

2010 State Updates

Alabama

State lakes program is going through some changes in how they are run. State is attempting to get city and county agencies more involved in operations of these facilities. May end up cutting some lakes from the current program. Angler use of the state lakes has been relatively stable. Common problems on many of the lakes are bass overcrowding and catfish stockpiling. Considering unlimited bass harvest on some of the lakes to help alleviate bass overcrowding. Reducing channel catfish stocking rates in some of the lakes that are showing signs of excess channel catfish.

Pond program stocking program had gone down over the years and was recently totally eliminated. Alabama is still performing technical assistance to pond owners. However, Alabama staff is reducing the number of technical assistance pond visits and as a potential substitute we are currently producing a pond mgmt DVD to hand out to pond owners upon request. Filming is about 90% complete and production should be finished within another year. The DVD will be a detailed "how to" type video where you can skip from chapter to chapter like a book.

Georgia

Marben PFA is located approximately 50 miles southwest of Atlanta near Mansfield, Georgia. It has 22 lakes that range in size from 1-acre to 95-acres. Four of the ponds are managed as special event ponds and are stocked with feed trained catfish, bream, largemouth bass, and hybrid striped bass. Two of the four ponds are stocked with only catfish while one is a multi species pond with bream, bass, and catfish. The fourth pond was recently renovated and will be stocked with feed trained hybrid striped bass. By managing multiple ponds with a variety of species, more fishing events can be held with great catch rates throughout the fishing season. One of the 22 ponds was recently renovated and will be stocked with bluegill, fathead minnows, golden shiners, and chain pickerel. The pond will be managed as chain pickerel fishery and will require special regulations (not yet implemented).

Flat Creek PFA is located in central Georgia near Interstate 75 and has one special event pond and a 108-acre impoundment. This area is the newest PFA in Georgia and has only been open to the public for a year. The lake is managed for quality bream and catfish and subject to the statewide PFA regulations. The lake was stocked bass heavy to increase predation on small bluegill, increasing growth, and producing quality bream. In only three years the bluegills are reaching 8 to 10 inches with some 11 inches long reported by anglers.

Ocmulgee PFA is a relatively new PFA with a special event pond and a 106-acre impoundment. The lake was stocked with a low density (11 per acre) of female F1 strain largemouth bass, fertilized, and stocked with bluegill, redear sunfish, golden shiners, threadfin shad, lake chubsuckers, and goldfish for forage. The lake is stocked with goldfish and lake chubsuckers annually to increase largemouth bass growth. The bass are protected from harvest with a catch-and-release regulation to allow the fast growing females to live long enough to reach trophy size. The average size bass in 2009 was nearly 6 pounds with several 8

to 9 pound bass available. During the fall 2009 survey, reproduction and male bass were documented in the lake. A second stocking of female bass will occur in the spring 2010. Each bass is PIT tagged to identify individual growth rates and document reproduction. All non-tagged fish will be culled from the population and harvest will be allowed within the next couple years after the 2010 stocking can be distinguished from natural reproduction.

Lake Paradise on Paradise PFA (one of 65 lakes and ponds) was drained to repair water control structure in 2006. Lake was initially stocked in the fall of 2007 with BLG, RES, and TFS and then LMB in the spring of 2008. Bass were stocked at a lower density (20/acre) than our normal recommendation. Lake Paradise is also normally a fertilized system and in the fall of 2008 LMB were averaging about 12". However, severe budget reductions mandated that we cease our fertilization program in the spring of 2009. Lake cleared up and aquatic vegetation (mainly Najas) quickly became a serious problem. Sampling conducted in the fall of 2009 showed that bass growth had almost halted and fish were in poor condition due to the excessive vegetation. A partial weed treatment was achieved in late 2009. Lake chubsuckers were stocked as supplemental forage in January 2010 and funds have been released to resume fertilization in 2010. Lake is scheduled to open in April with a LMB catch-and-release regulation for the first year. Will allow the harvest of BLG and RES.

The Georgia Department of Natural Resources plans to assess the largemouth bass *Micropterus salmoides* populations on Lake Lindsay Grace (235 acres) and Hugh Gillis Public Fishing Area (109 acres). According to previous length-frequency assessments, both lakes appear to have many little bass stacking up, similar to a pond scenario. As a result, neither lake has recruitment issues at all. We believe that Lindsay Grace may receive high exploitation, once the fish reach the minimum size limit (12 inches), while a creel survey indicates that Hugh Gillis is not receiving very much harvest and the fish are stacking up below the intended (14-inch) size limit. Growth in both lakes may be also be suffering as a result. Both lakes have tremendous trophy potential and have demonstrated this in the past, with lake records of 15 pounds 4 ounces (1980) on Lake Lindsay Grace, and 11 pound 10 ounces (2008) on Hugh Gillis PFA, but we believe they could be managed to their optimal capabilities with the proper size and bag limits. Current size limits do not appear to be working, but we cannot conclude this solely from length frequency work without getting idea of what our exploitation (U) and total annual mortality (A) is.

Objectives of the study:

- 1) Estimate angler exploitation (F) of largemouth bass using a high-reward-based tagging study
- 2) Estimate age and growth using otoliths and determine total annual mortality (A) using catch curve analysis

Use computer models, based on these estimates of exploitation (F), total annual mortality (A), and age and growth, to identify harvest restrictions that would increase overall total catch (fish > 305-mm TL), total catch of large fish (> 510 mm TL), and harvest of large fish at these 2 lakes.

Bear Creek Reservoir is a 206-hectare impoundment built in 2000-01 and operated by the Upper Oconee Basin Water Authority to supply water to four north Georgia counties (<http://www.bearcreekwtp.com>). The Georgia Wildlife Resources Division (WRD) stocked the reservoir with F1 largemouth bass, redear sunfish, bluegill, channel catfish, and threadfin shad between January 2001 and January 2003. WRD has sampled the reservoir since 2001 to track the developing fishery. In 2003, a fisheries management plan was implemented that included trophy bass regulations (protective 406 – 559 mm slot limit). The anticipated opening date for the reservoir was March 2003; however, due to post-9/11/01 security concerns, the reservoir was not opened to public fishing until summer 2009. The reservoir is now open to angling four days per week during spring and summer and three days per week during the fall and winter seasons.

According to spring electrofishing data, the catch rate of bass within the slot limit (406 – 559 mm TL) dropped from 20.6 fish/hr in 2006 to 5.8 fish/hr in 2008. Only 9% of the largemouth bass collected in 2008 fell within the protected slot limit and no bass were collected that exceeded the slot. From 2003 to 2008, mean relative condition (K_n) of largemouth bass in the 300-mm and 400-mm TL size classes decreased significantly ($P \leq 0.05$). According to mean length-at-age data, largemouth bass in Bear Creek reached 253 mm at age 2 and 326 mm at age 3. These growth rates are comparable to those of largemouth bass in north Georgia's less productive Tennessee Valley reservoirs. WRD will continue to monitor the population to determine whether increased angling pressure can improve the largemouth bass population structure. Significant angler harvest of sub-slot sized bass is needed to reduce stockpiling of small fish and increase trophy bass abundance.

Oklahoma

Oklahoma is currently re-writing their pond management booklet. The new book will include more information on alternative pond management, including alternative species. The use of rotenone will no longer be recommended for pond renovations because the department could not find any certified applicators willing to apply the chemical for pond owners. Booklet will now recommend pond draining. Currently considering making the booklet available via the web only and not providing published copies.

State still provides technical assistance to pond owners, but rarely perform field samples. Have started holding pond management workshops, which have been extremely popular. Frequently registrants overwhelmed staff and facilities. Oklahoma still provides free fish for pond stocking. As of January 1, 2010, state requires the use of triploid grass carp.

Oklahoma is currently sampling the catfish populations in the 30 lakes involved in the urban program with tandem hoop nets. Biologists have noted a great deal of variability in the catch rates of this gear and the state has initiated a study evaluating this gear. The study is looking at the use of these nets in lakes less than 100-acres and lakes in the 100-300-acre size range.

North Carolina

Utilize a community fishing program that includes 46 lakes. Have recently been discussing problems with a stockpiling of catfish in these ponds and managing for other species. Lake Devin (120-acres) was noted

for having a quality bass fishery before the state began stocking channel catfish. Lake Devin was stocked annually with 12,000 harvestable size catfish for 4 consecutive years and the quality bass fishery has since disappeared. North Carolina is initiating and evaluation of catfish stockings that will include retention time aspect.

Private pond program consists of providing technical guidance to pond owners almost exclusively over the phone. Do not sample ponds and site visits are almost exclusively weed checks. State does not provide fish to private pond owners.

NC State currently has a \$0 extension budget and has gone into a maintenance mode for trainings and workshops. Looking at the use of web based training using "Illuminate" software as an alternative training method.

Mississippi

Mississippi is currently in the process of revising the states pond guide booklet.

Mississippi State is organizing workshops for next years SEAFWA meeting and are considering a ½ day workshop on alternative pond management. The university is also looking at some potential research on alleviating bass overcrowding in ponds. A new graduate student, Tyler Stubbs is initiating some research into the relationships between fish populations and nutrients, fertilizers, and invertebrates.

Texas

The "Neighborhood" fishing program has been running 5-6 years. Currently includes 13 lakes in 8-9 cities. The ponds are stocked twice a month with channel catfish in the summer and trout in the winter. The participating cities purchase the trout and Toyota, through the Toyota Texas Bass Classic, annually donates \$250,000 to help fund the program. The program generates enough funds to cover the state's share of the cost. State has developed a logo and initiated a marketing campaign, which concentrates efforts within 5-10 miles of the lakes. Currently conducting an evaluation of the marketing campaign.

Texas is initiating an evaluation of catfish stocking study that will include looking at a 1-time annual stocking of 9" channel catfish and an evaluation on the use of hoop nets for sampling channel catfish.

Currently developing a pamphlet for municipal parks and recreation departments and subdivision developers that will contain information on construction strategies for lakes. Will include methods for building fishing ponds, wildlife ponds, or a combination pond.

Texas currently requires all fishermen to purchase a "Freshwater Fishing Stamp" (\$5) in conjunction with their fishing license. The stamp will be required for 10 years and expected to raise approximately \$60 million for capitol outlay projects.

Louisiana

In Louisiana technical advice to owners of ponds and small lakes is a part of the responsibility of the Inland Fish Division. Division biologists make over several site visits assisting residents of the state on

problems ranging from construction and stocking requirements, to harvest and disease identification. The biologists also answered numerous phone inquiries about various pond-related problems.

Aquatic vegetation has become a problem in most small impoundments. Biologist provides advice and technical assistance as well as aquatic plant identification assistance for the owner on request. Inland Fish division also issues Triploid Grass carp permits to individuals that have aquatic vegetation problems. Approximately 250 permits were issued in the last year.

Louisiana has not provided fish to private pond owners since 1988. Private pond owners are given a fingerling producers list where they can purchase fish. Also a pond management guideline is offered to these individuals for helpful management ideas. This producer's list and pond management booklet is on our web site www.wlf.louisiana.gov.

Urban fisheries exist in larger cities within the state such as New Orleans, Baton Rouge and Lafayette. Stocking fish in small lakes and ponds in these areas has become popular allowing the public a recreational pastime. Also, within our department we have the Aquatic education section that promotes fishing activities/information to our youth. This includes fishing clinics that are held on Wildlife Management Areas, city parks, expo centers, etc... that the department has stocked fish in these small ponds/lakes with species such as Largemouth bass, channel catfish and sunfish.

Species stocked in small ponds/lakes in Louisiana in 2009:

- Florida Largemouth Bass 10,486
- Channel Catfish 2,930
- Redear Sunfish 2,020
- Bluegill 820

South Carolina

The SCDNR currently maintains 17 public impoundments ranging in size from 5.0 to 300 acres. Historically, the level of management has varied significantly from lake to lake due to the fact a number of them are located on large watersheds which prevents or reduces the success of traditional management practices. Furthermore, recent budget reductions have resulted in changes in program priorities within the Fisheries Section, thus making it difficult to maintain or expand a number of management strategies on several of the impoundments.

Most of the lakes have been stocked with bluegill/redear, largemouth and channel catfish at some point and several have undergone renovation within the recent past. Rough fish populations remain a problem in a number of the impoundments as does poor water chemistry and nuisance aquatic vegetation.. Routine management practices such as liming and fertilization are conducted on six lakes, fish attractors are maintained in eight of the impoundments and amenities such as handicapped fishing piers and picnic sheds are present at nine of the sites. Those lakes deemed most manageable receive

annual fish population monitoring via seining or electrofishing. Efforts to manipulate fish populations or otherwise address identified problems with a particular lake's fishery have included stocking augmentation, marginal rotenone and/or and harvest restrictions. A recent qualitative angler survey of fifteen of the agency maintained lakes revealed most anglers rated their fishing experience "fair" to "poor". Below are summary results from this survey.

Additional information on SCDNR state lakes is available to the public at: <http://www.dnr.sc.gov/>

SCDNR State Lakes Angler Creel Card Survey

State Lake	N	Time Fished
Ashwood	95	3.21
Brown	96	3.38
Cherokee	201	4.03
Dargans Pond	53	4.00
Draper	80	2.98
Johnson	154	3.60
Jonesville	36	3.53
Lancaster	48	3.40
Long	68	3.61
Mtn. Lakes	71	4.01
Oliphant	42	3.56
Star Fort	8	2.94
Sunrise	32	2.72
Wallace	56	4.42
Warren	145	3.45
All Lakes	1,185	3.60

Percent frequency of anglers targeting fish species on all DNR State Lakes

State Lake	N	ANY	BLC	BLG	CCF	CRP	LMB	RBS	WEY	RES	LNG
Ashwood	99	51	1	19	7		21				
Brown	100	56	7	7	6		22	1		1	
Cherokee	204	53	5	8	14		17	<1		<1	
Dargans Pond	57	44	5	12	14		23	2			
Draper	81	62	1		30		7				
Johnson	156	54	1	10	4		29				<1
Jonesville	37	65	3	5	5		22				
Lancaster	49	35	32	2	16		16				
Long	71	55		11	8		25				
Mtn. Lakes	71	68	1	8	10		13				
Oliphant	44	48			20		30	2			
Star Fort	8	75	13				12				
Sunrise	32	62	3	6	13		12	3			
Wallace	59	52	5	12	20		5		5		
Warren	153	67	2	8	8	<1	14			<1	
All Lakes	1,221	56	4	9	12	<1	18	<1	<1	<1	<1

Mean Time fished for targeted species

State Lake	ANY	BLC	BLG	CCF	CRP	LMB	RBS	WEY	RES	LNG
Ashwood	3.24	6.00	2.47	3.00		3.71				
Brown	3.56	3.18	2.86	3.00		3.31	2.00		3.00	
Cherokee	4.56	2.91	2.74	3.87		3.64	1.50		1.50	
Dargans Pond	3.98	3.67	3.86	4.57		3.85	4.00			

Draper	3.09		2.00	2.94		2.42				
Johnson	3.60	2.00	3.05	4.21		3.63				10.00
Jonesville	3.93	3.00	2.00	4.00		2.69				
Lancaster	2.83	3.47	4.00	2.44		5.31				
Long	3.78		3.14	2.83		3.71				
Mtn. Lakes	4.16	10.00	3.00	3.00		4.06				
Oliphant	3.45			2.89		4.50	0.50			
Star Fort	3.33	0.50				3.00				
Sunrise	2.53	3.00	1.75	3.88		3.13	2.00			
Wallace	4.98	2.17	2.57	5.75		2.00		3.33		
Warren	3.66	3.67	2.70	3.46	12.00	2.41			2.50	

Anglers' quality rating percentages on DNR State Lakes

State Lake	N	Excellent	Good	Fair	Poor
Ashwood	98	2	12	29	57
Brown	100	6	15	22	57
Cherokee	203	5	17	19	59
Dargans Pond	56	9	12	34	45
Draper	81	7	25	23	44
Johnson	156	8	22	25	45
Jonesville	37	8	13	40	38
Lancaster	48	6	42	15	37
Long	71	4	11	39	45
Mtn. Lakes	71	7	17	24	52

Oliphant	42	7	31	24	38
Star Fort	8	25	13	25	37
Sunrise	32	9	19	37	34
Wallace	58	2	17	12	69
Warren	151	5	21	23	50
All Lakes	1,212	6	19	25	50