



70 years of the
Mammal Society

Schools' Mammal Challenge

National Mammal Week
22nd - 28th April 2024



We need your help!

1 in 4 of our native mammals are threatened with extinction. Mammals are under-recorded which hampers conservation efforts.

You and your school can help provide vital data on mammal populations. You have access to a habitat no one else is better placed to monitor - your schoolground.

Engaging students in mammal recording activities not only enhances their scientific literacy and field skills but also instils a sense of stewardship for the environment.

By highlighting the importance of mammal conservation and the need for accurate data collection, educators can empower students to become advocates for wildlife protection and champions of biodiversity conservation.

National Mammal Week (22nd – 28th April 2024) is an opportunity to celebrate mammals and mammal recording. This year we'd love to get schools involved by entering your school in the Schools' Mammal Challenge!

Enter your school in the challenge [here](#).

In this challenge pack, we will guide educators through three activities to start monitoring mammals:
#mammalmile, setting footprint tunnels, and using camera traps.

Looking for more guidance?

We are hosting a free webinar for educators on **Monday 8th April at 4pm**. This session will guide you through these activities and answer any questions you may have ahead of Mammal Week.

Live Lessons

Join us on **Monday 22nd April at 2pm** to introduce the challenge to your learners and answer questions about mammals and mammal recording.

On **Friday 26th April at 11am**, we'll be celebrating efforts made during Mammal Week and awarding our Mammal Monitoring Champions prizes.

*Sessions will be take place on Zoom and livestreamed to YouTube. Links to all these events will be sent to all schools registered for the challenge.

Awards and Recognition

Will be encouraging participating schools to share and celebrate their efforts on social media to be in with a chance of being awarded one of our School's Mammal Challenge awards!

Please use the hashtag #SchoolsMammalChallenge. You can also share your efforts directly with Fiona, our Education and Training officer via email (fiona@mammal.org.uk).

All schools participating will have access to downloadable certificates which can be awarded to participants.

Participating schools can also sign-up to receive a FREE "Mammals in your Landscape" poster later in the year.

Mammal Monitoring Champions:

Schools who go above and beyond in National Mammal Week will each receive a special trophy.

Mammal Monitoring Champions will also be able to book a 30-minute live lesson with Mammal Society staff, before the end of term. This will be an opportunity to hear from us about why mammals matter, and the work of the Mammal Society. Plus ask any questions you might have about mammals, mammal monitoring, or careers in conservation!

This will take place via Zoom/Teams at a time that suits you.



Curriculum links

By integrating the activities into the curriculum at various stages, students can develop a holistic understanding of mammal ecology, conservation principles, and scientific inquiry, preparing them for further study and engagement with environmental issues.

Key Stage 1 (KS1) - Ages 5-7:

Science: Introduce basic concepts of living things and their habitats through discussions about mammals and their characteristics.

Geography: Explore local environments and habitats where mammals might be found, fostering an understanding of the natural world.

English: Encourage students to describe their observations and experiences during outdoor activities, developing language skills and vocabulary related to mammals and their habitats.

Key Stage 2 (KS2) - Ages 7-11:

Science: Investigate the life processes of living things, including mammals, and explore the concept of habitats and adaptation.

Geography: Study local and global ecosystems, understanding the interdependence of living organisms and their environments.

Mathematics: Utilise data collected during activities for basic statistical analysis, introducing concepts of data handling and interpretation.

English: Develop communication skills through recording observations, writing reports, and participating in group discussions about mammal monitoring and conservation.

Key Stage 3 (KS3) - Ages 11-14:

Science: Explore more advanced topics in ecology, biodiversity, and conservation, understanding the role of mammals within ecosystems.

Geography: Investigate environmental issues and sustainability, analysing human impacts on habitats and wildlife populations.

Mathematics: Apply statistical techniques to analyse larger datasets collected during monitoring activities, fostering quantitative reasoning skills.

English: Engage in critical thinking and reflection through writing about ethical considerations and the importance of conservation efforts.

Key Stage 4 (KS4) - Ages 14-16 (GCSE Level):

Biology (GCSE): Study ecosystems, biodiversity, and conservation biology, applying knowledge of mammal monitoring techniques to practical investigations.

Geography (GCSE): Investigate environmental challenges and management strategies, exploring the impact of human activities on mammal habitats and populations.

Mathematics (GCSE): Analyse complex datasets using statistical methods, interpreting trends and patterns in mammal distribution and abundance.

English (GCSE): Develop analytical and persuasive writing skills through discussions about conservation issues and the importance of biodiversity.

Post-16 Education (A-level):

Biology (A-level): Explore advanced concepts in ecology, population dynamics, and conservation biology, conducting independent research on mammal monitoring and conservation projects.

Geography (A-level): Investigate environmental systems and processes, analysing the spatial distribution of mammal species and their interactions with human land use.

Mathematics (A-level): Apply mathematical modelling techniques to predict population trends and assess the effectiveness of conservation measures for mammal species.

English (A-level): Critically evaluate scientific literature and policy documents related to mammal conservation, developing persuasive arguments and written communication skills.

Activity 1: #mammalmile

Mammals play a crucial role in ecosystems, yet many species are poorly monitored. Your students' observations and records will help scientists understand mammal distribution, abundance, and conservation status.

Preparation:

- If possible, choose diverse locations for the mammal mile, considering habitats like woodlands, fields, or urban parks.
- Safety: remind students to stay together, respect wildlife, and be mindful of their surroundings. Please ensure you have conducted a risk assessment – see our template [here](#).
- Introduce mammal tracks and signs – you may wish to have a look at our mammal tracks and signs resources [here](#).
- Watch our introductory presentation [here](#). Or deliver it yourself [here](#).

Equipment and Materials:

- Notebooks, pencils, and binoculars (if available).
- Download the Mammal Mapper app for data collection. All data can be uploaded from one device, learners do not need to use their personal phones.
- FSC Mammal tracks and signs ID guide (optional, available to buy online)

Activity Procedure:

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.

Activity 1: #mammalmile

Data Collection and Analysis:

Encourage students to analyse their findings, looking for patterns and trends in mammal sightings or signs.

You may need to conduct research to identify some of the signs observed.

If you are really stuck, please send photos of any tracks or signs you need help identifying to fiona@mammal.org.uk. We will consult our Mammal Society experts and get an answer to you! Please ensure you have a good field picture, including a ruler for scale, a clear and close image of the sign and details of where it is from.

Foster collaboration by comparing data with other groups or schools.

Follow-Up Activities:

Visualise data through mapping or charting exercises.

Research specific mammal species and discuss conservation strategies.

Reflect on the experience and consider future monitoring initiatives.

Activity 2: Camera Traps

Camera trapping is a non-invasive method used to monitor mammal populations by capturing images or videos of animals in their natural habitats. By deploying camera traps, students can observe mammal behaviour and contribute to scientific research on local biodiversity.

Preparation:

- Select suitable locations for camera placement, considering areas with known mammal activity or diverse habitats.
- Ensure permission is obtained if deploying cameras on private or protected land.
- **Safety:** remind students to stay together, respect wildlife, and be mindful of their surroundings. Please ensure you have conducted a risk assessment – see our [template here](#).
- [Watch](#) or [deliver](#) our introductory presentation.

Equipment and Materials:

- Camera traps, batteries, and memory cards. (If your school does not have camera traps you can try your local mammal group, local record centre, or ask us and we'll see how we can help!)
- GPS devices or maps for recording camera locations.
- Notebooks and pencils for documenting observations.

Activity Procedure:

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!

Activity 2: Camera Traps

Data Analysis and Interpretation:

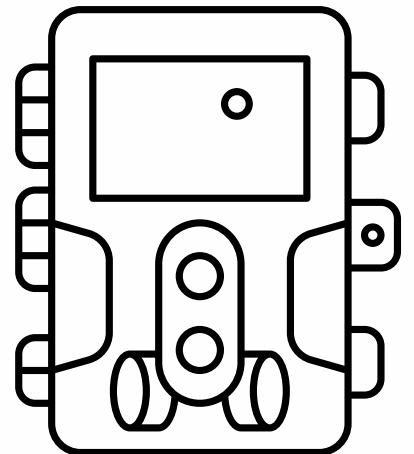
Guide students in analysing camera trap data, identifying trends in mammal activity, habitat preferences, and potential ecological interactions.

Encourage critical thinking and hypothesis testing based on observed patterns and correlations.

Follow-Up Activities:

Explore additional research questions or hypotheses generated from camera trap data.

Engage students in discussions about the importance of monitoring mammal populations for conservation and ecosystem management.



Activity 3: Footprint tunnels

Footprint tunnels are triangular baited tubes designed to capture footprints of small mammals, birds, and other wildlife. By deploying footprint tunnels, students can gain valuable insights into the diversity and abundance of mammal species in their local environments.

Preparation:

- Prepare your footprint tunnels: You can buy tracking tunnels from various sources ([WildCare](#)). Alternatively, you can opt to make them yourself (see below)
- Decide on suitable locations for footprint tunnel deployment, considering areas with diverse habitats and potential mammal activity.
- Safety: remind students to stay together, respect wildlife, and be mindful of their surroundings. Please ensure you have conducted a risk assessment – see our [template here](#).
- [Watch](#) or [deliver](#) this introductory presentation.

Equipment and Materials:

- Footprint tunnels.
- Bait to attract mammals to the tunnels.
- Ink pads/charcoal solution and paper for recording footprints.
- Notebooks and pencils for documenting observations and findings.

Activity Procedure:

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. You may wish to have a look at our [mammal tracks and signs resources](#) here.

Documentation: Encourage students to record their observations, including species identifications, date and time of visits, and any notable behaviours or interactions.

Activity 3: Footprint tunnels

Data analysis and Interpretation:

Facilitate discussions on the significance of footprint data in assessing mammal presence and activity levels.

Encourage students to analyse trends and patterns in footprint occurrences, drawing connections to habitat preferences and environmental factors.

Follow-Up Activities:

Explore additional research questions or hypotheses arising from footprint data analysis.

Engage students in discussions about the role of tracking techniques in mammal conservation and biodiversity monitoring.

Making footprint tunnels:

There are two styles of footprint tunnel you can make.

“Hedgehog” tunnels consist of one long tunnel where the small mammal walks through a charcoal power solution leaving footprints on paper when accessing bait.

Guidance on making these can be found [here](#).

These are best placed alongside hedges or structures like walls/fences. And are usually baited with wet cat/dog food.

Another option is a “small mammal tunnel or box”.

Small mammal tunnels are little square tubes or boxes with multiple entrances/exits and bait in the middle surrounded by charcoal.

These give you the flexibility to position amongst vegetation and don't have to be placed alongside an edge.

For this bait using grain and live meal worms.