SEPOND
SOUTHEASTERN POND MANAGEMENT

October 11, 2023

Mr. Ted Childress
503 Olmsted Street
Birmingham, AL 35242

Dear Mr. Childress:

Enclosed, please find your copy of the Management Plan we recently completed for Spoonwood Lake.

Spoonwood Lake is presently functioning as a dynamic, balanced fishery. As such, our management recommendations center primarily on reducing the total number of adult predators (largemouth bass), introducing supplemental forage (threadfin shad) and improving the conditions for the production of forage through enhancing the lake's fertility level:

- Largemouth bass (15" and less) should be harvested, up to a total of ~300 pounds per year.
- Stock 1 load of threadfin shad in Fall 2023.
- Apply 50 tons of agricultural limestone in Winter 2023.
- Maintain the current fertilization program in Spring 2024.
- Stock 2 loads of threadfin shad in Spring 2024.
- Conduct an electrofishing balance assessment (Annual Evaluation) roughly one year from this date.

Mr. Childress, we are always available to discuss these recommendations or answer any other questions you might have.

Good fishing,

Scott Cherones

SEPOND
SOUTHEASTERN POND MANAGEMENT

Management Plan For

SPOONWOOD LAKE

October 4, 2023

INTRODUCTION

As an integral part of the ongoing management program for Spoonwood Lake, Southeastern Pond Management conducted a comprehensive evaluation of the 10 acre impoundment on October 4, 2023. A representative sample of the fish community was collected by electrofishing to accurately assess the present state of balance. In addition, a water chemistry test was conducted to determine total alkalinity. The degree of aquatic weed infestation was also recorded. Results of the assessments provide the basis for this management plan.

The goal of this management plan is to create and maintain a balanced fish community in Spoonwood Lake. The following evaluation report and management plan details and explains our recommendations with the follow goals in mind:

- Create condition favorable for the consistent production of “quality size” and “trophy size” largemouth bass.
- Create conditions favorable for the consistent production of “quality size” bluegill.
- Generally maintain a high level of water quality as well as an aesthetically pleasing environment for aquatic recreation.

It is important to note that quality fishing will not be accomplished “overnight”. As you read through this plan, bear in mind that the specific activities we have recommended are not one-time inputs, but rather a collection of ongoing management activities that will establish and maintain long-term quality fishing. Proper pond management, like the management of any natural resource, is an ongoing process. Each management input is recommended individually; however, it should be noted that the management program suffers if all activities are not implemented. Feel free to contact us and further discuss management ideas you may have.

Previous evaluations of Spoonwood Lake have resulted in the thoughtful outline of management options in an effort to approach your stated management goals. Our latest findings, as well as results from previously applied management recommendations, are contained within the following pages.

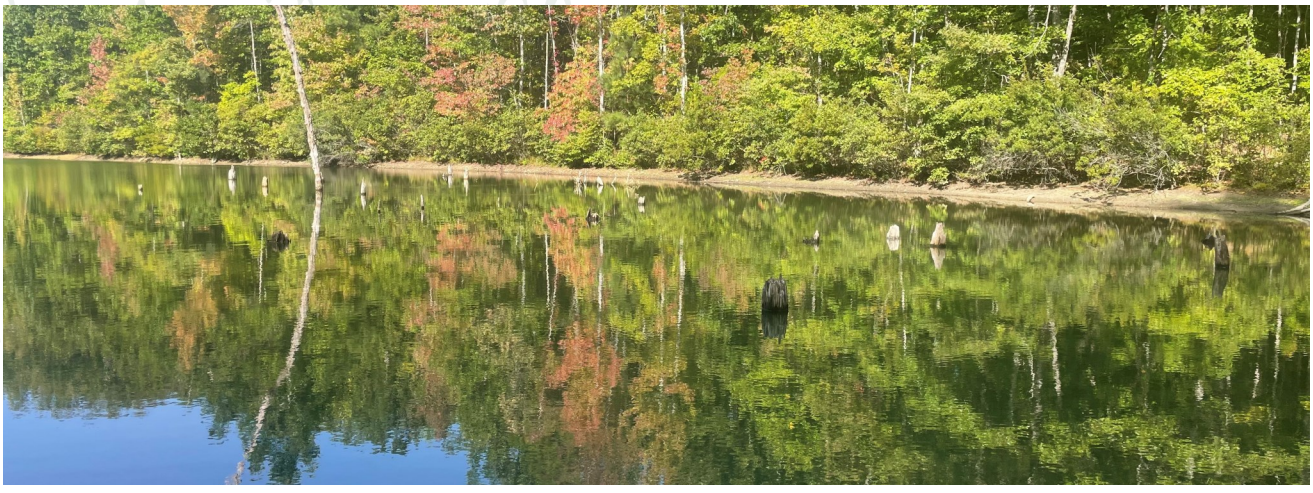
	Quality Size	Trophy Size
LMB	16-20”	20”+
Bluegill	7-10”	10”+

LAKE ASSESSMENT

At the time of our visit, total water alkalinity in Spoonwood Lake was measured at 21 parts per million (ppm). This level of alkalinity is barely above the minimum recommended threshold of 20 ppm, and represents conditions unsuitable for effective fertilization. Spoonwood Lake has been fertilized adequately in the recent past, resulting in a light plankton bloom at the time of our visit. Automatic fish feeders are not present on the lake. The natural woody fish habitat was noted as showing signs of age and decay. Occasionally adding fresh brush to habitat areas will keep them attractive to fish.

During the evaluation, we observed a light infestation of black willow growing along the margins. A description of this plant may be found in the Aquatic Weed Identification section of this report.

Bass harvest was reported as limited. This level of harvest has proven sufficient. Harvest, and its importance in structuring fish communities will be discussed in more detail in the Recommended Management Activities section of this report.



FISH COMMUNITY BALANCE

Fish communities in ponds are governed by a predator-prey relationship. The interactions of predator and prey are characterized by a concept we refer to as *balance.* Suitable balance in a fish community is characterized by a healthy distribution of both predator and prey over a wide range of age and size classes. **Predators** are species which rely on fish as their primary food source. **Prey** species rely on sources other than fish.

Classic balance in small impoundments is defined by several parameters, most importantly a suitable ratio (by size and weight) of predator to prey. If one size-class becomes overly abundant or lacking, a condition of imbalance results. By analyzing an electrofishing sample it is possible to determine the state of balance within a given fish community.

In fisheries science, the condition of individual fish is used as another indicator of the overall balance of the fish community. Relative weight (Wr) is an index used to categorize the *condition* of fish within a given population. Calculated Wr values greater than 100 indicate plump, robust fish. Wr values less than 100 suggest that individuals are in less than excellent condition, perhaps the result of some predator: prey Imbalance. Wr values less than 85 would indicate malnourished fish; a sign of intense competition for forage.

Figure 1 depicts balanced populations of predator and prey in a typical sport fish pond. Note that all sizes are well represented; no noticeable gaps are present.

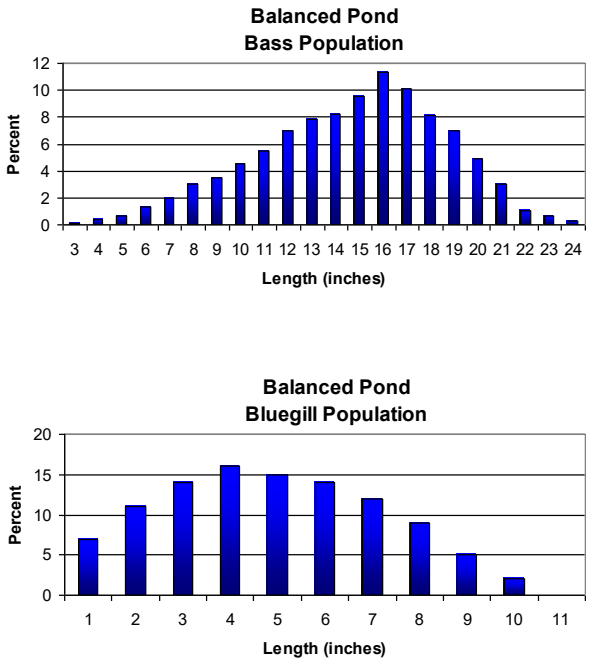


Figure 1. Length distribution of bass and bluegill in a typical balanced pond.

Predator and prey fish are measured and weighed to analyze the overall balance of the fish community.

FISHERY ASSESSMENT

The fishery in Spoonwood Lake was sampled with standard boat-mounted electrofishing equipment. The sample contained largemouth bass, coppernose bluegill, threadfin shad and redear sunfish (shellcracker). Currently, largemouth bass are functioning as the primary predators in Spoonwood Lake. The bluegill, shad and shellcracker are the prey.

Threadfin shad have become an important component of the forage base in Spoonwood Lake. We observed several different size groups, indicating a healthy population. Maintaining a healthy shad population will be important for Spoonwood Lake to continue producing quality and trophy size bass.

Bluegill and shellcracker were collected ranging in size from 3 to 9 inches in total length. Figure 2 depicts the length distribution of the bluegill population. Of note, a moderate amount of intermediate (3-5") bluegill and other forage was collected. Further, mature adult bluegill were present in the sample.

Largemouth bass ranging in size from 5 to 21 inches in total length were collected in moderate abundance. The length distribution of largemouth bass (Figure 3) reveals the presence of bass over a wide range of size classes. This represents significant improvement from the previous year, most likely the result of improved bass harvest, and the increase in available forage. The larger bass collected from Spoonwood Lake were individually tagged with an identification number so their growth can be monitored.

The average relative weight of adult bass in our most recent sample additionally reflects little change over 2021. This year's average relative weight was 95, as compared to 2021, which was 96 (Figure 4). Largemouth bass 15 inches and smaller represent the primary targets for harvest over the coming months. We harvested 32 pounds of bass during the evaluation.

Overall, we characterize the fish community in Spoonwood Lake as balanced. A more detailed explanation of balanced ponds in general, and Spoonwood Lake in particular is located in the Current State of Balance section of this report.

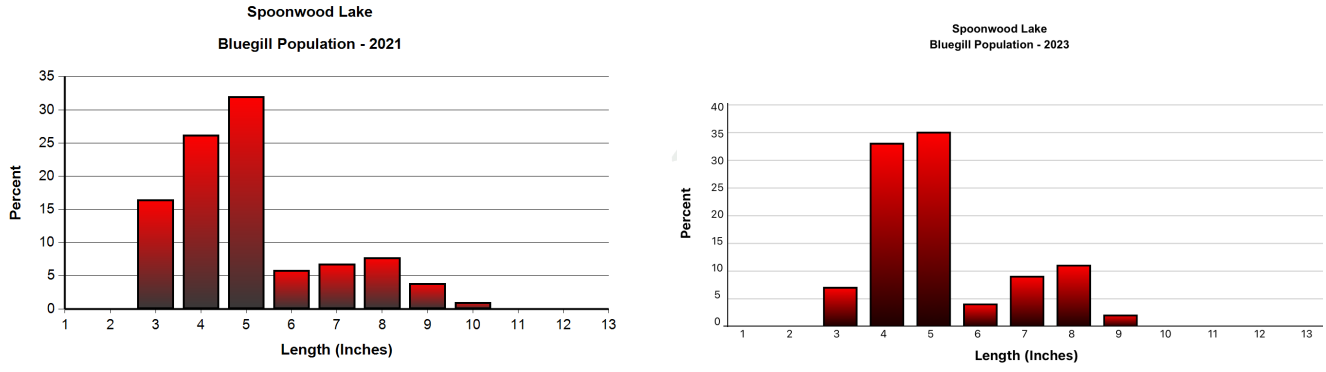


Figure 2. Comparison of the length distribution of bluegill collected from Spoonwood Lake in March 2021 and October 2023.

FISHERY ASSESSMENT

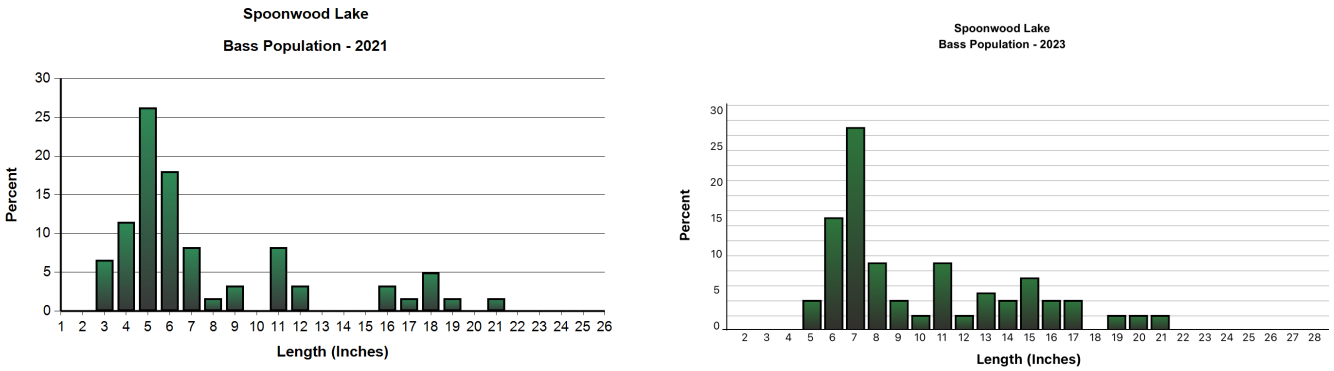


Figure 3. Comparison of the length distribution of bass collected in Spoonwood Lake in March 2021 and October 2023.

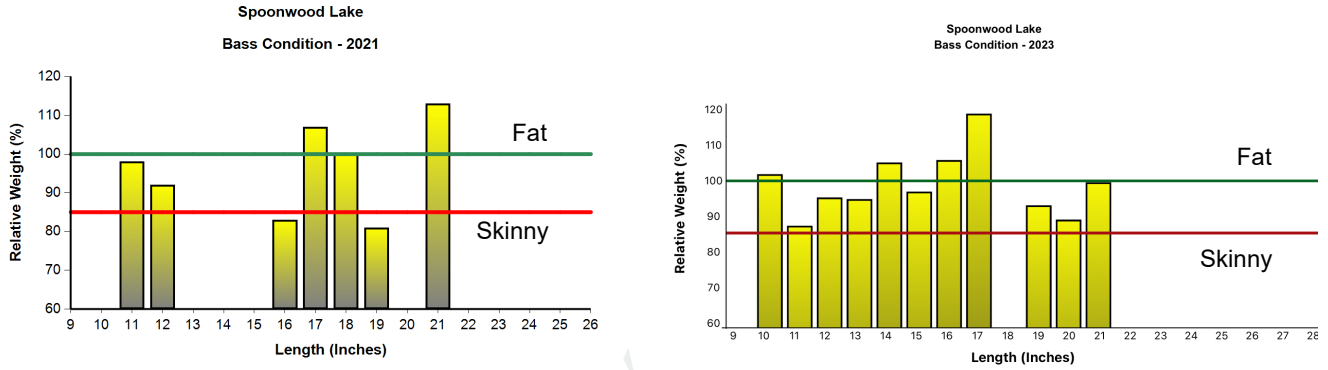


Figure 4. Relative weight distribution of adult largemouth bass collected from Spoonwood Lake in March 2021 and October 2023.

TAGGED FISH DATA

Length, Weight, and Condition of Tagged Bass in Spoonwood Lake October 4, 2023

Tag #	Length (in)	Weight (lbs)	Wr
23420	16.93	3.26	120.86 %
23419	20.94	5.15	96.81 %

BALANCED

Much of pond management is centered on creating or maintaining a balanced fish community. A balanced sport fish pond is preferred by most anglers because it provides quality bass and bluegill, both in terms of number and size. A balanced fish community is characterized by a wide size distribution of bass, bluegill and other forage species; adequate reproduction of all species is present.

As mentioned previously, our recent electrofishing sample from Spoonwood Lake contained a healthy distribution of bass across a range of size groups. Additionally, the majority of the bass were in good condition. Bass in the 16 to 17 inch length group were in excellent condition, indicating an abundant forage base for this length group of bass. However, bass in the 11 to 13 inch group were in slightly poorer condition, indicating the need for selective bass harvest and/or supplemental forage stocking to maintain a well balanced fishery.

The presence of intermediate size (3-5") prey is critically important in sport fish ponds. These individuals are the size preferred by the more abundant, younger bass in a typical population. A high relative abundance of intermediate size prey is often an indication of a balanced pond. When a state of balance exists, intermediate size prey are among the most abundant segment of the overall fish community. Under these conditions, bass typically grow quickly, and are capable of reaching their full growth potential.

During our electrofishing sample, we observed a healthy forage base, particularly the distribution of intermediate sized prey. In order to maintain the predatory: prey balance and the continued growth of bass in Spoonwood Lake, it will be necessary to ensure that conditions for the production of forage such as fertilization, supplemental feeding and selective bass harvest are sustained or even enhanced.

In a typical fertilized sport fish pond, bass harvest is required in order to prevent overcrowding. The old idea of "throw him back and catch him when he gets bigger" is not a sound approach in small impoundments. If sufficient harvest does not occur, a bass-crowded condition is the likely result. This usually leads to a low quality bass fishery. Strategies to improve the quality of the bass and bluegill fishing are discussed in the Recommended Management Activities section of the report.

FISH HARVEST

One of the keys to a balanced fish community, as well as the growth of trophy largemouth bass in your pond, is the selective removal of largemouth bass. Largemouth bass, when present with bluegill as their primary source of forage, produce an annual surplus which must be harvested in order to maintain balance. We generally recommend harvesting the smaller, more abundant size range of bass at a rate of **25 to 35 pounds per acre per year**. Bass harvest rates are designed to reduce the level of predation on the bluegill population as well as increase the growth rate and condition of the remaining bass. Recommended harvest quotas often change in response to population changes and should be reevaluated annually. Harvesting largemouth bass can be accomplished by the following methods:

- Hook and Line Harvest: Largemouth bass of the appropriate size should be removed whenever they are caught up to the harvest goals. A record should be kept of the total number and weight of bass removed during each fishing trip. Larger bass, those presently exceeding the size limit, may be "protected" since these represent the potential trophy bass in the pond.
- Electrofishing Harvest: Selective bass harvest through electrofishing is a particularly effective management tool. This method of harvest may be quite productive if hook-and-line efforts are not adequate. The cost for this service is based on time spent (hourly). We will keep close records of the total number and weight of individuals removed.

One important point is that bluegill and shellcracker harvest is strictly optional in balanced ponds. It is not necessary to harvest a certain weight of bluegill per acre to maintain the predator/prey balance or to prevent bluegill overpopulation. The bass will more than adequately control bluegill numbers. Typically, a generous amount of adult bluegill can be harvested in a well-fertilized, balanced lake. However, over-harvest of bluegill may be a concern, depending on the number of anglers and fishing pressure. We often recommend limiting bluegill harvest to **10 per person per day** in bass-crowded ponds to prevent over-harvest. In severely bass-crowded ponds, we recommend **suspending bluegill harvest** until the population increases through management efforts.

LIME APPLICATION

Water alkalinity plays a large role in the health and productivity of fish communities. The water alkalinity of a pond is determined by the soil pH and the alkalinity of the water source feeding the pond. Highly alkaline soils in the watershed of a pond (such as in the black belt) help promote the growth of phytoplankton, the base of the food chain, by allowing full availability of the nutrients in the system. Alkaline soils also have a high buffering capacity, which reduces broad daily fluctuations in pH.

Most small impoundments across the Southeast however, have relatively acidic soils in their watershed and require periodic applications of lime to maintain a total alkalinity of at least 20 ppm of CaCO3. This minimum alkalinity level is required to have high nutrient availability to phytoplankton communities, thus maximizing the effectiveness of a fertilization program. In lakes with an alkalinity reading of less than 20 ppm, we recommend applying a liberal dose of agricultural limestone.

There exists no "magic formula" to determine the amount of lime required to increase and maintain total alkalinity above the 20 ppm threshold. Many lakes in the Southeast seem to require only 2-3 tons per acre in order to meet the initial "lime requirement".

However, since you cannot apply too much lime to a pond and the more applied, the longer the benefit, it is usually more cost effective to apply larger amounts of lime, such as 4 to 8 tons/acre, at longer intervals.

The length of time between necessary lime applications is very difficult to predict. There are many environmental variables at play such as: 1. beginning alkalinity of the water, 2. amount of water flowing through the pond, 3. other sources of alkalinity (springs, etc.), 4. amount of tannic acid released in the water from trees and leaf matter and 5. amount of acidic soil particles entering the water.

The method of lime application is critically important to the effectiveness and longevity of a liming effort. Agricultural lime does not readily dissolve in water, rather it sinks and reacts with the soil on the pond bottom. Therefore, proper application of lime involves uniform distribution of the material over at least 80-90% of the surface of a lake. This is best accomplished using a specialized boat called a liming barge. Bulk lime is loaded directly onto the front platform of the barge; it is then washed from the platform with water from a high pressure pump as the boat is slowly driven throughout the pond.

Alkalinity tests quickly indicate the need for lime in ponds.

Bulk lime is applied by washing it directly into the water in such a way that it covers most of the lake bottom.

FERTILIZATION

The concept of *carrying capacity* describes the total biomass (i.e., weight) of fish a pond is capable of producing. A given body of water, subject to varying levels of fertility, has a finite limit, or carrying capacity, in terms of the overall biomass which it can support. Lake fertility limits the number as well as the average and maximum size of fish present.

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 in order to stimulate significant plankton growth. Plankton, both plant and animal, are the base of the food chain in ponds. Infertile ponds, those with low alkalinity and relatively little nutrient input, are characterized by low levels of plankton production. 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 low fertility is observed far up the food chain, all the way to the primary predators, largemouth bass. In order to create and maintain a high level of plankton production, 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.

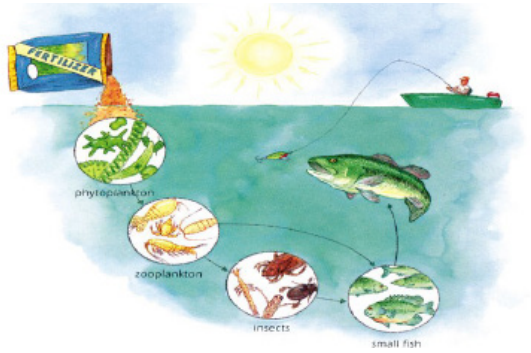
When you subscribe to our Fertilization Service, our technicians will routinely visit your pond and properly apply fertilizer. A well fertilized pond should have 18 to 24 inches of visibility.

We recommend SportMAX® Water Soluble Pond Fertilizer (10-52-4), applied at a rate of 4-8 pounds per surface acre per application. Fertilizer should be applied according to the Standard Pond Fertilization Schedule:

- Beginning in early March, make three applications at two week intervals.
- Make the next three applications at three week intervals.
- Thereafter, apply once per month or whenever visibility exceeds 18-24 inches.
- Cease fertilization by the end of October.

Our **Fertilization Service** completely removes the burden and nuisance of fertilizing your lake. Our trained technicians will visit your pond, at prescribed intervals, carefully measuring and recording water visibility and applying the proper dosage of fertilizer. Our visits are conveniently recorded on a small sign, situated on the pond bank. In addition, we regularly check and log total water alkalinity as well as keep an eye out for potentially problematic vegetation.

Fertilization is the most basic and important element necessary to create an environment conducive to the production and growth of sport fish. The cost of our Fertilization Service is listed in the Recommended Management Activities section of this report.



Food chain in a typical pond

SUPPLEMENTAL FORAGE STOCKING

The harvest of largemouth bass at the proper size and rate can be quite challenging in sport fish lakes, especially if they are not fished extensively. When the annual largemouth bass harvest falls short of the recommended quota, stocking supplemental forage becomes extremely important in efforts to maintain an adequate forage base. An abundance of forage must be available at all times in order to maximize the growth of top-end predators such as largemouth bass. The feeding behavior and movement patterns of adult predators change frequently. Therefore, the presence of a variety of forage types, occupying different habitats within the pond, tends to maximize predator:prey encounters and improves overall foraging efficiency.

In your lake, the introduction of **threadfin shad** *(Dorosoma petenense)* will be highly constructive. The benefits to stocking threadfin shad are numerous. The combination of a relatively small adult size, coupled with their ability to reproduce in large numbers, make threadfin shad a near perfect food for the most abundant size group of largemouth bass. Most often, results of successfully establishing threadfin shad into a lake will be observed in improved growth rates for all size groups of bass. In addition, by partially shifting bass predation from bluegill to shad, more bluegill will reach the important *intermediate* size range. Finally, through subtle interactions lower in the food chain, threadfin shad effectively reduce bass *recruitment*. In other words, fewer bass fingerlings survive to adulthood, thereby reducing the annual bass surplus. The bass that are *recruited* into the adult population will enjoy an increased abundance of prey, which leads to enhanced growth rates and a larger maximum size.

Threadfin shad frequently exhibit a distinctive schooling behavior, most often in open-water areas. In fact, the shad's primary defense against predators is its ability to seek out open water, away from where predators are more likely to be waiting to ambush prey. Once the bass figure out this behavior, the jig is up. Ponds with abundant shad populations frequently enjoy excellent top-water fishing action, oftentimes in or around schools of shad in open water.

Threadfin shad typically have two distinct heavy spawning periods: in the Spring and again in early Fall. Stocking is most often recommended immediately prior to or during a heavy spawning period. Stocking rates are designed to establish a sustainable population of threadfin shad and vary depending on the size of the lake and its state of balance.

Threadfin shad are ideal forage for increasing the growth and condition of largemouth bass. Adults range from 3 to 7 inches.

AQUATIC WEED CONTROL

Aquatic weed growth can be a serious problem in recreational ponds. Weeds use up important nutrients in fertilizers that are intended for fish production, as well as interfere with normal activities such as fishing and swimming. In addition, excessive weed growth detracts from the aesthetic value of a pond, particularly if it is the focal point of a recreational area.

There are three approaches we use to prevent or reduce unwanted aquatic weeds. They can be placed in 3 different categories: chemical control, biological control, and sunlight-limiting control. Often, an integrated approach involving a combination of these tools offers the most effective solution.

Chemical control involves the use of aquatically approved herbicides to reduce or eradicate aquatic weeds. Although chemical control can be costly on large areas, it is usually the best method for a quick response.

The most common form of biological control is stocking grass carp. Grass carp are often introduced into ponds at low stocking densities as a preventive measure before weeds become established. However, once weeds have become established, a higher density of grass carp is needed to control them. Grass carp readily eat a variety of common weeds, do not reproduce, and are fairly inexpensive. Typically, grass carp become less effective when they reach 6 to 7 years old and must be restocked. One drawback to grass carp is their propensity to train on pellet food intended for bluegill; thereby reducing the effectiveness of a supplemental feeding program.

There are also a variety of water colorants or dyes that can be added to ponds before weeds become established that limit sunlight penetration and "shade out" certain types of weeds. A regimented fertilization program is often the most effective form of sunlight-limiting control. Typically, phytoplankton blooms stimulated early in the spring through fertilization can shade out potential weed growth before it becomes a problem.

Color photos, including distinguishing characteristics and growth habits of the aquatic vegetation in your pond, are listed in the following Aquatic Weed Identification section.

Herbicide application is typically the quickest form of weed control.

Grass carp are often introduced for long-term control. Pond dyes temporarily limit sunlight to retard aquatic weed growth.

AQUATIC WEED IDENTIFICATION

Common Name: Black Willow

Scientific Name: *Salix nigra*

Distinguishing Characteristics:
Medium sized tree. Leaves are fairly long, lance shaped, tapering to a point with serrated margins.

Growth Habit:
Commonly growing at pond edge or growing in thick colonies in bottoms of new or recently drained ponds.

Management Program Impact:
Low, but potentially high.

DAM AND SHORELINE MAINTENANCE

Dam and shoreline maintenance should be addressed periodically to ensure the integrity of the dam and overall recreational value of the pond. The dam should be kept free of trees; roots may eventually tunnel into the dam, creating weak spots. If mature trees are already present, they should not be cut down, as dead and decaying roots are potentially more harmful. Generally, tress less than 4 inches in diameter at breast height do not have roots penetrating the core of the dam and should be removed before they become a threat to the structure of the dam.

In an effort to prevent erosion the entire dam should be covered with a manageable grass. Large rock is recommended at the waterline along the dam face if there is the potential for erosion from wave action. The spillway should also have some type of erosion prevention. The amount and frequency of water flow should determine the type. The bottom and sides of the spillway should be lined with large rock or concrete if water flows across it often.

For spillways that are used less frequently, well maintained grass provides sufficient erosion protection. Spillways should be checked periodically and any debris should be cleared. Additionally, the shoreline and surrounding watershed should be vegetated to prevent erosion and muddy water. If necessary, livestock should be provided limited access to the pond. Heavier vegetation should be trimmed or treated with herbicide.

Beavers and muskrats can cause aesthetic and structural damage to sport fish lakes. Large rock placed along the waterline of the dam will usually prevent beavers and muskrats from boring in. Trees can be protected by wrapping steel mesh around the base of the tree to a height of about 4 feet. Otters often visit ponds from nearby creeks and can have a significant impact of the fish population. Droppings with scales and fish bones are evidence of otter visits. These nuisance animals should be removed as soon as detected. Techniques include body-gripping traps, snares, foothold traps, and shooting. Permits and licenses may be required.

ANNUAL EVALUATION

In addition to ongoing management, your pond should be checked on a regular basis. Our annual maintenance plan includes an aquatic weed assessment, a water test to determine lime requirement, and an electrofishing balance check to assess the fish community.

Regular electrofishing evaluations are necessary to assess the effectiveness of a management program. Electrofishing allows us to stay on top of the pond's condition in order to make necessary changes in management recommendations.

MANAGEMENT RECOMMENDATIONS

Spoonwood Lake is functioning as a balanced system that has a moderate level of fertility. Several management inputs are necessary to maintain a state of balance as well as increase the total density of sport fish. The management activities we are recommending for Spoonwood Lake will center on reducing the total number of adult predators, introducing supplemental forage, and enhancing the conditions for the production of forage.

To create conditions suitable for effective fertilization, we recommend applying at least 50 tons of agricultural limestone this winter. To maintain a high density of sport fish as well as help control aquatic vegetation, we recommend continuing an intensive fertilization program in Spoonwood Lake. SportMax® Water Soluble Pond Fertilizer (10-52-4) should be applied according to the *Standard Pond Fertilization Schedule*.

For Spoonwood Lake, harvest bass 15 inches and smaller at a rate of 30 pounds per acre per year (300 lbs./yr.). The recommended bass harvest rate and size will likely change over the next few years as the fish community responds to management inputs. We recommend limiting bluegill harvest in Spoonwood Lake to a "consumptive" level, meaning ONLY bluegill and shellcracker which are intended for table fare should be removed; the over-harvest of adult bluegill, particularly during the spawning season, may lead to a decrease in the total number of mature, adult bluegill and a corresponding decline in angling catch per unit of effort. Annual electrofishing evaluations will help determine if fish harvest recommendations should be adjusted.

Supplemental forage in the form of threadfin shad should be stocked in order to enhance the growth and condition of the largemouth bass.

Aquatic weed control will also be an integral part of the management program for Spoonwood Lake. Black willow has the potential to multiply quickly and should be monitored closely, particularly during the growing season. We feel that the quickest and most efficient way to control aquatic weeds in Spoonwood Lake, if they should become a problem in the future, is by herbicide application. Finally, additional cover in the form of brush or rock piles would increase the catch rates of sport fish in Spoonwood Lake.

The management activities we recommend over the course of the next twelve months are listed in the following pages. In an effort to assist in the prioritization of these management inputs, we have developed a simple color-coding system. You will note this system in the bottom right-hand corner of the respective Management Recommendations to follow:

LEVEL 1	Highest priority. Generally, require immediate attention.
LEVEL 2	Secondary in importance to Level 1. Directed toward achieving your stated management objectives.
LEVEL 3	Increase enjoyment and/or functionality of your pond but have less impact on the overall management program.

ANNUAL HARVEST

ANNUALLY 2023-24

Current Status: Owner Responsibility

☐ **Approved** ☐ **Declined** ☐ **Done**

Date Approved: _____

Date Done: _____

MANAGEMENT ACTIVITY:
Harvest ~300 pounds of LMB (15" inches and less)

COST: Hook and line: N/A
Electrofishing: $450.00/hour.*

*An additional mileage charge will be added.

LEVEL 1

THREADFIN SHAD

FALL 2023

Current Status: Awaiting Owner Approval

☐ **Approved** ☐ **Declined** ☐ **Done**

Date Approved: _____

Date Done: _____

MANAGEMENT ACTIVITY:
Stock 1 load (~10,000) adult threadfin shad

COST: $ 2,100.00/load*

* This price does not include delivery.

LEVEL 1

LIME APPLICATION

WINTER 2023

Current Status: Awaiting Owner Approval

☐ Approved ☐ Declined ☐ Done

Date Approved: _____

Date Done: _____

MANAGEMENT ACTIVITY:
Apply 50 tons of agricultural limestone

COST: $ 120.00/ton*

* This price includes purchase and delivery of lime, application of lime and the cost of a loader/operator. An additional mileage charge will be added.

LEVEL 1

FERTILIZATION ROUTE

SPRING 2024

Current Status: Awaiting Owner Approval

☐ **Approved** ☐ **Declined** ☐ **Done**

Date Approved: _____

Date Done: _____

MANAGEMENT ACTIVITY:
Continue the current fertilization program

COST: $ 242.92 per month*

Price reflects your monthly (12) invoice amount. Fertilizer is applied by our trained technicians according to the ***Standard Pond Fertilization Schedule*** .

LEVEL 1

THREADFIN SHAD

SPRING 2024

Current Status: Awaiting Owner Approval

☐ **Approved** ☐ **Declined** ☐ **Done**

Date Approved: _____

Date Done: _____

COST: $ 2,100.00/load*

* This price does not include delivery.

MANAGEMENT ACTIVITY:
Stock 2 loads (~20,000) adult threadfin shad

LEVEL 1

ANNUAL EVALUATION

FALL 2024

Current Status: Awaiting Owner Approval

☐ **Approved** ☐ **Declined** ☐ **Done**

Date Approved: _____

Date Done: _____

COST: $ 1,100.00*

* This price includes comprehensive written Management Report. An additional mileage charge will be added.

MANAGEMENT ACTIVITY:
Annual electrofishing evaluation

LEVEL 1

Bass Harvest Records

Date	Number Harvested	Total Pounds Harvested	Comments

Bass Harvest Records

Date	Number Harvested	Total Pounds Harvested	Comments

Tagged Fish Data				
Date	Tag Number	Length (In.)	Weight (lbs.)	Comments

Fertilizer Application Records				
Date	Water Color	Water Visibility (in.)	Fertilizer Applied (lbs.)	Comments

Other Records	
Date	Comments