Lesson Plans

museum
National Museum of Ireland
Ard-Mhúsaem na hÉireann
Natural History

Title of the lesson	**Extinction- Who's to Blame? Tour**
Duration	60 mins
List of resources supplied by NMI	Handling items (grey wolf, elephant tusk). Pencil, clipboard, note paper, extinction exercise sheet.
Aims	Investigate extinction- definition of extinction, stages of extinction, looking at why species become extinct, evolution and extinction, "living fossils", mass extinctions, human impacts on species.
Keywords	Extinction, stages of extinction, endangerment, extinct in the wild, local extinction, global extinction, mass extinction, conservation, palaeontology, fossil, era, epoch, Ice Age, Palaeozoic, Jurassic, Climate Change, species, habitat, ecosystem, evolution, adaptation.
Instructional input	Tour: ***Intro talk- At Giant Irish Deer*** Introduce topic- extinction & its forms: (10 mins approx) • Stages of extinction- endangerment, extinct in the wild, local extinction, global extinction • Mass extinction- definition of and examples • Case Study of Giant Irish Deer- unsure of extinction in Ireland • Different layers & different fossils- how we age fossils, geological timescales • Linking fossils and eras (Dinosaurs & Jurassic, Ammonites & Carboniferous etc.) • What scientists can tell looking at a fossil (animal or plant type, size, possible habitat, how they moved, diet) • Looking at Giant Irish Deer to illustrate all three points ***Irish Room*** • Golden Eagle and White tailed Eagle- extinction & reintroduction • Brent Goose- stay on longer in Greenland as summer there is lengthening, over-wintering in Ireland getting shorter? Climate change disturbing migration patterns? • Sun Fish- Dependence on Gulf Stream to travel to Ireland, climate change may mean loss if Gulf Stream- animal vulnerable to climate change • Handling Item: Grey wolf (in Discovery Zone) - hunted to extinction

Instructional input cont.	***First Floor*** • Giant Panda • Handling Item: Big cat skulls (in Reading Area or Discovery Zone is member(s) of group are mobility impaired) • Thylacine (Tasmanian wolf, Tasmanian Tiger, Tassie tiger)- recent extinct mammal, last know individual died Hobart Zoo in 1936, officially declared extinct by the International Union for Conservation of Nature in 1982. • Whales- hunting & whaling in Asia • Giraffe- Rothschild's giraffe added to Red list August 2010- first giraffe species to be listed as endangered • Handling Item: Elephant tusk- ivory trade End with summary
Independent practice	Practical- Extinction exercise sheet This exercise sheet is an aid to note taking for the students as they follow the tour around the different exhibits. Animals visited on the tour are listed and a short paragraph on each to serve as a memory aid. Use of exercise sheet is optional and at the discretion of the teacher. Discussion & debate throughout tour.

Curriculum ties:

Junior Cert:

Civic, Social and Political Education (CPSE) Action Project, Concepts Stewardship and Development

Environmental and Social Studies (ESS) Section 2: People in their Environment

Transition Year (TY):

Transition Units e.g. Environmental Studies/ Environmental Awareness and Care, Debating Development (Climate Change)

Leaving Certificate Applied:

General Education (Social Education)

Elective Modules (Science- Ecology)

Student Tasks (Contemporary Issue Task)

Leaving Certificate Established:

Biology (1.4. General Principles of Ecology; 1.5. A Study of an Ecosystem)

Geography (Elective Unit 4: Patterns and processes in economic activities, Optional Unit 6: Global interdependence and Optional Unit 7: Geoecology)

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