**Schools’ Mammal Challenge Session Plan**

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| **Summary** |
| Activities for mixed-age children as part of the Schools’ Mammal Challenge, local mammals, the importance of monitoring for data on wildlife, and the ways to monitor and ID local wildlife.  Information on the Schools’ Mammal Challenge can be found here: [Schools Mammal Challenge — Mammal Society](https://www.mammalsociety.org.uk/schools-mammal-challenge)  This session plan gives suggested objectives and activities for participating in the Schools’ Mammal Challenge – you are not expected to complete all the activities. Please feel free to adapt or modify as you see fit. |

**Learning objectives**

**Nursery/pre-school:**

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| **Objective** | **Target** | **Approach** |
| Understand the meaning of the term mammal | Able to explain the unique characteristics of mammals.  Understand the terms ‘nocturnal’ and ‘diurnal’ | Class discussion on mammals they know, and what they have in common, classification sorting exercise |
| Understand why and how surveying mammals is part of conservation | Able to describe and demonstrate different techniques for monitoring UK mammals | Open discussion about how to detect mammals.  Use of trail cameras, footprint tunnels and #mammal mile activity. |
| Practice using the scientific method | * Make a hypothesis * Record data | Hypothesis for what animals we might detect using the footprint tunnel and trail camera.  Discussion of how we might use what we find. |

**KS1/2**

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| **Objective** | **Target** | **Approach** |
| Understand mammals’ place in the ecosystem | Able to explain connections between mammals, other animals, and landscape | Group activity to discuss and name as many mammals that might be found in local landscape.  Consider food, and predators, and effect it might have to remove one or more. |
| Survey techniques | Understand and apply surveying techniques for UK mammals | Open discussion about how to find mammals, gamification of survey techniques.  Use of trail cameras, footprint tunnels and #mammal mile activity. |
| Practice using the scientific method | * Make a hypothesis * Demonstrate data handling | Hypothesis for what animals we might detect using the footprint tunnel and trail camera.  Discussion of how we might use what we find |
| Become aware of jobs in conservation | Demonstrates awareness of possible career pathways in conservation | Discuss different skills needed for conservation – biology, maths, research, IT, landscaping, project management, communication |

**KS3/4**

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| **Objective** | **Target** | **Approach** |
| Understand the problem of data deficiency | Able to explain why we lack data on mammal populations and why this is an issue. | Group discussion with reference to state of nature report data.  Discussion of mammals present in local landscape and their conservation status. |
| Survey techniques | Understand and apply surveying techniques for UK mammals | Open discussion about how to find mammals, gamification of survey techniques.  Use of trail cameras, footprint tunnels and #mammal mile activity. |
| Practice using the scientific method | * Make a hypothesis * Demonstrate data handling | Hypothesis for what animals we might detect using the footprint tunnel and trail camera.  Discussion of how we might use what we find – on a local and national scale.  Design long-term monitoring methods for the school ground. |
| Become aware of jobs in conservation | Demonstrates awareness of possible career pathways in conservation | Discuss different skills needed for conservation – biology, maths, research, IT, landscaping, project management, communication |

**Activities**

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| Schools’ Mammal Challenge Activities | | |
| **Time required** | **Activity** | **Supporting resources** |
| 10-20 mins | **Introduction to Mammals**  Can anyone say what a mammal is?  Can anyone give any examples of mammals? Local mammals?  Classification game: Mammals, birds, amphibians and reptiles  (each corner of room designated for one of the classifications. Children listen to the info about an animal and decide which corner to move to for each.  What do all mammals need to do? (Eat, drink, sleep, hide, breathe, meet up with others, give birth)  Why might mammals be hard to find? (Hiding from predators / sneaking up on prey / sleeping somewhere sheltered to stay warm / only coming out at night)  If we see a mammal, we know there’s that kind of mammal in that habitat. What if we don’t see one – do we know there aren’t any? (no – could be unseen).  What other ways of telling if mammals are there or not? (Think of what they do!)  (feeding signs, poo, tracks, burrows/dens, photos taken by night, trapping animal)  Why are mammals difficult to monitor? (elusive, nocturnal etc.)  Are mammal populations doing well? (No! 1 in 4 native mammals are threatened with extinction) | [Mammal Facts Database](https://www.mammalsociety.org.uk/s/Mammal-Facts-Database.xlsx)  [State of Nature Report](https://stateofnature.org.uk/) |
| 1 hour | **Activity 1: #MammalMile**  Group Formation: Divide students into small groups and assign each group a specific area for observation you may wish for this to be a short transect (a line along which they collect data) the  total distance of all transects should equate to roughly 1 mile.  Observation: Instruct students to walk quietly, observing for signs of mammal activity such as tracks, droppings, burrows, or nests. They may wish to draw, describe, or photograph signs they are not familiar with emphasise the importance of detailed notes and thorough documentation.  Data Collection: Encourage students to record their observations accurately using the free Mammal Mapper app. (This can be done in the field or back in the classroom, if this isn’t feasible get the students to create their own observation table)  Discussion: Facilitate discussions about the significance of their observations and potential implications for mammal conservation. | [Educators Guide](https://www.mammalsociety.org.uk/s/Schools-Mammal-Challenge-2024-Educators-Pack.pdf)  [Tracks and signs resource](https://www.mammal.org.uk/tracks-and-signs-2/)  [Mammal poo resource](https://www.mammal.org.uk/mammal-poo/)  [KS1 research activity](https://www.mammal.org.uk/ks1-mammal-signs-research-activity/) |
| 30-45 mins | **Activity 2: Trail Cameras**  Camera Placement: Divide students into small groups and assign each group a specific area for camera deployment. (If cameras are limited you could ask each group to pitch why their location will be the most suitable and take a class vote.)  Setting Up Cameras: Students can experiment with using soft toys/teddys as mock animals – testing out the images captured as they move the toys around like mammals. Once they are happy leave the camera traps set up overnight.  Data Collection: Encourage students to review captured images or videos, identifying mammal species and recording relevant information such as behaviour, time of day, and environmental conditions.  Data Management: Organise and catalogue data collected from camera traps, documenting species sightings and any notable observations or patterns. Add your sightings to the mammal mapper app! | [Educators Guide](https://www.mammalsociety.org.uk/s/Schools-Mammal-Challenge-2024-Educators-Pack.pdf)  [Mammal Web resources](https://www.mammalweb.org/en/community/schools)  [Securing camera traps – blog](https://www.mammalsociety.org.uk/blog/2023/08/securing-your-camera-trap) |
| 30-45mins | **Activity 3: Footprint tunnels**  Make footprint tunnels  Tunnel Placement: Assign students to small groups and designate specific locations for deploying footprint tunnels. Get them to “think like mammals”, where will small mammals be moving/travelling?  Setting Up Tunnels: Provide instructions for assembling and baiting the footprint tunnels, ensuring proper placement and alignment. Leave overnight / for a few nights. If possible, set up a camera trap to observe who visits your tunnel!  Footprint Analysis: Guide students in examining collected footprints, identifying species based on characteristic tracks and patterns.  Documentation: Encourage students to record their observations, including species identifications, date and time of visits, and any notable behaviours or interactions | [Educators Guide](https://www.mammalsociety.org.uk/s/Schools-Mammal-Challenge-2024-Educators-Pack.pdf)  [Step by step guide to making footprint tunnels](https://www.mammalsociety.org.uk/blog/mammal-monitoring-methods-footprint-tunnels)  [PTES Hedgehog tunnel guidance](https://ptes.org/wp-content/uploads/2019/02/Guidance-for-farmers-on-detecting-hedgehogs-using-tracking-tunnels.pdf) |
| 20-30 mins | **Follow-up activities**  Find out more about the species you’ve identified – what is their conservation status? What habitats do they like? How could you improve your school ground for them?  How could you monitor mammals’ regularly? Produce a plan for mammal monitoring at your school. Set up a local mammal group  Present your findings and raise awareness of mammals in your school ground – hold an assembly, produce leaflets, share the news with your community.  Find out about careers in conservation. | [Local groups resources — Mammal Society (squarespace.com)](https://mammal-society.squarespace.com/local-groups/resources) |