

# Pond Background

A pond is a small body of water, usually surrounded by grass and trees. Ponds can be natural or made by humans. Ponds are very similar to lakes except they are much smaller in size. South Carolina has many ponds, both natural and man-made. Humans make ponds for many reasons including rain water collection for flooding control and to make a habitat look nice. A pond is a great habitat for many organisms and provides beauty to an environment.

Most ponds contain freshwater. They are also usually shallow and the sun's energy can reach the bottom. The surrounding area of a pond provides wonderful shelter for the animals that live in the water and on land. There are many food chains within a pond. A food chain shows how energy gets passed through a group of organisms in one chain starting with the sun (source of energy) and ending with the top predator. The top predator is also called the apex consumer.

Plants typically live around the pond such as grass and trees. Some plants even grow right inside the water's edge such as cattails. Lilly pads are another common plant that float on the surface and provide a great place for frogs and other animals to sit. Another plant common to a pond is phytoplankton. Phytoplankton are microscopic plants that float in the water. All plants in the pond rely on the sun for energy to photosynthesize. Photosynthesis is the process of plants taking carbon dioxide and water to produce oxygen and sugar (food for plants). Plants are producers in the food chain because they can make their own food (sugar).

Many animals also live in a pond habitat. Animals are consumers in the food chain because they must eat food to get energy. Insects thrive in a pond and can be seen on the water's surface such as a water strider, within the water like a mayfly and near the water with butterflies, beetles and ants. Many insects and other invertebrates are often special consumers that eat dead plant and animal matter. Fungi, bacteria, and some invertebrates consume dead organisms and return nutrients back into ecosystem for producers to use again. Frogs, like the bullfrog, can complete their whole life cycle in this environment, starting out as eggs in the water that hatch into tadpoles which develop over time into frogs. The most common animals found in the pond are the many fishes. Small sized fish like the bluespotted sunfish, medium sized fish such as the bluegill and larger fish called largemouth bass are only three types of fish found in a pond. Turtles are also very common in ponds. Yellow-bellied sliders and chicken turtles are just two examples that love to swim in the water with their webbed feet and climb out of the water onto logs in order to sun themselves and get warm. Snakes such as corn snakes, rat snakes and king snakes can all call a pond home. Many mammals love to live around a pond because of all the prey items they can hunt. Raccoons, river otters and deer are a few examples. Flying in the sky around ponds are song birds such as cardinals and blue jays as well as birds of prey like the bald eagle and hawk.