

VISITOR

VIRTUAL MUSEUMS IN THE COVID ERA



Activities

**What's that fox doing in my trash can? Your city's
changing biodiversity.**

Project Title	VISITOR (Virtual muSeums In The cOvid eRa)
Project reference No.	2020-1-FR01-KA226-SCH-095600

PARTNERS



Name of Activity	What's that fox doing in my trash can? Your city's changing biodiversity.
Age Range	11-14
Curriculum Subject Areas	Life Sciences, Natural History, Environmental Science
Curriculum Links (Nation)	<p>https://www.wallonie-bruxelles-enseignement.be/progr/386Prov-2008-240.pdf (Curriculum for first degree (12-14) secondary education in life sciences in the French-speaking community in Belgium)</p> <p>Two of the six domains of knowledge for the academic year and their concepts are:</p> <ul style="list-style-type: none"> • “History of Life and Science” <p>Students should be aware of the changes to mankind and living beings. Students should understand how man has abused knowledge and science through the creation of pollutants, pesticides, etc. and how they have impacted the environment.</p> <ul style="list-style-type: none"> • “People and the Environment”. <p>Students should become acquainted with phenomena such as the management, conservation, protection and use of resources Students should be able to reflect on the actions and consequences of man's influence on the environment and species.</p> <p>In general, the skills to be acquired are:</p> <ul style="list-style-type: none"> • Be able to propose one or more factors likely to influence a situation. • Be able to sort into two groups according to a criterion and its characteristic provided, generating a clear dichotomy. • Be able to highlight relationships between two variables. • Be able to accept, reject or qualify an observation provisional and/or partial with reference to illustrated documents.
Resources Needed	Paper, writing utensils (student's choice)
Links to Museum	https://www.naturalsciences.be/en/museum/exhibitions-view/250/423/392
Time Allocation	30 minutes

Description of Activity

Begin the activity by asking the class to describe an animal that they can see on their way to school by having them take turns playing a “What am I?” guessing game, with each student giving only clues about where the animal lives/sleeps and what it eats for the others to determine what it is.

This serves as the introduction to the topic of biodiversity in their cities.

Next, have the class read the informational page from the Natural Science museum website about strange critters that have wandered into and made homes out of cities in Belgium – the peregrine falcon, various insects and the fox. Discuss what the natural habitats of these animals are and compare those to the cities in which they’ve made their new homes.

This serves as the introduction to the topic of animals venturing out of their natural habitats and settling into urban areas.

Then, have the students draw two food chains/webs – 1 depicting the prey/predators of those animals in their natural habitats, and 1 depicting their prey/predators now that they’ve settled into cities.

EX. plants -> rabbits- > fox (natural habitat food chain)
rodents/pigeons/garbage -> fox (urban settlement food chain)

Discuss how their shift to the urban settlement food chain influences the processes of the food chain in their natural habitat. If foxes have emigrated from the forest to the city, what happens to their prey? The rabbit, for example, if left without such a common predator can negatively affect agriculture and plants by overgrazing, destroying crops and land and eroding soil. Conversely, what happens to the fox’s predator if they are removed from the food chain?

On the other hand, how does the intrusion of foxes into the urban settlement food chain change that environment? More generally, what is the danger of having more wild animals in cities? (collisions with vehicles, nuisance animals, etc.)

This serves to introduce the notion of how an imbalanced food chain impacts an area and its biodiversity.

Finally, discuss with your class what could have led to the emigration of these animals to urban settlements. Refer to the information from the museum website discussing pollution/pesticides that were introduced to their natural habitats, driving them away, as well as other harmful actions by humans (deforestation destroying their homes, for example).

To better understand the link between animals needing to adapt to new conditions once their natural habitats/food chains have been tampered with by humans, watch this short video sponsored by the Belgian govt:

https://www.youtube.com/watch?v=LHKTYSmT_HY&list=PLunekAoH_c5tZGI556JQY-OWembqVfCe-&index=4

(Conclude with the hedgehog losing its main food source as a result of human intervention will then propel it to look for viable food elsewhere, ie. urban settlements)