

Leicesters ponds

Creatures you can see living in and around them:



Ponds sustain many other animals and plants:

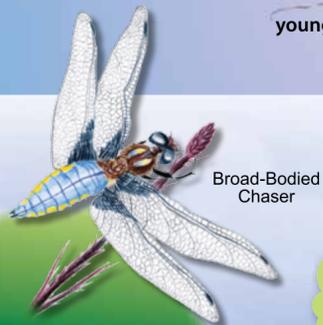
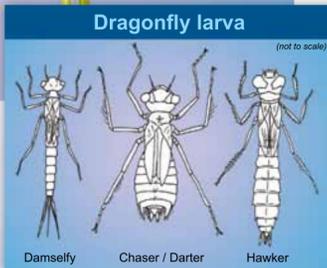
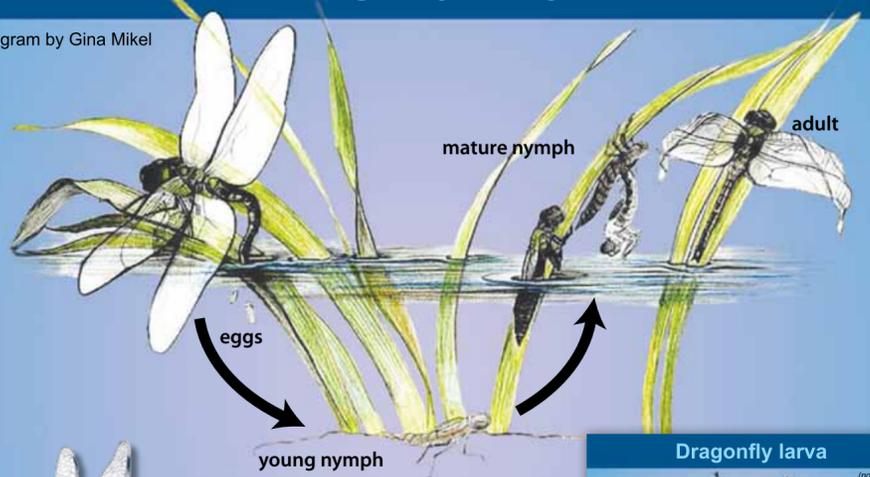
Dragonflies and Damselflies (Odonata)

Dragonflies have existed for 3 hundred million years or more. The Dragonfly family consists of Hawkers, Chasers, Skimmers and Darters, they are bigger than damselflies their eyes almost touch each other and at rest hold their wings out at right angles from their body. Damselflies are smaller and more delicate their eyes are apart and they hold their wings together down the length of their bodies at rest.

There are over 40 species recorded in the UK (some of which could now be extinct and were just visitors)

The dragonfly life cycle

diagram by Gina Mikel



Pond Plants & their purpose:

For a Pond to be a successful habitat it must have plants growing in it. They provide food, oxygen and shelter for the creatures living in the pond. For the plants to grow well they need light so large open ponds are ideal.

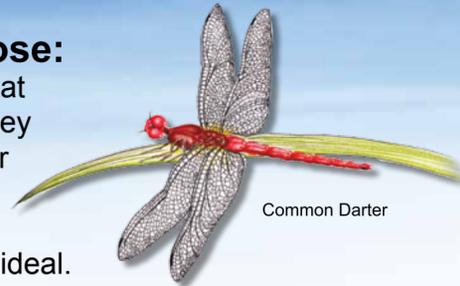
The smallest plants in a pond are microscopic phytoplankton and these provide the most food in the pond and are the start of the food chain. The small Herbivores (*plant eaters*) eat the plants and then they are eaten by the Carnivores (*meat eaters*)

Plants grow in various areas in and around the pond, some require to be planted at the edge of the pond and in the bog areas, these provide excellent shelter for the young amphibians emerging from the pond, dragonfly nymphs climb up their stems when they are ready to develop into an adult.

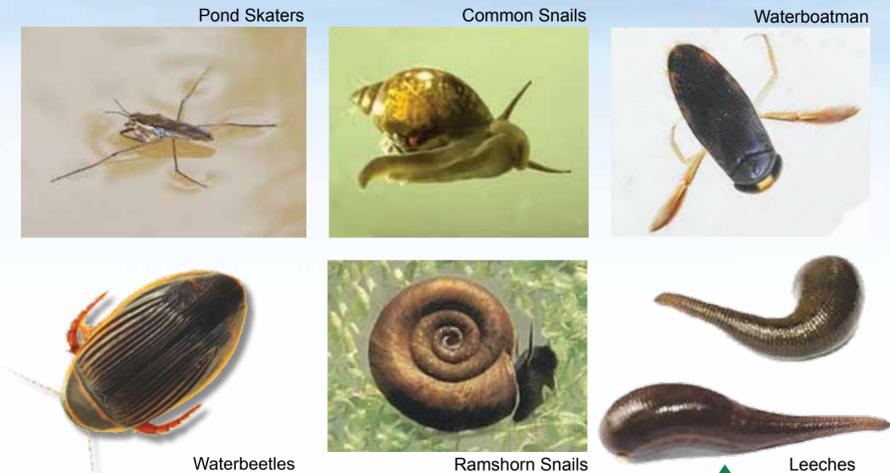
Some plants like Duckweed float on the surface with their roots dangling in the water, other surface plants like Water Lilies have their roots in the mud and their leaves and flowers float on the surface, these plants provide shade.

Plants that are fully submerged in the water produce most of the oxygen like Hornwort, Newts will lay their eggs on these plants and other pond plants such as water forget-me-not and water mint.

Many of the plants will spread quickly so once a year it's recommended to clear the plants back, this is best done in the autumn when any young Amphibians have left the pond. Always leave the debris next to the waters edge for a few days so any creatures that may be trapped are able to climb back into the water.



CAN YOU SEE ANY OF THESE CREATURES IN THE POND?



Did you know - leeches have been used by Doctors for hundreds of years to suck out infected blood in wounds, they are still used today in hospitals and clinics.

Be Safe at the waters edge.

NO DOGS allowed in pond – Habitats will be disturbed killing species, water may be contaminated and harmful to Dog's health. Please **DO NOT** remove any creatures from the pond. **DO NOT** bring any plants or pondlife especially fish from other sites and place in the pond. This will seriously harm the Ecology and upset the balance of life in the pond. Non- native plants will be uncontrollable and pondlife from other sources will spread disease. Fish will terminate the valuable Newt population.

Dragonfly illustrations by Roger Jones

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Frogs, Toads & Newts

Amphibians are animals that can live on land and in the water:

The Common Frog

(Rana temporaria)

Frogs main habitats are woods, fields, meadows and peat bogs – always in moist environments near water. Their food consists of slugs, worms and various insects. Movement is by hopping and they can leap up to half a metre in one jump. Frogs will hibernate from October to February in a sheltered place on land or even at the bottom of a pond in the silt. During breeding season which is usually early spring, the female can lay between 1,000 – 2,000 eggs. These are laid in clumps which initially sink to the bottom of the pond until they fill with water and then the clumps float to the top.

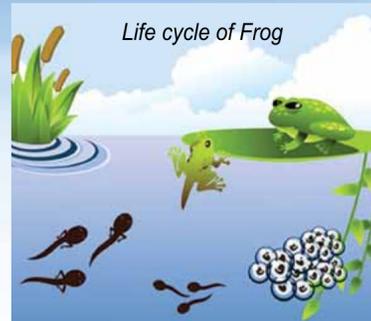
Tadpoles hatch after about 2 – 4 weeks and by 3 months they have grown legs to adapt to living on land. The tail is last to go, it is slowly absorbed by the body as the tadpole grows. Around the beginning of June will be when the young frogs should be ready to leave the pond.



Image by David Crawford

Sometimes tadpoles mature slowly or not at all, it is a very common occurrence, especially if there are a lot of them in the pond. Their lack of development could be down to the following factors: competition due to the numbers, they become slow to develop, there may not be enough food to go around. Another explanation is to do with the water quality or condition; they are highly sensitive, so small changes to the water may affect them.

The adjacent stream may also provide migrating wildlife to our pond and visa versa.



Another explanation is temperature, cooler weather slows their progress, also parental fitness, where good or bad genes are passed down to the offspring, or it could be a combination of these factors. Its likely that either some tadpoles will die due to competition or predators, some will grow naturally and leave the pond opening up space for others to develop and follow them out of the pond, or others will overwinter then develop the next year, especially if the weather is mild.



The Common Toad

(Bufo bufo)

What is the difference between a Frog and a Toad?

A frog has a smooth, slippery skin. Toads have a dry and warty skin. Toads tend to crawl or hop rather than jump, they have shorter and less powerful back legs, frogs leap and have long powerful legs to do this.

Frog spawn is laid in clumps, toads lay their eggs in long strands. Frog Tadpoles are a Brownish colour, Toad Tadpoles are Jet Black. Toads spend more time on land and only go to the water to breed.

Smooth Newt

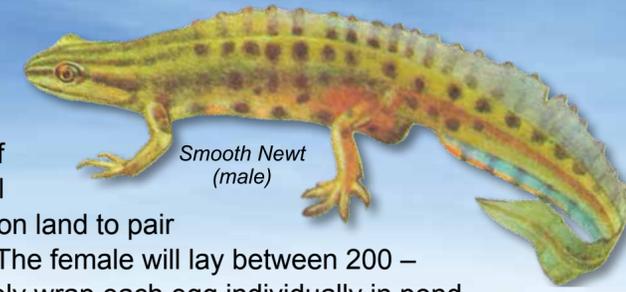
(Lissotriton vulgaris)

Newts can be found in the smallest of ponds and they eat a variety of invertebrates (*creatures without a backbone usually insects*)



Smooth Newt (female)

It is as early as the end of February when Newts will leave their winter shelter on land to pair off in the water to breed. The female will lay between 200 – 300 eggs and will delicately wrap each egg individually in pond plants. After mating the adult Newts will return to land where they hunt. The eggs develop into small young in around 4 months during this time their lungs develop internally and they lose their external gills. They are then able to leave the pond to find a damp place to hibernate.



Smooth Newt (male)

The Smooth Newt is the most common Newt which can be seen in this pond. There is another, rare species of Newt called a Great Crested Newt (*Triturus cristatus*) they are a European protected species and they are also protected under the Wildlife and Countryside Act. The reason they are protected is because of the declining numbers due to the loss of suitable habitats. They are larger and darker than the Smooth Newt, the male has a crest along its back and a separate crest along its tail.

We have created special habitats for the wildlife in the Park

It is important to have the correct environment surrounding a pond and Wildlife area, which will sustain the Ecology within that area so that it will naturally develop. Leaving areas to grow wild without cutting them back and disturbing them, installing woodpiles and considering the plant species are all important.

In Leicesters Park we are constantly looking at providing these pockets of Natural Habitats to encourage Insects, birds and animals on to the Park. By providing these safe havens for them and the food that will sustain them this will increase the populations and provide many different species. This will benefit not only the Wildlife populations but the Users of the Park who will be able to see unusual and interesting birds, Pondlife and animals.

Even in your Garden at home you can encourage Amphibians (Frogs, toads & newts) by leaving a small area wild, create a small pond within it and nearby stack bricks and wood piles.

Ponds that Dry out

It is not a disaster if a ponds water level drops or it dries out, many pond plants and animals will survive and even benefit from periods of drought. Aquatic animals can survive in damp mud for long periods. Many predators may die such as fish but that will only boost the other ponds wildlife. It is often asked why ponds are not topped up from mains water or a nearby water course. This water will be treated or contaminated and will pollute the pond by changing the quality of the water or introduce silt, unwanted nutrients and other species which will affect the existing balance and environment of the pond.