

CHAPTER 06

Habitat

Pond as a habitat:

Ponds are small, shallow, freshwater habitats that provide a home to many plants and animals. Some of the organisms within the pond ecosystem stay in the water all their lives, whereas others visit the water to reproduce or to feed. Many pond inhabitants are too small to be seen with the naked eye.

Ponds are watery habitats that provide good conditions for many types of living thing. They have fresh water like a lake, but they are smaller than lakes.

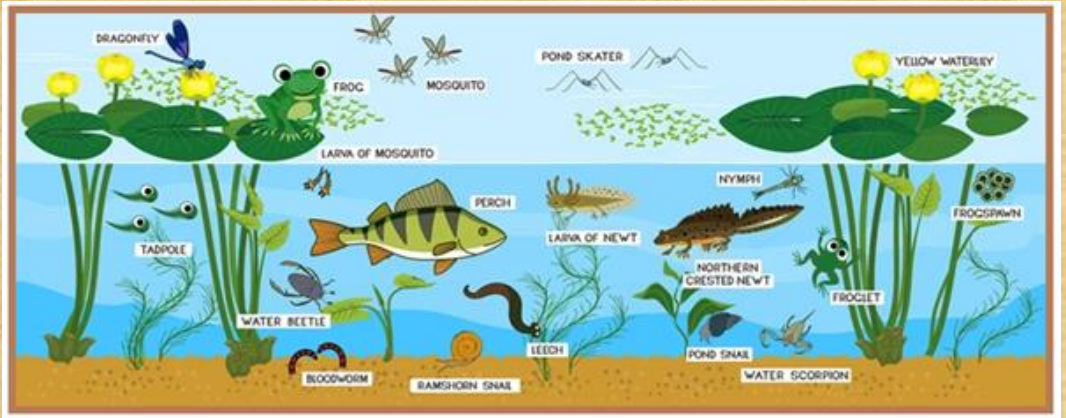
Pond habitats do not stop at the water's edge but continue on for several yards. Animals that live around the pond do so because it is their prime source for water and food.



Plants in a Pond Ecosystem

Successful ponds have lot of different plants growing in them. These plants provide food, oxygen and even shelter for animals living in and around the pond.

Plants need sunlight for photosynthesis, so sunny ponds are more successful than those situated in shady areas. There is a food chain in the pond, and it starts with microscopic phytoplankton and algae. These are eaten by fish and small animals, which are then eaten in turn by larger animals.



Bank Side and Marsh Zones

There are different zones around a pond. The area farthest away from the pond but is still damp is called the bank side. Plants that enjoy dampness thrive in this zone. Such plants include willow herb and meadowsweet.

The marsh zone is at the water's edge and plants that grow in this area attract such animals as frogs to the pond. Yellow flag iris and sedges are marsh plants. The tall stems of sedges are good hiding spots for young amphibians and dragonfly nymphs.

The Aquatic Zone and Plants

True aquatic plants such as water lilies live in this zone. Water lilies have roots that are buried in the mud of the pond bed, but the leaves and flowers float on the surface. Other plants such as duckweed are surface floaters. Their roots dangle

down into the water. Floating plants should not cover the entire surface of the pond because the submerged plants will be unable to live.

Fully submerged plants that live in ponds, such as starwort and pondweed, provide oxygen to the pond so they are essential to the health of fish. The more fish a pond has, the healthier the pond is.

Animals in a Pond Habitat

While fish are the most common life form in a pond, there is a multitude of animal species that live in and around ponds. Among the common pond animals are snails, turtles, snakes, and salamanders.

Frogs and toads also flock to ponds to lay their eggs and dine on mosquitoes and their larvae as well as on dragonflies and water spiders. Birds that dive for fish or eat pond plants and insects include ducks, geese, kingfishers, herons as well as gulls, red-winged blackbirds and swallows.

Small mammals like water voles and shrews also call a pond their home. Voles are primarily vegetarians and eat bulbs, roots, seeds and other plant matter. Shrews do eat seeds, but feed mainly on earthworms, slugs and insects.

Different organisms live in different regions of pond:

This is due to some conditions like availability of different amounts of food, air, light etc.

We find organisms like dragonfly, mayfly and kingfisher living above the surface that is hovering above the pond and then resting over a bamboo pole or a stick jutting out of the surface of the pond. They get food from the surface of the pond. Organisms like snail, whirling beetle and pond skater live on the surface. The larva of mayfly and dragonfly also live on the surface of the pond. Plants like Pistia float on the surface completely while those like the lotus have roots going deep under. On the surface, organisms are easily eaten up by others because there is little protection for them. However, there is plenty of food and air and this is why fish usually come to the surface to feed.

Great water boatman, leech and mosquito larva are found in mid water. Fish and crabs also swim around this region. Pond margins have several grasses, frogs, cranes, crabs etc. Fish usually lay eggs here.

The plants that we see in water are called aquatic plants. Animals that live in water are called aquatic animals. This type of habitat is said to be an aquatic habitat.

Pollution and Pond Life

Bacteria abound in a healthy pond environment. Waste from the living and dead animals that reside in the area is broken down by these bacteria and recycled. There is no pollution in a healthy pond.

Pollution occurs when people intrude on a pond habitat. One form of pollution is dumping of garbage and trash. Other forms include pollution from chemicals such as pesticides that run off farms or lawns and seep into the groundwater.

Too much fertilizer can also cause problems when it seeps into ponds. It encourages algae overgrowth. Too much algae exhausts the oxygen in the pond. The result is lack of oxygen that can kill off pond life.

Though ponds are relatively small when compared to most freshwater systems, every square inch of their space can be rife with life. Shallow enough for sunlight to reach the bottom layers of water and the pond floor, natural ponds are a haven for both plants and animals that require light to survive.

A single drop of pond water can contain more than a million microscopic organisms. Invisible to the naked eye, these life forms include various bacteria, algae, parasites, fungi, protozoa and tiny arthropods. Though they are tiny, they are extremely vital in ponds as they form the backbone upon which larger animals thrive. A well-balanced population of microbes, which develops over time, helps to ensure the resilience of a pond.

