

2011 State Updates

Alabama

State lakes

There are 23 state lakes (20 sites) in Alabama. Jack Turner, the state lakes supervisor, reported that usage has declined about 25% in his tenure, most of this in the last 6 years. The most common problem that affects angling success in many of the lakes is bass-crowding. Not only are bass growth rates low, but recruitment of bluegill and crappie are usually low in these systems. Historically, many of these lakes were drained and restocked every few years to maintain a productive population. However, this option is less attractive now as many of the drainage systems are in poor shape. This renovation would also leave the lake manager without an income for 1 to 2 years as they are hired on contract. In attempt to improve some of these bass-crowded fisheries, several practices are commonly used such as, bass removals via electrofishing, shoreline rotenone of juvenile bass, adding fish attractors to increase angling and efishing success, and most recently, the statewide bag limit on bass has been removed for some of these lakes. Two lakes are currently being renovated.

Another potential strategy is being looked at on Lee Co. Lake. Lee Co. Lake is a 130 acres and has been bass-crowded for many years. It is relatively shallow and has very little shallow-water cover for juvenile fish. Efforts have been underway for the last 3 years to increase shoreline cover to protect juvenile bluegill and crappie. Water willow (*Justicia americana*) has been transplanted in several areas which have grown remarkably. Other shoreline cover has been placed in the lake such as, recycled Christmas trees, blow-down trees, plastic structures, and rip-rap. A study is underway to evaluate the preferences of juvenile bluegill and crappie to these different shallow water cover types. Once the most cost-effective cover type is determined, cover will be established along approximately 30% of the shoreline to see if it in combination with bass removal can have a positive impact on the fishery.

A regulation has recently been put in place where we have to stock triploid grass carp. So far, they have proven harder to produce in our hatcheries and more difficult to obtain at a reasonable price from a private hatchery. Our main aquatic weed concern in the lakes is Lyngbya since it is difficult to control with herbicide. So far, the triploids do not seem to be as effective as the diploids at controlling this species. Some OTC-marked juvenile crappie have been stocked in a few of the lakes recently in attempt to supplement an otherwise poor year-class. Their impact on the future fishery of these lakes is still under analysis.

Due to the declining popularity in the program as a whole, some changes have been made in the last couple years to reduce operating cost. Four of the lakes are operated by local city agencies through a concession contract or a partnership. One lake has been opened to the public without a lake manager or permit requirement. State lakes management will likely continue to move in this direction where possible.

Pond Program

In attempt to lower salary costs, beginning March 1, 2010, Alabama DCNR went from 6 districts to 5. Alabama is still performing on-site technical assistance to pond owners. However, the increased size of each district and new district responsibilities (e.g. more stream work) has forced the pond technical assistance program to be offered in a more efficient manner. One approach was to reduce the number

of frivolous pond checks. The idea of charging a fee for this service has been explored and found to have several potential drawbacks, thus is still under discussion. Therefore, district biologists have learned to be more effective at providing assistance over the phone and have had to use more discretion when deciding if a site visit is necessary. Biologists have also been given more flexibility as to when pond checks can be performed. Previously they were only conducted in the months of June and September. Now, we are able to schedule pond checks anytime between these months with regard to our other responsibilities. Finally, Ben Ricks developed a carbon copy pond check sheet that allows us to provide the pond owner with his pond data and written recommendations at the pond bank. Our pond management handbook as well as detailed fact sheets describing various population conditions and management practices are also provided at the pond. This allows the pond owner to have the recommendations in hand and take action immediately and the biologist no longer needs to spend hours in the office writing letters with the recommendations.

In 2008, our department began the creation of a pond management video. The goal of this video was to enhance our current technical assistance program and how it is understood by pond owners. It will include every level of detail regarding pond management that is included in our pond book, fact sheets, and described during on-site pond checks. However, it will go a step further by showing the management practices in action. The video is expected to be nearly 2 hours long and will have chapters where the pond owner can navigate to a section of interest. The amount of time involved in order to write, film and produce a comprehensive video of this magnitude was underestimated. Scheduling certain seasonal shots proved the most difficult and our greatest limitation. Currently, about 95% of filming is complete. Production is well underway.

ADCNR discontinued the pond stocking program in 2009.

Other

EPA has put together a National Pollutant Discharge Elimination System (NPDES) which includes a new permitting process for applying pesticides. This new permit is called the Pesticides General Permit (PGP) and will be administered and enforced by Alabama Department of Environmental Management (ADEM) in the state of Alabama. It states that any applicator that applies pesticides to "waters of the U.S." will be required to have this permit and be subjected to the record keeping and reporting guidelines. It will go into effect on April 9, 2011.

For more information go to this link: http://cfpub.epa.gov/npdes/home.cfm?program_id=410

This EPA website describes the basics of the permit. EPA will be administering the permit in a few states, but not Alabama – that will be ADEM, however their version will be likely be similar to the EPA version. We plan to check with ADEM before the April date to see exactly how this will affect our agency. It is still unclear as to what their interpretation will be for small impoundments. We are not sure if it will affect private pond owners, but it could greatly affect our ability to use rotenone and herbicides in our public waters. We have learned that the permitting process will require extensive documentation of every application.

Arkansas

Just routine sampling efforts, no special projects. There were a total of 306 fishing derbies held last year.

Georgia

Currently have an ongoing study evaluating the relative abundance, growth, mortality and exploitation of largemouth bass in two Georgia coastal plain reservoirs. Largemouth bass were tagged with hallprint dart tags during the spring of 2010 in both Lake Lindsay Grace (95ha) and Hugh M. Gillis Public Fishing Area (HGPFA) (44ha), respectively. Monetary rewards were either \$5 or \$105 per fish. An age sample was collected during tagging and total annual mortality (A) was estimated from catch-catch-curve analysis and ranged from 38% on Lake Lindsay Grace (N= 456) to 42% on HGPFA (N= 512). Tag returns were exceptionally high for the high reward tags (\$105) and ranged from 30 to 47% between reservoirs. Tag returns on the low reward tags (\$5) ranged from 10% to 20% between reservoirs. Of all the tags that were returned, the number of fish harvested ranged from 64% to 71% across both impoundments. As a result, Total Fishing Mortality (U) was estimated at 30% on Lake Lindsay Grace and 27% on HGPFA. Leaving estimates of Total Natural Mortality (V) at 8% on Lake Lindsay Grace and 15% on HGPFA. Despite high rates of voluntary catch release documented across much of North America's black bass fisheries, it does appear that exploitation is a concern in South Georgia. Both populations will be modeled for various length limit scenarios once one angling year has been completed in March 2011.

In an attempt to increase interest in fishing for sunfish and tourism, the first annual "Bobberthon" Tournament was organized. For this tournament, 200 harvestable sunfish in each of three Public Fishing Area lakes (Ocmulgee, Flat Creek, and Dodge Co.) were collected via electrofishing, tagged, and released. Over a period of two months any angler that caught a tagged fish was eligible for a prize and qualified to fish the season ending "Grand Bobberthon" tournament at Dodge Co. PFA. The grand prize for the tournament was a 14' Triton johnboat and trailer. The concept was pitched to our agency by one of our state representatives and tournament organization was a cooperative effort between GA DNR and the local county tourism bureaus in which the three PFAs were located. All the PFAs involved were within this representative's district. County tourism bureaus were responsible for soliciting the vast majority of prizes from vendors within their counties. Prizes included items such as a Zebco 33 and a bible, gift cards, state park pass, fish cookers, \$100 US savings bond, 2-night stay at a state park cottage, etc. Overall, the tournament was considered a success and is going to be held again this year.

Walleye stockings have been completed in several north GA reservoirs including some smaller impoundments over the last few years. Several of these lakes are beginning to develop walleye fisheries and local anglers are very pleased with the addition of this fishery.

Currently staff members within the fisheries management section are working on developing an "Angler Recruitment and Retention Plan". The plan is attempting to develop a comprehensive approach to increase interest in fishing. Some of the things being considered are evaluating our current KFEs, ways to increase urban opportunities, educational opportunities within the schools, developing a youth angler award and state record program.

Still producing fish for private pond owners. Pond owners are charged a relatively low rate and have four options to choose from:

1. A bream, bass and catfish combination is recommended for ponds one acre or larger. This option provides bream (80% bluegill and 20% redear sunfish) at the rate of 500 per acre, and bass and channel catfish at rates of 50 per acre. The cost for this option is \$65 per acre of pond.

2. Pond owners can choose to receive only bream and bass (at the same stocking rate as Option 1) by selecting Option 2. Option 2 is also recommended for ponds one acre or larger. The cost for this option is \$60 per acre.
3. The channel catfish only option is recommended for ponds smaller than one acre. This option provides 500 channel catfish per acre for ponds smaller than one acre. For catfish-only ponds one acre or larger, state hatcheries will provide a maximum of 500 catfish per pond. The cost is \$20 per 100 catfish.
4. Channel catfish fingerlings are also provided to supplementally stock ponds that already contain bass and bluegill at the rate of 100 per pond or 50 per acre, whichever is greater and up to 1,000 fish per applicant. The cost for supplemental catfish is \$20 per 100 catfish. Pond owner is informed that the catfish must be reared in cages to 10 inches in order to help them avoid predation after being released.

Georgia still provides technical advice (i.e. recommendations on aquatic weeds, water quality, etc) to pond owners. However, pond owners must bring weed or water samples to one of our offices. Have not performed field investigations for several years.

Kentucky

KY Farm Pond Stocking Program

Takes in roughly \$30,000/yr. 2010 lowest number of delivers/acres since 2001 but the price was raised to offset increasing transportation expenses. Current rates; 0 – 1.4 acres = \$75; 1.5 – 2.9 acres = \$200; greater than 3 acres = \$200 per pond plus \$150 per additional acre over 3 (Gerry Buynak ext 4526).

KY Technical Guidance Program

Biologists handle all possible inquiries via phone but make site visits accordingly. Aquatic vegetation and stunted bass are the most common problems. Biologists will identify nuisance vegetation and recommend treatment. Biologists also electrofish accessible ponds to verify fish population issues and recommend a course of action. Over 200 ponds were visited and over 1000 inquiries handled via telephone, email or letter statewide in 2009. We refer most new construction to KY Pond Management Guide or local NRCS office for publications and soil testing.

KY FINS Program

In 2010, 29 lakes ranging from 1-29 acres in size were stocked multiple times with a total of 155,000 channel catfish and rainbow trout. All lakes in the FINS program have standardized regulations; 5 rainbow trout, 4 channel/blue catfish, 1 largemouth bass with a minimum size limit of 15", and 15 bluegill/other sunfish. Exploitation studies and creel surveys are ongoing. Ponds can be included in the program with a pledge of 25% in kind match, including mowing, trash pick up and weed control. All lakes/ponds in the program are less than 30 acres and are stocked intensively at 200 fish/acre for catfish and several thousand trout per stocking (Dane Balsman ext 4480).

Catfish Stocking Rates in Small Impoundments

Biologists have begun evaluating stocking rates with the use of tandem hoop nets. Age and growth data is collected to assess the status of each population. At present stocking rates range from 10 – 100 fish/acre. Large variability has been noted in hoop net catch rates.

Research Studies: (502-564-3400)

1. Redear and bluegill management in small impoundments (Dave Dreves ext 4469)
2. Channel catfish sampling and management in small impoundments (Chris Hickey ext 4467)
3. Trophy LMB development at a newly constructed small impoundment (Chris Hickey ext 4467)
4. Stocking of limited blue catfish as a bonus fishery in small impoundments (Chris Hickey ext 4467)
5. Stocking two different sizes of blue catfish in small impoundments (Chris Hickey ext 4467)
6. Stocking flathead catfish to improve size structure of largemouth bass and panfish in small impoundments with stunted panfish populations (Dane Balsman ext 4480)
7. Supplemental bass stocking in small impoundments (Chris Hickey ext 4467)

KY Voluntary Public Access Program: The goal of this program is to promote and increase recreational fishing and boating opportunities in Kentucky. Private landowners who own farm ponds, lakes, boat ramps, or stream access can enroll in the program and receive a financial reimbursement from KDFWR to allow the public to access these areas. Landowners are not selling or giving up the rights to their land, but merely agreeing to allow the public access to these specific areas for the sole purpose of fishing and/or boating (Kerry Prather ext 4457).

Other Issues:

1. Renovation of old small impoundments
2. Habitat improvement/restoration in small impoundments
3. Water quality issues (water withdrawal arguments, pollution, consumption advisories)
4. Use of lands around state owned small impoundments (land use practices, buffers, boat docks, public access)
6. Adopt-A-Lake Program (trash pick-up and site maintenance)

Oklahoma

- American Horse State Fishing Lake dam repair - This 100-acre lake in NW Oklahoma experienced a 500-year flood in 2007 and water over-topped the dam causing severe erosion on the back side. ODWC has contracted for engineering services but agency Lake Maintenance staff will be repairing the dam. We hope to apply to FEMA for reimbursement of some of the expense.
- Lake Elmer State Fishing Lake also in NW Oklahoma experienced an almost total fish kill in 2009 (nutrient enrichment from adjacent farm land). The lake was drained for renovation (shoreline deepening, silt removal, access improvements and habitat/fish attractor installation) and will not be completed until 2011.
- Adult blue catfish from 12 to >36 inches long were stocked in 30-acre Dahlgren State Fishing Lake. The fish were originally collected from a larger reservoir and transplanted as part of an electrofishing efficiency experiment. These fish had been accustomed to a shad diet and did not convert well to the available bluegill. Fish collected during the recapture phase of the study almost always had empty stomachs and were in poor condition. Anglers were encouraged to remove these fish whenever they caught them.
- The ODWC pond management booklet, published in 1985, is under revision and will be put on the agency website in addition to having printed versions available.

- Oklahoma Fishery Research Lab staff are conducting a study of the efficacy of stocking 9-inch "grow-out" channel catfish into state fishing lakes. Baited hoop nets are being used to collect samples (Chas Patterson: cpatterson@odwc.state.ok.us)
- Oklahoma State University is looking at the efficacy of stocking 9-inch channel catfish into 250 to 1200-acre municipal water supply reservoirs using hoop nets as sampling tools (Dr. Jim Long: longjm@okstate.edu)

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".
- Recently increased consideration has been given to a more "put and take" management approach for several of the impoundments. Supplemental stockings of catchable size bluegill and redear sunfish (>6") have been conducted to provide additional angling opportunities in situations where slow growth and/or recruitment problems have been identified. This option has been well received by the public. Additionally, while hybrid striped bass have not been utilized in the past, this species may be considered in the near future. Further expansion of "put and take" management lies largely with the ability of the agencies fish hatcheries to produce and grow the fish needed. Adult threadfin shad have also been stocked in two impoundments in an attempt to establish this species as an additional forage base in the presence of crowded largemouth bass. Although the lakes' fertility was deemed high enough to support the shad, it has not proven successful thus far.
- Several impoundments have recently experienced structural problems with their dam or water control structure, necessitating costly repairs. In addition, several instances involving encroachment by lakefront homeowners, in the manner of unauthorized docks etc. being constructed on state property has necessitated agency response.

- Current budget constraints and changes in the agency's program focus have resulted in the termination of agency sponsored public fishing rodeos and similar events involving state lakes.

Texas

Evaluation of Harvest and Survival of Channel Catfish (9-inch advanced-fingerling) in Community Fishing Lakes (public reservoirs <75 acres) by Charlie Munger (District Biologist in Canyon, TX)

One of Texas Parks and Wildlife Department's management practices for community fishing lakes is annual stockings of 9-inch channel catfish in the fall (e.g. typically November). Stocking is thought to be a cost-effective way to provide fishing opportunity to urban communities. Standard sampling by district biologists indicate that these fish do not remain in the lakes through the year, but it was unknown whether the fish are being harvested or they are dying without being caught. Two panhandle community lakes were surveyed using hoop nets and creel surveys for 14 months in an attempt to determine the fate of stocked channel catfish. Results of the surveys indicate that anglers were not harvesting the channel catfish. Hoop net data indicate that the channel catfish were disappearing from the lakes within five months of stocking when angling pressure is the lowest and no channel catfish were observed as harvested in either creel survey during the 14 months. Further evaluation of the 9-inch channel catfish stocking program will occur.

Neighborhood Fishin' Program

Texas continued to operate and grow the Neighborhood Fishin' Program. The Inland Fisheries Division believes that our Neighborhood Fishin' Program is the best way to recruit and retain new anglers in Texas. Its focus is to provide quality fishing opportunities to millions of citizens who reside in our major population centers (San Antonio, Dallas, Fort Worth, Houston, Austin, and others). Eight-five percent of Texans currently live in these urban areas and most don't fish. This program aims to give Texans a good place to fish - close to where they live. This program targets youth, their families, and our non-traditional customers. It is a strategic program that involves stocking catfish or rainbow trout on two week intervals in small public park lakes. Funds received in 2009 enabled us to expand the program from 14 lakes in 2009 to 15 lakes in 2010, through the purchase of fish for stocking. We recently added one new lake in the San Antonio metropolitan area (Southside Lions Park) to maximize participation and better reach our targeted audience. We estimate that our current program is positioned to reach over 50,000 users per year. Funds received in 2010 would be used to maintain fish stocking activities at its current level through 2011. Funds from the 2009 Toyota Texas Bass Classic were also used to implement and evaluate marketing plans in seven major markets (Austin, Bryan-College Station, Dallas/Ft. Worth, Houston, San Angelo, Waco, and Wichita Falls). Funds from the 2010 Toyota Bass Classic would be used to continue and expand these marketing efforts during 2011, with a special focus in the San Antonio, Dallas-Fort Worth, and Houston metropolitan areas. Successful communication with a local audience in complex media markets such as San Antonio, Dallas/Fort Worth, and Houston can be a challenge. For those markets, partnerships with local park and recreation departments and short-term promotions through carefully targeted radio, television, and outdoor signage will have an effective and immediate impact in reaching target audiences and augmenting word-of-mouth, networking and flyer distribution. About half of participants are new-to-angling (children or adults who've not been regular license-buyers). Fully half say "it's the only place they fish". We estimate that for every \$16 spent on the Neighborhood Fishin' program we bring one more person into fishing – each new fishing license sold

(\$30) increases funding for natural resource management, conservation, and restoration in Texas. More information can be found at the website

http://www.tpwd.state.tx.us/fishboat/fish/management/stocking/urban_catfish.phtml).