



Beaver

- Beavers are completely vegetarian, eating aquatic plants, grasses and shrubs and woody plants.
- In times of drought beaver pools act as significant fish refugia.
- Beaver dams collect and slowly release water downstream throughout the year. They filter sediment and improve water quality downstream and help alleviate downstream flooding.
- Are often referred to as 'ecosystem engineers'. By modifying their habitats through the coppicing of tree and shrub species, the digging of canal systems and, in some cases, damming of water courses benefits to other species including otters, water shrews, water voles, birds, invertebrates (especially dragonflies) and breeding fish. This kind of habitat restoration can be extremely costly to achieve by artificial means.
- Beaver ponds capture carbon and have been suggested as an important ally in mitigating climate change.
- Lifespan, roughly ten years.

Red Kite

- Hunted almost to extinction at the end of the 19th century, saved by one of the world's longest running protection programmes, now successfully reintroduced and thriving.
- Eats mainly carrion and worms, but opportunistic and will occasionally take small mammals. Being scavengers, are particularly susceptible to poisoning by e.g. illegal poison baits set for foxes or crows.
- Inhabit broadleaf woodlands, valleys and wetland edges.
- Have historically helped keep human areas free from carrion and rotting food.
- Voted "Wales's favourite bird".
- Oldest recorded Red Kite was 38 years old.

Hedgerows

- Hedgerows have often been overlooked as one of Britain's most valuable habitats and their importance as wildlife havens and highways, barriers and wind-breaks is now being fully recognised.
- Hedgerows were originally planted to divide the land into fields and pens, marking the boundaries of farms and parishes.
- They suffered a dramatic decline as field sizes increased.
- Trees, brambles and woody shrubs such as hawthorn, blackthorn and field maple make up a mature hedgerow.
- These are much needed refuges for songbirds, while voles, mice and shrews are typical hedgerow mammals that take advantage of all the autumnal fruit.
- Maintain them as boundaries in their own right - they are forced to be thicker and more rich
- Over 100 years to get strong.

Bumblebee Colony

- Vital pollinators of crops and wildflowers. Particularly effective with tomatoes, as their buzz frequency releases large pollen loads.
- All bumblebees form small colonies, visiting flowers as far as 2km away to feed on the nectar and gather pollen.
- The pollen coats the bee's hairy body and is then combed into a pollen basket.
- Usually, only the queens survive the winter, so there's no need for bumblebees to store large quantities of honey in the hive.
- Of the 250 known species, 24 are found in the UK but only six of these are a familiar sight in our gardens.
- The bumblebee's buzz is produced by vibrating muscles and not the beating of the wings.
- Queen Bee can live for 3 to 4 years. Workers - a few weeks to months.



Cwmsaebren Woodland

- The wood next to the town centre with good access and open spaces is a combination of Sessile Oak and other native species, as well as conifer plantation managed by NRW.
- Cwmsaebren woodland near Treherbert is used on a regular basis by a group of local people wanting to improve their health after serious illness.
- Coed Lleol has a permit with Natural Resources Wales to run a range of fun practical activities with the group, e.g. bush-craft, access creation, woodland skills - all supervised by qualified staff.
- The trees in the woodland cooperate and communicate feelings and even share nutrients through roots and symbiotic fungi networks.
- Provides food and habitat for many animals.
- Most of the woodland is under 100 years old and will reach maturity after around 300 years.

Earthworm

- Feeds on plant debris (dead roots, leaves, grasses, manure) and soil.
- Loosens and aerates the soil and improves soil drainage. Soils drain up to 10 times faster than soils without earthworms.
- Earthworms can increase pasture growth by 25% over the long term
- Earthworms are sometimes known as 'ecosystem engineers' because they significantly modify the physical, chemical and biological properties of the soil profile.
- Providing food for predators: Earthworms, like all creatures, are part of food webs. Birds are well known predators, but native earthworms are also food for endangered and endemic land snails.
- Lifespan on average is 6 to 9 years, but known to live for up to 20 years.

Old Person

- Embodies traditional way of life including on knowledge on traditional crafts.
- 80 years old, has always lived in the area.
- Has learned to look at life with acceptance and spark of irony.
- Being an elder of the community s/he embodies resilience and wisdom.
- S/he is a custodian of history, a story keeper.
- Has time to listen and has access to many recipes, tips, technologies.
- Has survived hardship and change.

Lichen

- Indicators of air quality and "early warning system" for climate change.
- Lichen's are comprised of a stable symbiotic association between a fungus and algae and/or cyanobacteria.
- Wales has the highest diversity of Lichen's in the world
- Potential medicine - new antibiotics.
- They provide food a variety of animals such as squirrels, birds, and deer; habitat for small insects and other invertebrates; and even insulation for birds nests.
- Soil is the foundation for most ecosystems and lichens are critical in creating soil.
- Life-span of up to 9,000 years old. It is common for lichen to survive for several centuries.



Young Child

- 4 years young
 - Embodies joy, playfulness, innocence, energy
 - Sees the world as a large playground full of magic
 - Needs a loving and safe environment in order to grow into a caring adult
 - Eager to learn, always in the moment
 - Practices 'beginners mind' every day.
 - Learns quickly and is not stuck in old patterns.
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