WETLAND TYPES:
Definitions for the Michigan Frog and Toad Survey

1. VERNAL POND

   Vernal ponds are small bodies of standing water that form in the spring from meltwater and are often dry by mid-summer or may even be dry before the end of the spring growing season. Many vernal ponds occur in depressions in agricultural areas, but may also be found in woodlots. Wetland vegetation may become established but are usually dominated by annuals.

2. WET MEADOW

   Wet meadows usually look much like a fallow field except that they are dominated by waterloving grasses and sedges. They will contain nearly 100% vegetative cover with very little or no open water. Any surface water present is temporary or seasonal and only during the growing season in the spring. Wet meadows often form a transition zone between aquatic communities and uplands with soils that are often saturated and mucky.

3. BOG OR FEN

   Bogs are found on saturated, acid peat soils that are low in nutrients. They support low shrubs, herbs and a few tree species on a mat of sphagnum moss. Some bogs are totally overgrown and some consist of open water surrounded by floating vegetation. Acid-tolerant plants found in and around bogs include woody plants such as labrador tea, poison sumac, tamarack, and black spruce. Many species of orchids prefer bog habitats, as do insect-eating sundews and pitcher plants. Bogs are usually only found in the northern part of Michigan.

   Fens are similar to bogs except that the soils are more alkaline because they result from water passing through calcareous deposits. Fens have a higher plant diversity than bogs due to higher nutrient levels. Fens can be found in the southern part of Michigan.

4. MARSH

   Marshes have standing water from less than an inch up to 3 feet deep. The amount of water can fluctuate seasonally or from year to year. They are dominated by soft-stemmed emergent plants such as cattails and rushes. Vegetative cover is usually around 50%. In Michigan, marshes can be found at the edge of some rivers and lakes, in lowlands and depressions, and in swales between sand dunes.

5. WOODED SWAMP

   Wooded swamps are aptly named because they are dominated by woody plants such as shrubs and/or trees. The soil is saturated throughout the growing season. Some may become dry during the summer months. In Michigan, trees and shrubs found in wooded swamps include red and silver maple, cedar, balsam, willow, alder, black ash, elm and dogwood. They often occur along streams or on floodplains, in flat uplands or shallow lake basins.
6. POND

Ponds are open bodies of water that are less than 20 acres in size and that do not dry up during summer months. There is little emergent vegetation but some floating vegetation may occur around the edges.

7. OTHER