



Science Unit: *Animal Growth and Changes*

Lesson 3: *Fieldtrip to George C. Reifel Migratory Bird Sanctuary*

School Year: 2012/2013

Developed for: Hastings Elementary School, Vancouver School District

Developed by: Linda Herbert (scientist); Natacha Corrie and Chris Donegan (teachers)

Grade level: Presented to grade 2/3; appropriate for grades 1 – 7 with age appropriate modifications

Duration of lesson: 4-5 hours

Notes: Location: 5191 Robertson Road, Delta, BC V4K 3N2. Phone: 604-946-6980. Book school trips at least a few months prior to the trip, as space is limited. Tours are 1.5 hours and include time at the bird museum onsite. Cost is \$1.50 per student (2013 prices), which is a 50% discount of regular child admission.

<http://www.reifelbirdsantuary.com/>

Objectives

1. Observe resident and migratory birds in their natural habitat.
2. Learn about different species of resident birds – how to recognize them, their life cycles, needs and habitats.

Background Information

The George C. Reifel Migratory Bird Sanctuary is located in the Fraser River estuary on Westham Island in Delta B.C. Over 280 species of birds have been spotted at the estuary including both resident and migratory species. The sanctuary itself is composed of approximately 300 hectares of wetlands, marshes and dykes and is an important habitat for many migratory species. Millions of birds stop here each year on their way up and down the Pacific Coast.

The sanctuary offers a variety of educational programs for school groups. Please note that school groups must book a tour in advance and that the sanctuary only books one morning and one afternoon class booking per day. Reservations are for classes of up to 30 students. Sanctuary programs promote the appreciation of wild migratory birds and their habitats, the Fraser River estuary environment, and local conservation initiatives.

Logistics

- Washrooms and picnic facilities are available next to the parking lot.
- There is no playground or play space and thus classes should only plan to eat their lunch there, not stay for an extended time once their tour is over.
- Booking a program provides the group with a 50% discount on admission and a guide for approximately 1.5 hours, including any time spent in the museum.
- Trails and walkways are wheelchair accessible. The 10 m observation tower is not wheelchair accessible but there is another viewing area available that is wheelchair accessible.



SCIENTIST IN RESIDENCE PROGRAM

Vocabulary

<u>Resident species:</u>	A species that can be found locally year round.
<u>Migration:</u>	Seasonal movement of a species between different habitats.
<u>Migratory species:</u>	A species that migrates between habitats and thus will only be observed in a specific location at certain times of the year.
<u>Estuary:</u>	The habitat formed where a river or other freshwater body joins with the ocean.
<u>Bird of prey:</u>	A carnivorous bird that hunts and eats other animals (mammals, other birds, amphibians, lizards, rodents, insects, etc.)
<u>Raptor:</u>	A bird of prey that actively hunts for and catches its food. Can be distinguished from other birds of prey by their keen eyesight, strong, curved talons and sharp, strong beaks. Includes hawks, eagles, falcons, ospreys, vultures and owls.

Materials

- Clipboards
- Worksheets (can print on waterproof paper)
- Camera(s)
- Pencils
- Bird ID book(s)

In the Classroom (prior to leaving on the fieldtrip)

Introductory Discussion

1. Review vocabulary
2. Briefly describe the worksheets
3. Discuss safety rules and behavioral expectations
 - Treat all organisms with respect and be careful not to disturb or scare them – no running, no loud noises, no tossing rocks, sticks etc. into the water.
 - Do not feed the birds anything except bird seed (small bags of bird seed can be purchased at the sanctuary to feed the ducks and other waterfowl).
 - Stay on the trails, especially in the spring time to avoid damaging any nests etc. that may be hidden in the off trail areas.
 - Remember that the animals at the sanctuary are WILD animals and not pets. If they feel you are a threat to them or their young they can scratch, bite, peck etc. Treat them with respect.
 - Obey all instructions given by the sanctuary guides and employees.

Science Activity/Experiment

1. A guided tour, lasting 1-1.5 hr will be given by a sanctuary tour guide(s). The tour content will depend on the season and age of the students. Specific topics can be requested, for additional information visit the *School Programs* section of the website: <http://www.reifelbirdsanctuary.com/>
2. The sanctuary has already developed a variety of workbooks and activities that can be used on the fieldtrip. For this fieldtrip we chose to incorporate materials from the *Exploring the Sanctuary* workbook.
 - a. Fieldtrip record keeping (page 8)



SCIENTIST IN RESIDENCE PROGRAM

- b. Sanctuary checklist (page 10) – the checklist can be modified to only include seasonal species.
3. The tour starts with a presentation in the small onsite museum. Students are also given a chance to observe the many specimens on display. This is a perfect opportunity to point out some of the most common species the students are likely to see so that they will be able to recognize them on the tour.
4. It is suggested that some bird ID books or pocket guides are brought along as well. Older students can be taught to use them prior to the fieldtrip while for younger students, guides can be used by the scientist, teacher and parent volunteers.

References

1. Campbell, Wayne et al. 2005. Compact Guide to British Columbia Birds. Lone Pine Publishing.
2. Kavanagh, James. 1993. Nature BC. Lone Pine Publishing.
3. McClosky, Erin and Gregory Kennedy. 2010. British Columbia Nature Guide. Lone Pine Publishing.
4. Sept, J. Duane. 2004. Common Birds of British Columbia. Calypso Publishing.
5. <<http://www.reifelbirdsantuary.com/index.html>> Welcome to the George C Reifel Migratory Bird Sanctuary. [information on the sanctuary including available programs and teacher resources] Accessed May 31, 2013.
6. <<http://www.reifelbirdsantuary.com/explore.pdf>> The George C. Reifel Migratory Bird Sanctuary Teacher's Guide- Exploring the Sanctuary. Produced by the British Columbia Waterfowl Society and Ducks Unlimited Canada. [teacher's resource for use with elementary students] Accessed May 31, 2013.