

Birds in Schools, Melbourne
Final Report

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Unless otherwise stated, photographs are by Birds in Schools Project Officer, Alexandra Johnson.

Birds in Schools, Melbourne – Summary

Birds in Schools was delivered in Melbourne for the first time in 2019. The program was managed by the Birds in Schools Project Officer, and supported by local councils: Moreland City Council; Hobsons Bay City Council; Wyndham City Council; and City of Greater Dandenong as well as by Parks Victoria and experienced BirdLife volunteers. This document reports on the program, summarising the outcomes as recorded by the Birds in Schools Project Officer, and the evaluation completed at the end of the program.



Left: Photo provided by Cornish College

Birds in Schools (BIS) is an education resource designed and delivered by BirdLife Australia in partnership with participating teachers and their schools. BIS is science curriculum-aligned and engages teachers and students in the scientific process, through learning to identify, investigate, and survey the birds and habitat of their school grounds. The ultimate objective of BIS is to develop and implement an action plan related to improving school biodiversity.

Program Partners

Volunteers

Experienced BirdLife volunteers supported the program through sharing their individual expertise and assisting with the delivery of the school lessons, teaching students bird identification strategies and survey techniques during these focused lessons, guiding students in their planting efforts on the action days, installing nest boxes and attending the end of program excursions. The total volunteer contribution from our dedicated team amounted to approximately 65 hours, and around \$2,000.

Local City Councils

Local city councils were hugely supportive of the program, supporting BIS through providing invaluable expertise, in-kind support and donations of materials. Councils provided a substantial 32 hours of direct assistance at our action days. Moreland City Council provided in-kind support though allowing us to use their meeting space for the professional development session for teachers and volunteers, donated plants, plant guards and stakes for the school action days, supplied a class set of gardening tools for students to use, and expertise and assistance on school action days. Hobsons Bay City Council donated plants, plant guards and stakes, supplied a class set of gardening tools, and expertise and assistance on school action days. Wyndham City Council assisted in engaging interested schools and provided expertise and assistance on school action days. City of Greater Dandenong donated locally native plants, plant guards and stakes, supplied a class set of gardening tools for students to use, and provided expertise and assistance on school action days.

Parks Victoria

Parks Victoria provided invaluable in-kind support by giving participating schools the opportunity to visit and participate in the schools program at Serendip Sanctuary, as an end of BIS celebration and chance for students to practice their bird identification skills. BirdLife liaised with Parks Victoria to organise seven excursions for five schools to Serendip Sanctuary, amounting to 28 hours of Parks Victoria staff contribution. Education Officers and Community Engagement Officers took students on the Wildlife Walk at the Sanctuary, and BirdLife facilitated bird watching and ponding activities to discover water invertebrates that water birds rely on for food. One school participated in an excursion to La Trobe Wildlife Sanctuary for a bird watching tour.



Students participating in the program at Serendip Sanctuary.

School Participation

Nine schools participated in BIS with a total of 18 teachers involved. Through the efforts of these teachers and the support of their schools, BIS reached a total of 500 students in 22 classes from Grades 1 to 10. The program was designed to be flexible and was delivered in a range of modes by participating schools, including by classroom teachers as a science unit or an elective environmental subject, as a specialist subject by a sustainability teacher, to a primary school Student Representative Council, and a secondary school Green Team. The participating schools and student details are outlined in the following table (Table 1).

Table 1: Schools participating in Birds in Schools

School	Grade Level	Class and Student Numbers	Teachers	Time Period
Coburg Primary School	Grade 5/6	3 classes, 71 students	3 teachers	Term 3
Spotswood Primary School	Grade 1/2	4 classes, 82 students	4 teachers	Term 2
Oak Park Public School	Grade 3/4	5 sustainability specialist classes, 120 students	1 teacher	Term 3-4
Wyndham Christian College	Grade 1-4	2 environment club classes, 52 students	1 teacher	Term 3-4
Wooranna Park Primary School	Grade 5/6 Interest group	1 environmental interest class, 30 students	1 teacher	Term 2-4
Cornish College	Grade 1 and Grade 5	4 classes, 90 students	4 teachers	Term 3 - 4
Preston South Primary	Foundation to Grade 6	Student Representative Council, 28 students	2 teachers	Term 3-4
The Grange P-12 College	Grade 5	1 science extension class, 10 students	1 teacher	Term 4
Collingwood College	Grade 7-10	Green Team, 15 students	1 teacher	Term 3-4

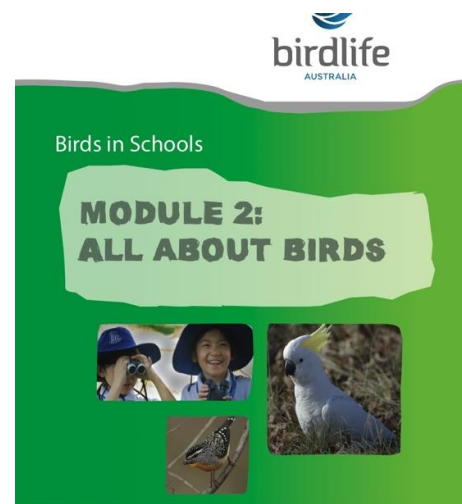
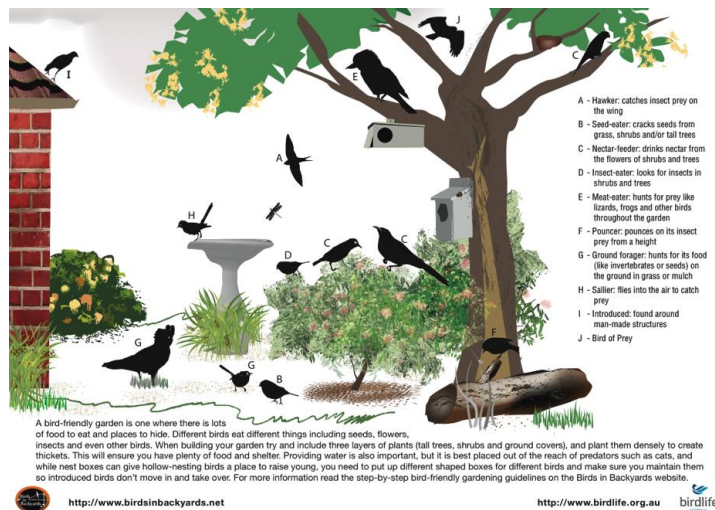
Project delivery

Professional Development

Teachers participate in a professional development session with BirdLife Australia to give them the skills required to provide the teacher-delivered component of the program. BirdLife volunteers also attended a BirdLife Australia professional development session to enable them to assist with the program. The professional development sessions covered all required background information, training in how to conduct a survey, and communicated expectations for participating schools and volunteers. Teachers were supplied with the four modules that make up the BIS program, including lesson plans, background information and resources, as well as a bird field guide and two pairs of binoculars.

Lessons

The lessons provided in the BIS program are aligned with the science, English and maths curriculum, and teach students to identify and survey birds, investigate their habitat requirements, analyse the data collected, make recommendations as a result of this data, and ultimately, devise an action plan to make their school more bird friendly. BIS lessons are divided up into 1. lessons delivered by teachers, and 2. lessons delivered by BirdLife staff in conjunction with experienced volunteers.

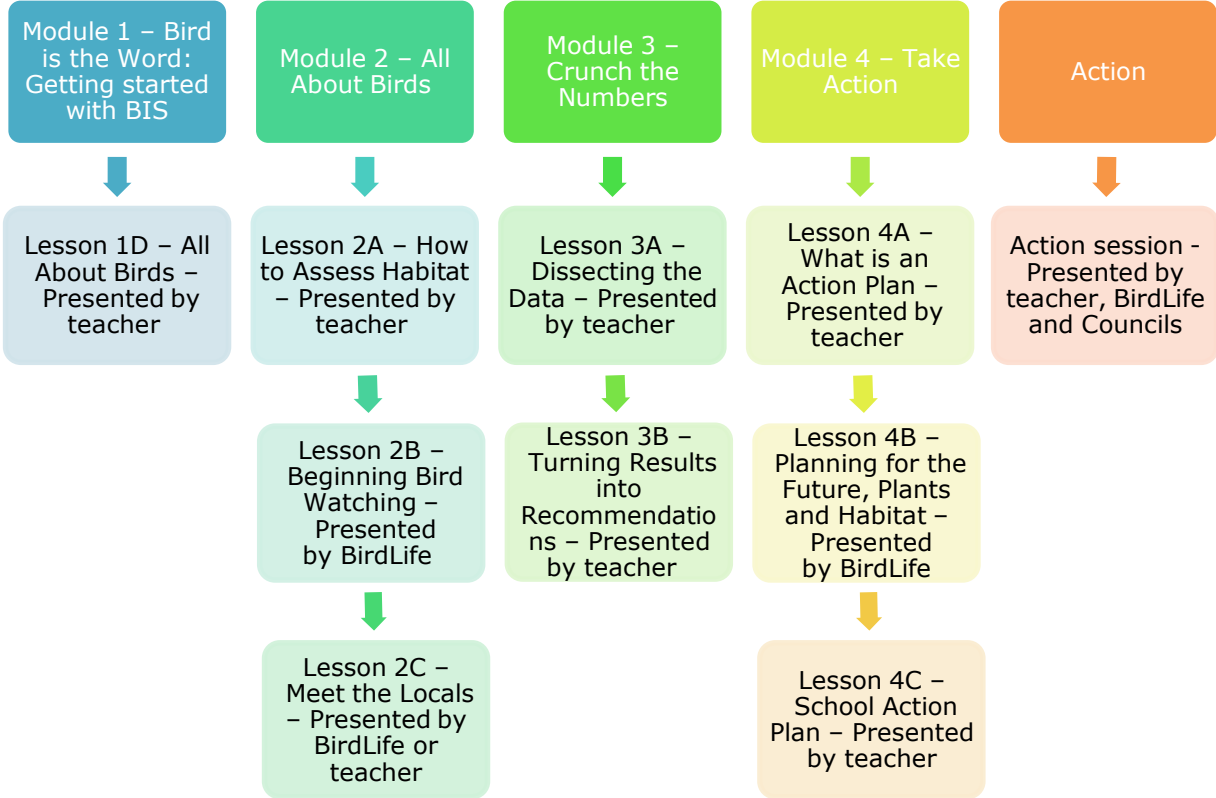


Detailed lesson plans, background information and resources are provided to participating teachers.

BirdLife staff and volunteers present specialised lessons on identification, survey techniques and habitat requirements, and provide the resources and capacity to carry out school action plans. As part of the 2019 BIS program, the Birds in Schools Project Officer delivered 42 lessons in participating schools and was supported by a committed group of volunteers.

Participating teachers delivered the remainder of the lessons as appropriate in their classrooms. Detailed lesson plans, background information, instruction, and resources, are provided to teachers to deliver their lessons. The modules and lessons delivered through BIS are outlined in the following diagram, depicting teacher and BirdLife presented lessons (fig 1).

Lesson Summary



Taking Action

While some birds are flourishing in urban areas, others are facing challenges due to the removal of important features that they require in their habitats, such as access to water sources, old trees with hollows for nesting, or the important understory layer including shrubs, grasses and flowering plants, that provide food and shelter, particularly for smaller native bird species. To address these concerns, following their lessons, each school participated in an action, carrying out the work of their action plan.

BirdLife organised the delivery of nine action plans, involving 12 action sessions. Actions included planting locally native plant species from grasses and small flowering plants to

attract insects and insect eating native bird species, to shrubs to increase habitat and provide shelter and nesting opportunities for small native bird species, and native trees to provide food sources and future nesting sites. Students planted approximately 600 native plant species. Schools built and installed nesting boxes for a range of species that rely on hollows for raising their young, as well as providing bird baths to increase the availability of water for drinking and bathing. The details of the school actions are shown in the following table (Table 2).

Table 2: School action information

School	Action
Coburg Primary School	Planting native plants Bird bath Three nest boxes
Spotswood Primary School	Planting native plants Talk at school assembly about plants for birds
Oak Park Public School	Planting native plants Two bird baths Food waste bins and education to discourage undesired bird species
Wyndham Christian College	Bird bath
Wooranna Park Primary School	Planting native plants Two nest boxes
Cornish College	Planting native plants
Preston South Primary	Planting native plants Bird bath
The Grange P-12 College	Planting native plants Bird bath
Collingwood College	Planting native plants Student-led education about plants for birds Two bird baths Three nest boxes

Teacher Evaluation of BIS

Following the completion of BIS, teachers participated in a survey to report on student learning and evaluate their experience and the success of the program. Teachers were asked to rate the program in several areas throughout the survey, with a rating of 1 being a low and a rating of 10 being high. The following sections of this report are a summary of this evaluation survey, using this rating scale.



1. Lessons and Resources

Following the program, teachers rated the lessons and support and resources provided, with the results of this evaluation in the following table (Table 3).

Table 3: Quality of lessons and resources as rated by teachers

Question Posed to Participating Teachers	Average Teacher Response
The lessons provided by BirdLife staff and volunteers.	9.9
The support provided by BirdLife staff and volunteers.	9.9
The usability of the module booklets provided as part of the BIS program.	9
The usability of the accompanying resources provided as part of the BIS program.	9.4
The access provided to resources and experiences that your students and/or school would not typically have access to.	9.8

The professional development session and modules supplied to teachers included instruction on how to use the data collection tool, Birddata, to record survey data. Some teachers were provided with additional support from the Project Officer to use Birddata when requested by

the teacher. Half of the schools participating used Birdata to record their survey results, with the other half providing reasons for not doing so. These reasons included lack of technology, using the BirdLife Backyard Bird Count app instead, and the young age of students (Grade 1). In the end of program evaluation, teachers rated the usability of Birdata at 8.75.

2. Student Learning and Engagement

The engagement and learning of students in the BIS program was very high. This was evident during the program as well as in the evaluation survey that teachers participated in at the conclusion of BIS. The following table shows the responses teachers gave to indicate the level of student engagement, including engagement of students not generally interested in science, enjoyment, and learning during the BIS program.

Table 4: Student learning and engagement as rated by teachers

Question Posed to Participating Teachers	Average Teacher Response
Your students' level of engagement in the BIS program.	9.5
Your students' level of enjoyment of the BIS program.	9.6
Your students' level of learning in the BIS program.	9.5
The growth in students' understanding and appreciation of birds and their habitats.	9.5
The level of science learning undertaken by students.	8.2
The engagement of students that may not typically be engaged in science learning.	8.8



Centre: Provided by Cornish College.

3. Professional Development

In the program evaluation, teachers recorded significant growth in their capacity as teachers to deliver science-based education programs, and in their understanding and appreciation of birds and their habitats, with the results shown in the following table (Table 5).

Table 5: Teacher professional development as rated by teachers

Question Posed to Participating Teachers	Average Teacher Response
The growth in your capacity as a teacher to deliver science based education programs, such as BIS, as a result of your participation in BIS.	8.7
The growth in your understanding and appreciation of birds and their habitats.	9.5

4. Curriculum Links

The BIS program is aligned with the science curriculum and was taught primarily as a science unit by participating schools. Teachers also linked BIS learning into other areas of classroom learning as appropriate, in line with student interests, class and school needs and existing programs. Other areas of classroom learning that the program was linked to included literacy, art, inquiry, maths, technology and community engagement. As part of the post-program evaluation, teachers outlined the ways they linked the program into other classroom and school activities, this is shown on the following page. They were asked what areas of the curriculum they were able to link Birds in Schools to, outside of their main, science focus.



Left and right: Provided by Tamara Camilleri.

5. Overall Success of Birds in Schools

The first BIS program in Melbourne was well received by all participants, with teachers, students, volunteers, council staff and other supporters all enthusiastic and engaged with the program. Teachers were asked to reflect on the success of the program at their school by rating the overall success of the program, the success of their action day, and the success of their excursion (Table 6). The following table outlines teachers' views. Teachers were also asked if they would like to participate in the program again, with all expressing interest.

Table 6 : The success of the Birds in Schools program as rated by teachers

Question Posed to Participating Teachers	Average Teacher Response
The overall success of the BIS program for your school.	9.5
The success of your schools' action day.	9.6
The success of your schools' end of year event or excursion.	9.7



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