

Wonderful Wetland Wildlife

Activities for children aged 7–11 years

WWT has a well-established and well-loved education programme that we run across the UK at our ten wetland sites. We've designed these short activities based on one of our school activities. We've made it to connect you and your family to the natural world and help you to work with your children to feel great about nature and understand some of the things that WWT love and care about.

Why wetlands?

WWT works across the UK to save, conserve and build wetlands for wildlife and people. Wetlands are some of the most important places on earth – storing huge amounts of CO₂, providing a natural way of stopping flooding and serving as a home for huge numbers of different creatures.

This activity will help you and your children to learn about a range of incredible wetland animals and the wetland habitats they live in.

These activities link to the science National Curricula of England, Northern Ireland, Scotland and Wales.

Stuff you need:

- **Set of 27 wetland wildlife cards (see final pages of this document)**

Note: Where you see a  this indicates a question to ask your child

Indoor activities

(1 hour)

Wetlands are home to some amazing animals. These activities will introduce you to some of these incredible creatures.

- Take either all of the wetland wildlife cards or a selection of the cards depending on the age and ability of your child(ren).
- Lie them down with the picture side face up.

Which animals can you name?

- Don't worry if they don't know the names of all of the animals at this stage. You can simply turn over the remaining cards to reveal their names. Repeating this activity is a good way for your child to get to know the names of some of these animals.
- Place the cards picture side up again. Get your child to sort them in any way they like (e.g. can fly / can't fly; has legs / doesn't have legs). How have they decided to sort them? At this stage there is no right answer. It's just to get the idea that animals (and plants) can be classified or grouped in different ways. Again, this can be repeated multiple times if you wish.

Q What do we mean by vertebrates and invertebrates?

Key word: **VERTEBRATE**

An animal that has a backbone. Vertebrates include fish, amphibians, reptiles, birds and mammals.

Key word: **INVERTEBRATE**

An animal that doesn't have a backbone. They either have a soft body, like worms and jellyfish, or a hard outer casing covering their body, like spiders and crabs.

- Get your child to sort the animals into these two groups. They can then turn the cards over to see if they were right (the answer is on the back).
- If any were incorrect, simply move them into the correct group. Keep the cards in their two separate piles. Get your child to look at the vertebrates. Read the following information together, explaining that vertebrates can be further broken down into:

Key word: **AMPHIBIAN**

- Amphibians spend part of their time in water and part of their time on land.
- They are cold blooded: They need to sit in the sun to raise their body temperature or move to a colder place to cool down.
- They have moist skin and most can breathe through their skin.
- They are born in water (usually in the form of eggs know as 'spawn').

Key word: **BIRD**

- Birds have feathers (no other animals have true feathers).
- They lay eggs with a hard shell.
- Most (but not all) birds can fly.

Key word: **FISH**

- Fish live in water.
- They breathe through gills instead of lungs. This means they can take oxygen straight out of the water and don't need to come to the surface for air.
- They are cold blooded.
- They have scales.

Key word: **MAMMAL**

- Mammals have hair or fur.
- They are warm-blooded. This means that they can keep the temperature inside them the same even when it is very hot or very cold.
- They give birth to live young.
- Mothers feed their young with milk.

Key word: **REPTILE**

- Reptiles are cold blooded.
- They have scales.
- They are born on land.
- They breathe through lungs.

- Ask your child to split the cards into these five different groups. Keep back any they are unsure of. Turn them over to find out if they are correct.
- Go back to those they weren't sure of. Turn them over to see which group they fit into. Discuss why they fit into this group and not another.
- Read the following information together, explaining that the invertebrates can also be broken down into (among others):

Key word: **INSECT**

- Insects have an exoskeleton - a hard, shell-like covering on the outside of their body.
- They have six legs.
- They have three main body parts (a head, a thorax, and an abdomen).
- They have a pair of antennae on top of their heads.

Key word: **ARACHNID**

- Arachnids have eight legs.
- They don't have antennae.
- They have two main body parts (a cephalothorax and an abdomen).

Key word: **MOLLUSC**

- Molluscs don't have legs.
- They have a soft body without segments.
- They have a shell (sometimes this is hidden inside their body!)

Key word: **WORM**

- Worms don't have legs.
- They have long, narrow bodies.
- They have a head and a tail end.

Key word: **CRUSTACEAN**

- Crustaceans have a hard exoskeleton or shell.
- They breathe through gills, meaning they can live underwater (though not all of them do).

- See if your child can split the invertebrate cards into these five different groups. Turn them over to find out if they are correct.
- Look together at some of the animals that are more difficult to categorise.

Q Why do you think they fit into one group and not another?

Help to explain this where they are not sure.

- Play 'guess the animal'.
 - Lay out all of the cards.
 - Get your child to choose one of the animals on the cards without telling you (they shouldn't pick it up - leave it with the other cards).
 - Ask your child a yes / no question about their animal (e.g. Does it have fur? Can it fly?).
 - Once they have answered, remove all of the animals that are now ruled out (e.g. if you ask has it got fur and they say yes, you can remove all of the animals that don't have fur).
 - Keep asking questions and removing cards until you only have one card left.
 - Is this the animal your child chose?
 - Now swap over so that you choose an animal and they have to guess which you have chosen.

Take it outside:

(30 minutes)

- Go to a place outdoors.

Q What animals can you see?

Are they vertebrates or invertebrates? Which group do they come into (mammal, amphibian, insect etc)? How do you know?

- Ask your child to use the **notes and sketches** pages to think about some of their favourite animals – can they show what they love about them using drawings, words or maybe even a poem?
- Get your child to think about why these are their favourite.

Q What is it that you love about these animals?

How does watching them make you feel? Are they beautiful? Can you imagine what they might be thinking right now?

Q What could we do to help protect these animals?

Wetland wildlife cards

- To make the cards, cut the line across the width of your paper then fold each half in half again so you end up with a picture on one side and the information on the other. Stick the two sides together with glue.



Grey heron

Diet: Fish, small birds such as ducklings, small mammals and amphibians

Wetland adaptations: Long neck allows it to get to its prey beneath the water

Classification: Vertebrate - Bird

Habitat: Ponds, lakes, rivers and estuaries

Additional information: Stands stock still quietly waiting for its prey

Cut



Kingfisher

Diet: Fish, invertebrates, amphibians

Wetland adaptations: Their eyes have adapted to make prey look closer to the surface and they have a special membrane to protect their eyes when they hit the water

Classification: Vertebrate - Bird

Habitat: Lakes, streams, rivers and canals

Additional information: They dig nest tunnels in vertical, sandy river banks



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Cut

Stickleback

Diet: Insects, crustaceans, tadpoles and smaller fish

Wetland adaptations: Some sticklebacks have adapted to be able to cope with both fresh and saltwater meaning they can live in both rivers and the sea

Classification: Vertebrate - Fish

Habitat: Ponds, lakes, ditches and rivers

Did you know? The male develops a bright red throat and belly and performs a courtship dance to attract a mate. The male also builds and protects the nest

Cut



Eel

Diet: Plants, dead animals, fish eggs, invertebrates and other fish

Wetland adaptations: Long, narrow body enables it to get into crevices

Classification: Vertebrate - Fish

Habitat: Rivers and ditches

Did you know? Adult eels migrate 3,000 miles (4,800 km) to the Sargasso Sea to spawn. It then takes the young eels two or three years to drift back to their homes here in the UK



Cut

Smooth newt

Diet: Insects, caterpillars, worms and slugs while on land; crustaceans, molluscs and tadpoles when in the water

Wetland adaptations: Can breathe through their skin

Classification: Vertebrate - Amphibian

Habitat: Ponds in spring; woodland, grassland, hedgerows and marshes in summer and autumn; hibernates underground, among tree roots and under rocks and logs over winter

Did you know? Their body gives out a poisonous fluid when they feel threatened

Cut



Common frog

Diet: Invertebrates and smaller amphibians

Wetland adaptations: Eyes are positioned on top of the head allowing the frog to see whilst its body is under the water

Classification: Vertebrate - Amphibian

Habitat: Ponds during the spring; woodland, gardens, hedgerows and grassland in summer and autumn; hibernate in pond mud or under log piles in winter

Did you know? Frogs hop whereas toads crawl



Cut

Common toad

Diet: Insects, spiders, slugs and worms

Wetland adaptations: Slightly webbed back feet help them to swim

Classification: Vertebrate - Amphibian

Habitat: Ponds in spring (prefer larger, deeper ponds than frogs); woodland, gardens, hedgerows and grassland in summer and autumn; hibernate under log piles, stones or in crevices over winter

Did you know? Toads usually have dry bumpy skin whilst frogs usually have moist slimy skin

Cut



Coot

Diet: Plants, seeds, snails and insects

Wetland adaptations: Flaps of skin on the toes act in the same way as webbed feet when swimming and stop them from sinking in mud

Classification: Vertebrate - Bird

Habitat: Lakes, ponds and rivers

Did you know? The white part on the front of its head gave rise to the phrase "as bald as a coot"



Cut

Grey heron

Diet: Fish, small birds such as ducklings, small mammals and amphibians

Wetland adaptations: Long neck allows it to get to its prey beneath the water

Classification: Vertebrate - Bird

Habitat: Ponds, lakes, rivers and estuaries

Did you know? Herons can stand absolutely still waiting for their prey

Cut



Kingfisher

Diet: Fish, invertebrates, amphibians

Wetland adaptations: Their eyes have adapted to make prey look closer to the surface and they have a special membrane to protect their eyes when they hit the water

Classification: Vertebrate - Bird

Habitat: Lakes, streams, rivers and canals

Did you know? They dig nest tunnels in vertical, sandy river banks

Cut



Cut

Daubenton's bat

Diet: Insects.

Wetland adaptations: Can use its feet and tail to scoop up insects from the water's surface

Classification: Vertebrate - Mammal

Habitat: Woodland close to ponds and lakes

Did you know? These bats are often called 'water bats' because they feed so often over water

Cut



Water vole

Diet: Plants

Wetland adaptations: Waterproof fur

Classification: Vertebrate - Mammal

Habitat: Rivers, streams, ditches, ponds, lakes, marshes, reedbeds

Did you know? Despite being sometimes referred to as a 'Water Rat', there is no such thing - there are brown rats, black rats and water voles

Fold



Cut

Otter

Diet: Fish, waterbirds, amphibians and crustaceans

Wetland adaptations: Webbed feet; dense fur to keep them warm; can close their ears and nose when underwater

Classification: Vertebrate - Mammal

Habitat: Lakes, rivers, streams, coasts

Did you know? After disappearing from large parts of the UK numbers are growing due to improved water quality

Cut



Fold

Grass snake

Diet: Amphibians, fish, small mammals and birds

Wetland adaptations: Have developed very strong swimming technique

Classification: Vertebrate - Reptile

Habitat: Ponds, lakes, grassland, woodland

Did you know? Grass snakes are Britain's largest reptile



Cut

Pond skater

Diet: Small insects

Wetland adaptations: Have water-repellent hairs on the bottom of their feet, enabling them to walk on the surface film of the water. They hunt by detecting vibrations in this film

Classification: Invertebrate - Insect

Habitat: Ponds, lakes, ditches and slow-flowing rivers

Did you know? Pond skaters can actually skate, jump and fly

Cut



Daphnia (water flea)

Diet: Plants, bacteria

Wetland adaptations: Antennae have developed for use in swimming

Classification: Invertebrate - Crustacean

Habitat: Lakes and ponds

Did you know? They are transparent. You can even see their heart beating inside them

Cut



Cut

Grayling

Diet: Insects, spiders, crustaceans, molluscs, and smaller fishes

Wetland adaptations: One of the most streamlined fish, enabling it to swim faster

Classification: Vertebrate - Fish

Habitat: Fast, clean rivers near the source

Did you know? Known as the 'lady of the stream' due to its brightly coloured dorsal fin.

Cut



Water hoglouse

Diet: Decaying animals and plants

Wetland adaptations: Its gills are at the back of its body, allowing it to breathe when its head is buried in mud

Classification: Invertebrate - Crustacean

Habitat: Ponds and ditches

Did you know? The water hoglouse is closely related to the woodlouse

Cut



Cut

Cyclops

Diet: Algae, decaying animals

Wetland adaptations: Bullet-shaped body allows fast change of direction

Classification: Invertebrate - Crustacean

Habitat: Ponds, lakes and slow-flowing rivers and streams

Did you know? They only have one eye

Cut



Greater water boatman

Diet: Invertebrates, tadpoles and small fish

Wetland adaptations: Hind legs have developed into paddle shapes to aid swimming

Classification: Invertebrate - Insect

Habitat: Ponds, ditches and canals

Did you know? The greater water boatman can trap air underneath its wing cases so it can breathe under water



Cut

Dragonfly

Diet: Small insects

Wetland adaptations: Bullet-shaped body allows fast change of direction

Classification: Invertebrate - Insect

Habitat: Ponds, lakes, canals and ditches

Did you know? Dragonflies have been around for 300 million years

Cut



Ramshorn snail

Diet: Plants

Wetland adaptations: Can trap and store air inside their shells

Classification: Invertebrate - Mollusc

Habitat: Ponds

Did you know? Their name comes from the shape of their shell which resembles a ram's horn



Cut

Pond snail

Diet: Plants

Wetland adaptations: Have a respiratory tube that acts like a snorkel so they can breathe without coming to the surface

Classification: Invertebrate - Mollusc

Habitat: Rivers, lakes and ponds

Did you know? It is thought to have brilliant learning abilities and the snail's memory has been widely studied by scientists

Cut



Freshwater limpet

Diet: Plants

Wetland adaptations: Can cling on to rocks so doesn't get taken by the current

Classification: Invertebrate - Mollusc

Habitat: Rivers, ponds, lakes

Did you know? Although called limpets, they are actually in the same family as ramshorn snails

Cut

Fold



Cut

Sludge worm

Diet: Bacteria

Wetland adaptations: Can breathe through their skin

Classification: Invertebrate - Worm

Habitat: Ponds, lakes, rivers

Did you know? They can survive in heavily polluted water

Cut



Fold

Leech

Diet: Fish, freshwater snails, tadpoles, worms

Wetland adaptations: Can breathe through their bodies

Classification: Invertebrate - Worm

Habitat: Ponds and streams

Did you know? Many leeches feed on the blood of other animals (without killing them)

Fold



Cut

Flatworm

Diet: Daphnia, dead animals

Wetland adaptations: Breathe through their skin

Classification: Invertebrate - Worm

Habitat: Ponds

Did you know? If cut in two, they grow into two separate worms

Cut



Fold

Water spider

Diet: Insects, crustaceans, tadpoles and smaller fish

Wetland adaptations: Traps air in the hairs on its body enabling it to breathe underwater

Classification: Invertebrate - Arachnid

Habitat: Ponds, lakes, very slow-flowing streams

Did you know? The water spider is the only spider in the world that spends its life under water

Fold



Fold

Great raft spider

Diet: Invertebrates, small fish, water spiders

Wetland adaptations: Hairy legs enable them to walk on the surface of the water

Classification: Invertebrate - Arachnid

Habitat: Ponds, ditches, bogs

Did you know? Great raft spiders have been known to hunt underwater by running down the stems of plants to reach their prey

Cut

Cut