lakes, ponds and reservoirs



CHARACTERISTICS

Lakes and reservoirs are wetlands and deep water habitats with the following characteristics: situated in a depression on the landscape or in a dammed river channel; trees, shrubs, emergent plants, mosses or lichens not making up over 30 percent of the area; the total area exceeding 20 acres, although some areas under 20 acres may be included if their depth is over six and one-half feet at low water, or if an active waveformed or bedrock shoreline makes up all or part of the boundary; and usually extensive areas of deep water with some wave action. Ponds have nearly permanent open water at least one-half acre up to 20 acres in size. The bottom sediments are mud, sand, gravel, cobble and/or organic debris. Many Illinois ponds are manmade and include farm ponds, borrow pits and small reservoirs.

WHAT LIVES HERE?

Organisms may be found throughout, on top of and along the edges of the water of lakes, ponds and reservoirs. Bottom dwellers are called benthic organisms and include crayfishes and mussels. Free-swimming organisms, like fishes, are nekton. Plankton are tiny, freefloating organisms. Neuston, such as water striders, live on the surface film of water. Vegetation is limited to the shallow edges from shore to a depth of about six feet. Commonly seen plants include knotweeds, water lily, water lotus and spatterdock. Lakes, ponds and reservoirs vary in the diversity of species they contain. Water temperature is one of the key factors in regulating which species can live in a lake or pond. Water temperature affects the amount of dissolved gases, (oxygen, carbon dioxide and others) the water can hold as well as the feeding, growth and reproduction of aquatic organisms. Some Illinois lakes are unproductive (oligotrophic) with few different types of organisms but plenty of oxygen and clear water. Others, like Carlyle Lake, Rend Lake and Lake Shelbyville, are highly productive (eutrophic) with many suspended particles, low dissolved oxygen and a great variety of species. Some lakes, such as Devil's Kitchen Lake, are between the two extremes (mesotrophic).

RECREATION

biking, boating, camping, canoeing, fishing, hiking, hunting, swimming, trapping, water skiing, wildlife observation and/or photography

WHERE IS IT FOUND?

More than 2,900 lakes, 84,000 ponds and 3 large reservoirs are found in Illinois. Besides some lakes that were naturally formed through the actions of glaciers thousands of years ago and oxbow lakes, the remainder of these water bodies are manmade. Rend Lake in Jefferson and Franklin counties, Carlyle Lake in Clinton, Fayette and Bond counties and Lake Shelbyville in Shelby and Moultrie counties are the three reservoirs.

© Illinois Department of Natural Resources. 2024. *Biodiversity of Illinois*. Unless otherwise noted, photos and images © Illinois Department of Natural Resources.