# ONLINE CITIZEN SCIENCE TOOLS



### **DESCRIPTION OF THE LEARNING SCENARIO** PREPARED BY VILNIUS TECH

This lesson plan looks at iNaturalist and Seek by iNaturalist as examples of online Citizen Science tools By the end of the lesson students can: (1) Recognize iNaturalist and/or Seek as online Citizen Science tools; (2) Understand the purpose of iNaturalist as a national and global data collection tool; (3) Understand the requirements for a good observation; (4) Log a good quality observation on the iNaturalist App.

Note: Because observations on the iNaturalist App are in the public domain, please read the teacher's guidance to ensure this App is suitable for your students to use and that you are comfortable using the App yourself before asking students to use it (see <u>Guide for Teachers</u>)

You will see that iNaturalist have also created Seek, an introduction to monitoring for younger students which you may feel is more appropriate. Both iNaturalist and Seek by iNaturalist are free to download from the App store. If you decide to use iNaturalist with your students, you will need to set up a school or class log in. This can then be used on multiple devices at the same time.

THE LEARNING SCENARIO WAS PREPARED UTILIZING MATERIALS BY ZELANDIA.

#### **INTRODUCTION**

Bring up the iNaturalist Home page <u>https://www.inaturalist.org/</u> on your classroom whiteboard or monitor. This App can be used all over the world to record living things and to help scientists gather important information.



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#### Take your students through these steps as an introduction to this citizen science tool:

#### **EXPLORE**

## Your students will appreciate the global usage of the App and how the data appears visually.

Click the 'Explore' tab to look at the world view observations. This may automatically show Lithuania first. In this case, you can toggle back to world view by clicking the small cross next to 'Lithuania'.

#### Discuss:

What are all the little orange dots? These are all observations made by citizen scientists around the world.

Next, zoom in to Lithuania and down to local area level to find your school community. (Note: older students can do this in small groups on classroom devices which will help to prompt classroom discussion).

Why are the pins different colours? The colours represent different groups of species e.g. plants or birds which have been assigned different colours.

#### LEARN

#### Now find out what information you can learn about different species.

Click on the 'Learn' tab on home page. This is where students can find out information about different species. Students can type in a species of their choice e.g. 'samana' and look at the information available.

#### Discuss:

What information is available on each species page? If you search for samana, where are the observations on the world map? What about some of the other Lithuanian species? What is the difference between an observer and an identifier?

Look at the 'Status' information. What does this tell us?



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#### RECORD

#### Learn what you need to do to make a good observation.

When you click on the 'Record' tab on the home page, this is where you will need to log in to your iNaturalist account. You will then arrive at the 'Add an observation' page on the web site. It is useful to go through the fields with students so that they understand what is required. How you navigate the App will depend on the devices you have available.

#### **Device Options:**

- Use class cameras with geo data switched on upload observations to classroom computer. If no geo data facility on the camera, the location can be input afterwards.
- Use class iPads to log directly into App and complete observations in the field. If devices do not have mobile data, ensure they are logged on to Wi-Fi on your return to class so that the observations are uploaded to your account.
- If devices have mobile data, the drop-down ID software will give a potential ID in situ.

#### Making a good observation – Top tips!

There are a few simple tips for making a good observation. Once students have had a look a handful of observations on iNaturalist, they can put forward/discuss their ideas for what they need to do:

- Do I need to be close to what I am photographing and why?
- Why does the photo need to be clear?
- What do I need to put in the 'What did you see' field and why?
- Can I use more than one photo on an observation? Why might that be useful?
- Can I delete an observation later?
- What happens if I can't get a good photo e.g. bird flying?
- Why must I click 'Share' before taking the next observation?

#### Practise

Next, students should have an opportunity to practise taking observations in groups with devices in the school grounds to ensure that everyone gets an opportunity to experience the process from start to finish. Once uploaded (when you have Wi-Fi again in the classroom), students can critique their own observations as a class and delete those which are not good quality from the account.

#### Reflection

This will be an opportunity for students to reflect on the lesson objectives. Discussion points are: Why is iNaturalist a useful online tool? How can I help Science in my community by taking observations? • What was easy or difficult about taking observations? What can I do to make a better observation next time?



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