

# Louisiana Natural Resources News

Newsletter of the Louisiana Association of Professional Biologists

May, 2007

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## 2007 LAPB FALL SYMPOSIUM ANNOUNCEMENT

The dates are set, and the Executive Committee is busy putting together our annual Fall Symposium and business meeting. The Symposium, titled *Recent Natural Resources Research in Louisiana with a Focus Session on Ecological Impacts of Natural Resource Management* will be held a week earlier than in the past few years, August 9 – 10 in Lafayette, Louisiana. We will convene at the NOAA Estuarine Habitats and Coastal Fisheries Center at 646 Cajundome Boulevard that Thursday morning at 8:00 am. We will have a social and supper Thursday evening, a dedicated poster session the following morning, and expect to wrap things up early-afternoon on Friday.

The structure of this year's Symposium will be similar to recent years. The first day is dedicated to recent research and is presented by graduate students working not only to further their own education and careers but to enhance our

collective understanding of processes affecting our natural resources and the impact of their management. Mentoring our young professionals is part of the mission of the LAPB, and this is a great opportunity to share knowledge with our newest colleagues. The best student presentation, judged on both the scientific soundness of the research and quality of the presentation, is awarded a cash prize at the social Thursday evening. We are currently filling the agenda for the student program so if you know of good students who are near completion of their work and would share their results with us, please contact Mike Carloss at [mcarloss@wlf.louisiana.gov](mailto:mcarloss@wlf.louisiana.gov) as soon as possible.

Unlike the student session, which consists of a variety of research topics, our session on the second day is presented by established professionals and focuses on a selected topic. This year, we will focus on the impacts of our natural resource management from wildlife population expansion and ecotourism to coastal restoration and pollution control.

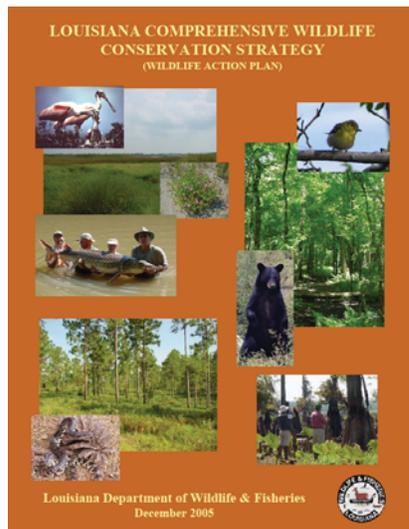
Again this year, we are planning a poster session. Many of us are neither graduate students nor participants in the focus session but are doing work that would be of great interest to our membership. We are asking you to share your work with us by putting together a poster presentation. Posters should be no larger than 42 x 42 inches and we will provide boards for mounting. The posters will be available for viewing concurrent with student session the first day, but the dedicated poster session and judging will take place from 8:00 to 10:00 am on Friday morning. A cash prize for the best poster will be awarded after lunch Friday afternoon. Please contact Larry Reynolds at [Lreynolds@wlf.louisiana.gov](mailto:Lreynolds@wlf.louisiana.gov) or Jimmy Anthony at [janthony@wlf.louisiana.gov](mailto:janthony@wlf.louisiana.gov) by July 15<sup>th</sup> to participate in the poster session.

Lastly, the LAPB is calling for nominations for our publications awards. We honor an outstanding publication in Wildlife, Fisheries, General Conservation, and Popular categories. Eligible publications must have been published in 2006 or 2007 and at least one author must be a LAPB member. Please send your nominations to Fred Kimmel at [Fkimmel@wlf.louisiana.gov](mailto:Fkimmel@wlf.louisiana.gov) no later than July 15 and the sooner the better.

Please plan on joining us in Lafayette. Registration is at the door and costs \$10.00 for annual membership, \$10.00 for the Symposium, and \$10.00 for the social and supper. Spread the word to prospective student presenters and colleagues who would be willing to share their work via poster presentations, and we look forward to seeing all of you in August!

## State Wildlife Grants and the Louisiana Wildlife Action Plan

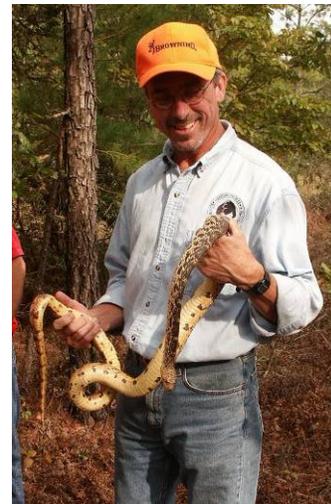
Andy Ardoin, LDWF Wildlife Action Plan Coordinator



The State Wildlife Grants program (SWG) is a federal grants program administered by the U.S. Fish and Wildlife Service (USFWS). The USFWS provides grants to state, territorial, and tribal wildlife agencies to supplement existing funding sources and to promote conservation of declining species and their habitats. It was signed into law on November 5, 2001 by President George W. Bush as part of the *Department of Interior and Related Agencies Appropriations Act, 2002*. SWG was a refinement of the Wildlife Conservation and Restoration Program of 2001 (WCRP).

SWG is funded annually by U.S. Congressional appropriations and is not tied to sales of hunting or fishing licenses. SWG is therefore subject to the Congress' budgetary priorities for a given year. Each state agency's apportionment is derived from a formula based on total land area and population. Since 2001 (including WCRP), Louisiana's apportionment has ranged from \$733,805 to \$1,176,673. The Louisiana apportionment for FY 2007 is \$921,265.

According to the enabling legislation, the intent of SWG is to provide, "...for the development and implementation of programs for the benefit of wildlife and their habitat, including species that are not hunted or fished." Congress required that each state or territory complete a Comprehensive Wildlife Conservation Strategy. These documents—now referred to as Wildlife Action Plans (WAP)—provide state-specific information on conservation needs. The USFWS clarified that, "Congress intends that [SWG] should be used to address the species and their habitats identified in State Comprehensive Wildlife Conservation Plans/Strategies" (USFWS Director's letter to State Fish and Wildlife Agencies, FY 2006). Use of SWG funds are therefore guided by conservation needs outlined in a state's WAP.



The Louisiana WAP (G.D. Lester *et al.*, 2005, *Louisiana Comprehensive Wildlife Conservation Strategy (Wildlife Action Plan)*, LA Dept. Wildl. Fish., Baton Rouge,

LA) provides an overview of Louisiana's natural resources, descriptions of ecoregions, and detailed descriptions of habitats and species-specific conservation needs within each habitat. It presents strategies and research priorities for species of conservation concern. The four broad goals of the Louisiana WAP are 1) species conservation; 2) habitat conservation; 3) Public Outreach and Education; and 4) Partnership development. Copies of the Louisiana WAP can be obtained from the Fur & Refuge Division of the Department of Wildlife and Fisheries (DWF), or reviewed online at: <http://www.wlf.state.la.us/experience/wildlifeactionplan>.

The DWF uses SWG to fund in-house projects and projects completed by sub-grantee partners. Below are examples of projects funded by SWG:

- “Sherburne WMA Bird Productivity and Survivorship Study”—DWF project funded in 2005. This 10-year project seeks to evaluate impacts of natural area designations and silvicultural practices on resident and migratory landbirds in a bottomland hardwood area. Data are being incorporated into the national Monitoring Avian Productivity and Survivorship (MAPS) program. In addition to filling data gaps in the MAPS project, this project will improve DWF understanding of implications for wildlife stemming from forest management practices.
- “Fisheries Inventory of Louisiana’s Major Rivers”—DWF project funded in 2003. The Inland Fisheries Division surveyed the Mississippi, Atchafalaya, Red, Black, Sabine, Ouachita, Mermentau, and Calcasieu Rivers. The WAP identified a substantial lack of information on fisheries resources as a major impediment to effective management. This project was a major step in filling these data gaps. A final report of river species assemblages was submitted to the USFWS on March 29, 2007.
- “Herpetofaunal Inventory of Three WMAs in North Louisiana”—Contract to Louisiana State University in Shreveport (L.M. Hardy, Principle Investigator), funded in 2004. Dr. Hardy completed an inventory of herpetofauna on Loggy Bayou, Bayou Pierre, and Jackson-Bienville Wildlife Management Areas. In addition to a list of reptiles and amphibians documented on these WMAs, Dr. Hardy provided valuable recommendations for improved inventories and future research needs in this part of Louisiana. A final report was submitted to the USFWS on November 8, 2006.
- “Native Warm Season Grass Drills”—Cooperative project funded in 2006. Working in partnership with the Natural Resources Conservation Service (NRCS), Quail Unlimited, and the National Wild Turkey Federation, DWF is working to acquire and promote the use of native warm season grass drills by private landowners wishing to re-establish native grasses for wildlife management. Restoration of native grasses in lieu of Bermuda grass and Bahia grass is beneficial to many birds including Northern

Bobwhite, Dickcissel, and Henslow's sparrow. US Department of Agriculture programs provide cost-share for establishment of native grasses, and the Northern Bobwhite Conservation Initiative includes native grass establishment as a conservation goal. Landowners have been reluctant to establish native warm season grasses, in part because specially designed drills are required to handle the seeds. DWF, NRCS, and Rural Conservation and Development Districts will coordinate the rental and maintenance of the special grass drills. This SWG project is a cooperative effort to meet conservation goals by providing technical assistance to landowners.



The DWF published a Request for Proposals dated 5 March 2007 soliciting projects funded through the fiscal year 2007 SWG apportionment. The DWF is reviewing 26 proposals targeting a variety of taxa and habitats including freshwater mussels, black bears, emerging deltas, and many others. Our objective is to mail Notices of Award by 31 May 2007.

Although the WAP and SWG are highly integrated, we hope that the WAP will develop into a broader guidance document for conservation beyond SWG projects. The WAP has potential application to coastal restoration initiatives, improved implementation of Farm Bill programs such as the Wildlife Habitat Incentives Program, focusing research to fill data gaps, and education of the general public through partnerships with non-governmental organizations. The WAP and SWG are important elements of non-game conservation efforts. If you would like more information about how SWG or the Louisiana WAP could support conservation in your area, please contact Andy Ardoin at (225) 765-0239.

## **Deer Telemetry Study Update**

*Scott Durham, LDWF and Justin Thayer, LSU*

The Deer Telemetry Study is off and running! Over 40 deer have been captured and ear marked, with 24 of those deer receiving radio collars for weekly monitoring. Surprisingly, more than half of the deer that have been collared were bucks. Specifically, 12 adult bucks received fixed-length collars and four 1.5 year old bucks were fitted with expandable collars that will stretch as the animal matures. Adult does have been harder to catch, with only 7 receiving collars. Of the 7 collared does, one died of pneumonia a month after it was caught. This

deer likely was an EHD or blue-tongue positive deer that was stressed already and thus contracted a secondary infection that caused a rapid decline in health.

The deer captured that were not collared all received ear markers. They were not collared due to body size. Of these, 8 were buck fawns, three were 1.5 year old bucks, and 4 were doe fawns. These marked deer should provide excellent data for the study since they are known-aged individuals. For example, this seasons yearling bucks have the potential to be harvestable in the last sampling season of the project (fall 2008).

All deer so far have been trapped south of I-10 on approximately 4,000 acres. Deer were captured near each major boundary including the Intercoastal Canal, Interstate-10, and Choctaw Bayou. Few deer are showing any major movement patterns, with most of them staying close to the location where they were trapped. None of them have been located north of the Interstate,



suggesting at least so far, that there is limited movement across this major obstacle during early spring. Although there has been no movement across the Intercoastal Canal, several deer have crossed Choctaw Bayou. All except one returned after a day or two. Trapping efforts next season will be focused north of the interstate and on the west side of Choctaw Bayou to distribute the sample over a broader region.

The study site has greened out in a big way with tremendous herbaceous browse availability, and the deer do not have to move very much to feed. The study area is actively managed bottomland hardwoods with cutting and entry cycles designed to regenerate valuable timber and wildlife tree species such as green ash and Nuttall oak. This kind of management creates conditions that provide very good deer habitat with carrying capacities among the states highest. Herd health collections have shown deer to be browsing deciduous holly, fungi, *Rubus* sp. fruit and leaves, honeysuckle, vetch fruit, clover, trumpet creeper, wild geranium, *Smilax* sp., mulberry fruit, woodbine, and other unknown herbaceous species.

Louisiana has many unique landscape features and to gain information on a particular physiographic region is going to be very valuable to hunters, foresters, and land manager's who need to make harvest and other wildlife management decisions. The objectives of the study are to: 1) Assess space use and movements of male and female white-tailed deer, 2) Evaluate age and sex-specific harvest rates of white-tailed deer, and 3) Evaluate survival and cause-specific mortality of male and female white-tailed deer. The results from this study will provide scientific data that is fundamental and needed in our state. Bottomland hardwoods make up about 25% (4.3 million acres) of the deer habitat in Louisiana and are considered the most productive of the 9 deer physiographic regions.

Volunteer efforts this trapping season were outstanding with special thanks extended to the Wildlife Society at LSU and biologists with LDWF. Additionally, the local hunting/fishing television show "Paradise Louisiana" with Gary Rispono filmed a two part segment on the project that aired over two weeks in south Louisiana. The two segments can now be viewed on their website at <http://www.paradiselouisiana.com/default/Videos.html>.

We also want to thank other volunteers and contributors that have been so helpful and generous with their time, facilities and financial donations including: Acoustical Supplies, The Southeast Deer Study Group, the Quality Deer Management Association, the Bercham Group, Acadian Sportsmen's League, Bayou State Bowhunters, and the Louisiana Wildlife and Fisheries Foundation. Also special thanks go to Vic Blanchard, Alex Chauffe, and Kenny Hernandez, whom have given us great access, logistical help and work effort.

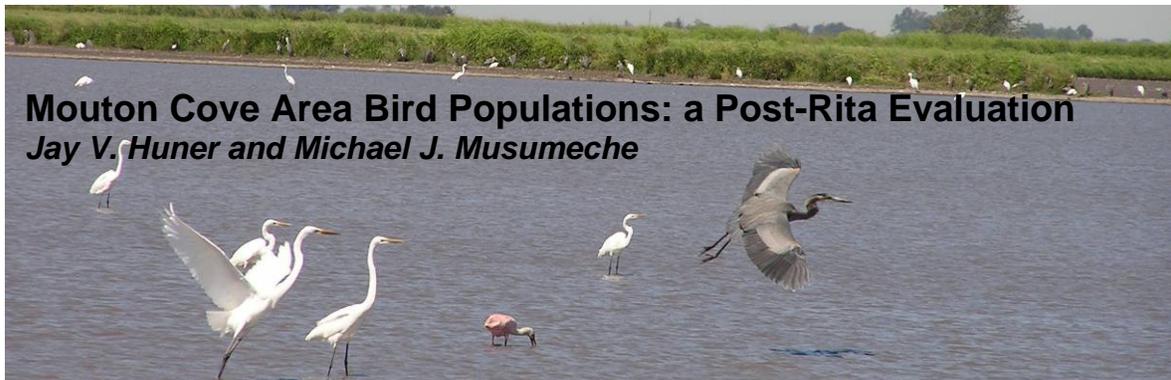
## **Hurricane Rita Fishery Recovery Monitoring in SW Louisiana**

*Bobby C. Reed, and Eric Shanks, LDWF District 5 Fisheries*

The Louisiana Department of Wildlife and Fisheries (LDWF), Inland Fish Division, District 5, has been monitoring the streams and rivers of Southwest Louisiana for water quality and fisheries resources since Hurricane Rita hit the area on September 24, 2005. Massive fish kills were widespread in the coastal plain marshes and rivers from three to five days following the storm. Water quality stations were set up on the Calcasieu, Mermentau, and Sabine Rivers and standard parameters measured weekly beginning October 2005 through January 2006. Some stations were slower to return to "normal" than others, however, all of the 21 stations were showing acceptable water quality by January 2006.

Twelve sampling stations had been established by LDWF in these rivers some 20 years before, providing baseline data on the fisheries resources before the storm. October and November 2005 samples showed the impacts to be far

worse than originally expected. No centrarchids (bass/sunfish), clupeids (shad/herring), or cyprinids (minnows) were captured in over three hours of electrofishing. Water quality samples showed that streams were in better shape further inland from the coast. April 2006 samples brought little good news; one 11 inch largemouth bass, one 5 inch bluegill, and one 12 inch channel catfish -- all on the Calcasieu. The LDWF crews began to see a few gar fish and bowfin, but there were still no centrarchids found on either the Mermentau or the Sabine rivers. October 2006 samples demonstrated the resiliency of Mother Nature that few could have believed. While biologists expected the fisheries to rebound eventually in the impacted waters, few expected what was found just one short year later. The summer spawn of surviving centrarchids had been extraordinary: largemouth bass production on the Calcasieu and Sabine rivers not only exceeded the 20 previous years, but doubled the catch-per-unit-effort numbers of the "best" years. The Mermentau River samples also indicated a good rebound. This spring, fishermen are reporting good catches of 8 - 12" bass that are in excellent condition. Most of the smaller fish are being released, according to LDWF creel surveys. Again, nature shows us that no ecological niche will remain unfilled for long.



From September 2002 through April 2005, we surveyed the birds in the agricultural wetlands, pastures, and riparian forests in the Mouton Cove area of Vermilion Parish, Louisiana several times a month. The study area was more or less circular with a diameter of about 5 miles and included three numbered sites on the coastal birding trail developed by the State of Louisiana - "The Nation's Wetland Coastal Birding Trail". We generated a seasonal bird checklist at the end of 2004 and a report on the birds of the Palmetto Island State Park site at the end of June 2006. In all, some 240 bird species were recorded and 72 species either nested or were probable nesters at or near the study area. This work was supported by grants to J. V. Huner as Director of the University of Louisiana at Lafayette Crawfish Research Center. Funding agencies were the Louisiana Crawfish Promotion and Research Board and the Coypu Foundation (2002 into 2004) and the Louisiana Office of Culture, Recreation, and Tourism (2004 into 2005).

In early October 2005, Hurricane Rita generated a storm surge that inundated the study area south and in some places north of Louisiana Highway 82 with full strength sea water. Significant damage was done to vegetation and crawfish and rice fields inundated with salt water could not be used for their intended crops. In areas spared from the surge, crawfish fields that would have been filled in the fall of 2005 could not be filled because farmers depend on surface waters that were too saline to pump into ponds for freshwater crawfish. The problem was exacerbated as the 2005-06 winter drought offered no rainfall to fill ponds unaffected by the surge or to flush ponds from which salt water had been drained in October or November.

Several visits during the spring and summer of 2005-06 revealed a dramatic reduction in avian fauna species and numbers of individuals per species compared to baseline data developed from September 2002 – June 2005. In 2006, we submitted a proposal to the Coypu Foundation for a one year follow up survey of the study area.



*Musumeche*

We did so because the area provided important habitat for a number of birds prior to Hurricane Rita; it was an important component of the state's coastal birding trail; and the short term impacts of Hurricane Rita on the area should be documented. The Coypu Foundation Board of Directors agreed to fund the study administered through the Louisiana Wildlife Federation, and we began our survey work in January of this year (2007). Our surveys will continue through December of this year.



*Musumeche*

So far in 2007 we have found good numbers and diversity (197 species as compared to the earlier survey total 240 species) during the first five and a half months of our survey. Many of the fields that were dry during the fall-winter-spring of 2005-06 were flooded in the fall of 2006. Farmers flooded the fields to leach accumulated salt from the substrate and/or to produce crops of crawfish. Crawfish production was generally poor for the 2006-07

season but the full complement of waterbirds, especially waterfowl, associated with the area in our past survey work was well represented. We were especially impressed with the continued presence of large numbers of scaup, joined by unexpected Redheads, in the shallow 6-10" deep fields. We were pleased to find expected species and numbers of shorebirds present during spring migration. A complete report on the results of our survey work will be published in the Louisiana Wildlife Federation Magazine by mid-2008.

## Student Bloopers

Lee Foote, University of Alberta

Though Louisiana is no longer my home, my lifetime membership to LAPB brings me the newsletters and they are always an interesting read because of the reporting on the wildlife progress that is being made. My work in Canada is as a professor of conservation biology at the University of Alberta where I focus on wetlands, wildlife, and sustainable use issues. I grade a lot of exams and term papers by students and over the years have kept a journal of the interesting statements and assertions students have made. Sometimes they get things pleasantly misconstrued. Maybe you will enjoy them too. From my course on *Utilization of Wildlife Resources* my students told me that:

1. Early hunters migrated into North America by way of Beginia . . .
2. Depensatory processes hold down the Wally [walleye] population in Alberta . .
3. Technological improvements affect oceanic fish harvest, for example, boats now have frizzing compartments . . .
4. Hunters can be used to manage moos populations.
5. The advertisement of the “crying Indian” is misleading because it doesn’t represent the hole culture.
6. Killing an animal denies it right to feel happys.
7. Some journalists commit errors of emission.
8. Animals are not morale agents.
9. According the Val Geist’s “hell hole hypothesis” early native hunters entering North America faced the dangerous dire wolves, North American cheaters, and giant shit-faced bears.
10. Ducks of the genus Anus are dabbling ducks.
11. Removal of boars may allow new mail bears to enter the population.
12. Single parents have less time to take their children hunting than do duel parents.
13. Ferruginous hawks can be observed stalking their prey outside their boroughs.
15. Once the first whopping crane egg hatches, the parents begin feeding it.
16. We should reduce wolf numbers near farms engaged in predation.
17. Some nests have eggs that are invaded by predators.
18. The cost of an aerial survey is about \$43,000 for a deer with a fixed wing aircraft.
19. Monitoring exotic plants is expensive because of the sheer volume of goods moved across borders.
20. One mechanical method of controlling plants is hand removal. Fire, on the other hand, has been used for deforestation.
21. Grizzlies require an army of habitats.
22. The borrowing owl relies on excavations.
23. Water quality suffers from cattle grazing. With a defecation rate of 14 times every 24 hours, few cattlemen even consider this effect.

## **Louisiana Envirothon**

*Mike Carloss, LDWF*

The goal of environmental education is the development of knowledgeable, skilled and dedicated citizens who are willing to work toward achieving and maintaining a natural balance between quality of life and quality of the environment. The Louisiana Envirothon works in partnership with resource management professionals and the general public to promote and strengthen the goal of environmental education.

The Louisiana Envirothon is a multidisciplinary, environmental problem-solving competition for students in grades 6 through 12. Teams of five young people from the same school or associated with an organized group (i.e. FFA, 4-H, home-school groups, BSA pack) train and compete in five natural resource areas: soils, aquatic resources, forestry, wildlife, and a current environmental issue. There is also an oral presentation component of the competition, in which teams present a solution to an environmental problem related to a current issue. Throughout the competition students learn hands-on, in real-life context, the complexities of solving environmental problems while working as a team and having fun.

The 2007 Louisiana Envirothon was held at the Model Sustainable Agriculture Center (MSAC) of the University of Louisiana at Lafayette on May 5, 2007. Students, competing as team members, rotated through a series of stations managed by natural resource specialists. For example, a forester manned the forestry station, and a soil scientist coordinated the activities at the soils station. Mike Carloss and Cassidy Lejeune with the LA Department of Wildlife and Fisheries conducted the wildlife portion of the testing. The 2007 Current Issue was Sustainable & Renewable Energy. Team members were given a written test (which involved hands-on field activities) to complete. Each test was taken as a team with each team member participating in answering the questions.

Acadiana Home School was the team with the highest overall score and will travel to the Canon Envirothon competition this summer to represent Louisiana. The Environmental Education Commission will pay the team's expenses. Information on the Canon Envirothon Competition can be found at [www.envirothon.org](http://www.envirothon.org).

### **Event Goals**

- To promote a desire to learn more about the natural environment and equip students with the knowledge and skills needed to apply the basic principles and practices of resource management and ecology to complex environmental issues.
- To promote stewardship of natural resources and to encourage the development of the critical thinking, cooperative problem-solving and decision-

making skills required to achieve and maintain a natural balance between the quality of life and the quality of the environment.

To provide students with experience in environmentally-oriented activities, enabling them to become environmentally-aware, action-oriented citizens.

## **Monograph Announcement**

*Bill Herke, LSU*

In the 1970's I tried to publish a monograph that contradicted many of the fisheries paradigms of that time. In my opinion, it was the best thing I wrote in my 40-year career. My greatest professional disappointment is that it was too far ahead of its time to get it past the journal reviewers. If it had been published in a journal, I believe it would have had a significant effect on fisheries science. After several years of trying to satisfy various reviewers, I copyrighted and "published" it myself, but this procedure gave it very little circulation.

In the succeeding years, many of the conclusions in the monograph have been reached by other researchers, so the monograph is somewhat dated. Nevertheless, there is still much in it that is pertinent today. Consequently, since I am now semi-retired, I have had the time to put it on a website ( [www.herke-estuarine-fisheries.com](http://www.herke-estuarine-fisheries.com) ) to make it more readily available. Also on the website is a list of 60 different reprints on various coastal fisheries issues. These are available on request by using the email form on the website.

If you have an interest in such things as coastal marsh nursery use, organism growth rates, environmental factors affecting emigration, recruitment periods, initial spawning age, and length frequency analysis, I invite you to visit the website.

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