

# Eglinton Park STEM Trail

## Welcome to the Eglinton Park STEM trail!

Join Stemmie, the Eglinton Park dinosaur, on their adventure to learn more about the animals of Eglinton Park.

- |                         |                           |
|-------------------------|---------------------------|
| 1. MINIBEAST HUNT       | 7. WORM CHARMING          |
| 2. SIGNS OF WILDLIFE    | 8. FROG AND DUCK RACE     |
| 3. TRANSIENT ART        | 9. SOUNDS OF THE PARK     |
| 4. MOLE EXPLORERS' GAME | 10. WALKING WITH MAMMOTHS |
| 5. POOH STICKS          | 11. TREE MEASURING        |
| 6. BIRD WATCHING        |                           |



Scan the QR code to find different seasonal challenges to complete during the year.



**Start**

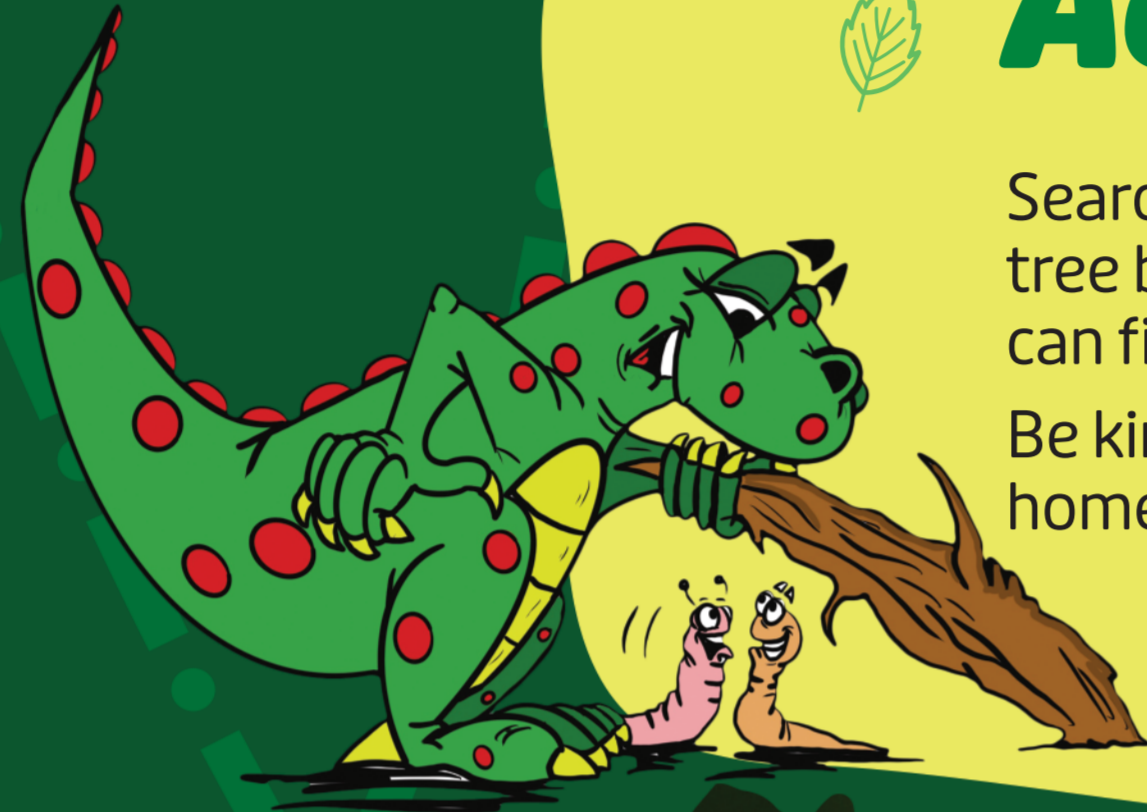
The Eglinton Park STEM trail is a collaborative project between the North Ayrshire Countryside Rangers and North Ayrshire STEM Education team.



# Activity

Search under logs, in leaf piles and holes in tree bark to see what minibeasts you can find.

Be kind to minibeasts and leave their homes as you find them.



Butterfly



Woodlouse



Bumblebee



Snail



Ladybird

# Minibeasts

- There are more than 24,000 different species of minibeasts in Scotland.
- Bumblebees and butterflies are pollinators.
- Woodlouse are natural recyclers that feed on dead plants and put nutrients back into the soil.
- Ladybirds are predators that feed on smaller minibeasts.
- Snails are prey for other animals.



When is a woodlouse not a woodlouse? Scan the QR code to find out.



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## Activity



Look on the ground, in the trees and under the bushes around you. What signs of wildlife can you see and hear?

Can you find spiderwebs, woodpecker holes or chewed pinecones?

If you listen carefully you might even hear a woodpecker drumming in the trees.

## Greater Spotted Woodpeckers

- Greater Spotted Woodpeckers curl their tongue behind their skull. This acts as a shock absorber to protect their brain when pecking a tree trunk.
- The pecking of a tree trunk is called 'drumming'. Woodpeckers do this to find food and to communicate with other woodpeckers.



Scan the QR code to hear a woodpecker drumming.



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## Activity

Can you make some transient art?  
Use natural materials to create pictures on the ground for others to find.



## Roe Deer

- The Roe Deer is our most common species of deer in Scotland and the only species found in Eglinton Park.
- The coat of a Roe Deer will change colour and texture throughout the year, starting thin and rusty red in the Spring and turning to a thick dark brown in the Winter.
- Roe Deer have short, stubby antlers with three points. Every year they will shed their antlers and grow a new set.

Scan the QR code for poems and stories about woodland animals.



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## Activity

Pretend you are a mole and the castle ruins are your network of tunnels.

Explore the 'tunnels'. Where might you store your earthworms? Where might you meet other moles?

Look out for signs of mole activity throughout the park. Can you find any mole hills?



## Moles

- Moles are adapted for burrowing. Their velvety coat helps them move easily through the soil and their mouth and nose point downward to stop soil getting in.
- Moles have very poor eyesight and navigate using their sense of smell while feeling for textures and small vibrations.
- Moles are known to create stores of earthworms in their tunnels for eating later.



How far can a mole burrow in 1 day?  
Scan the QR code to find out.



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## Activity

The bridge is a great spot for playing Poohsticks.  
Choose your stick, drop it in the water and watch it race under the bridge to the other side.  
Try sticks with different shapes and sizes.

## Animals of the River

- Animals use the river in lots of different ways.
- For the Kingfisher and Heron, the river is a place to fish for food.
- Bats feed on insects that are attracted to the water.
- Otters use the river as a path to move from place to place.
- Salmon and Sea Trout migrate from the sea into the river to lay their eggs in the oxygen rich waters.



Kingfisher



Bat



Heron



European Otter

How far do Salmon travel to lay their eggs? Scan the QR code to find out.



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# Activity

Sit quietly, wait and watch.  
What birds can you see?  
Use the natural materials around you  
to create a bird's nest to keep eggs  
and chicks warm.

## Birds

- There are 22 species of duck commonly seen in the UK. Of these, the Mallard is the most common.
- In winter, family flocks of Blue Tits join together to search for food.
- Male and female Robins look identical.
- The Gold Crest is the UK's smallest bird species. Their thin beaks are ideal for feeding on insects hiding between pine needles.



Blue Tit



Robin



Mallard Duck



Gold Crest

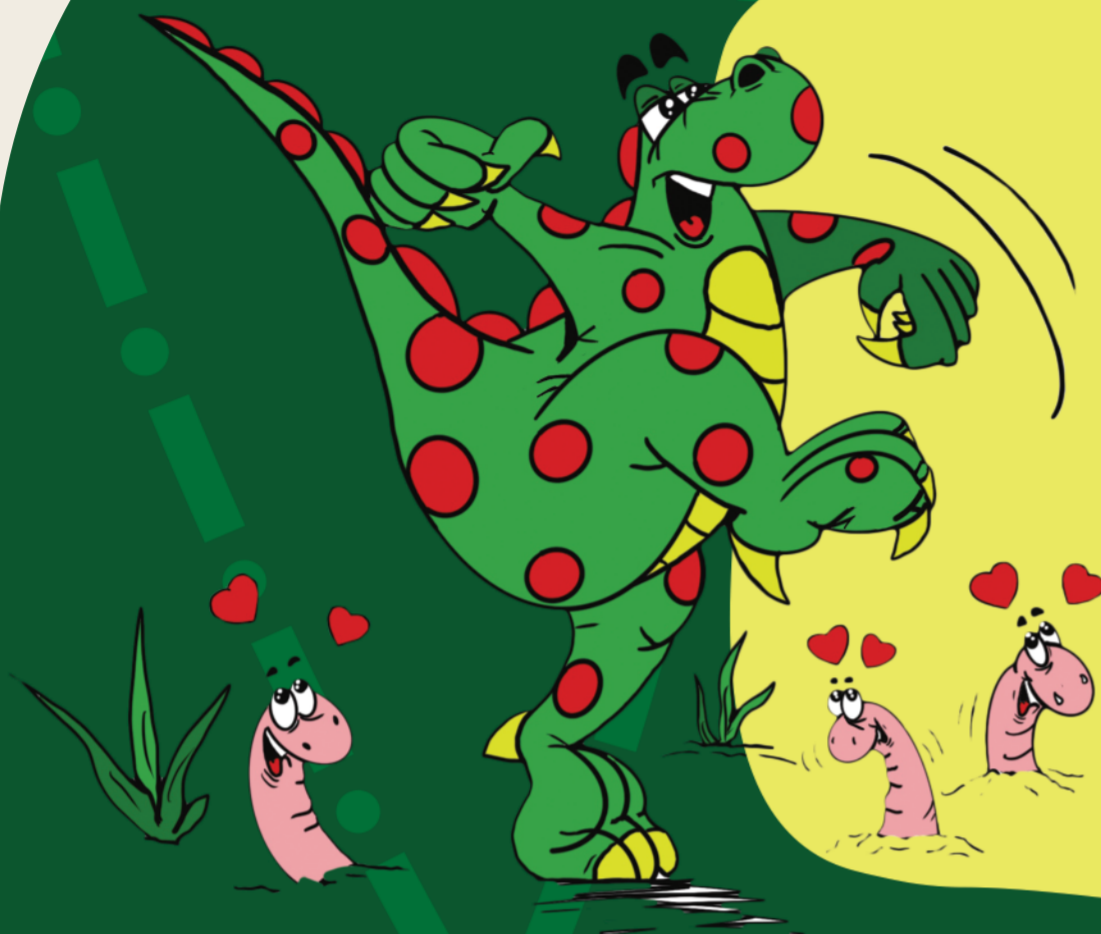
Which birds are only visitors to Eglinton Park? Scan the QR code to find out.



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## Activity

Have you ever 'charmed a worm'? Find a patch of grass and stomp your feet up and down for as long as you can.

Look to see if any worms have appeared. Remember to be kind to worms and let them burrow back underground.



## Worms

- Earthworms breathe through their skin, so they must come to the surface when it rains or risk drowning.
- Earthworms eat organic matter such as fallen leaves. Important nutrients that help plants grow are returned to the soil when worms poo!



Do worms really have 5 hearts? Scan the QR code to find out.



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## Activity

Who would win a race between a hungry duck and a frightened frog? Ask an adult to time how long it takes you to hop across the bridge like a frog.

Try again, but this time waddle like a duck. Will the frog escape, or will the duck catch its dinner?

## Amphibians

- Toads, frogs and newts belong to a family of animals called amphibians.
- Frogs can change their skin colour to blend in with their surroundings. They can also breathe through their skin as well as using their lungs.
- The Palmate Newt is the smallest newt in the UK.

*As you walk through the Yew trees on the other side of the bridge, keep your eyes peeled for some of the nocturnal animals of the park.*



Common Frog



Palmate Newt



Common Toad

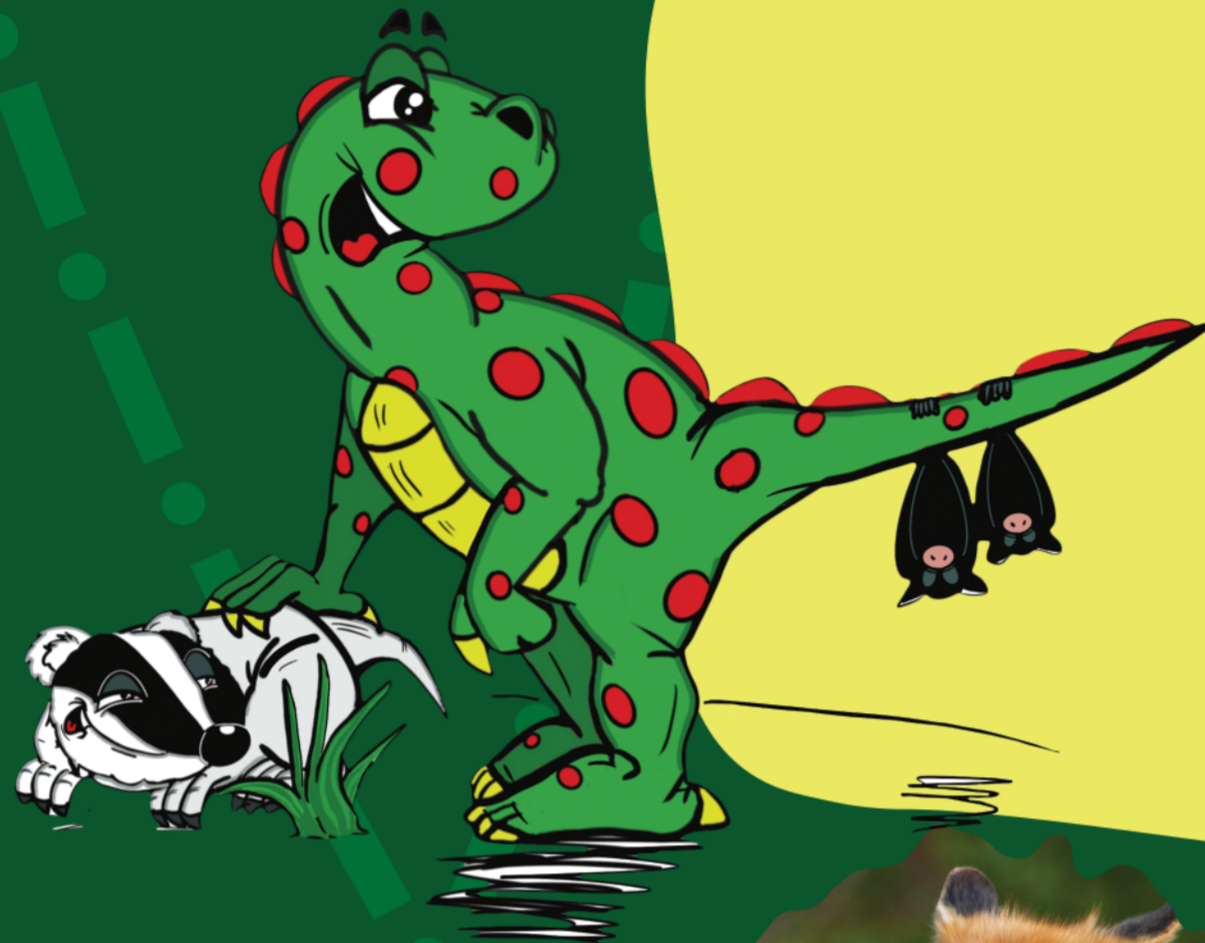
Scan the QR code to find out how toads avoid being eaten by predators.



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# Activity

Nocturnal animals rely on their sense of hearing to find prey or avoid predators. Close your eyes and listen to all the sounds you can hear.

What natural sounds can you hear?  
What human-made sounds can you hear?



Fox



Bat



Tawny Owl



Badger

# Nocturnal Animals

- Animals that are most active at night are called 'nocturnal'.
- Nocturnal animals of Eglinton Park include Pipistrelle Bats, Tawny Owls and Badgers.
- Foxes are not strictly nocturnal. They are crepuscular, meaning they are most active at dawn and dusk.

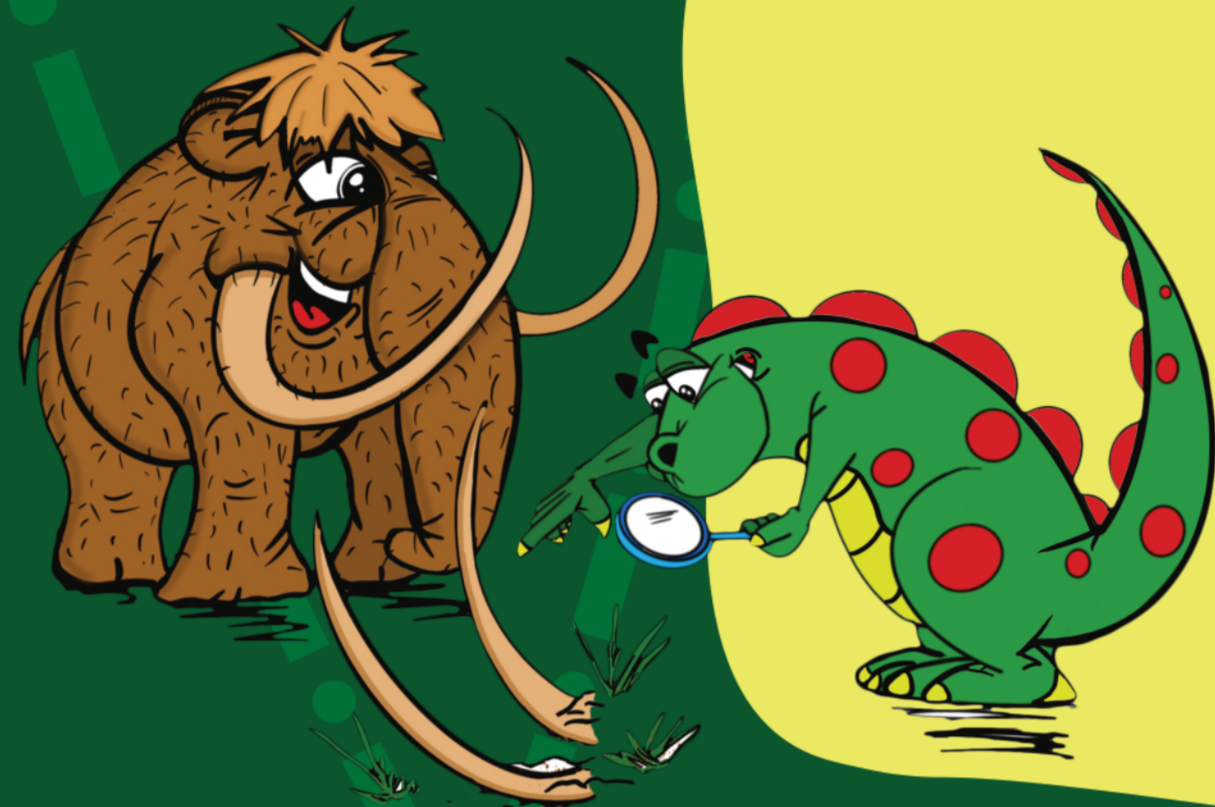
Which nocturnal animals sometimes live together? Scan the QR code to find out.



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## Activity

Woolly Mammoths grew to approximately 4 metres tall and had legs over 3 metres long!

A mammoth step was approximately 2.2 metres long. Use the mammoth footprints to count how many of your steps is equal to one mammoth stride.

## Woolly Mammoths

- Four different species of mammoth have been found in Britain, but only the Woolly Mammoth has been recorded in Scotland.
- Mammoths roamed the grounds of Eglinton Park as recently as 27 000 years ago.
- Fossilised mammoth tusks were found in Dregghorn and Kilmaurs in the 19th Century.



What other woolly animal roamed Eglinton Park? Scan the QR code to find out.



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## Activity

Find a large tree. Hug the tree with your arms spread out.

Can you guess how many hugs it will take for you to go round the tree? Now check.

Have someone stand next to the tree. Guess how many times you could fit a person in the height of a tree?



## Grey Squirrels

- Grey Squirrels were introduced to the UK in the 19th century and are now more common than the native Red Squirrel.
- In autumn, Grey Squirrels collect and store food to eat during the winter. A squirrel nest is called a 'drey' and is made of twigs, leaves, bark and grass.

Scan the QR code to find out how to measure the height of trees.



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# Bird ID board



Blackbird



Wood Pigeon



Wren



Heron



Long Tailed Tit



Crow



Gold Finch



Coal Tit



Magpie



Great Tit



Sparrow



Dunnock