

Ponds and Lakes

Water, water everywhere...much of the land of Rare Breeds Centre is based on clay, clay is non-porous – it doesn't let water pass through it which means it is great for ponds and lakes. Dig a hole around here in the winter and it will fill with water that doesn't drain away and *hey presto* we've got the start of another pond.



The Secret Lake

This is an artificial lake which was a long time ago by a previous farm owner to create a shooting pond to attract wild ducks and geese. Although it is at the top of a hill, all the water from the nearby fields drains into the lake and keeps it topped up.

Over the years, the lake has become colonised, first with plants and then with insects some of which like snails live on the plants (herbivores) and some, such as dragonfly larva feed on other insects (carnivores). The Secret Lake is full of small fish called Roach and Rudd and these feed on the insects and plants in the water (omnivore) At the top are the ducks, moorhens and occasional cormorants that visit the lake to feed on the fish.

This feeding on each other is called a food chain – there are many types of food chains and luckily we humans are at the top of them all!

Pond Life

There are lots of ponds around the farm, some stay full all year and others dry up in the dry months of summer. The best pond is behind the hedge at the back of this lodge. Ponds need oxygen and light to support life – oxygen comes from the pond plants and air, and the light comes from the sun.

Ponds and lakes support a diverse range of wildlife from beautiful plants, insects, frogs and newts to fish, birds, snakes and animals such as water rats – all feed and rely on each other for survival.

We are keen to create new ponds and wet lands around the farm to encourage wildlife and will be digging a new pond behind this lodge shortly.

Given that in the last 50 years, we have lost over 90% of lowland ponds in the UK it is vital that we look after the ones that we have. The pond next to the lodge is newly dug and will take several years to develop.

Where does our water come from?

All our water begins life as sea water

- The sun warms the sea and some of it evaporates into the atmosphere
- The evaporated *Water Vapour* as it's called rises into the air and forms clouds
- Eventually, the water vapour cools, condenses and falls as rain
- When the rain falls, it either runs off the land into lakes and streams here or soaks down through the ground until it hits a layer of non-porous rock and creates an *Aquafer* (a sort of underground spongy river)

Eventually if it isn't used or evaporates, the water ends up back in the sea and the whole process starts again – this is called the *Water Cycle*

