Bird Walks run from April to September.

Though our monthly bird walks happen most regularly, there is no cost to run them. The only cost would be volunteer appreciation which can take many forms. Last year we awarded three of our birders with awards for “Outstanding contributions to bird studies.” We include information on the monthly bird counts here so you have a full picture of our birding program. Data is entered into eBird, a collaborative enterprise with hundreds of partner organizations, thousands of regional experts, and hundreds of thousands of users, and is managed by the Cornell Lab of Ornithology.

3.Current Year Highlights and Community Benefits:

BioBlitz

SCHOOL PRESENTATIONS

During last year’s June BioBlitz, scientists gave in-person presentations to approximately 800(!) students at 35 classes in five different schools: Spring Creek Community School, Myrtle Philip Community School, École La Passerelle, Whistler Waldorf, and Whistler Secondary. BioBlitz is now an important part of the annual curriculum for local schools that is warmly welcomed by students and teachers.

SCIENTIFIC CONTRIBUTIONS

The highest priority initiative in the RMOW’s Big Moves Climate Action Implementation Plan Goal #9 is to: “Develop policy, planning and legislative strategies to protect and restore local ecosystem health and support continued provision of natural infrastructure services.

E.g. develop/implement Priority Habitat Strategy and Species & Ecosystems at Risk Plan.” BioBlitz events provide data for this plan.

Each BioBlitz weekend sees our volunteer scientists scouring different ecosystems each year to increase our knowledge about the diversity of species in our area. In total, volunteer contributions for BioBlitz exceed 1,000 hours each weekend. In just 18 weekends of BioBlitz spanning back to 2007, BioBlitz findings now represent close to half of all records on the Whistler Biodiversity Project (WBP) master list (www.whistlerbiodiversity.ca). Results from the 2024 BioBlitz, still coming in, will bring the total number of species documented in our area close to 5,000.

PUBLIC PRESENTATIONS

We provided two public presentations at last year’s BioBlitz. In June, we had four of Canada’s most knowledgeable experts present on slime moulds, and were delighted to attract over 30 local residents. In July, Michael Allen presented to almost 100 people on local wildlife trends. Such presentations increase the reach of BioBlitz and help connect residents to nature.

Fungus Among Us

FUNGI PRESENTATIONS TO STUDENTS: In 2024, Fungus Among Us scientists presented to over 650 students in 31 classes. All four Whistler elementary schools were included: Spring Creek Community School, École La Passerelle, Myrtle Philip Community School and Whistler Waldorf. We were also delighted to again present to students at Xe’ólacw Community School in Mount Currie. The response we get from students and teachers is always terrific and we intend to offer presentations for many years to come.

FUNGI EDUCATION FOR ALL RESIDENTS: Fungus Among Us has become an annual highlight for many community members, especially with the growth in popularity of mushroom hunting. The positive feedback we get each year from participants and gurus alike is the main reason we run the festival.

Our event includes:

- **PHOTO CONTEST:** Based on its success since we introduced it in 2020, we again will offer the 'Fantastic Fungi Foto Contest' to get people outside and focusing on mushrooms.
- **TALKS WITH GURUS:** We plan for a collection of short talks about fungi biology, ecology, uses and conservation. We are in discussion with Squamish herbologist Leigh Joseph and hope to have her among the presenters in 2025.
- **WALK WITH GURUS:** We take people on mushroom walks in small groups to have an opportunity to learn about the wonder of fungi from gurus and connect with our natural world and others who care about nature. 2025 will look similar to 2024 when we had 20 gurus who led 10 groups of 18-20 people. These walks always sell out and are limited only by the number of gurus we can bring to Whistler.
- **COOKING WITH MUSHROOMS:** This event has been hosted by Bruce Worden, chef and GM of Milestones. Bruce is not only an amazing chef but also an experienced wild mushroom picker. During the event, participants not only learn ways of preparing delicious mushroom dishes, but Bruce also talks about proper picking etiquette. This event is always the first to sell out since we have a maximum capacity of 40 people. This year we might switch things up a bit and be creative about involving more people in this highly sought-after event.
- **MUSHROOM DISPLAY:** This is an event where labelled mushrooms collected on the walks are on display and gurus are on hand to answer any questions. This is the only event that is by donation and not ticketed. We do this for two main reasons: 1) Once tickets are sold out, this guarantees that anyone can still take part, and 2) it's an option to take part in the festival that all can afford. Each year we typically display 150-200 labelled species and attract >200 people.

DATA COLLECTION: Fungi (not including lichens) now represent more than 20% of the almost 5,000 species on the Whistler Biodiversity Project list. Virtually all of these records are from Fungus Among Us, with further additions from BioBlitz events of fungal species that emerge early in the growing season.

One of our main goals since 2020 has been to increase the scientific value of our event. Each year since, we've therefore contributed fungal specimens for study and storage at the UBC Herbarium. Collections such as these are important to help clarify fungal taxonomy, particularly in recent years when DNA and other analyses have shown that many of the fungi in North America originally assumed to be the same species as in Europe are actually different. Another example of the utility of this information was demonstrated when the BC Conservation Data Centre first included fungi in its ranking of species at risk. Due to our excellent species list, Whistler has very good documentation of which rare species occur in the area (which currently totals 70).

Bird Studies

COMMUNITY ENGAGEMENT AND CONNECTION: Our Bird Study Programs are run by volunteers who eagerly pass knowledge from older generations to younger, and from more to less knowledgeable birders. All are welcome to attend our events and while most of our participants are residents or second homeowners, we get a few visitors as well. This sharing strengthens connections within communities and encourages and strengthens a shared love of nature and commitment to stewardship. Many of our older birders, some in their 80s, are not only making contributions to birding data that are enormously valued, but they report that bird watching is great exercise and helps keep the mind sharp.

NATURE PROTECTION: Birders, according to a recent study, are five times more likely than non-birdwatchers to participate in wildlife and habitat conservation to recycle and engage in other eco-friendly activities; and to vote for wildlife-positive regulations and policies (Audubon.org).

DATA COLLECTION TO INFORM MANAGEMENT DECISIONS: Birds are environmental indicators, and changes in their behaviour and migratory patterns can provide valuable insights into the effects of climate change. Bird watchers play a crucial role in monitoring these shifts, contributing to our understanding of this global challenge. Our Bird Study Programs monitor bird species in Whistler and the Sea to Sky corridor. Our birders provide real and valuable data that documents the range of species in Whistler and corridor and informs land use decisions. All our data goes to eBird or the Breeding

Bird Survey and Christmas Bird Count databases. Data from our bird surveys was also recently included in RMOW Priority Habitats mapping (for the Shallow Shorelines layer).

Our long-term monitoring of birds provides essential data for conservation. As an example, Evening Grosbeak is a species that breeds in Whistler and whose population in Canada has declined precipitously in the past 50 years. An excerpt from the Species at Risk Management Plan says: “In Canada, long-term trends based on the North American Breeding Bird Survey (BBS) indicate an 82% decline since 1970 122 while Christmas Bird Count (CBC) data indicate an 87% decline over a similar time period” [p. iii; emphasis added].

We publish our birding data as a continually-updated pamphlet, Whistler Birds.” This publication not only helps distribute information for local and visiting birders, it is also the key resource for annual updates to the RMOW’s Species and Ecosystems At Risk report.

These are just two examples of the way our bird studies contribute to efforts to prioritize conservation efforts. The Provincial government uses a similar assessment process for birds and other species, and these assessments would be much less accurate without local bird studies.

Local conservation priorities are mainly informed by Federal and Provincial listings of species-at-risk, but Whistler Naturalist bird surveys have also led to direct efforts to conserve habitat. Some examples include the protection of critical habitat at the Fitzsimmons Creek Delta and reporting of sightings of rare species such as Northern Goshawk and Green Heron.

6. Additional Information:

Bio Blitz

We believe that the activities and events we’ve described in this application provide valuable contributions to the protection of wildlife habitats and biodiversity by both

inspiring individual residents to start/expand stewardship efforts and allowing local government to make better management decisions to support biodiversity based on our findings.

We are also highly committed to reaching as many students as possible to introduce/reinforce the wonders and beauty of nature. For the past decade, Whistler BioBlitz has become an important part of the curriculum of local schools and is always warmly welcomed by both students and their teachers. For example, see teachers' comments below.

TEACHER FEEDBACK FROM SCHOOL PRESENTATIONS

“Bioblitz is an amazing experience for teachers and students. This year our presenter taught us all about aquatic bugs. He made many connections to what we were learning about in class. He was enthusiastic, knowledgeable, respectful of students’ questions and answers and very flexible when students wanted to change the topic. Love the presentations we get, and everyone learns so much!”

 Myrtle Philip Community School, Grades 2/3.

“The insect presentation we had was fantastic. The presenter knew how to keep the kids engaged and it was age appropriate. The combination of slides and live bugs to look at was excellent for helping the kids make connections to the knowledge being presented. Setting up the slides was easy, and we were able to get started right away. The presenter did a good job of connecting with each student and getting them excited about the topic.”

 Myrtle Philip Community School, Kindergarten.

“Scott was great in my K/1 class! The students really enjoyed his presentation about insects, and we all learned a lot! I liked how his presentation was interactive to keep the students engaged. He also allowed them to use some creativity when the students got to design their own insects. They were so engaged. Thanks for organizing, it was awesome!”

 Spring Creek Community School, Grades K/1.

“It was a pleasure having Ryan and Tyson in the class, they were both very professional and had a ton of enthusiasm for science and slime moulds! I would definitely invite them back to a future classroom given the chance.”

██████████ Whistler Secondary, Science 8.

“It is always so wonderful and engaging to get local experts into the classroom who can share their knowledge and enrich our understanding and stewardship of the natural world around us. These visits help to spark our imaginations, find beauty and magic in nature and to foster a deeper appreciation for our environment.”

██████████ Spring Creek Community School, Grades 4/5

“My class really enjoyed Wendy’s presentation. Her boxes of pollinators were interesting. Wendy was very knowledgeable. She was approachable and they kids enjoyed exploring with her looking for pollinators outside. Thanks for bringing Bio Blitz to our school.”

██████████ Spring Creek Community School, Grades 3/4.

Fungus Among Us

Comments made in the survey we sent out after the event really speak of the value our event has in the community. Here are some of our participant’s favourite things:

"It really felt like a community event (even if some of the participants were from elsewhere)."

"I really enjoy the display tables, seeing the mushrooms picked on display labeled and sorted. The gurus are always so knowledgeable in the field."

"We love the Walk with Gurus! So magical to share a day with such incredible scientists/enthusiasts."

"Fun to walk and learn."

"The display was so impressive."

"Fun people passionate about learning more and sharing info."

"Access to super knowledgeable and approachable experts."

"Just a great opportunity to learn more about mushrooms and enjoy a wonderful lunch."

"We enjoyed the walk."

"The two hosts were knowledgeable and passionate."

"The forest to table lunch is, as always, a humorous culinary adventure."

"Tips from Chef Worden."

"I thoroughly enjoyed the forest to table lunch. Everything was delicious! I loved the walk too! It was so informative."

"The guides were enthusiastic."

"The walk. It was great for the kids."

"The children had fun!"

"The willingness of the mushroom experts to share their knowledge and enthusiasm."

"We learned everything we wanted and more! Andy was a such a great expert, so informative, so friendly!"

"It really felt like a community event (even if some of the participants were from elsewhere)."

"As much Thom and Andy MacKinnon as possible in future!!"

"The nature walk with the mushroom display in the afternoon was great. It was wonderful to see all the collected specimens and learn where they came from."

"Ben was really fun to take a walk with, very knowledgeable and also just great to learn from, answering questions and leading the group traveling through different sections of trees to see what we could find."

Bird Studies

CLIMATE CONSIDERATIONS: Bird populations are declining around the world. While many factors contribute — from habitat loss to pesticides, outdoor cats, and window

collisions — it is increasingly clear that climate change is an important driver behind this worrying trend.

Climate patterns have shifted throughout Earth's long history, but the speed of human-caused climate change in the Anthropocene is unprecedented, making it more difficult for birds to adapt. So how do changing climatic conditions affect birds? Our Bird Study Programs help find that out by entering all our observations into databases that are available for scientific study.

Changes in climate can affect ecosystems by influencing animal behaviour and ranges. Birds are a particularly good indicator of environmental change for several reasons:

- Each species of bird has adapted or evolved to favour certain habitat types, food sources, and temperature ranges. In addition, the timing of certain events in their life cycles—such as migration and reproduction—is driven by cues from the environment. For example, many North American birds follow a regular seasonal migration pattern, moving north to feed and breed in the summer, then moving south to spend the winter in warmer areas. Changing conditions can influence the distribution of both migratory and non-migratory birds as well as the timing of important life cycle events.
- Birds are easy to identify and count, and therefore there is a wealth of scientific knowledge about their distribution and abundance. People have kept detailed records of bird observations in Whistler for more than thirty years.
- There are many different species of birds in Whistler living in a variety of habitats, including lakes, wetlands, alpine, forests and meadows. If a change in behaviour or range occurs across a variety of bird types, it suggests that a common external factor might be the cause.

8. Please describe how your organization can contribute to the RMOW Strategic Plan:

CLIMATE ACTION

Biodiversity is our strongest natural defence against climate change and protecting biodiversity. The climate and biodiversity crises are interlinked and need to be tackled together if we are to secure a viable future on this planet. Protecting biodiversity is key to achieving Big Move #9: “Protect, support and increase the resilience of local ecosystems, natural assets and biodiversity.”

Specific initiatives related to Big Moves include:

A3.2 Continue to monitor ecosystem health and biodiversity

To make decisions that effectively protect the environment, you need good data. Over the years, over 2,000 species have been documented by Whistler BioBlitz, and this data has been a critical contributor to many RMOW initiatives including, most recently, Species and Ecosystems at Risk and mapping of Priority Habitats. Programs have research components, and this unbiased data is invaluable when making environmental management planning decisions.

To make decisions that effectively protect the environment, you need good data. Over the years, almost all of the ca. 1,000 fungal species confirmed in Whistler have been documented by Fungus Among Us and, to a lesser degree, Whistler BioBlitz. This data has been an important contributor to the RMOW’s annual update of Species and Ecosystems at Risk.

To make decisions that effectively protect the environment, you need good data. Our Bird Study Programs have research components, and this unbiased data is invaluable when making environmental management planning decisions.

A3.5 Support environmental integration and education opportunities

It takes a community effort to protect local ecosystems and biodiversity. BioBlitz and our other events are meant to introduce and excite people about nature which, in turn, will increase the community’s desire to protect Whistler’s natural environment.

It takes a community effort to protect local ecosystems and biodiversity. Because people only care FOR what they first care ABOUT, through our bird studies programs we help people care ABOUT birds and the environments they need to survive; in turn, those people are much more likely to become stewards for birds and other wild species.

COMMUNITY ENGAGEMENT

School Presentations:

As detailed above, BioBlitz school presentations now reach virtually all elementary students in Whistler, as well as science classes at Whistler Secondary. We believe this is our best way to reach the community and promote biodiversity education.

Because our community loves to learn, we offer in-person (free monthly bird walks) and online resources for learning opportunities. We also connect community members with like-minded people who love nature which strengthens a sense of belonging in Whistler.

We understand many in our Naturalist Community worry about current and future harm to the environment caused by human activity and climate change (aka eco-anxiety or a chronic fear of environmental doom). We've heard that being able to volunteer for and/or attend our events, (in other words, being part of the solution), helps with mental health.

Another benefit of community engagement is that the more the community learns about the natural environment in Whistler, the more we can collectively act as curators of this wonderful place to visitors who come here primarily for a natural experience.

Public Presentations:

In addition, we also offer public talks during BioBlitz as detailed above. Since Whistler is a busy place, any opportunity to attract residents to learn more about nature is valuable, and these talks show us there is a large appetite for them.

Alleviating Climate Anxiety:

Many people experience anxiety about current and future harm to the environment caused by human activity and climate change (aka eco-anxiety or a chronic fear of environmental doom). We've heard that being able to volunteer for and/or attend our events, (in other words, being part of the solution), helps with mental health

SMART TOURISM

By helping protect nature, Whistler BioBlitz contributes indirectly to Smart Tourism, specifically by helping “...preserve and protect Whistler’s natural assets...”

We provide opportunities for visitors to contribute, participate and learn about Whistler’s culture. It seems we always have a few visitors attending our Bird Walks and by the end of the walk, many sign up to our email list so they can stay connected with our naturalist community from afar. Our walks and online information allow visitors to participate in community events and/or explore on their own with a much deeper appreciation of the natural world in Whistler.