

# CURTIS POND

## LANDSCAPE/POND COMMITTEE

### SIMPLE FACTS ABOUT PONDS

We are privileged to have a pond in our neighborhood. Therefore, we need to know how to keep our pond safe, clean, and pretty. These facts have been arranged to help you find out more.



### HISTORY AND FACTS

The village pond was once a drinking place for animals being driven to market. The pond was often sited at crossroads and used by villagers as a meeting place.



Most ponds are man-made. Ponds in parks and village and farmyard ponds were dug to provide drinking water for animals. Ponds were also built by streams to hold water for driving huge mill wheels. Large houses often had a stew pond in their grounds, in which fish were reared for food for the landowner and his family. These stew ponds attracted wild ducks, which were trapped in nets to provide a meal. Some of these ponds have

since been filled in, but where they still exist they provide an important habitat for wildlife.

## PROTECTING PONDS

Ponds and other areas of fresh water are important not only for people to enjoy, but also as homes for many plants and animals. Without ponds, ditches, and streams, much of our wildlife would disappear. In the twentieth century, many freshwater areas and wetlands have been drained for farming, house construction, and other human endeavors.

Pollution is probably the largest threat to ponds and pond life. Fertilizers from farms and chemicals from industry drain into the water and kill off the wildlife. It is important to save the areas of fresh water that are left.

Human litter can also be a danger to wildlife. Animals get stuck and unintentionally murdered in things like tin foil, plastic bags, and so forth. Also, litter can contain toxic chemicals to wildlife in ponds.



## POND PLANTS

Pond plants grow in distinct zones.

*Marsh Zone:* The marshy zone beside a pond is waterlogged. Plants that grow in this region usually have a spongy texture to carry oxygen.

*Shallow Water Zone:* Shallow water plants have their roots in the water at the edge of the pond. Reeds are among the plants that grow here. When these plants die, they fall into the pond. As the dead material builds up year after year, the water level is reduced. This area eventually becomes marshy and so marshland plants take root in it. In this way the pond gradually grows smaller. The shallow water plants are not as rigid as land plants. Instead, they have soft, air-filled stems supported by the water and leaves that sit on the surface of the pond.

*Mud Zone:* A bit further into the pond, plants grow in the mud and have floating leaves.

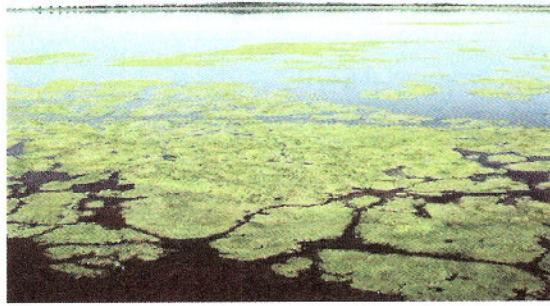
*Deep Zone:* Plants in deeper water either float freely or are totally submerged under the surface. The floating plants move about in the wind. A dense bundle of roots absorbs minerals directly from the water. The deeper water of a pond supports plants that live under the surface.

They all look very different from land plants. The water supports the weight of the plant, so there is no need for strong stems. Instead they have fine stems that are easily broken. Their roots are small and either float freely or anchor the plant in the mud. The leaves of submerged plants are also very fine. The leaves absorb carbon dioxide gas from the water, which the plants use to make their food. On sunny days, look out for tiny bubbles of oxygen among the leaves of submerged plants. Plants need sunlight to make their food, so you will not see many bubbles on dull days.



### **WHAT'S THAT GREEN STUFF?**

*Algae.* The smallest plants in the pond are algae, which are related to seaweed. In warm, sunny weather, some algae rise to the surface of the pond to form a yellowy-green scum, called an algal mat. Like other plants, algae carry out photosynthesis in the sunlight to make food. They are an important part of the food web in a pond because many small creatures feed on them. Larger algae sink to the bottom when they die, where other creatures feed on them.



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