



YYC Young Citizen Scientists

Birds Grade 3

Lesson 5: Knowledge review session

Duration: 1 hour **Location:** Indoor

Overview

In this lesson students will:

Use citizen science apps (as well as other sources) to research a bird species of their choice and display this data by creating a 'top trumps' playing card. This lesson is designed to review knowledge and skills gained so far in the lesson sequence, before progressing to the practical citizen science sessions.

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Learning objectives

By the end of the session, students will be able to:

- Use a citizen science app as a source of information.
- Identify 3 distinguishing features of their chosen species.
- Identify the lifecycle stages of their chosen species.

Curriculum links

Grade: 3

Science Topic E: Animal Life Cycles:

- Describe the appearances and life cycles of some common animals, and identify their adaptations to different environments.
- Classify a variety of animals, based on observable characteristics; e.g., limbs, teeth, body covering, overall shape, backbone.
- Observe and describe the growth and development of at least one living animal, as the animal develops from early to more advanced stages.



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Equipment required

- iPads/tablets
- Animal identification guides and cards
- Access to other research resources, such as the internet or books (not provided)
- Photocopied worksheets – 1 per student (shown later in this lesson plan)

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Additional information

In this lesson students will be using the iNaturalist app to look at species discovered locally. Detailed instructions are included at the end of this document.



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Lesson plan

Time	Activity	Equipment needed
5 mins	Show the students iNaturalist on the smart board. So far, they have looked at this app to add observations. Today, we will use it to learn about an animal of their choice. Demonstrate to students how to add species information on iNaturalist (step by step images are shown below the lesson plan).	<ul style="list-style-type: none">• Smart board
40 minutes	Introduce the task for today: each student will make their own top trumps card. <ol style="list-style-type: none">1. Students will need to choose a species.2. Research the animals using the information submitted to iNaturalist, the identification guides, and a range of other resources provided by you, such as books or the internet.3. Students can either makes notes, or add the information directly to the top trumps card.	<ul style="list-style-type: none">• iPads• identification guides and cards• Research resources (provided by you), such as books and the internet
10 minutes	Play top trumps! <ol style="list-style-type: none">1. Split students into groups of 4 or 5.2. Students hold their completed top trumps card, hiding this from others.3. The youngest player goes first, calling out their best statistic (e.g. if they think they have chosen a fast animal, they may wish to choose 'speed'. So for the chickadee, they would call "speed -20").4. The other players will then see if they can beat this statistic based on the same category. The highest number wins, and that player gains 1 point.5. The winner of the previous round then gets to call their statistic first.	<ul style="list-style-type: none">• Completed top trumps cards



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	6. Play several rounds, then swap groups.	
5 minutes	Each student to list 3 things they learnt about their own animal, and 3 things they learnt about another animal by playing the game.	

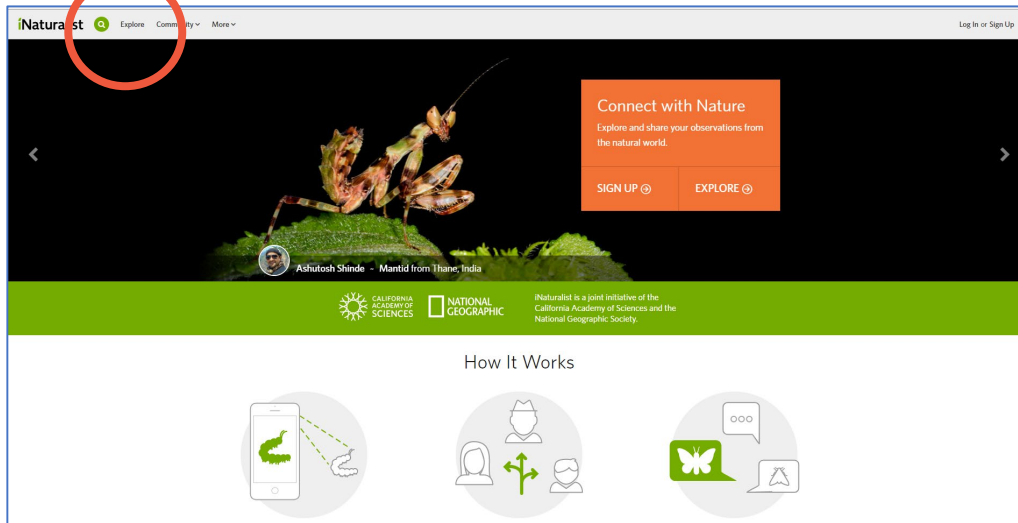


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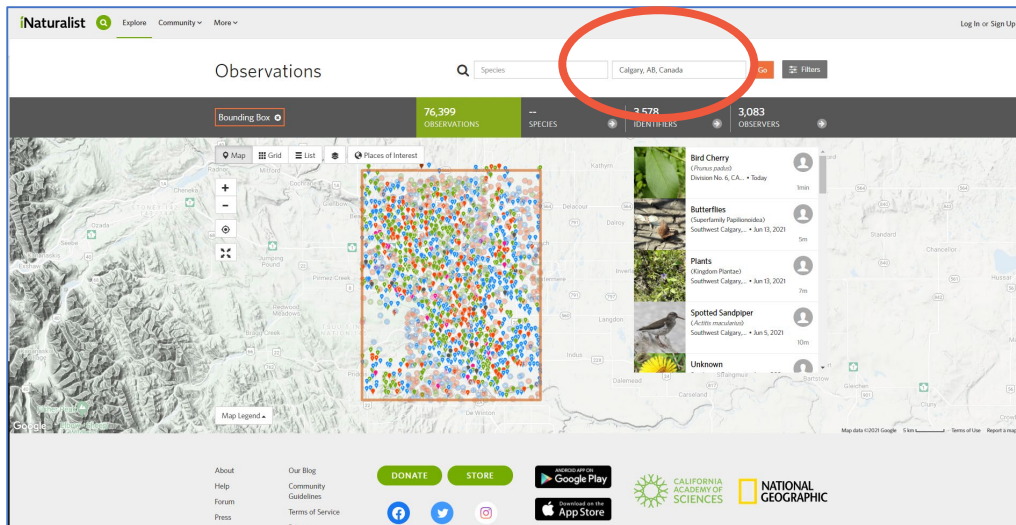
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How to find information on iNaturalist



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Go to the iNaturalist homepage and click 'explore'



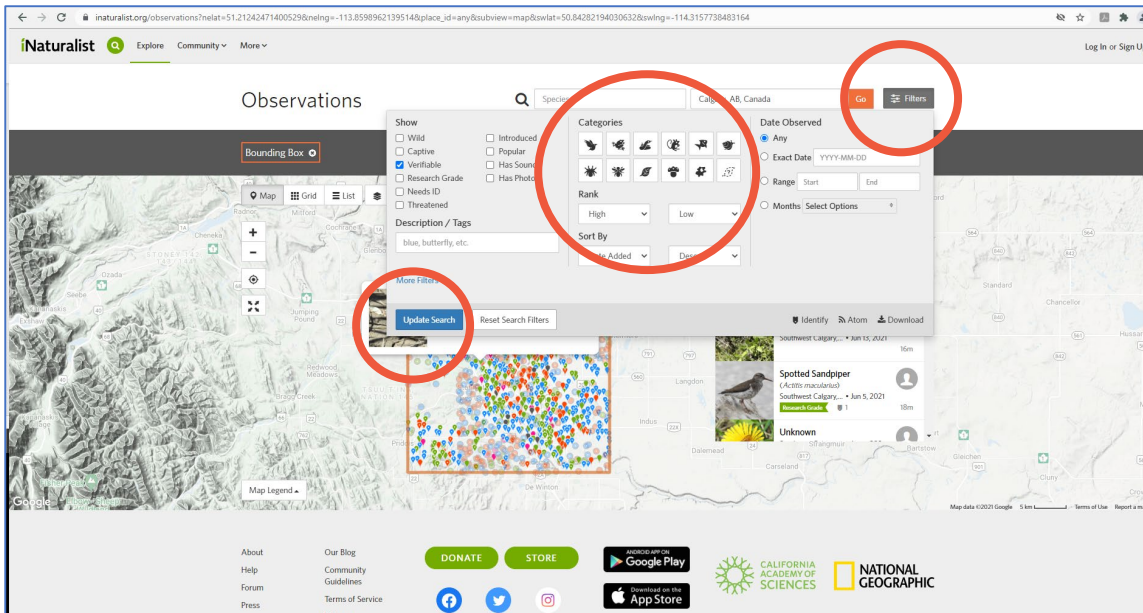
Type 'Calgary' into the 'location' box to see local species. All iNaturalist submissions in Calgary will now be displayed on the map.



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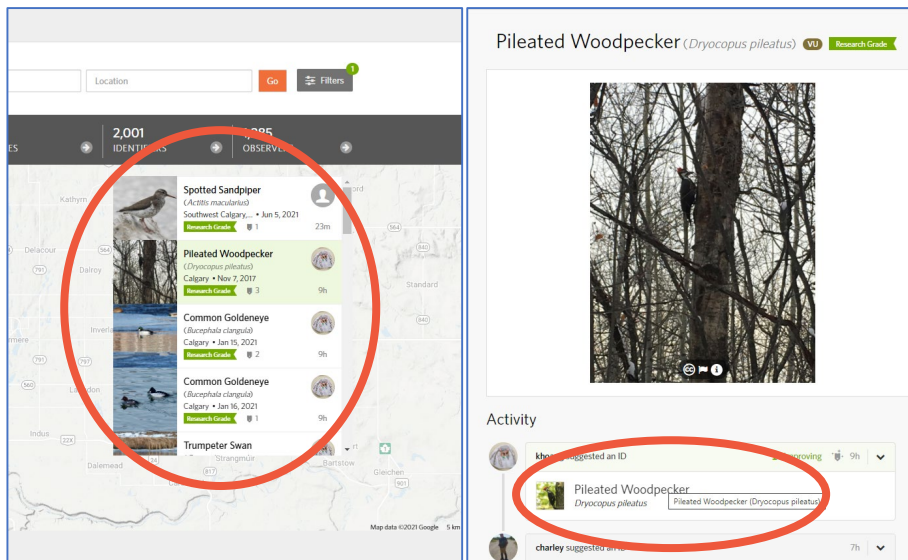
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Click on 'filters', then select an animal option from 'categories'. For example, you may wish to only select bird species to display. Now press 'update search' in the blue box.



Choose a species from the menu which will appear next to the map. Clicking on this will take you to the individual sighting, which may provide interesting information. Clicking on the identification on the sighting page will take you to a page full of information about your chosen species!



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Example completed top trumps card

Citizen Science Top Trumps



Drawing of species:

Name of species: Black-capped Chickadee

Fun fact:

During the summer, black-capped chickadees usually eat insects!

LIFESPAN (YEARS)

2

SPEED (KM/HOUR)

20

WEIGHT (GRAMS)

12

SIZE (CM)

15

TOP TRUMPS FILE

Information about this species:

Black-capped chickadees are usually found near trees and shrubs. They can be found across Canada and the USA.

Life cycle stages:

Lay 5-10 white, speckled eggs. Eggs hatch after 2 weeks. Young chicks (fledglings) leave the nest after 17 days but return for food for a few weeks.



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Citizen Science

Top Trumps

Drawing of species:

Name of species:

Fun fact:

LIFESPAN (YEARS)

SPEED (KM/HOUR)

WEIGHT (GRAMS)

SIZE (CM)

TOP TRUMPS FILE

Information about this species:

Life cycle stages: