

## **From: The Virginia Forest Landowner Update V. 23 No. 3, Summer 2009**

### **Pond Management – What to Think About?**

**by: Brian “Scutter” Lee, *Biological Solutions, Inc***

Ponds provide excellent opportunities for owners to manage a valuable fisheries resource, and enjoy the fruits of their labor when things go right. Common problems associated with pond management include unbalanced fish populations, aquatic vegetation, and costs incurred to resolve these issues. The first question that is critical for any pond owner to ask is, “What is the desired management goal for the pond?” Will the pond be managed for recreational fishing, aesthetics, storm water retention, irrigation, or will the pond be managed to serve multiple uses? Extension offices, state fish and wildlife agencies, and/or private consultants need this information to provide the pond owner with management recommendations for both short-term and long-term management of the pond. Some common “hot topics” regarding pond management are addressed below. These topics focus on ponds managed to support recreational fishing.

#### **Pond Construction**

Before investing money and time building a pond, make sure you have an adequate water supply to fill your pond, and more importantly the proper soils that will retain water. Pond size should be at least one acre to prevent desirable fish from being over-harvested. The maximum pond depth should not exceed 10 - 12 feet, and ponds should have a minimum shoreline depth of 3 feet to prevent aquatic vegetation from reaching undesirable levels.

#### **Fish Stocking**

Common mistakes that pond owners make are stocking the wrong species, and stocking fish without having a pond surveyed. For most ponds in Virginia, the best advice is to KEEP IT SIMPLE. Desirable fish to stock are largemouth bass, bluegill, redear sunfish, channel catfish, golden shiners, and fathead minnows. It is not recommended to stock gizzard shad, blue catfish, pickerel, pumpkinseed, and especially black and/or white crappie. These fish overpopulate, experience slow growth rates, and/or compete with desirable fish such as largemouth bass for available forage.

Many pond owners think stocking fish is going to solve all fish population problems. Frequently, stocking fish creates more problems than it solves. Stocking without conducting a survey often results in wasted money. A survey will determine if stocking is necessary, and if so, what species, size, and numbers to stock based on desired management goals of the owner.

#### **Aquatic Vegetation**

Aquatic vegetation provides critical nursery habitat for juvenile fish, supplies oxygen, and creates ambush points for predator fish. If aquatic vegetation exceeds optimal levels (> 30%), ponds may be negatively affected causing excessive angler hook fouling, fish kills, and unbalanced fish populations. If aquatic vegetation reaches undesirable levels, the target species should be positively identified by a qualified person. Once identified, proper control measures can be recommended. Common management techniques include chemical (spraying pesticides), biological (stocking triploid grass carp), or mechanical (removing with machine or by hand). It is critical that pond owners understand and comply with local, state, and federal regulatory requirements commonly associated with spraying pesticides and stocking triploid grass carp.

For more information on pond management, go to the Virginia Department of Game and Inland Fisheries (VDGIF) website and click on the following link <http://www.dgif.virginia.gov/fishing/pondmanagement/>. This link provides pond owners with additional information to assist with pond management.

**Scutter Lee is the owner/president of Biological Solutions Inc.**

**biologicalsolutions@gmail.com, 804/366-7245**