

Teacher Notes

Classroom Activity: Wonders of Winter

Discover some of the natural “Wonders of Winter” at the Museum using the 3D Virtual Visit. Take your students on a self-guided virtual tour to explore wildlife in the galleries and learn about how they survive the cold winter months. Students complete a themed word search to help develop vocabulary, problem-solving and memory. Teacher’s notes, including resources plus suggested activities are provided and can be used to complement the learning outcomes.

Level: 2nd class +

Format: Classroom activity - activity sheet and resources to be used within the classroom

Duration: 30+ mins

Availability: Online and self-guided

Curriculum links:

SESE Science

- Investigating and experimenting
 - Collect information and data from a variety of sources
- Living things
 - Plant and animal life

English

- Reading – Developing strategies; Reading for pleasure and information

Learning outcomes

On completion of this classroom activity pupils should be able to:

- Give a brief description of a natural history museum and the range of animals and fossils on display.
- Increase knowledge of living things e.g. observe and identify the different animals that live in Ireland in winter, and learn about adaptations such as hibernation and camouflage.
- Complete a themed word search activity.

Resources Featuring in this Classroom Activity:

Video Resource:

- Welcome to the National Museum of Ireland – Natural History (1 min 47 sec)
- The Video Resource for this lesson can be found on YouTube here
<https://www.youtube.com/watch?v=Xre3DqdpN5o>

Subtitles/closed captions are available for all videos. These can be turned on by clicking the CC icon found to the lower right corner of the video player bar in YouTube.

Word Search:

- The Wonders of Winter Word Search can be downloaded [here](#).

3D Virtual Visit:

- This resource can be found on the website [here](#). Step-by-step instructions below.

PowerPoint Presentation:

- This resource can be downloaded on the main webpage [here](#). File size approximately 6MB.

Suggested Lesson Plan:

1. We **highly recommend** that Teachers please **view** the short video in advance of showing them to your class.
2. Explain to your class they are going to make a virtual visit to the Museum today. Ask them have they ever visited the Museum before and what they saw there. If they have not visited the Museum before ask them what kinds of things do you find in a museum and why do people visit them. Show them the Welcome to the National Museum of Ireland- Natural History video resource (link above).
3. Ask your pupils do they know of any animals that live in the wild in Ireland. Ask them what wild animals do they see in their garden, school or local park during winter.
4. Take them on the Wonders of Winter 3D Virtual Visit of the Museum (instructions, itinerary and maps below).
5. Use the PowerPoint presentation alongside or after the 3D Virtual Visit.
6. Ask your pupils to observe and think about the animals that they see. Ask your pupils open ended questions, getting them to describe the animal they see, where they might live (habitat), what they might eat, and do they have a favourite and why. Ask them why they may not see many of these animals during winter.
7. Use the notes and useful links (below) to find out more information about the animals and their adaptations to help explore the Wonders of Winter with your pupils.
8. To finish up the lesson get your pupils to complete the Wonders of Winter Word Search (link to download and print above).

Options for Classroom Activity Follow-Up:

- Get your students to choose a favourite animal that lives in the wild in Ireland and use the 3D Virtual Visit to help them find it. Do this in small groups or if computer resources are available to students in the classroom encourage them to develop skills as they explore the 3D Virtual Visit themselves.
- Take part in the Garden Bird Survey for schools this winter - <https://birdwatchireland.ie/our-work/surveys-research/research-surveys/irish-garden-bird-survey/>
- Make a recycled bird feeder for the school or garden - <https://www.rspb.org.uk/fun-and-learning/for-kids/games-and-activities/activities/make-a-recycled-bird-feeder/>

Virtual Visit Itinerary

1. Robin
2. Badger
3. Hare
4. Red squirrel
5. Grey squirrel
6. Hedgehog
7. European eel

Link and step-by-step instructions on how to use the 3D Virtual Visit below.

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Instructions for using the 3D Virtual Visit:

- Click on the link (<https://www.museum.ie/en-IE/Museums/Natural-History/Visitor-Information/3D-Virtual-Visit>). These interactive presentations require up-to-date versions of Internet browsers (Chrome, Safari, Internet Explorer, Firefox).
- We strongly recommend to practice using the 3D Virtual Visit in advance of using with your class. It can be tricky at first but gets easier with practice!
- Begin with the Ground Floor – Irish Fauna, click the play button. The 3D Virtual Visit will launch and automatically zoom in to a view of the Giant Irish Deer at the entrance. Please see image below.



Image 1: 3D Virtual Visit – View upon launching Ground Floor – Irish Fauna

- The viewer can be expanded to fullscreen by clicking the Fullscreen icon in the bottom right-hand corner. See highlighted icon in image below:



Image 2: 3D Virtual Visit – Expand to Fullscreen

- Click and drag the cursor to move the camera view 360 degrees.

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- Double-click any area on the floor of the museum to move your virtual position and get different views and perspectives on animals.
- Double-click on the walls, cabinets, or animals to zoom in for a closer view.
- To navigate to a different animal represented on your map, click the Floorplan icon, which is highlighted in the image below. This will zoom out to provide an overhead floorplan view corresponding with that on the maps provided.



Image 3: 3D Virtual Visit – Change to Floorplan View



Image 4: 3D Virtual Visit – Floorplan View

- Click on an area of the floorplan that corresponds with the number of your chosen animal on the map provided. An example of this process is given in images below. Remember, you may then have to click and drag the cursor to move the camera view around to face your animal of interest!

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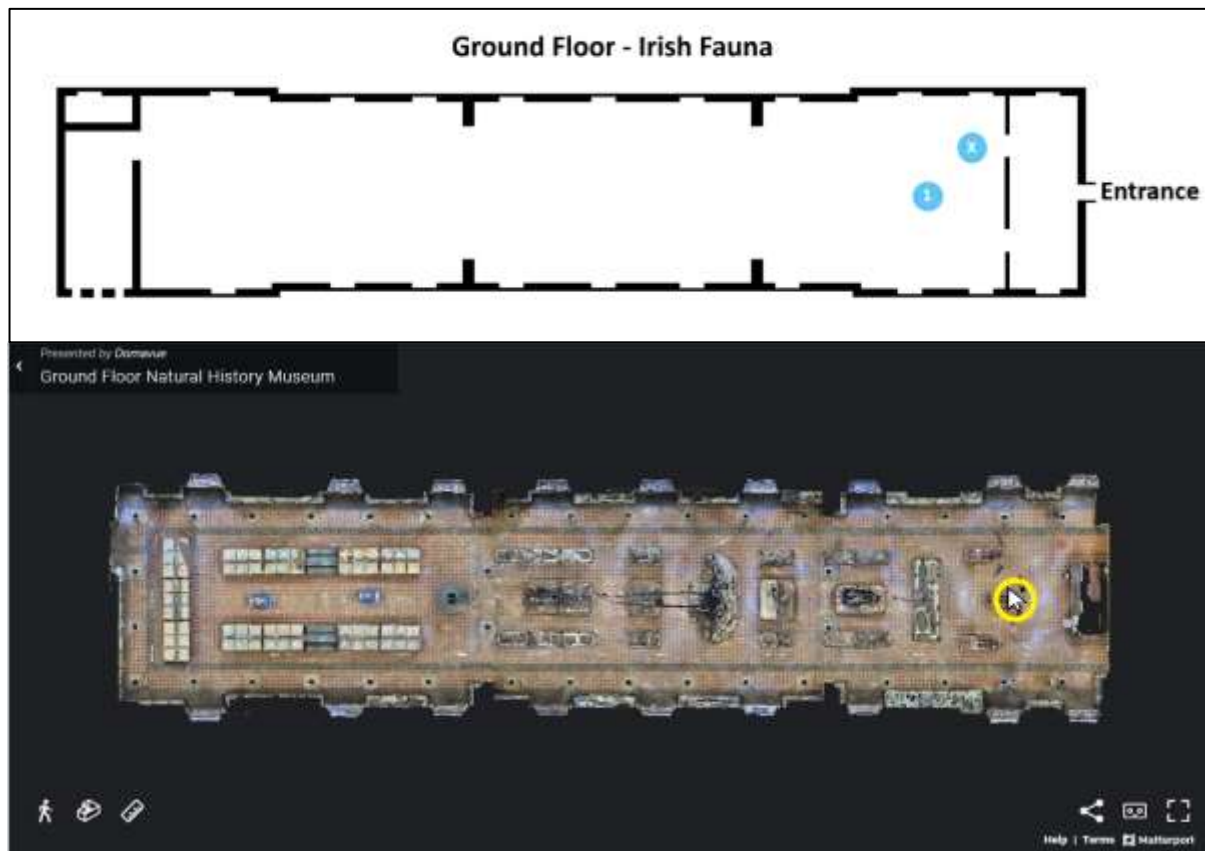


Image 5: 3D Virtual Visit – Double-click an area corresponding with your map to zoom in

- Note the 3D Virtual Visit also contains a Ruler function to allow real measuring of animals in the museum! Simply click the ruler icon as indicated in the image below and follow the instructions on-screen to measure the size of an animal, or the size of their head, jaws, legs etc. Play around and explore!



Image 6: 3D Virtual Visit – Ruler Function

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- Once your first animal on the map has been completed, click the floorplan icon and navigate to the area corresponding with the next animal of interest on the map(s) provided. Use the features of the viewer to examine this animal.
- Press the “Esc” key on your keyboard to exit out of full screen mode at any time.
- Play around and explore!

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Maps:

Ground Floor – Irish Fauna

X You Are Here

1



Robin

Ground Floor - Irish Fauna



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Maps:

Ground Floor – Irish Fauna

X You Are Here

2



Badger

Ground Floor - Irish Fauna



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Maps:

Ground Floor – Irish Fauna

X You Are Here

3



Hare

Ground Floor - Irish Fauna



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Maps:

Ground Floor – Irish Fauna



You Are Here



Red squirrel

Ground Floor - Irish Fauna



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Maps:

Ground Floor – Irish Fauna

X You Are Here

5



Grey squirrel

Ground Floor - Irish Fauna



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Maps:

Ground Floor – Irish Fauna

X You Are Here

6



Hedgehog

Ground Floor - Irish Fauna



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Maps:

Ground Floor – Irish Fauna

X You Are Here

7



European eel

Ground Floor - Irish Fauna



PowerPoint Notes and Useful Links:

1. Robin

- **Robins in winter:** They are one of the most common garden species seen in winter in Ireland.
- **Image details:** These two robins were the 57th specimens to enter the collection in the year 1902. They are from Crumlin in Dublin.
- For more information on robins visit BirdWatch Ireland:
<https://birdwatchireland.ie/birds/robin/>

2. Badger

- **Badgers in winter:** Badgers go into a torpor (meaning they are less active) in winter but they do not hibernate.
- **Image details:** This badger family have been on display in the Museum since 1911.
- For more information on badgers visit the Vincent Wildlife Trust Ireland:
<https://www.vincentwildlife.ie/species/badger>

3. Hare

- **Irish hares in winter:** Unlike other hares (in the image provided), the Irish hare's fur rarely turns white in winter.
- **Image details:** This is actually a scene of a hare and willow grouse from Norway. It shows how colour change or camouflage can be very useful in winter.
- For more information on the Irish hare visit the Vincent Wildlife Trust Ireland:
<https://www.vincentwildlife.ie/species/irish-hare>

4. Red squirrel

- **Red squirrels in winter:** Red squirrels store their food (pine cones, acorns...) just under the soil in late summer and autumn. They do not hibernate.
- **Image details:** This red squirrel's fur is faded because it is very old. It has been in the Museum since 1897 and is from Co. Wicklow.
- For more information on red squirrels visit the Vincent Wildlife Trust Ireland:
<https://www.vincentwildlife.ie/species/red-squirrel>

5. Grey squirrel

- **Grey squirrels in winter:** The grey squirrel does not hibernate in Ireland and in fact spends much more time looking for food than red squirrels during the cold months.
- **Image details:** This grey squirrel is from Co. Longford.
- For more information on grey squirrels visit Invasive Species Ireland:
<https://invasivespeciesireland.com/species-accounts/established/terrestrial/grey-squirrel>

6. Hedgehog

- **Hedgehogs in winter:** One of Ireland's only true hibernators and they have adapted this way of living to get them through the lack of food available during the cold winter.

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- For more information on hedgehogs check out the **Word Search** and visit National Parks and Wildlife Service's (NPWS) webpage Notice Nature: http://www.noticenature.ie/October_Species_of_the_Month.html
- **Image details:** Both these hedgehogs came from Co. Waterford in the 1890's.

7. European eel

- **Eels in winter:** Eels hibernate each winter under the mud beds of rivers. They are critically endangered.
- For more information on the European eel visit Inland Fisheries Ireland: <https://www.fisheriesireland.ie/fish-species/eel.html> and the International Union for the Conservation of Nature Red List (IUCN) <https://www.iucnredlist.org/species/60344/12353683>
- **Image details:** This eel was found in Enniscorthy, Co. Wexford in 1929. It had choked in an attempt to swallow a big frog!

Other Useful Websites and Resources:

- To learn more about recording biodiversity in Ireland visit the National Biodiversity Data Centre: <https://www.biodiversityireland.ie/>
- Learn more about the Green Schools Initiative - <https://greenschoolsireland.org/>

Video Transcript

Video Resource 1: Welcome to the National Museum of Ireland – Natural History

Video Length: 01:47

Time Stamp	Audio Transcript: Museum Educator Geraldine speaking
00:09	Welcome to the National Museum of Ireland - Natural History, sometimes called 'The Dead Zoo'! My name is Geraldine - <i>[Emma Continues:]</i> - and I'm Emma. We are both zoologists and museum educators. Today we'll take you inside the museum to see some of the animals and learn more about them. Let's Go!
00:27	This science museum opened its doors over 163 years ago, and today, it has over ten thousand animals and fossils for you to see up close. Discover the wildlife of the Irish room and fossils of animals that used to live in Ireland long ago. Visit the Mammals of the World exhibition, where you can get nose-to-nose with some of the largest creatures on earth, from whale skeletons, to elephants, and even a tiger!

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00:57	And don't forget to take a look at the balconies where you will find lots of fish, reptiles, birds, insects, spiders and much more!
01:07	You can visit the museum to see all these exciting animals or visit the website to see more videos and a 3D virtual walkthrough of the museum, on which you can learn more about the exhibits from the comfort of your own home or classroom.
01:22	See if you're able to spot your favourite animal! Could it be the rare giant panda? Or maybe a basking shark - the biggest fish in the Irish sea. Step inside one of Ireland's most visited museums where there are lots of amazing things to learn and explore!