

complete annual cycle of pond temperature and DO by sampling every week or two.

In summer, make temperature and DO measurements before 6 a.m. and again at 3 p.m. Sample at intervals of 1-3 feet (30-100 cm) throughout the water column where the pond is deepest. (Once found, this point can be marked with a simple buoy, such as a plastic milk carton on a string attached to a brick.) If an electric thermometer isn't available, use a fisherman's thermometer encased in a water-collect-

ing vial (available at sporting goods stores). Lower to desired depth, then wait for the thermometer to adjust to temperature.

Results of the temperature and DO measurements should be recorded as tables and possibly also as graphs. Examples are shown on page 21. These are called temperature and DO profiles. If taking and analysing DO samples at each of the depth intervals is too time-consuming, then take just a few key samples. For example, take one at the bottom of the pond, where DO

is most likely to be inadequate, and one at a medium depth.

General guidelines for determining suitability of ponds for warm-water or coldwater fishes are covered in Chapters 7 and 8 on management for fishing in each of these kinds of ponds. Proper temperature and DO levels are discussed there.

Additional reading of literature on pond and lake biology is recommended, especially if the owner intends to make and interpret his/her own measurements. A list of references is at the end of the bulletin.