



**GET  
INVOLVED  
TODAY!**

# **Creating Natural Connections Magnificent Mammals**



# CUMBERNAULD LIVING LANDSCAPE

**Cumbernauld Living Landscape is improving Cumbernauld's greenspaces for both people and wildlife, while helping everyone in the community connect with the nature on their doorstep.**

Cumbernauld is incredibly green and we believe that everyone should benefit from this. However, these green areas are often disconnected from one another and many are not as good for people – or wildlife – as they should be.

Without good quality, healthy places people and wildlife cannot flourish. Working closely with the local community, we need to ensure that healthy places are at the heart of the town's future. We will achieve this through a range of projects across the town, divided into four major workstreams.

**Improving Habitats and Access** – We're improving habitats for wildlife and making it easier for people to find and access these sites. We will also enable people to volunteer and take practical steps to conserve and improve these places.

**Connecting Young People to Nature** – We're providing opportunities for children to get involved in practical environmental projects and helping schools use the outdoors as part of their lessons.

**Promoting Green Health and Wellbeing** – It is now well established that access to the outdoors is vital for people's health. The Wild Ways Well project helps people, care practitioners and groups to use nature to manage their mental health.

**Unlocking Community Capacity** – We are unlocking and developing the skills of the community. By building relationships with groups and individuals and helping them to take action for nature we will ensure a legacy that will last beyond this project.

The lockdown is demonstrating just how important nature is to people's physical and mental health – but it is also making accessing greenspaces much more difficult. While our outdoor sessions are on hold we want to help people experience the benefits of nature on their own doorstep. This booklet contains ideas, inspiration, information and activities that anyone can try to help them connect with the outdoors. Perhaps they'll help you to see Cumbernauld's greenspaces in a new light. Remember to observe guidelines on social distancing and only access nature in your local area.

# What is a Mammal?

Ask yourself this question – what is a mammal?

Well – you’re a mammal so you should know! Mammals are animals with a spinal cord and warm blood. Most have the ability to give birth to live young and to feed them on a special substance called ‘milk’. They have three bones in their ears to transmit sound and a hinged lower jaw. All Mammals have hair on their body (even some whales have eyelashes!) and only mammals have hair. Within mammals there are three groups – the monotremes (platypus and echidna) which lay eggs; Marsupials (kangaroos etc.) which raise their young in pouches and placentals which give birth to live, well developed young (everything else, including us!).

## The characteristics of mammals:

1. Mammary glands to produce milk
2. Warm blood (and red blood cells with no nucleus)
3. Fur or hair
4. 3 middle ear bones and a hinged jaw
5. Prismatic enamel – specially shaped enamel structure strengthens the tooth
6. A specially shaped heart.

Mammals diverged from reptiles and birds about 300 million years ago, today there are around 5000 living species of mammals worldwide – no one knows the exact number! There are 53 species living wild in Scotland. We can split the mammals into groups called ‘Orders’ The largest orders are *Rodents*, *Bats* and *Eulipotyphila* (pronounced **you-lee-poty-fya** - these guys are Hedgehogs, moles and shrews, surprised they are not classed as rodents eh? Me too!) The other 3 Orders in Scotland are *Primates* (which you and I are part of), *Carnivora* (dogs, cats and seals!) and finally, *Cetartiodactyla* (pronounced **se-tar-shio-dac-tila**) this covers the cetaceans such as whales, dolphins and orca and also covers even toed ungulates such as deer, goats and cattle. The last Order in Scotland is Diprotodontia – of which we have 1 species, the Red-Necked Wallaby! Bet you didn’t know there were wallabies living wild in Scotland!

Most mammals are clever and have complex senses to help them stay alive. Most communicate to each other and to other species often through things like scent marking (foxes, badgers even the household cat are good at this). Many vocalize through alarm calls and often have special calls for their young. Some can use special sounds like ultrasound (bats), infrasounds (deer) and echo location (dolphins). Some like to live in family groups - others like the Highland Tiger, the Scottish Wildcat, are lone solitary animals.

We have a range of educational workshops including Wild About Wildlife for schools and groups. For more information for your group or school about Outdoor Learning contact Tracy at [tlambert@scottishwildlifetrust.org.uk](mailto:tlambert@scottishwildlifetrust.org.uk) or phone 07826170829

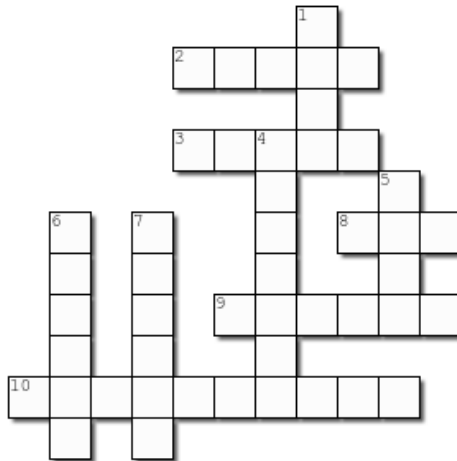
# Magnificent Mammal Wordsearch

How many of the species in the list can you find?



## Magnificent mammals

Complete the crossword puzzle below



Created using the Crossword Maker on [TheTeachersCorner.net](http://TheTeachersCorner.net)

### Across

2. A gang of these tried to take over Toad Hall from Wind in the Willows
3. This tiny mammal name sounds like telling a kangaroo to be quiet
8. This character is just FABULOUS
9. Criptic clue - Small artist stand
10. This mammal has poo that can smell of parma violet sweets

### Down

1. This bunny had black tips on its ears
4. This is the smallest of Scotland's native deer
5. One of the characters of Toad Hall who had to fight off weasels and stoats
6. Bambi's friend Thumper was one of these
7. What's black and white and makes their bed every day?

# Mammal Identification

## Badger – *Meles meles* – Broc (Scots Gaelic)

**Family** – Mustelidae – have musk glands at their bottom

**Body shape** – low to ground, 100-130cm long

**Weight** – 8-12kg

**Colour** – black and white striped face, grey fur

**Features** – long front claws for digging, long muzzle for sniffing out worms

**Eats** – Omnivore - worms, hedgehogs frogs, insects, loves peanuts!

**Habitat** – woodlands, farmlands and urban areas, lives in a sett.

**Life span** – up to 5yrs in wild up to 14 in captivity



Terry Whittaker 2020VISION

## Breeding

Mating takes place all year but peaks between February and May. Females practice delayed implantation and litters of 2-3 young are born in February the next year. Young are weaned after about 12 weeks and will be living independently by late summer.

## Fun Facts

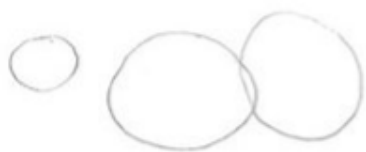
- ❖ Badger fur is tough and triangular in cross section. Try rolling some between your fingers.
- ❖ Their stripy faces help them to see and recognise each other at night.
- ❖ They can smell and hear worms underground and suck them up like spaghetti – up to 300 a night!
- ❖ The whole family poos in a communal toilet called a latrine.
- ❖ Their homes (called setts) and the paths between them can be hundreds of years old.

## Become a tracker

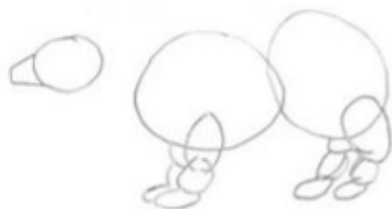
Badger tracks can be tricky to find, sometimes when they are walking they place their back foot right on top of the front print. Badgers have 5 toes with the front paws having very long claws. These front paws are used for digging out setts or for digging out juicy worms for a snack to eat.



# LET'S GET CREATIVE



Art can be really therapeutic – and you don't have to be a brilliant artist to have a go at drawing! Why not try this simple badger. All you need to do to start is draw three circles with a pencil.



Draw an oval for the snout and add a few more to make up the legs and feet.



Now draw some curved lines to connect all the circles together. Add a tail, eyes and ears.



You're almost done... Rub out the parts of the circles that you no longer need and go over the rest in pen or heavy pencil. Shade the body in with grey and black – remember to leave some white stripes on the face!

## European otter – *Lutra lutra*– Dòbhran (Scots Gaelic)

**Family** – Mustelidae – have musk glands at their bottom

**Body shape** – low to ground, about 60 - 80cm long

**Colour** – grey-brown fur (waterproof)

**Features** – broad snout, pale chest and throat

**Eats** – worms, hedgehogs frogs, insects, loves peanuts!

**Habitat** – rivers, streams, ponds, water's edge, marshland

**Life span** – up to 5-10yrs



### Breeding

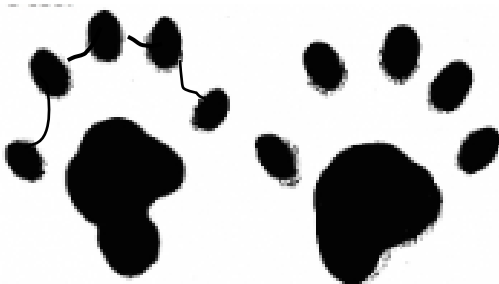
Otters are strongly territorial, The territories are only held against members of the same sex, so those of males and females may overlap. Mating takes place in water and they are nonseasonal breeders. First breeding is found to be 2 1/2 years. Gestation for the Eurasian otter is 60–64 days, pups remain dependent on the mother for about 13 months. The male plays no direct role in parental care.

### Fun Facts

- ❖ Otters have many long, stiff sensitive hairs on their nose: these help the otter find food.
- ❖ Otters have webbed feet for swimming. They can also close their ears and nose when under water.
- ❖ Otters can only hold their breath for 20 seconds
- ❖ Mother otters teach cubs how to hunt by catching live fish and releasing them for the cubs to chase and re-catch

### Become a tracker

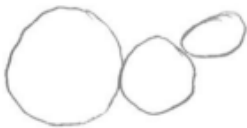
Otter poo smells slightly of prawn cocktail crisps. Otter tracks are the defined by a slightly slanted row of four footprints. The search for tracks can be made easier by looking in areas with mud or damp sand. A webbed 5 toe footprint at the front is distinct



Front

Back

# LET'S GET CREATIVE



Art can be really therapeutic – and you don't have to be a brilliant artist to have a go at drawing! Why not try this simple Otter. All you need to do to start is draw three circles with a pencil



Add a few more ovals to make up the legs and feet



Now draw some curved lines to join the circles together. Add the ,eyes, snout and tail.



You're almost done... Rub out the parts of the circles that you no longer need and go over the rest in pen or heavy pencil. Shade the body in with brown.

## Pine marten – *Martes martes* – Crannchu na coille (Scots Gaelic) meaning little dog of the woods!

**Family** – Mustelidae – have musk glands at their bottom

**Body shape** – low to ground, 75-100cm long and thin

**Weight** – 1 -2.2kg

**Colour** – reddish brown fur with short thin legs and long bushy tail

**Features** – semi retractable claws for climbing trees, short triangular muzzle with distinctive creamy yellow bib on chest

**Eats** – Omnivore - worms, field voles, bird eggs, insects, loves blaeberry!

**Habitat** – woodlands, mixed woodlands/urban

**Life span** – up to 10 years



Steve Gardner

### Facts

Pine martens live in dens high up in trees but they are also known to use a burrow in the ground and sometimes an old badger sett. They feed mainly on the ground looking for field voles, berries and other insects and their territories can be huge ranging from 2-35km! Sadly these iconic creatures nearly became extinct as their fur was highly sought after. Today they are still persecuted by farmers and gamekeepers even though they are protected.

### Breeding

Mating occurs between July and August with the female delaying implantation much like the badger. The kits are born in march/April and are fully grown by June. The can produce 1-6 kits but larger litters are rare, the most common litter size is 3 kits, it still a lot of mouths to feed. The kits are very hungry and grow fast.

### Become a tracker

Pine martens are related to badgers and otters and like those animals they also have 5 toes, much smaller but still 5 toes. Pine martens also have very special claws which help them climb trees



Front Foot



Hind Foot

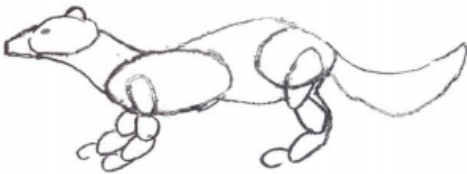
# LET'S GET CREATIVE



Art can be really therapeutic – and you don't have to be a brilliant artist to have a go at drawing! Why not try this simple Pine Marten. All you need to do to start is draw three circles with a pencil



Add a few more ovals to make up the legs, feet and snout.



Now draw some curved lines to join the circles together. Add eyes, ears and nose – and of course a big bushy tail!



You're almost done... Rub out the parts of the circles that you no longer need and go over the rest in pen or heavy pencil. Shade the body in with chestnut brown. Don't forget its creamy white bib.

## Fox – *Vulpes Vulpes*– sionnach (Scots Gaelic)

**Family** – Canidae

**Body shape** – small dog-like, shoulder height 40cm body length 90-105cm

**Weight** – 2-14kg

**Colour** – Reddish orange

**Features** – large ears, bushy tail with white tip

**Eats** – **Omnivore** – small rodents, birds, bugs, berries

**Habitat** – woodlands, parks and urban areas

**Life span** – 2-5 years



© Malene Thyssen

### Breeding

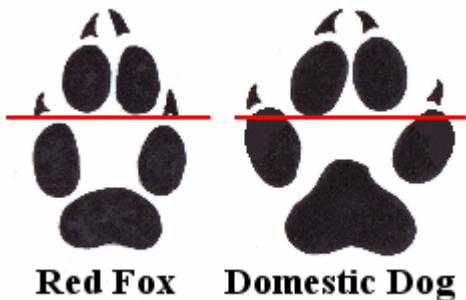
Foxes mate in winter and give birth in spring. The gestation period lasts 49–58 days. The female gives birth underground in a 'den', during this time the male brings food. Though foxes largely stick to one partner DNA evidence indicates levels of multiple partner mating.

### Fun facts

- ❖ Foxes can jump over 2-meter fences
- ❖ Their forepaws have 5 toes, but their hind paws only have 4!
- ❖ They can hear a mouse squeak from 100 meters away
- ❖ Foxes also have whiskers on their legs
- ❖ A group of foxes is called a skulk
- ❖ Fox musk comes from a gland near the base of their tail

### Become a tracker

When you find a print place a blade of grass across the middle of the print along the top of the two outermost toes. On a fox track there is a gap between the back of the two middle digits and the front of the outer two digits so that the line shouldn't intersect the middle digital pads. On a dog the outer pads will generally overlap the middle ones so the line will intersect them (see diagram).



**Red Fox**

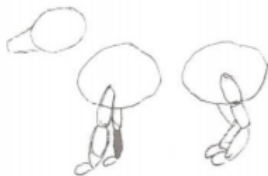
**Domestic Dog**

# LET'S GET CREATIVE

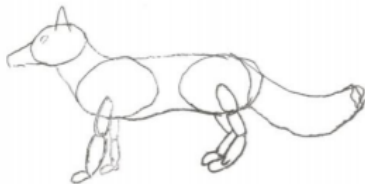
## Draw A Red Fox



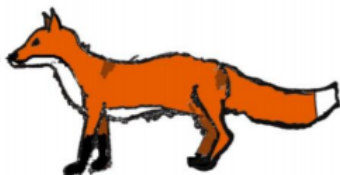
Art can be really therapeutic – and you don't have to be a brilliant artist to have a go at drawing! Why not try this simple Red Fox. All you need to do to start is draw three circles with a pencil



Add a few more ovals to make up the legs and feet



Now draw some curved lines to join the circles together. Add the eyes and nose – don't forget the big bushy tail!



You're almost done... Rub out the parts of the circles that you no longer need and go over the rest in pen or heavy pencil. Shade the body in with orange. Remember to leave its white chest and belly and shade in its black feet.

# Red squirrel – *Scurus vulgaris* – feòrag-ruadh (Scots Gaelic)

**Family** – Sciuridae

**Body shape** – very small compact body with bushy tail

**Weight** – 400-600g

**Colour** – Red fur – however they are not always red some can be black, brown, greyish or even white!

**Features** – Fantastic ear tufts during winter, small with bushy tail

**Eats** – Omnivore - nuts, berries, insects, young birds, eggs, fungi and bark

**Habitat** – woodlands, parks

**Life span** – up to 6 years



Paul Barlay

## Breeding

Mating occurs in late winter during February and March and in summer between June and July. Up to two litters a year per female are possible. Each litter averages three young, called kits. Gestation is about 38 to 39 days. During mating, multiple males will chase a single female until the dominant male, usually the largest in the group, mates with the female. Males and females will mate multiple times with many partners.

## Fun Facts

- ❖ Red squirrels are not always red; sometimes they can be black, brown or even white in colour.
- ❖ Red squirrels can swim and hang upside down!
- ❖ Reds don't hibernate; in winter they rely on food that they have previously buried, and they can locate their food supplies in over 1 foot of snow

## Become a tracker

Squirrel leave tiny tracks, which can be easily overlooked. Forefoot width 2.5cm, length 3.5cm, about the size of a 10 pence. Front has four toes, back has five



# Roe deer – *Capreolus capreolus* – earb (Scots Gaelic)

**Family** – Cervidae

**Body shape** – Small barrel shaped body on thin legs, shoulder height 65-85cm  
body length 95-145cm

**Weight** – 10-25kg

**Colour** – Reddish brown hide in summer with dull brown in winter

**Features** – large ears, males have small antlers

**Eats** – Omnivore - nuts, berries, insects, young birds, eggs, fungi and bark

**Habitat** – woodlands, parks and urban areas, moors and farmland

**Life span** – 7 years



## Breeding

Mating or “rut” occurs from July to August. Males will fight to the death! Female delays implantation of the egg until late December/early January this prevents young being born in a hard winter. Roe deer are the only deer species to do this. Gestation period 290 days - almost always produce twins born from late May, early June.

## Fact

- ❖ Male antlers have up to 3 points.
- ❖ Antlers are dropped in November and regrow in December.
- ❖ Kids will wean for 4 months but stay with mum a full year.
- ❖ Both sexes of deer will bark in alarm but doe's will also squeak and make 'pheeep' sounds to kids
- ❖ Major causes of death are roads and starvation.
- ❖ Deer's ears can rotate 180 degrees so they can listen to sounds behind them! They can hear infra sounds – sounds so low we cannot hear them.

## Become a tracker

Roe deer tracks are quite small about 4.5cm long and 3cm wide. As you can see the front hoofs differ slightly from the back with 2 little notches behind the main track on the back hoof. Look for shapes in the mud you may see the toes coming together to form a V the point of this V is the direction of travel.



Front



Back

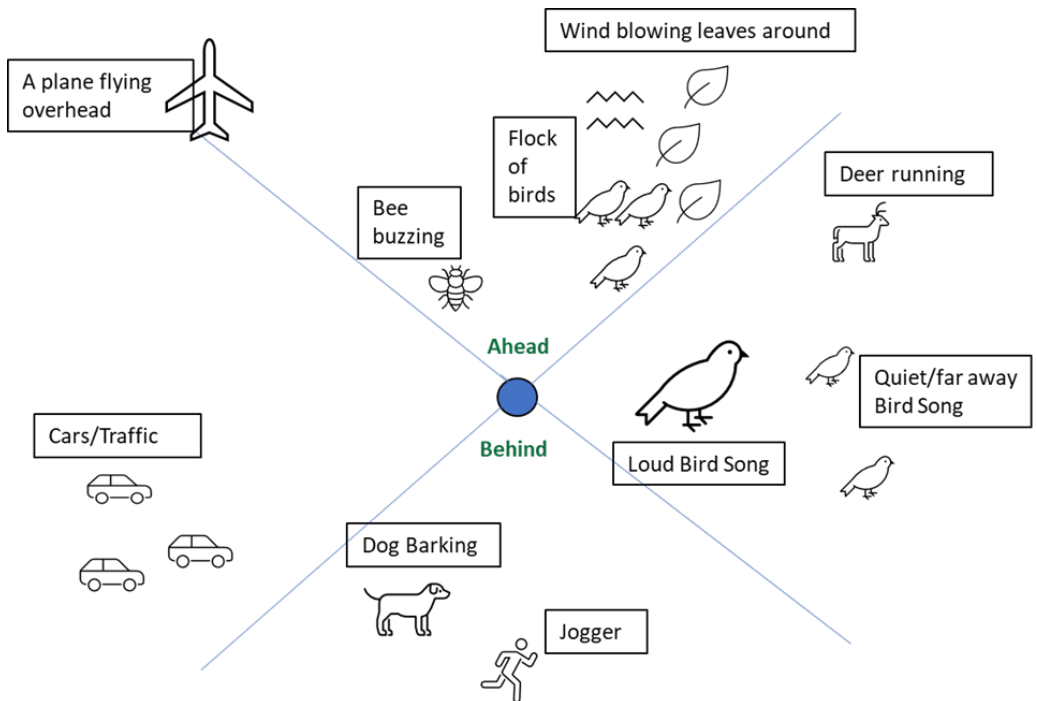
# Deer's Ears

Find a quiet spot to sit for a few minutes, close your eyes, open your ears listen like a deer! Draw a small circle in the middle of a blank sheet of paper and imagine this is your head viewed from above. Split the sheet into four to represent ahead, behind and to your sides.

Now mark on the paper all the sounds you hear and the direction they come from, showing where they come from in relation to you and how far away they are. You could draw pictures, write words, whatever you like (there's an example below).

Now try to use your deer senses... cup your hand behind your ears with the palm facing forward. How does this change what you can hear? Turn your hand around so it is in front of your ear with the palm facing backwards, how does this change things?

Spend some time listening to the forest come alive around you.



# The Mammal Year

Peak fox breeding season. Dogs and vixens together defending territory. Roe deer fertilised eggs implanted in uterus	January	Female badgers pregnant Red squirrel mating season begins Hedgehogs inactive (hibernating)
Vixens digging dens and spending more time underground.	February	Peak time for badger cub births Hedgehogs inactive (hibernating)
Peak fox cubbing period, vixens denned down, dogs bringing food—dogs look tired!	March	Badgers very active collecting bedding, many road deaths Red squirrel kittens being born. Hedgehogs beginning to emerge
Fox cubs emerge, play around dens. Roe bucks begin establishing territories.	April	Badger cubs exploring setts, may venture out in good weather. Hedgehogs highly active, scouting for nesting sites.
Fox cubs being weaned (peak time for calls to SSPCA about 'abandoned' fox cubs).	May	Badger cubs exploring around sett. Hedgehog mating season begins.
Roe deer kids being born. Foxes abandon dens.	June	Badgers seen in daylight. Red Squirrel mating season begins. Height of hedgehog mating season.
Dog and vixen taking fox cubs to feeding sites. Roe deer rut begins. Males hold territories around does.	July	Droughts can lead badgers to travel long distances. Hedgehog young emerge.
Foxes eating fruit. Roe deer rut.	August	Badgers eating cereals and fruits. Red squirrel kittens being born. Peak hedgehog road deaths
Foxes beginning to disperse, cubs fully grown.	September	Hedgehogs prioritise feeding—Males begin to hibernate
Peak time for fox road deaths. Male roe deer shed antlers.	October	Badgers prioritise feeding Female hedgehogs begin to hibernate.
Vixens looking for dens. Males roe deer growing antlers	November	Badgers begin their winter slowdown.
Foxes actively defending territory Peak time for calls to police due to vixen's screams.	December	Badgers spend time underground. Fertilised eggs implant in uterus and begin developing.

# Mammal quiz

All answers are Mammals!

1. Basil Brush was what type of animal?
2. What would you do "gently down the stream"?
3. Bodger's animal friend loved mashed potato but what is the animal?
4. A famous movie from 1968 which starred Charlton Heston and a remake with Andy Serkis.
5. This could be an aquatic version of a famous wizard but let's not mention the bad guys name!
6. Sonic was what type of animal?
7. Which mammal just hopped over here with the Romans?
8. Usually found "down under" what mammal escaped from an island on Loch Lomond?
9. Before becoming a cub what mammal would you be first?
10. The book Moby Dick was based on this mammal?

Here's last months answers for the Tree quiz:

- |   |                |    |            |
|---|----------------|----|------------|
| 1 | Fortingall Yew | 6  | Hawthorn   |
| 2 | Rowan          | 7  | Oak        |
| 3 | Holly          | 8  | Willow     |
| 4 | Yew            | 9  | Scots Pine |
| 5 | Six            | 10 | Alder      |

# Wild Ways Well and Mammals

Wild Ways Well is about getting outdoors and spending time in nature to improve your health – particularly your mental wellbeing. Spending time learning about and interacting with mammals is a great way to do this!

You'll **Be Active** by carefully walking outdoors (observing social distancing) keeping your mind busy and occupying your time looking for signs of these elusive creatures. You'll find signs of mammals everywhere, even in Urban areas.

We can **Connect** with mammals by opening up our senses and empathising with the way they live their lives. Wild mammals have many of the same needs as us – how do they find food, water and shelter in Cumbernauld? How do their senses compare to ours? Do they see the world in the same way we do?

We can **Keep Learning**, there are hundreds of web pages, books and tv programmes dedicated to mammals. We have shared the world with other mammals for millions of years, we can learn what our ancestors thought of them and how we can live alongside them today. Although they are secretive and hard to see mammals are actually all around us, and are vital to the ecosystem we all share but we rarely **Take Notice** and look very closely at them. It's amazing how much we miss out in nature when we just walk through without paying attention to what is around us.

We can **Give** by giving ourselves a break from the drama of the current events and focusing on the little things around us that give us pleasure and by sharing these with others, in person or online. We can give back by learning how we can live alongside wild mammals in harmony, how we can help them by improving their habitat and changing our behaviours.

When lockdown is lifted our Wild Ways Well groups will be back out exploring and enjoying the woodlands of Cumbernauld every week. In the meantime we have online activities, Facebook pages and weekly online chats. If you're interested, contact Paul at [p.barclay@tcv.org.uk](mailto:p.barclay@tcv.org.uk) for details of how you can take part.



**BE ACTIVE** – Take part in health walks and practical outdoor activities. Explore your local paths, woods and greenspaces.

**CONNECT** – Meet new people. Connect with the people, the wildlife and the nature that's all around us.



**GIVE** – Your time to be in nature. Give something back by sharing experiences and undertaking conservation tasks.

**TAKE NOTICE** – Note the changing cycles of life. Use your senses. Listen to birds, smell the flowers, live in the moment.



**LEARN** – Identify plants and wildlife, try new crafts, learn new skills. Discover things about nature and about yourself.

# Nature Ninjas create homes for mammals



Our volunteer group, the Nature Ninjas, is dedicated to rewilding Cumbernauld and bringing communities closer to nature. Our projects directly benefit mammals within Cumbernauld greenspaces. Through our habitat creation projects such as wildflower meadow installation we create beneficial areas for mammals to reside and feed in.

We created large wildflower meadows at Whiteless, Broadwood loch and St. Maurice's pond. Biodiversity of local invertebrate species has increased significantly as a result. This has a knock-on effect for mammals which now have a large ready feeding source and area to nest in. We created over 6500m<sup>2</sup> of wildflower meadows last year in Cumbernauld!

Our volunteers love these tasks. Working in these beautiful areas leaves an indelible mark that improves the area for wildlife and communities for years to come. Our workdays bring such an overwhelming feeling of satisfaction to our volunteers with many of our volunteers forming lasting friendships from interacting with like-minded individuals. These days are truly cherished by members of staff and volunteers alike.

Would you like to get into the outdoors and make a difference to nature and communities on your doorstep? Our groups go out on Tuesdays and Wednesdays from 10-3. Volunteering is great fun: making friends, learning new skills, keeping fit and working in amazing locations all within Cumbernauld! At Cumbernauld Living landscape we are committed to the progression of our volunteers and can offer apprenticeships to volunteers who wish to find employment within conservation. We can also provide travel expenses or a pick-up service. If you would like to know more contact our friendly volunteer coordinator David at [d.walsh@tcv.org.uk](mailto:d.walsh@tcv.org.uk) or phone 07483 050744.



**Cumbernauld Living Landscape** is a partnership between the Scottish Wildlife Trust, North Lanarkshire Council, Sanctuary Scotland, the James Hutton Institute and TCV – The Conservation Volunteers.

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**[cumbernauldlivinglandscape.org.uk](http://cumbernauldlivinglandscape.org.uk)**

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Cumbernauld, G68 0EH

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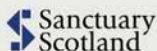
**E** [cumbernauldll@scottishwildlifetrust.org.uk](mailto:cumbernauldll@scottishwildlifetrust.org.uk)

**f** CumbernauldLivingLandscape

**@WildCumbernauld**

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#### Partners



#### Funders



Cumbernauld Living Landscape is led by the Scottish Wildlife Trust, a Scottish registered charity (charity no. SC005792) and a company limited by guarantee and registered in Scotland (registered no. SC040247). Wild Ways Well is provided by TCV, registered as a charity in Scotland (SC039302).