EDUCATION RECAP

Charles Anfield, CGCS, *Heritage Bluffs Golf Course*

Follow up to Fish Management for Your Golf Course Lakes and Ponds

The MAGCS Members met at Joliet Country Club for the April Meeting, hosted by Mark Kowaliczko (Kov-a-lesh-ko). The education topic for the day was "Fish Management for Your Golf Course Lakes and Ponds" and was presented by Ted Werenski, Fish Biologist of Richmond Fisheries in Richmond, Illinois.

Ted started out his presentation with the question, "Is your lake an asset or an eyesore"?

- Factors influencing lakes include:
- Design and construction of lake
- Fish stocking programs
- Fish surveys
- Bio weed control
- Aeration systems

Mark Kowaliczko

Design and Construction

The long term performance of the lake will be heavily influenced by the original design of the lake. If it is built correctly, it will be much easier to manage. If not properly constructed, annual problems will occur. The pond should be a minimum of 10-12 feet deep covering 30% of the pond volume. Steeper slopes of a 3:1 grade are best. Shallow depths on the edges often lead to emergent plant problems. This is often where the filamentous algae is formed due to light penetration of the shallow depths. Often times, ponds are built with shallow depths on the edges for safety reasons.

Fish Stocking Programs

Fish are the top of the food chain in a Northern Illinois lake ecosystem. The Largemouth Bass and Bluegill are the preferred species to dominate a lake. It is crucial to the health of the lake to have balance in the number of species, size of populations and overall fish numbers. Periodic stocking may be necessary to maintain optimum population levels. If you avoid stocking, undesirable aquatic growth and unwanted fish may dominate lakes. Fish species available for stocking include: Largemouth Bass, Bluegill, Hybrid Sunfish, Red ear Sunfish, Fathead Minnows, Channel Catfish and Amur Grass Carp. Individual lakes require a balance. A specific fish stocking program is required for each lake.

Fish Surveys

A fish survey is important to be able to make a good management decisions. You need to determine the numbers of the fish population. Electrofishing is a method to determine a representative sampling of the lake. The survey can identify numbers of species, sizes, overall numbers and the health and condition of the fish. Electrofishing is not designed for mass removal of unwanted species or to reduce numbers.

Bio Weed Control

In an attempt to find a less expensive alternative to chemical or mechanical weed control, our Illinois Department of Conservation has authorized the use of sterile grass carp (White Amur). The White Amur is native to northern China and southern Siberia. It has been used throughout the world for biological control of aquatic vegetation. The Triploid White Amur is produced from the normal "Diploid" parents, using state-of-the-art hatchery techniques. It is a certifiably sterile animal and cannot reproduce in nature. It is important to keep the stocking rate appropriate to keep the fish at the desired size. A fish that is too large will not eat algae. It is better to have a larger number of smaller fish. These fish require a permit that is regulated by the Illinois Department of Natural Resources.

Aeration Systems

Aeration systems are designed to circulate water in a lake or pond. This can come in the form of surface aeration such as fountains or bubblers. Subsurface aeration comes in the form of compressor diffusers. These are not as effective in lakes less than 10 feet in depth.

Richmond Fisheries provides professional aquatic management services with special emphasis on fisheries management. Their goal is to assist customers in proper lake management, fish management and aquacultural production. **-OC**