

**museum**

National Museum of Ireland  
Ard-Mhúsaem na hÉireann



FIGURE 1 THYLACINE ON DISPLAY IN THE MUSEUM

# EXTINCTION STORIES

Teacher Notes for Post-Primary Classroom Activity

## LESSON PLAN

Discover stories of extinction in the collections of the museum using a series of short curriculum-linked videos that include Irish Sign-Language.

## Teacher's Notes

### Classroom Activity: Extinction Stories (Irish Sign-Language Resource)

**Discover stories of extinction in the collections of the museum from the comfort of the classroom.** Watch curriculum-linked videos that include Irish Sign-Language, and discover how animals like the giant deer, dodo and thylacine disappeared from this world. Download Teacher Notes to explore accompanying classroom activities to complement the learning outcomes.

**Level:** 1<sup>st</sup> – 3<sup>rd</sup> Year and TY

**Format:** Classroom activity – resources to be used within the classroom, includes Irish Sign Language interpretation.

**Duration:** 30+ mins

**Availability:** Online and self-guided

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#### Curriculum links:

Junior Certificate - Biological World

- Element: Systems and interactions
- Element: Sustainability

National Council for Curriculum and Assessment - Transition Unit 'Environmental Studies'

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#### Learning Outcomes:

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

- Describe the meaning of “extinct” and recognise examples of different extinctions throughout the Earth’s history.
- Describe animal extinctions specific to Ireland in the distant past and more recent past e.g. case studies of giant deer, spotted hyena and wolf
- Describe two examples of animal extinctions from around the world e.g. case studies of the dodo and thylacine.
- Describe “extinction” versus “local extinction”.
- Describe the role of conservation and identify how animals can be re-introduced into a habitat, and describe the pros and cons e.g. re-introduction programme example of Wolves in Yellowstone, USA versus Ireland.

## Video Resources Featuring in this Classroom Activity:

1. How the Giant Irish Deer went Extinct in Ireland (1 min 39 sec);
2. How the Spotted Hyena went Extinct in Ireland (1 min 17 sec);
3. How the Dodo went Extinct (1 min 59 sec).
4. How the Thylacine went Extinct (1 min 49 sec)
5. How the Wolf went Extinct in Ireland (3 min 27 sec).

Total time: 10 min 11 sec.

### Link to the Video Playlist Resource -

<https://www.youtube.com/watch?v=yeMzwtNe0tU&list=PLjqgWoV8sdN5CBd8YfXOYZ74z-QiaDZyy>

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

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## Suggested Lesson Plan:

1. Before your class watches the videos ask you students to discuss the following in small groups. *What are some examples of why animals go extinct? (e.g. over-hunting, climate change, natural disasters, habitat loss etc...)*. Ask you students to compile a list of the examples they discussed and separate them into natural causes of extinction and human-influenced extinction.
  2. Ask your students do they know of any animals that can no longer be found in the wild in Ireland.
  3. Ask them to watch the videos, and think about why the animal went extinct and if it was a natural or human-influenced extinction.
  4. Once the videos are completed, the class can have a discussion on the animals they saw. Options for follow-up activities are below.
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## Options for Classroom Activity Follow-Up:

- Using the 3D Virtual Visit (link & instructions below) and map(s) provided (see below), students find the different animals featured in the videos.
- A classroom lesson or independent student research project. This can focus on the conservation and re-introduction of a large predator to the Irish countryside, using the case study of the white-tailed eagle Re-introduction Project in Co. Kerry. The project should focus on the pros and cons of the re-introduction of a large predator to the Irish ecosystem. See the Useful Websites and Resources list below for more information on this project.

## 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 the image below:



**Image 2: 3D Virtual Visit – Expand to Fullscreen**

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



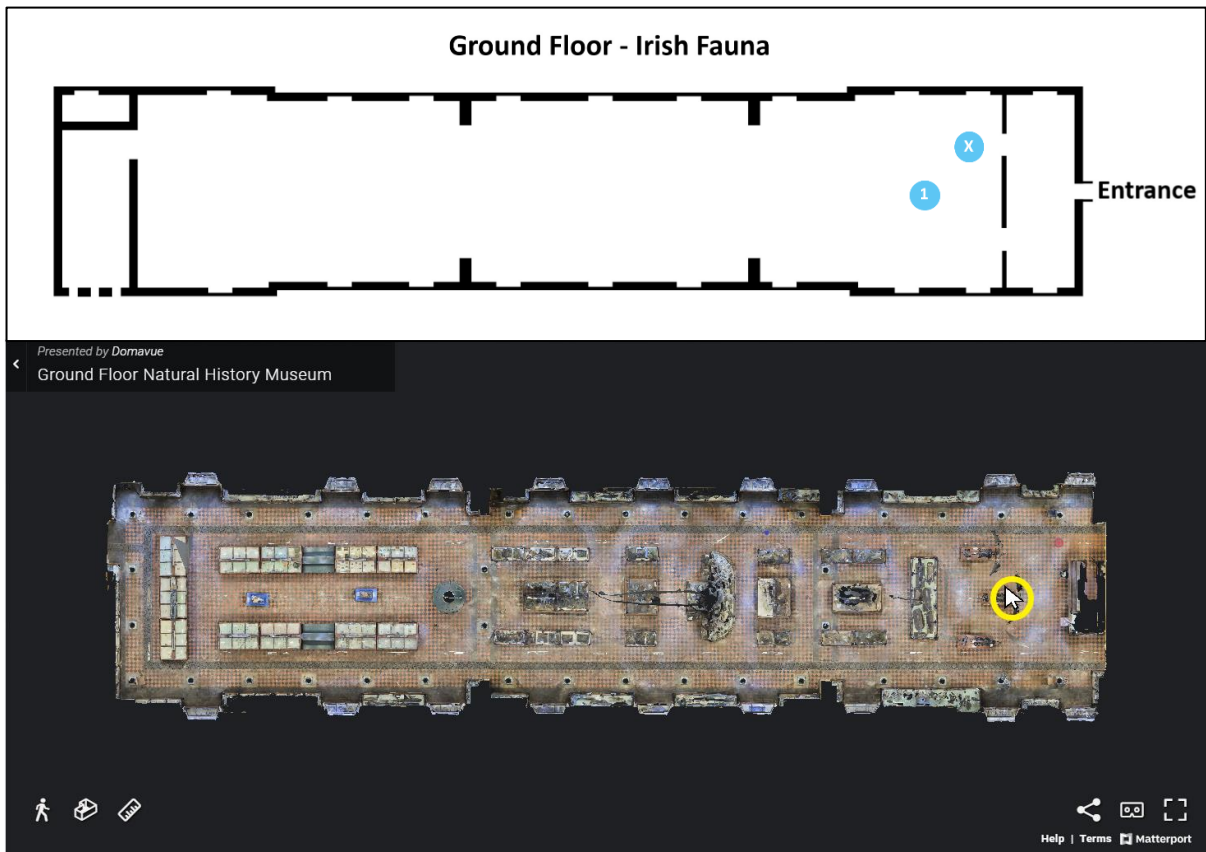
- Double-click any area on the floor of the museum to move your virtual position and get different views and perspectives on animals.
- Double-click on the walls, cabinets, or animals to zoom in for a closer view.
- To navigate to a different animal represented on your map, click the Floorplan icon which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



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



**Image 4: 3D Virtual Visit – Floorplan View**



**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**

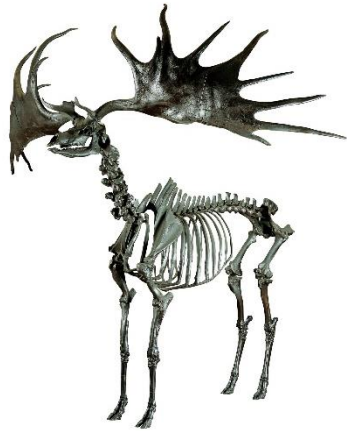
- Once the Ground Floor map has been completed, press the “Esc” key on your keyboard to exit out of full screen mode. Scroll down the webpage to the First Floor – Mammals of the World. Click play, and once the 3D Virtual Viewer launches, click the floorplan icon and navigate to the area corresponding with the next animal of interest on the map(s) provided. Use the features of the viewer to examine this animal.
- Play around and explore!

Maps:

Ground Floor – Irish Fauna

**X** You Are Here

**1**



**Giant Irish Deer**



Ground Floor - Irish Fauna



First Floor – Mammals of the World

X

**You Are Here**

2



**Thylacine**

3



**Grey Wolf**

4



**Spotted Hyena**

# First Floor - Mammals of the World



Second Floor – First Balcony – Fishes, Birds and Reptiles

**X** You Are Here



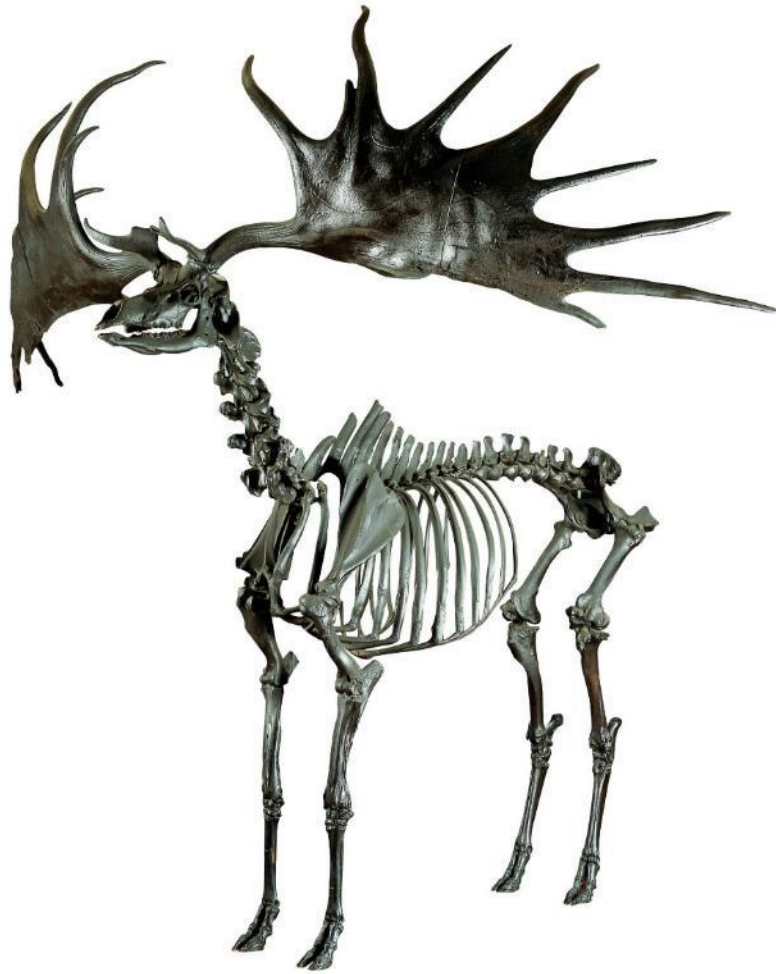
**5**

**Dodo**

Second Floor - First Balcony- Fishes, Birds and Reptiles







Images of Featured Animals:

**Image 7: Giant Irish Deer Skeleton**



Image 8B: Spotted Hyena visible on 3D Virtual Visit



Image 8B: Spotted Hyena – See fossil jawbone found in Cave in Co. Cork to the lower left)



Image 9: Grey Wolf





**Image 10A: Thylacine**



**Image 10B: Thylacine visible on 3D Virtual Visit**



Image 11A: Dodo visible on 3D Virtual Visit



Image 11B: Dodo

### Useful Websites and Resources:

- The IUCN RedList of Threatened Species: <https://www.iucnredlist.org/>
- National Parks and Wildlife Service – information page on the white-tailed eagles - <https://www.npws.ie/research-projects/animal-species/birds/white-tailed-eagle-phase-2>
- “How Wolves Change Rivers”: A 4min30s YouTube Video based on TED Talk by George Monbiot. Note, some terminology used in this video is very advanced and aimed at an adult



audience. However, the images and story are excellent  
<https://www.youtube.com/watch?v=ysa5OBhXz-Q>

## Featured Video Resource Transcriptions:

### Giant Irish Deer

Video Length – 01:39

Time stamp	Audio Transcript: Museum Educator Emma speaking
00:05	<p>One of the most amazing things you can see at the museum are these giant <b>skeletons!</b> Have you seen a similar-shaped animal anywhere in Ireland before? You may have seen deer, such as the Red Deer in Killarney National Park in Co. Kerry, or the Fallow Deer in The Phoenix Park in Dublin.</p> <p>These are the fossil skeletons of <i>another</i> type of deer that also used to live right here in Ireland, The Giant Irish Deer. These amazing animals roamed the grasslands of Ireland over 10,000 years ago! Unfortunately, we can't see them today because they are <b>extinct</b>.</p>
00:46	<p>So, how do we know that they lived here in the past? We know this because their fossil skeletons were found under the bogs in Ireland! Scientists think that these Giant Irish Deer went extinct even before humans arrived in Ireland, and some think that they went extinct as a result of natural <b>climate change</b>.</p> <p>There was a long period of cold in Ireland about 10,000 years ago which lasted for 500 years. During this time, Ireland was covered in a blanket of ice and snow. Plants disappeared and the deer could no longer find food to survive, so they eventually went extinct.</p>

## Hyena

Video Length – 01:17

Time Stamp	Audio Transcript : Museum Educator Emma speaking
00:05	<p>This jawbone belongs to an animal that used to live in Ireland over 30,000 years ago! Look at those sharp teeth! This is a <b>fossil</b> which was found in a cave in Co. Cork, and it belonged to a spotted Hyena, like this one from modern day Africa.</p>
00:25	<p>Ireland was once home to hyenas, brown bears, and even woolly mammoths! At the museum we have <b>evidence</b> that all of these animals once lived in Ireland. They came to Ireland by walking from Europe! Back then, the sea levels were much lower, and that meant there were “land-bridges” between neighbouring countries.</p> <p>When the sea levels rose over many thousands of years, Ireland became cut-off from other countries. When the climate changed during the Ice Age, many of these animals could no longer survive in Ireland and were unable to move back to warmer parts of Europe. This is how many of these animals became <b>extinct</b>.</p>

## Dodo

Video Length – 02:00

	<b>Audio Transcript: Museum Educator Emma speaking</b>
00:05	Extinction is not just something that happened in the ancient past. Some animals have gone <b>extinct</b> in much more recent times. This is one of the rarest <b>specimens</b> in our museum collections. It is a skeleton of a Dodo bird!
00:22	The Dodo was one of the first animals known to go extinct due to human actions in modern history. The Dodo was a large bird which lived on an island called Mauritius in the Indian Ocean. After spending many generations living on the island with no <b>predators</b> , Dodos became flightless, and developed a ground-living, ground-nesting lifestyle, with no need to fly to escape predators.
00:50	All was well until the 1600s, when humans began visiting the island as a stop on their round-the-world sailing explorations. Ships carried rats to the island, and they began to eat the Dodo's eggs. These flightless birds were easy to hunt and provided a good source of fresh food for sailors after months at sea. With no way of escaping these new predators, the Dodo eventually became hunted to extinction in 1688.
01:21	Very few specimens exist in museums around the world. We only know what they looked like from early drawings and paintings that were made in the 1600s, most of which are now thought to be inaccurate! Only one <b>taxidermy</b> , or stuffed specimen of the Dodo exists today at the Oxford University Museum of Natural History, and only the head and one foot still survive. The Dodo remains one of the most famous examples of extinction caused by humans.

## Thylacine

Video Length – 01:49

Time Stamp	Audio Transcript: Museum Educator Emma speaking
00:05	This animal, the very unusual Thylacine, is one that went <b>extinct</b> in recent times. Other names include the “Tasmanian tiger” or “Tasmanian wolf”. If you take a closer look, you can see why. It looks like a dog or wolf-shaped animal, with stripes along its back like a tiger!
00:24	They lived in Australia and on an island called Tasmania. Although it looks like a dog, this animal was actually a closer relative of animals such as the kangaroo and the koala! It was a <b>marsupial</b> , meaning it had a pouch to carry its young.
00:39	When Europeans travelled to Australia and Tasmania in the 1800s, they brought animals such as sheep to farm. But Thylacines were thought to be sheep-hunters and soon rewards were offered by the government to anyone who would hunt and kill a Thylacine. As a result, many Thylacines were hunted, and by 1914 they were considered a rare species.
01:04	People began to realise that perhaps some of these animals should be protected or kept in zoos. However, humans knew very little about how to keep them, and they were declared extinct in 1933 when the last known Thylacine died in Hobart Zoo in Tasmania.
01:23	Only under 800 specimens are found in museums around the world today, and we are lucky enough to have some here. We use the Thylacine as an important reminder of the impact that humans can have on nature, and what can happen when we don’t work hard to protect a species.



## Wolf

Video Length: 03:27

Time Stamp	Audio Transcript: Museum Educator Emma Speaking
00:05	<p>When we think of extinction, we imagine animals that are <b>extinct</b> throughout the world and can no longer be found anywhere today. But did you know that an animal can be extinct from just one part of its natural range? This happens when an animal becomes extinct in one area but can still be found in other areas. This is called "<b>local extinction</b>".</p>
00:32	<p>This animal is called the Grey Wolf, and although it can be found in other parts of the world, it has become extinct in Ireland. Did you know that wolves used to live in Ireland? The Irish word for wolf is "Mac Tire", meaning "son of the land". There is <b>evidence</b> of wolves living in Ireland from about 30,000 years ago, long before humans arrived, and they continued to live alongside us right up until 1786. There are many mentions of wolves in Irish legends, and in many Irish place names and surnames. Under English rule, the government saw the presence of wolves in Ireland as a bad thing, and they began to try to get rid of them. Rewards were offered to anyone who killed a wolf. Soon their numbers declined, and it is thought that the last wolf in Ireland was shot in 1786 on Mount Leinster on the Wexford/Carlow border.</p>
01:38	<p>Though wolves are now extinct in Ireland, they still live in many other countries around the world. Recently, they have even been <b>reintroduced</b> or put back into areas where they used to live. Protecting an animal like this is known as <b>conservation</b>. Examples of wolf reintroductions include Yellowstone National Park in America, and France and Spain. Can you think of any reasons why it might be important to save or return extinct animals?</p>
02:12	<p>One reason is that they have an important job; keeping nature in balance. Wolves hunt deer, and without wolves, deer numbers can go very high, and those deer eat too many of the plants and trees, which then stops other animals from living in the same area. Wolves help keep deer populations at healthy levels and hunt the weak and sick deer, so the herds are healthier overall. A great example is Yellowstone in America where they were reintroduced in 1995. Wolves have made the entire habitat a healthier one with more wildlife than before. However, wolves need an awful lot of wild habitat and space to live in, and the Irish countryside has changed a lot in the last 200 years. There are much less forests and wild spaces, and many more farms and houses. Some people have spoken about the idea of maybe returning or reintroducing wolves to Ireland. Do you think it would be a good or bad idea and why?</p>