Beaverhill Bird Observatory's BirdSmart Education Program Report 2019-2020

By: Stephanie Thunberg, Sara Pearce Meijerink, Karambir Singh and Geoff Holroyd

July 1, 2020

Abstract: The Beaverhill Bird Observatory's BirdSmart education program made 254 presentations to 21,024 people from November 1st, 2019 to May 31st, 2020. Feedback from teachers on our SurveyMonkey questions indicated that all respondents (100.0%) would participate in our programs again and all (100.0%) recommended the BirdSmart education program to other teachers!

The BirdSmart education program started in September when schools were contacted for bookings. Presentations were booked and prepared by part-time staff throughout the fall. Originally, presentations were intended to operate from November 1st, 2019 to May 31st, 2020. However, due to COVID-19 the in-person programming was prematurely concluded on March 14th, 2020, coinciding with Alberta Health Services recommended school closures and limitations on afterschool programs and social gatherings. This year the BirdSmart program provided 136 in classroom presentations, reaching approximately 4,452 students and 465 adults from 51 different schools. Unlike previous years, older grades accounted for a significant proportion of our presentations. This is likely due to the early closure of schools, as most elementary presentations are booked in April and May to match up with when they do their spring, animal units. The BirdSmart program was concentrated around Edmonton and the greater Edmonton area, with a higher emphasis on the Calgary region than previous years. This year the geographical outreach of BirdSmart expanded locally in central Alberta to Hinton, Morinville, Leduc, Drayton Valley, Spruce Grove, Fort Saskatchewan, Millet, Camrose, Red Deer, Cochrane, Thorsby, Breton and Warburg. For the first time ever, BirdSmart expanded its outreach internationally to the University of Guadalajara in Puerto Vallarta, Mexico thanks to

BBO chair, Geoff Holroyd providing three presentations to university and adult audiences during his vacation.

Outside of schools, 26 presentations were provided to childcare centers, youth group organizations, adults, seniors, and students, reaching approximately 9,616 students, and 2609 adults, or a total of 12,225 people. Youth groups included Boy Scouts and Girl Guides, while adult groups included senior's homes, universities, museums, churches and clubs (Table 1). The Oil Kings Hooky Hockey Game had the largest impact out of all of our presentations, reaching approximately 11,200 people. At the hockey game, Sara Pearce Meijerink, our head biologist, was featured on the Videotron with 3 short presentations about bird conservation and climate change, while accompanied by our education birds (Table 1). Furthermore, BBO staff and volunteers attended 11 events reaching approximately 963 students, and 1,214 adults, or a total of 2,177 people. The variety of events this year included birthday parties, retail store events, science nights, family carnivals, university events, craft fairs and sporting events (Table 2). During all events staff manned a booth, provided public education and interpretation, and were accompanied by a live owl.

| Number of | Grade Level | | Number of | Girl Guides/Boy Scouts Groups | | |
|---------------|------------------|-----------|---------------|----------------------------------|--|--|
| Presentations | | | Presentations | | | |
| 17 | Pre-Kindergarten | | 2 | Beavers | | |
| 17 | Kindergarten | | 3 | Brownies | | |
| 12 | Grade 1 | | 1 | Scouts | | |
| 11 | Grade 2 | | 2 | Sparks | | |
| 16 | Grade 3 | Number of | | Other Locations | | |
| | | | Presentations | | | |
| 6 | Grade 4 | | 3 | Oil Kings Hooky | | |
| 4 | Grade 5 | | | Hockey Event | | |
| 7 | Grade 6 | | 1 | St. Augustine Anglican | | |
| | | | | Church | | |
| 42 | Grade 7-9 | 3 | | Puerto Vallarta campus | | |
| | | | | of University of | | |
| | | | | Guadalajara, Mexico | | |
| 4 | Grade 10-12 | | 2 | Homeschool groups | | |
| Number of | Seniors Homes | | 1 | Edmonton Nature Club | | |
| Presentations | | | | | | |

Table 1. Details of the number of presentations by school grades and groups given by BBO Education Staff

| 1 | Capital Care Norwood | 1 | Tipple Park Museum |
|---|-------------------------|---|-------------------------|
| 1 | Long Term Care | 1 | King's University |
| | | 3 | Child Care Centers |
| | | 1 | Municipal District of |
| | | | Bighorn No. 8's 'Living |
| | | | in the Natural |
| | | | Environment' Banquet |

 Table 2. Details of the type and number of other events attended by BBO Education Staff.

 Number of Events Attended

| Tumb | Number of Events Attended | | | | | | | |
|------|----------------------------------|---|----------------------------|--|--|--|--|--|
| 3 | Birthday Party | 2 | Berkiebiner Moonlight Ski | | | | | |
| 1 | Evangel Assembly | 1 | MacEwan University Library | | | | | |
| 1 | GreenField School Science Night | 1 | Wildbird General Store | | | | | |
| 1 | Hasting Lake Hall Christmas Fair | 1 | Meika's Bird House Store | | | | | |

In early 2020, BBO staff attended 2 teachers' conventions, complete with a booth and owl in efforts to promote the BirdSmart program. With great success the BBO was able to fully book presentations until the end of the education season (May 31, 2020). However, due to COVID-19 health concern and school closures, 120 presentations and 4 events from March 14 onwards were cancelled. These bookings were projected to reach over 3,205 students, and 506 adults, across the province of Alberta including; Edmonton, Devon, Wetaskiwin, Sherwood Park, Vegreville, Onoway, Stony Plain, Buck Mountain, Morinville, Millet and Camrose.

This year the BirdSmart program provided a grand total of 162 in-person presentations and attended 11 events to all ages reaching 15,031 students and 4,288 adults (total 19,319 people contacted in-person) both in school and non-school related groups and organizations. If not for COVID-19, our total in-person outreach would have been an estimated 18,236 students and 4,794 adults.

In light of the COVID pandemic, in order to continue the BirdSmart program outreach efforts, staff adapted the education program into an online webinar format. Presentations previously delivered in classrooms were being offered free over Zoom to the public for April and May. A total of 35 webinars were delivered to 274 unique Zoom users who registered for the webinars. An estimated 536 individuals participated in the webinars from all around the country

including; Fort Saint John (British Columbia), Barrie (Ontario), Viking, Medicine Hat, Cochrane, Jasper, Sherwood Park, Morinville, Drumheller, Spruce Grove, Ryley, Athabasca, Slave Lake, Leduc, Edson, Olds, Mundare, Calgary and Edmonton.

Zoom webinars while popular with the public, were not suitable to meet the online safety requirements from many school boards. Therefore, beginning in May, staff started offering free webinars through Google Meets for grades K-12 that were closed to the public and booked exclusively with classrooms. While some teachers chose to partner up with their colleagues, majority of webinars were delivered to individual classrooms. We delivered 57 Google Meets webinars to digital classrooms throughout May and June (Table 4), reaching 1,074 students and 95 adults.

| Number of Webinars | Grade Level | | Number of Presentations | Other Groups | | |
|-----------------------|--------------------|--|----------------------------|----------------|--|--|
| 8 | Pre-Kindergarten - | | 1 | Onoway Library | | |
| | Kindergarten | | | | | |
| 31 | Grade 1 - 4 | | 2 | Girl Guides | | |
| 11 | Grade 5 - 6 | | | | | |
| 1 | Grade 7 | | | | | |
| 1 | Grade 10 | | | | | |
| 2 | Grade 11 | | | | | |

Table 4. Details of the number of webinars by school grades and groups given by BBO Education Staff

Combining our in-person presentations and our online webinars, our total outreach for the 2019/2020 BirdSmart education winter season was 16,105 students, 4,383 adults and 536 unknown-age webinar attendees, for a total of 21,024 individuals!!

All school presentations were tailored to match the Alberta School Curriculum's Program of Studies for each grade (https://education.alberta.ca/). BirdSmart's presentations focused on birds, conservation, and climate change. One new presentation "How Birds Survive Winter" was delivered this year targeting Grades 1-4, Scouts and Brownie groups. New slides were added to existing presentation, including; "Say No! to Single Use Plastics" slide, "You Can Make a Difference" slide, and slides outlining banding recoveries from BBO's history. All presentations

underwent a cosmetic update to unify the appearance of our programing. Webinar versions were also created for each presentation.

The BirdSmart program continued using the website Survey Monkey to monitor inperson presentation quality and to collect audience opinions from follow-up feedback surveys. The responses from audiences continued to be outstanding. This year 36 questionnaires were completed; 80% were from schoolteachers, 2.9% from children's after-school groups, 2.9% from senior homes and 2.9% from the Girl Guides of Canada. Fewer responses were gathered this year since the in-person education season was cancelled prematurely due to COVID-19 and we were unable to share our survey links through our webinar platforms. Most of the feedback was positive across all 6 categories of assessment, with exception to "Additional activities and crafts". Most respondents reported "N/A" for "additional activities and crafts". While only 71.5% of participants thought our pricing was excellent, an additional 25.7% of participants thought the pricing was good, totaling 97.2% participant satisfaction. Education budget cuts from the provincial government may have contributed to the lower pricing score than in last winter. A grand total of 88.2% of respondents reported the program to be excellent (Table 3).

Table 3. When asked: "How would you rate the following program components?", participants ranked each category for their received education program including; 'Topic', 'Quality of PowerPoint component', 'Pricing', 'Presenter', 'Additional activities and crafts (if applicable)', and 'Interactions with the educational owl (if applicable)' using a five point scale. A rank of 'Poor' earns 1 point, Below Expectations earns 2 points, Average earns 3 points, Good earns 4 points, and Excellent earns the maximum 5 points for the corresponding category.

| | Weighted | Number of | N/A | Poor | Below | Average | Good | Excellent |
|----------------|----------|-------------|------|------|--------------|---------|-------|-----------|
| | Average | Respondents | | | Expectations | | | |
| Торіс | 4.9 | 34.0 | 0 | 0 | 0 | 0 | 11.8% | 88.2% |
| Quality of | 4.8 | 36.0 | 2.8% | 0 | 0 | 0 | 17.1% | 82.9% |
| PowerPoint | | | | | | | | |
| component | | | | | | | | |
| Pricing | 4.7 | 36.0 | 5.0% | 0 | 0 | 2.8% | 25.7% | 71.5% |
| Presenter | 5.0 | 36.0 | 0 | 0 | 0 | 0 | 2.8% | 97.2% |
| Additional | 4.5 | 35.0 | 60% | 0 | 0 | 0 | 50% | 50.0% |
| activities and | | | | | | | | |
| crafts (if | | | | | | | | |
| applicable) | | | | | | | | |

| Interactions | 4.9 | 36.0 | 5.6% | 0 | 0 | 3.0% | 5.9% | 90.1% |
|-----------------|-----|------|------|---|---|------|------|-------|
| with the | | | | | | | | |
| educational owl | | | | | | | | |
| (if applicable) | | | | | | | | |

The majority of respondents believed the impacts of climate change on birds was introduced in an age appropriate manner (75.0% said "Yes", 25.0% said "Maybe") and 63.9% believed the presentation increased the viewers' understanding of climate change on birds in our environment (with 27.0% saying "Maybe"). This year's smaller response sample size may have contribute to these relatively lower percentages when compared to previous years. All respondents (100.0%) reported they would participate in our programs again and they would all (100.0%) recommend the BirdSmart education program to other teachers!

Some highlight comments included in this year's online responses are as follows:

"Our presenter (Karambir) was excellent with the children! He presented it at their level and was very good with the questions they asked! My students really enjoyed it!"

- Meyonohk School

"Sara was an amazing presenter & my kindergarten students loved the presentation. They were very engaged the entire time and thrilled to be able to touch a real owl."

- Aurora Elementary School

"The presentation was great! The girls enjoyed meeting Rickie and they were all very attentive to the presentation. Stephanie was great at tailoring the content and delivery to the age of the girls (5-6 yr olds) and even the leaders learned some new facts about owls! I would highly recommend BBO to any group that is interested."

- Girl Guides of Canada



Figure 1. Stephanie with Rickie, our Northern Saw-whet Owl (Photo by Catherine Guthro)

The 2019/2020 BirdSmart educational program experienced challenges from provincial education budget cuts late in 2019 causing reductions in bookings, to COVID-19 cancelling all in-person presentation from March 14, 2020 onwards. However, the program is resilient and gaining notoriety across the province. Teachers continue to praise presentation quality and spread the word amongst fellow instructors. BirdSmart has retained numerous customers, whom book presentations with us every year. These setbacks are likely to be temporary and to continue our outreach, BirdSmart has adapted and evolved, in order to provide online webinars to the public and digital classrooms. These webinars continue our education outreach efforts, even during a time of physical distancing. BirdSmart will continue to grow and thrive during these challenging times and we look forward to another successful season of providing educational programming in the winter of 2020/2021!

This BirdSmart program was funded by the Community Environment Action Grant from the Alberta Climate Change Office and the Alberta Gaming, Liquor and Cannabis Commission, for which we are thankful. BBO thanks Karambir Singh, Stephanie Thunberg, Sara Pearce Meijerink and Geoff Holroyd for delivering presentations. We also thank Helen Trefry, Meghan Jacklin and Geoff Holroyd who attended one or more events/presentations. Thank you to Gord Court, an Alberta Environment and Parks senior biologist, who kindly loaned us Ray-Cromie, the Great Gray Owl and Vinnie, the Peregrine Falcon for presentations. We also thank Bill Paulsen and Pam Webb who volunteered to transport the owls between their home and Edmonton as needed. Finally, a HUGE thank you to Phil and Helen Trefry who provide stalls in a barn and took care of our education owls.





Figure 3. Karambir presenting to junior high students about Wetland Conservation & Climate Change