

March 12, 2004

Dear Prospective Property Owners:

Over the last 15 years, Southeastern Pond Management has dedicated itself to provide quality pond care to pond owners throughout the Southeast. With three offices throughout the southeast and eight biologists with Master level degrees in fisheries, we are able to offer the most recent in pond care services.

I am truly excited about the 70 acre Highlands Lake. Its close proximity to Oxford, rolling wooded hillsides, and abundant fish population make it a tranquil location for families to reside and recreate. The opportunity to catch trophy largemouth bass can be as close as your back door.

In order to ensure the success of the 70 acre Highlands Lake, proper construction and stocking programs were implemented. Presently, the lake has excellent water quality due to the abundant springs and adequate water shed. It is likely that the water level will vary little during the course of the year. To further enhance the water quality and promote the growth of the fish population, agricultural lime was applied to the pond shortly prior to impoundment. The application of agricultural lime will help sustain a high level of biomass in the pond as well as negate the potential for aquatic vegetation.

Shortly after construction, coppernose bluegill, redear, and flathead minnows were stocked in October 2002. The following spring, threadfin shad were stocked to promote the growth of trophy largemouth bass. In June of 2003, F1 largemouth bass were stocked. F1 largemouth bass are an innovative type of bass that allows for both northern and Florida genes to be present in the largemouth bass. As a result, a fast growing, aggressive largemouth bass is attained. Other lakes in the Oxford area have F1 largemouth bass reaching well over 2 pounds after just one year. Pure Florida largemouth bass are rarely stocked due to their tendency to be hard to catch. Channel catfish were also stocked at a moderate rate to allow anglers who enjoy fishing for catfish the opportunity to angle large sized catfish.

Although proper construction and stocking are the basis for a healthy and productive pond, it is important to implement proper management on a yearly basis. For the Highlands Lake, proper management inputs will include fertilizing, fish feeding, and electrofishing.

Fertilizing

The limiting nutrient in most freshwater systems, as it relates to plankton production and a generally high level of fertility, is phosphorous. Phosphorous must be added on a regular basis during the growing season on order to stimulate significant plankton growth. Plankton, both plant and animal, are the base of the food chain on ponds. Infertile ponds, those with low alkalinity and relatively little nutrient input, typically demonstrate low levels of plankton production throughout the year including the critical growing and spawning season. In effect, this limits the amount of food available to the

small insects and insect larvae which are the next link in the food chain. The “ripple effect” of a low level of fertility is felt far up the food chain, all the way to the primary predators, the largemouth bass.

In order to create and maintain a high level of plankton production in your pond, thus providing conditions most favorable for fish production, fertilizing on a regular basis is required.

Fertilization takes place during the growing season from March through October. There are any number of suitable pond fertilizers. We recommend water soluble granular (10-52-4) at a rate of 4-8 pounds per surface acre per application. Fertilizing is a key component to proper pond management and should be applied according to the following schedule:

Standard Fertilization Schedule

1. Beginning is early March; make three applications at two week intervals.
2. Make the next three applications at three week intervals.
3. Thereafter, apply once per month or whenever visibility exceeds 18-24 inches.

Fertilization is perhaps the single most basic and important element in order to create an environment conducive to maximum production and growth of fish. In addition to improving fish production, fertilizing can greatly reduce the amount of vegetative growth in your pond through the process of “shading out” sunlight.

When phytoplankton is stimulated to a density of 18-24 inches of water clarity, sunlight is unable to penetrate to deeper water. Without sunlight, the nuisance weeds are unable to grow. However, it is important to note that fertilizing, if done incorrectly or infrequently, can spur weed growth by supplying the nuisance vegetation with nutrients.

In addition to weed control, fertilizing is fundamental to increase the base of the food chain. Fertilized ponds can support up to 350 pounds of fish per acre, while unfertilized ponds will support considerable fewer pounds of fish per acre. In addition, threadfin shad are planktivores and rely solely on the plankton that is stimulated through fertilizing as their food source.

Supplemental Fish Feeders

Supplying copperside bluegill with feed that is distributed from automated fish feeders is a quick and efficient way to maximize the growth rate of copperside bluegill. Over the last several years, I have seen copperside bluegill grow to 7 and 8 inches in one year when provided with supplemental feed. In addition to increasing growth rates, supplemental feed increases the prey base providing more food for the largemouth bass. When largemouth bass can feed on bluegill and shad without putting forth much effort, they can attain large sizes quickly.

One of the best advantages of installing supplemental feeders is the fact that bluegill may be caught at almost any time. It is an excellent method by which young anglers may catch

fish quickly. Supplemental feeders should be installed shortly after bluegill are introduced. Floating fingerling catfish feed should be applied up to three times per day from March through October. A sinking feed can be used in winter months when bluegill are less active.

Fish Population Analysis

Analyzing the fish population each year is vital to maintaining balance in your pond. Electrofishing gives us the ability to determine the spawning success of the largemouth bass, bluegill, and threadfin shad. Additionally, we can determine the harvest regime that will help insure the balance of your pond. Our electrofishing report is 18-20 pages in length and describes both in graphic and verbal form the data collected via electrofishing. We will also list the time frame for implementation, the cost, and the benefit of the suggested management activities.

Electrofishing, liming, and fertilizing are all imperative yearly management programs. Other management programs that may become necessary on a limited basis are weed control and liming.

Because the application of agricultural lime was performed prior to impoundment, it is not likely that additional lime will be needed for some time. Monitoring the water quality every year during the electrofishing evaluation will determine the liming requirements. I estimate that it will be 4-7 years before the addition of agricultural lime is again necessary.

Aquatic vegetation may arise at some point during the summer months. Although the depth of the pond and proper fertility will reduce the potential for weed growth, there are some types of weed species that may arise. If weed growth becomes abundant, the application of herbicides or grass carp may be necessary. These management inputs may be implemented when the time arises.

Overall, the 70 acre Highlands Lake is well on its way to becoming a premier fishery in Mississippi. There are a few large bodies of water that have had as much care and attention directed toward the construction and stocking as Highlands Lake. This will certainly be evident in the recreational fishing opportunities and the positive impact this can have on property values. However, this will not happen by chance. Proper pond management is vital to the long-term success of the pond. Like all biological systems, a little management can produce tremendous results. I expect that anglers will be catching largemouth bass in the 10+ pound range by the fall of 2007 if management goals are attained.

We are always happy to address the concerns of pond owners. All property owners may contact us at anytime in order to address their concerns. We look forward to your success and congratulations on a wonderful pond.

Sincerely,
Scott Kirk

Fisheries Biologist, MS