



# TEXAS A&M FOREST SERVICE

## *Forest Resources:* Pond Construction and Management

A properly located, well-constructed pond is a beautiful addition to a landscape. Ponds provide owners with excellent recreational activities such as fishing, swimming and wildlife viewing as well as potential water sources for livestock watering, irrigation and firefighting. Building and maintaining quality ponds requires proper location and design, stocking with appropriate fish species, and establishing vegetative cover.

### **Pond Construction:**

The first step in good management is proper construction. A prospective pond owner should contact a representative of the Natural Resources Conservation Service (NRCS) in the county in which the pond will be constructed. The NRCS offers free guidance for planning, design and construction. Private consultants also provide assistance in pond management for a fee. The owner should also use a reputable contractor (with references) familiar with design and construction of ponds that meet NRCS engineering specifications.

While the pond is under construction, consult a fisheries biologist for recommendations that will enhance fishing. For example, brush piles or standing trees left in specified areas will serve as fish attractors. Fish attractors help anglers locate and catch fish. They attract fish by providing them cover and serving as habitat for aquatic insects and forage fish. Common types of fish attractors include evergreen treetops weighted to the bottom, piles of rock or cinder blocks, and tied and weighted reefs of discarded tires. Place them in shallow depths of two to six feet where oxygen levels are adequate.

Advice can be given on underwater contours (mounds or ditches), suitable sites for spawning (gravel), and placement of docks and piers. While the pond is under construction is a good time to apply agricultural limestone to the pond bottom. Remove trees, stumps and fences that

might be hazardous to boats or swimmers.

### **Stocking:**

Contact a local fish fingerling supplier for bluegill, red-ear sunfish (shellcracker), catfish and the Florida strain of largemouth bass for ponds that contain no fish and meet other requirements.



### **Liming and Fertilization:**

Liming is essential before most ponds can be effectively fertilized. Many times, ponds will not respond to fertilization if bottom muds are acidic. Under these conditions, agricultural limestone must be applied to correct the acidity. If the pond fails to develop a plankton bloom after repeated applications of fertilizer, mud samples must be taken from the pond's bottom. Take samples from several different locations, and then mix them together. Spread the sample on a piece of plastic or wood to dry. After drying, contact the local Natural Resources Conservation Service (NRCS) for processing of the soil sample.

Fertilizer must be properly applied to increase natural fish food. Properly fertilized ponds normally produce 3 - 7 more pounds of bream and largemouth bass than unfertilized ponds. Before stocking, the pond owner should decide if fertilization is a part of the long-term management plan. Ponds cannot be fertilized economically if the water stays muddy or if excessive amounts of water are flowing through the spillway during spring and summer.