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Answering What does Delta Wildlife do?'

BY PIERCE BROWN



eople often ask me "What does Delta Wildlife do?" I usually respond with a pause, take a deep breath, and ask how much time they have for me to share with them what Delta Wildlife can do for them.

As a private landowner, I have personally benefited from the expertise of the Delta Wildlife staff in consulting me on how to improve my property for the betterment of wildlife and wildlife habitat. Delta Wildlife has provided private and public landowners with services and benefits over the past 30 years. They continue to be at the forefront of doing much the same in the 19 Delta and part Delta counties of Mississippi. The following are just some of the projects that Delta Wildlife is involved with:

- Delta Wildlife's Nuisance and Invasive Species Division (NISP) partners with the Natural Resources Conservation Service, USDA Wildlife Services and other state agencies to help manage destructive nonnative feral swine that causes millions of dollars of damage to both public and private lands. Our NISP division partners with USDA Wildlife Services to assist with the year-round management of fish-eating bird species on local aquaculture farms and facilities. According to recent published research from the Thad Cochran National Warmwater Aquaculture Center, predation by fish-eating birds can negatively impact the local economy up to \$145 million if not managed appropriately. Delta Wildlife's work in these arenas benefits our producers and our local economy.
- Delta Wildlife works with other non-government agencies such as The Nature Conservancy, Ducks Unlimited, Wildlife Mississippi and Foundation for Mississippi Wildlife, Fisheries & Parks as a part of the Mississippi Outdoor Stewardship Trust Coalition responsible for helping the state legislature and other state government officials establish the Mississippi Outdoor Stewardship Trust Fund (MOSTF). This vital fund will be instrumental in mitigating taxpayer dollars to important outdoor projects for our state's wildlife management areas, state parks, and local municipalities.
- Delta Wildlife has partnered with local businesses like Cascio Storage and Warehouse and multi-national corporations such as Corteva's Pioneer Seed division and Syngenta to provide funding and products so that habitat seed can be purchased at a significant discount to benefit our wildlife. Delta Wildlife has also garnered help from TC Energy to place critical habitat fish structures in our Delta's public access waterways and wood duck boxes on our

Thank you to our partners for your help and support of these ongoing projects. Again, these are only some of the things we at Delta Wildlife do. Therefore, I am proud to be a member of Delta Wildlife and ask that you join if you aren't a member already.

NPBur Pl

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Conversation with Delta Wildlife Partner:

Kay Whittington

Director of MDEQ's Office of Land and Water Resources

BY KELLEY PINION

ay Whittington protects one of Mississippi's most valuable resources — our water supply. Whittington's commitment to conservation grew from a life-long love of the outdoors and an eagerness to protect the environment. After receiving a BS in Civil Engineering and an MS in Environmental Engineering from the University of Alabama, her focus on water resources brought her to Mississippi to work with the Mississippi Department of Environmental Quality's (MDEQ) initiative to control water pollution. Forging relationships with Delta Wildlife and Delta FARM, she worked with farmers in the region to voluntarily reduce water pollution, ultimately conserving water resources.

In 2013, MDEQ appointed Whittington as the director of the Office of Land and Water Resources (OLWR), a department with a mission to ensure the water quantity and quality are available to support Mississippi's environment and

economy now and in the future. This charge also includes designing, constructing and maintaining the state's dams to protect our citizens and their property.

As her role expanded, her relationship with Delta Wildlife evolved. "It was a natural extension of our working relationship when I began working primarily on water quantity issues," Whittington said. "Delta Wildlife has provided input as we developed conservation practices for wildlife water use permits. They have also provided input and funding for continuous flow meters on wells used to enhance wildlife habitat so that wildlife water use can be refined in the model."

While Whittington's career introduced her to the region, her husband's Delta roots indoctrinated her to the vibrant culture of food, hospitality and music. Spending time on their family's Delta land deepened her connection to the areas more tranquil resource, an appreciation she and her husband share with their teenage son and daughter.

Whittington's stewardship of our natural resources is as apparent in her personal life as it has been throughout her 25-year career.

We recently talked to Whittington about her role at MDEQ, her department's tremendous effort to manage Mississippi's water resources and her continued commitment to work with Delta Wildlife to ensure sufficient water is available for wildlife in the Delta.



DW: What are your current and ongoing efforts to benefit the citizens of Missis-

Whittington: Water resources management starts with understanding how much water is available at different locations throughout the state. MDEQ's OLWR geologists, scientists and engineers monitor water levels to collect the necessary information on availability. In addition, OLWR conducts in-depth regional hydrologic investigations to better understand water supplies in prioritized areas. This information is available and useful for persons needing water for a specific purpose, such as economic development or public water supply.

The abundant water supplies in Mississippi contribute directly to the state's quality of life and economic prosperity. However, the water resources available in each area of the state can vary significantly depending on various hydrogeologic conditions that may affect base flow in streams, water

quality and quantity and the prolificacy of local aquifers.

This variability requires a concerted monitoring effort to collect groundwater and surface water data to allow responsible decisions regarding managing and developing the state's water resources.

The water withdrawal permitting process is closely coordinated with inventorying and assessing water availability from freshwater aquifers and major freshwater streams. As the entity responsible for issuing water withdrawal permits, OLWR issued 2,263 new and renewal groundwater permits and 22 new and renewal surface water diversion permits in Fiscal Year 2023.

MDEQ's OLWR is also responsible for assuring compliance with permit conditions and regulations governing water well drillers and dam safety. This includes working with well owners in the Delta to assure compliance with water conservation and irrigation efficiency requirements.

DW: What are the current challenges or opportunities you face in reaching these goals?

Whittington: The future of the Mississippi Delta's economic and environmental viability depends on abundant, accessible water of sufficient quality. Over 80 percent of the water used for irrigation, aquaculture and wildlife habitat enhancement comes from the shallow

Mississippi River Valley Alluvial (MRVA) Aquifer. Over time, pumpage demands have increased, leading to water-level declines. To protect the viability of the Mississippi Delta's MRVA aquifer and Delta-wide stream flows, MDEQ created an executive-level task force to address these challenges in 2011, and a 2014 Executive Order created the Governor's Delta Sustainable Water Resources Task Force.

The Task Force and its workgroups consist of various state and federal agencies, stakeholder organizations and academia - all focused on developing and implementing approaches and strategies to ensure sustainable ground and surface water resources for current and future generations in the Mississippi Delta.

In Fiscal Year 2021, MDEQ's OLWR adopted a new general permit (MRVA-003), which updated conservation measures to encourage the continued adop-

tion of water conservation practices via the permitting process. In Fiscal Year 2023, 1,958 permits and certificates of coverage under the general permit were issued with conservation requirements as part of the special terms and conditions. An online reporting portal developed by OLWR receives meter reading data from participants and continues to yield valuable information critical to improving total pumpage estimates and model accuracy. Water-level data from wells in the Mississippi River Valley Alluvial aquifer is being collected and evaluated to monitor the effects of pumping and assist in developing water management practices.

MDEQ's OLWR is also working with the U.S. Geological Survey (USGS) to update, refine and utilize the Mississippi Delta portion of an existing regional groundwater flow model developed by USGS.

This large-scale regional model covers the entire Mississippi embayment and extends through the primary drinking-water aquifers as part of the Mississippi Embayment Regional Aquifer Study. This model will be used to better understand the groundwater flow system, the potential effects of variations in pumping patterns and to evaluate various water resources management scenarios. New data continue to be collected for integration into the existing groundwater flow model.

DW: What are your recent successes?

Whittington: Since 2016, MDEQ's OLWR has worked closely with the U.S. Geological Survey to construct an improved groundwater model for the Delta. Task Force member organizations have been instrumental in obtaining substantial federal funding for the USGS's work. We expect to present some modeling results that can predict water levels that match measured water levels to the Task Force later this year.

The USGS modeling effort and other OLWR water management actions depend on robust, accurate water-level and water-use data. In 2014, with Task Force support, a Voluntary Metering Program was implemented, through which permit holders of 10 percent of the wells in each Delta county submit annual metered water-use reports to OLWR. An online reporting portal was developed for



▲ The Whittington Family (L-R) Aven, Charlie, Kay & Elizabeth

◆ Kay's pets - Cash & Emmy

participants. The data collected through this voluntary program has been critical because the model cannot accurately predict water levels if it is not based on how much is pumped annually.

Another success is the continued improvement of the permit to use water for irrigation, aquacul-

ture and wildlife habitat enhancement. Soon after it was formed, the Task Force determined that widespread adoption of practices to improve water-use efficiency should be the near-term priority for dealing with the Delta's water quantity issue.

Task Force organizations were influential in having Mississippi State University create a new irrigation specialist position at the university's Delta Research and Extension Center (DREC) in Stoneville and, subsequently, the National Center for Alluvial Aquifer Research (NCAAR) to work on identifying the best irrigation management practices and informing Delta producers about those practices and how to implement them. On-farm research has shown that computerized hole sizing for poly-pipe, soil moisture sensors and surge valves can reduce water use on furrow-irrigated corn and soybeans by 20-50 percent without reducing yields.

In Fiscal Year 2021, OLWR, after close consultation with the Task Force, adopted a new general permit (MRVA-003), which updated conservation measures to encourage continued adoption of water conservation practices via the permitting process. In Fiscal Year 2023, 1,958 permits and certificates of coverage under the general permit were issued with conservation requirements as part of the special terms and conditions.

The challenge of ensuring sustainable water resources for the Delta is daunting, but these successes and the continued collaboration of Task Force members, federal agency partners and other partners like Delta Wildlife make it achievable.



Kate Lamb, 6, daughter of Stewart & Sarah Lamb; and Charles Stockett, 6, son of Burke and Samantha Stockett. A stringer of bream caught in Holmes



Baird Dawson, 12, son of Phillip and Betsy Dawson, Lake Trout, Jackson Hole, Wyoming



Dowdy Carmen, 8, son of Jarrod & Sydni Carmen, Whitetail buck, Issaquena County



Gaines Flowers, 14, son of Julie & Scott Flowers, Record Book Impala, South Africa



Thomas Thurman, 9, son of Clint and Louise Thurman, Whitetail buck, Sunflower County



Benton Grafton, 11, son of Chris & Nicole Grafton, bream, caught at Tara Wildlife



Easton Selby, 10, son of Laura Zepponi Selby and Ron Selby, mourning doves, **Washington County**



John Gritman Sykes, 4, son of Anna McClain and Dalton Sykes, Largemouth Bass, Sunflower County



Maddox Harris, 8, son of Bryan and Cricket Harris, 8-point buck, Grenada County



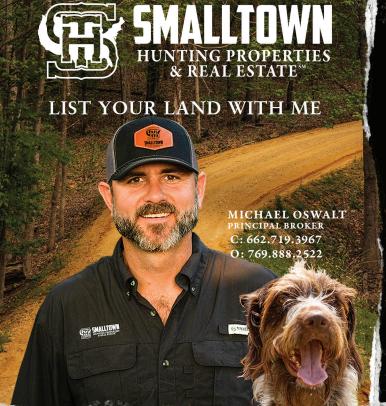
Brody Grafton, 6, son of Chris & Nicole Grafton, first official fish, bream, caught at Thompson Lake in Benton County





Gaines Flowers, 14, son of Julie & Scott Flowers, Flathead Catfish, Mississippi River

Dowdy Carmen, 8, son of Jarrod & Sydni Carmen, first turkey, Grenada County



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Numerous references available.

ISSAQUENA COUNTY: ACTIVE/MULTIPLE SHARES AVAILABLE MAGNA VISTA HUNTING CLUB SHA

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5,565 +/- ACRES



\$750,000 PER SHARE

COAHOMA COUNTY: SOLD HUNTING CLUB SHARE

BOBO BRAKE HUNTING CLUB WAS FORMED OVER 40 YEARS AGO BY A GROUP OF LIKE-MINDED WATERFOWLERS WITH THE SAME GOAL IN MIND, CHASING DUCKS IN ONE OF THE PRETTIEST BRAKES IN THE MISSISSIPPI DELTA.



31 +/- ACRES







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Delta Wildlife

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Fisheries Management Plans

Waterfowl Habitat Management Plans

Wetland Restoration Plans and Assistance

Wetland Hydrology Restoration

Quail Habitat Restoration Plans and Assistance

Native Warm Season Grass and Legume Planting

Bottomland Hardwood Reforestation

Conservation Easements

Discount Food Plot Seed Sales

Wood Duck Nesting Boxes

Bluebird Nesting Boxes

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White-tailed Deer Management and Assistance

Urban Forestry

Wildlife Forestry Management Plans

Backyard Habitat

Conservation in the Classroom

USDA Conservation Program Assistance

USDA Conservation Program Implementation

CRP

WRE

WHIP

EOIP

Waterfowl Surveys

Research Assistance

Non-Consumptive Wildlife Habitat Enhancement

Watershed Restoration



How to have 'Fund' in Mississippi Outdoors

BY WILL PREVOST Delta Wildlife Staff



he Mississippi Outdoor Stewardship Trust Fund (MOSTF) was created by the Mississippi legislature in 2022 to fund projects that will preserve and improve wildlife habitat and outdoor areas in Mississippi. Funding will be provided for things like conservation efforts, improvement of state parks and outdoor recreational areas, improvement of access to public waters and lands and habitat restoration on public and privately owned lands. The fund is a great success for outdoor recreation in Mississippi in the fact that it will provide funding for important projects that agencies may not have had funding to accomplish in the past. MOSTF Executive Director Ricky Flynt said, "This will be a great program that will benefit many people across the state of Mississippi who are interested in outdoor recreation."

MOSTF is overseen by a board of trustees appointed by the Governor and Lieutenant Governor. State agencies, municipalities and non-government organizations (NGOs) can apply to get funding for their projects, and the board of trustees will ultimately decide where the money goes. "There are a lot of municipalities and NGOs that are trying to do good conservation work and outdoor recreation projects but don't have the necessary funds; they may have some funding but not enough to cover the entire thing, and our funding can help cover the difference to accomplish those projects," said Flynt.

In 2022, 104 applications were submitted and MOSTF awarded \$9.8 million in funding to 21 projects across Mississippi with over \$31 million matched by recipients and other sources. The projects selected will accomplish the goals of improving access to public waters and lands, restoring wildlife habitat and improving state parks and outdoor recreation trails. One Delta-specific project that was approved in 2022 will fund \$1 million to restore and enhance wetland habitats on 4,200 acres of public lands on Mahannah and Howard Miller WMAs. This project will use the funding to renovate waterfowl impoundment levees, replace water control structures, improve drainage, convert water well structures and provide gravel road and levee access. Another example is the Horseshoe Lake Restoration Project, which was funded \$26,250 to restore public access and recreation opportunities to the Holmes County Lake. This will be accomplished by controlling more than 500 acres of invasive aquatic plants with herbicide applications.

For 2023, the Mississippi legislature awarded the program additional funding of \$15 million. Applications for 2023 MOSTF funding were received in October and the Board of Trustees will review each application and appropriate the funding in the coming months. MOSTF is currently dependent on the legislature to appropriate yearly funding, but there is hope that there will be a dedicated funding source in the future. According to Flynt, "Based on the number of applications we have received, there is a great need, really a demand, for this type of funding across the state. With additional funding we will be able to continue to do more good work with a lot of great applications that have yet to be funded."

- The projects that were approved for MOSTF funding in 2022 are:
- Pearl River Source Water Protection and Recreation Project, Phase 1 (\$2,696,471)
- Renasant Park Enhancements for Natural Resource-Based Outdoor Recreation, Environmental Education, Eco-Tourism and Sustainability (\$1,737,060)
- Freedom Ridge and Purple Creek Basin Improvements (\$1,000,000)
- Mississippi Delta Wetlands Enhancement Projects (\$1,000,000)
- Richardson Sportsplex and Outdoor Recreation Park (\$996,300)
- Improving Wildlife Habitats Statewide Collaborative Conservation Partnerships (\$570,000)
- Sims Road River Access and Eco-Tourism (\$480,000)
- Stewardship Agreements on National Forests to Improve Forest Health-MS (\$327,870)
- Noma Drive Boat Ramp Improvements (\$250,000)
- Forest Management on State-Owned WMA's (\$175,000)
- Kamassa Lakeside Fish and Fellowship with Accessible Piers (\$150,000)
- Highway 57 Sports Complex Walking and Birding Trail (\$126,326)
- Trail Improvements Tishominga State Park (\$102,800)
- Youth Environmental Stewardship Program (YES Program) (\$90,000)
- Invest in the Present to Improve the Future (\$34,500)
- Turcotte Shooting Facility Skeet House Construction (\$31,750)
- Horseshoe Lake Restoration Project (\$26,250)
- Swamp Access & Interpretation Project at Lee Tartt Nature Preserve (\$21,450)



- North MS Fish Hatchery Visitor Education Center Event Pond Improvements (\$13,750)
- Lake Columbia Kayak Launch (\$8,700)
- Holmes County State Park Kayak Launch (\$8,700)



FIELD PROVEN. YIELD PROVEN.



DELTA PROVEN.









Staff Highlight: Henry Fraiser

The Dedicated Wildlife Technician



enry Fraiser is a wildlife technician working for the Nuisance and Invasive Species division for Delta Wildlife. He has been with the organization for five years and is responsible for removing feral swine from the landscape, participating in cormorant and pelican harassment for the aquaculture industry and participating in bi-weekly aerial surveillance of roost sites, loafing areas and feeding areas for nuisance cormorants and pelicans starting in the fall through spring times of the year.

Henry has an education background that includes attending Pillow Academy and Mississippi Delta Community College. Before joining Delta Wildlife, he worked as a caretaker at Backwater Brake Hunting Club in Greenwood, Mississippi. He was born and raised in Greenwood and still lives there.

When asked about his job, Henry mentioned that he enjoys helping farmers and landowners improve their bottom line and realize the full potential of their crop revenue and natural resources. He is proud of the work he does and the positive impact it has on the environment and the local community.

In his personal life, Henry is an avid hunter, fisherman and gardener. He enjoys cooking and watching college football and basketball, especially games at the "Hump" in Starkville. He shares his home with two cats and a dog named Jack, who keep him busy when he is not working.

Henry Fraiser is a dedicated and hard-working wildlife technician whose passion for nature and the environment shines through in his work. His commitment to his job and community is an inspiration to others, and Delta Wildlife is fortunate to have him on their team.



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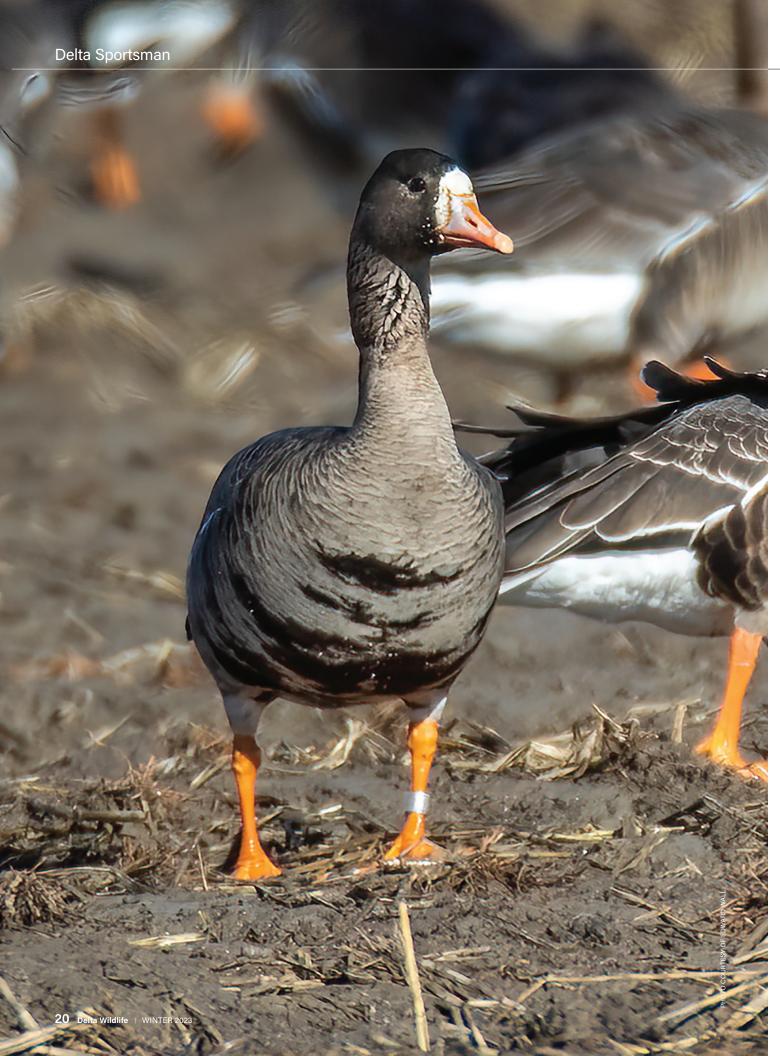
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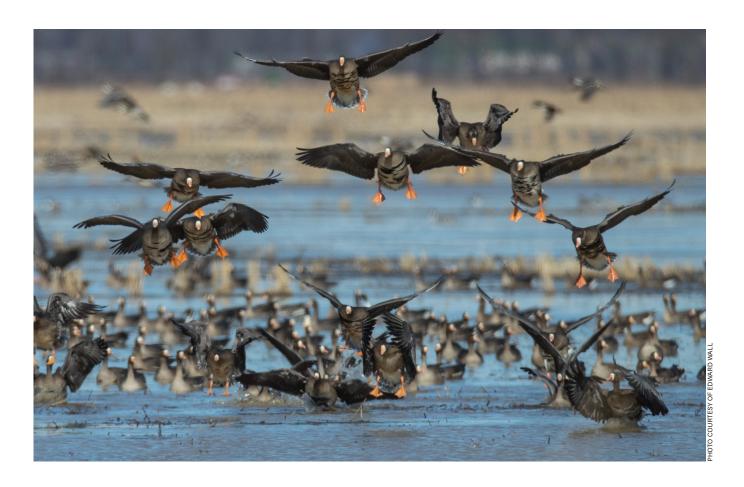
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Ben Pentecost Ed Pentecost Brad Phillips







Speck!

BY RON SELBY

Executive Director of Delta Wildlife/Delta F.A.R.M.

luck...yodel.... cluck, cluck, yodel, yodel." We respond in kind and mirror their calls - not to mock but to match — their sense of urgency. There are a dozen at first, followed by another, and then another as they appear over the treetops heading for our assorted spread of silhouettes, floating and full-body decoys. They look like WWII bombers as they approach in loose formation, moving slowly towards us yet with purpose. "Cluck...yodel.... murmur, murmur, murmur." I can feel their sound in my chest as my heart races while they circle above me in a merry-go-round fashion, with some dropping while others rising. I tip the bill of my cap to the left to peek without revealing my excited countenance. I can see their barred bellies directly above me, hovering and teetering out of range. My trance is interrupted as a half dozen specklebellies glide between us and float above the decoys. I watch their big orange webbed feet reaching for the water. I hear a voice say, "Take 'em!" I rise effortlessly while aiming for the one on the far left. At the report of our shotguns, the geese began to fall, and when all was quiet, we had four lying in the silhouettes. We send our retriever Bud to fetch the birds as the flocks retreat. Within minutes

we could hear the approach of another band of White-fronted Geese announcing their arrival. We hunker down in our paneled blind and ready ourselves for another volley.

The Evolving Specklebelly

Interest in targeting White-fronted Geese in the Mississippi Delta became in vogue recently. According to Dr. Mike Brasher, senior waterfowl scientist for Ducks Unlimited, the White-fronted Geese we Delta hunters are pursuing here are part of the Mid-Continent population that historically wintered along the Texas Gulf Coast. With the advent of rice farming in the areas east and west of Houston, these White-fronted Geese began to take advantage of the waste grain found in the fields neighboring the Gulf Coast marsh. However, this abundance of food has been steadily declining with the urban sprawl of Houston taking out much of the rice production in that area along with the White-fronted Geese's favorite food source. Since the 1970s, the percentage of the Mid-Continent White-fronted Geese overwintering along the Texas Gulf Coast has dropped from 70 percent to as little as 10 percent today.

Over time, the birds drifted toward Louisiana and adjacent states where rice acres had increased significantly over the past 40 years. According to Dr. Brasher, White-fronted Geese tend to have a high fidelity to their wintering grounds. Due to this particular trait, they are more likely to return once they imprint on an area. With this slow but steady expansion into new wintering grounds, White-fronted Geese began to show up more regularly in the Mississippi alluvial flood plain starting in the mid-1990s. Meanwhile, the Mid-Continent White-fronted Geese population has grown considerably over the last forty years from around 500,000 to somewhere between 2.5 million – 3.5 million.

Brasher says the popularity of White-fronted Geese in Arkansas now rivals that of mallards, with a goose season that begins in late October providing early hunting opportunities. "They're highly adaptable to different habitats, which adds to their intrigue. They respond to calls and decoy spreads much like mallards and most will agree they rank in the top five regarding table fare," he says.

What is a Specklebelly?

The Greater White-fronted Geese get their name from their white face patch of tiny white feathers behind their opaque orange bill. They are brownish with black splotches on their belly, hence the nickname Specklebelly or Specks. Juveniles do not present these chest bars, and it is believed the more pronounced and heavier the bars, the older the bird.

White-fronted Geese can weigh 4 to 8 pounds and have wingspans reaching 4.5 feet. They are similar in size to Snow Geese yet smaller than Canada Geese. They can live to be older than 30 years in captivity, with the oldest recorded in the wild being about 25.5 years old.



PHOTO COURTESY OF EDWARD WALL

Hunting Specklebelly Geese in the Mississippi Delta

I highly recommend hunting these remarkable birds. The White-fronted Geese (Specklebelly Geese) hunting season for us here in Mississippi opens November 10-26 and then coincides with our regular duck hunting season through to the end of January. However, check your rules and regulations since all are subject to change with migrating waterfowl. When scouting, look for them wherever other ducks or geese frequent. They are gregarious birds and may



be found in large groups feeding and resting in wide-opened agricultural fields with snow geese or small impoundments and potholes with mallards and other dabbling ducks. Their winter diet consists primarily of grass seeds, grain, sedge tubers, annual broadleaves and grasses. Once you have patterned them, look for quality cover to hide your blinds. Even though they respond well to calls and decoy setups, getting in shotgun range can still be a challenge. I have had my best success focusing on small 5-15-acre watershed impoundments found on Conservation Reserve or Wetland Reserve Easements where either moist soil plants are being managed, or grains such as millet and rice have been planted for all waterfowl.

When it comes to calling, be sure to have a speckled-bellied call. Specks sound different than other geese and will respond much better to their kind. We use calls made by Primos and RNT; however, several companies make them. The best advice is to use the one you can operate and are confident in using. We have had much success choosing decoys with a mix of speckled-belly silhouettes, full-size and floating decoys. There are a lot of good brands out there; however, spend the money and get the most life-like decoys you can find. Depending on what ducks are in the area, we usually add a mix of duck decoys, including mallard, pintail and teal.

Currently, the limit is three White-fronted Geese per hunter. These are separate from your duck limit, which can lead to quite a mixed bag if you're lucky. On occasion we've taken limits of both ducks and geese, which can be a lot of fun.

Specklebelly Research

Dr. Brasher reports that Ducks Unlimited is investing in more research and collaborating with other partners to better understand the continued expansion of White-fronted Geese. According to Brasher, these geese nest in more remote places than ducks, making them more difficult to survey. Scientists rely on alternative methods to count them during surveys. One such method is the Lincoln-Peterson method, which relies on the data collected from band recoveries and surveys of hunter harvest. If they know the harvest rate and total harvest, simple algebra can be used to generate an estimate of the fall population size. Unlike many of the popular waterfowl species' numbers, which have declined over the past five years due to extreme drought in their respective nesting areas, the White-fronted Geese numbers have remained somewhat flat after experiencing extended periods of rapid growth.





Speckle Belly Steaks!

limit of Specks can yield enough table fare for four to six people. The breast alone can produce two lobes of solid meat weighing 4-6 ounces each. The speckled belly breast meat is delicious and often called the "Filet Mignon of the sky."

Regardless, I still like to soak them in water for 24 hours, then rest in milk for another 24 hours. I then check for steel or other non-lead shot to avoid dental injury. Once I'm satisfied with preparation, I season and cook the lobes like my favorite steak!

INGREDIENTS:

- White-Fronted Geese Breast lobes
- Fresh rosemary
- $\sqrt{}$ 1 -2 cloves of garlic
- Kosher Salt
- Olive Oil $\sqrt{}$
- \checkmark Butter

DIRECTIONS:

- 1. Get the charcoal grill ready.
- Chop rosemary and garlic then mix with kosher salt.
- Rub rosemary, garlic and salt mixture on room temperature meat lobes.
- Allow the meat to absorb the mixture for at least 30 minutes.
- Brush lightly with olive oil
- Once charcoal is ready and the grill is hot, place the lobes directly over the fire.
- Cook 3-4 minutes per side and remove from heat. Do not overcook wild game!
- Place pads of butter on the breast lobes and allow them to steep and rest under a sheet of aluminum foil for about 5 minutes.

Serve with your favorite Mississippi Delta rice variety, and pair with a fine red wine!

Ron Selby is the Executive Director of Delta Wildlife/Delta F.A.R.M.















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Deer Data Management & Timing

BY SAM FRANKLIN

Delta Wildlife Staff

he fall white-tailed deer harvest season is an essential time for hunters. It provides them with an opportunity to hunt and harvest deer for meat and other purposes. However, it is not just a recreational activity. Harvesting white-tailed deer is an essential part of wildlife management. Wildlife managers use harvest data to determine herd health, monitor population trends and make informed decisions about future management practices. Collecting fall and early winter white-tailed deer harvest data is a collaborative effort between hunters, wildlife managers and conservationists.

As hunting season approaches, it is crucial to understand the timing and significance of gathering biological metrics during the peak breeding season for white-tailed deer in the southeastern United States. These metrics, such as antler size, body weight (especially the timing during the rut the harvest occurred) and breeding behavior provide invaluable insights into the health and management of deer populations. While some individuals may only see the breeding season as an opportunity for hunting, it is essential to recognize the bigger picture of how these animals interact and how their populations are managed.

Wildlife managers can make informed decisions about how to manage deer populations over the long term by collecting and analyzing biological data during the peak breeding season. Antler size and body weight tracking can provide information about the overall health of the deer population. A decline in antler size or body weight before the breeding season may indicate issues with nutrition or other environmental factors, leading to management decisions regarding habitat restoration or food supplementation. Breeding behavior data can also provide insights into population dynamics. The significance of the fall white-tailed deer harvest data cannot be overstated. This information is critical for making informed decisions about future management practices, such as setting hunting seasons, bag limits

and other regulations. For example, if the data indicate that the deer population is declining, wildlife managers may need to decrease the number of hunting permits issued to ensure the long-term sustainability of the herd.

In addition to providing valuable data for wildlife management, fall white-tailed deer harvest data is also used for research purposes. Researchers use the data to study the genetic diversity of the deer herd, the impact of hunting on the population and other important topics. The fall white-tailed deer harvest season is a critical time for hunters, wildlife managers and conservationists. The collection of harvest data provides valuable insights into the health and population trends of the deer herd, which is critical for making informed decisions about future management practices. Hunters should report their harvest to their Deer Management Assistance Program (DMAP) representative or their respective state wildlife agency, which then compiles the data and makes it available to that membership or public entity.

White-tailed deer management is like any other business, and to run a business, a manager needs data to see what's working and what's not, then make changes accordingly.

By tracking patterns in data sets in tandem with real-time biological data/metrics, managers can make decisions on the fly during the season as it progresses based on real-time data and not hunches. A mid-season review of data coming in gives the conservationist and manager alike the ability to circumvent issues before they become too widespread to address on their local landscape.

In conclusion, the importance of gathering and timing of those biological metrics during the peak breeding season for white-tailed deer data management in the southeastern United States cannot be overstated. By utilizing this data to make informed management decisions, we can guarantee the health and sustainability of our deer populations for future generations. So, let's appreciate the broader picture and the role that data plays in responsible wildlife management.





The Delta has been our home for seven generations, and home to those we care about. We value the natural resources of the Delta and the joy they bring to us. Our goal every day is to nurture and protect those as we continue to provide the best services possible to our customers.

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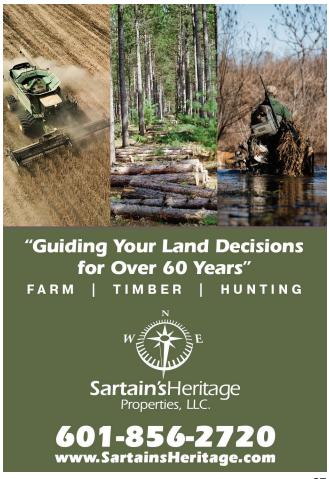
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Catching Coyotes

BY RONNIE DAVIS

rapping coyotes in the Mississippi Delta can be rewarding, exciting and frustrating all in one day. Coyotes are easier to catch in the Delta than in the hills or big wooded areas. Delta coyotes are not as skittish as the ones living in these other settings because they see farmers, pickups and tractors on a regular basis. Delta land has hundreds of miles of turn rows or field rows, making covering miles and miles of territory easy for these animals.

Scouting for Coyotes

Most farmers welcome the removal of coyotes, especially where they enjoy hunting rabbits, squirrels, deer, duck and other species of prey. Coyotes like to use turn rows, crossovers, creek crossings, or wherever a truck or tractor gets from one place to another. I normally ride the turn rows looking for tracks or covote scat (droppings). Ditch crossings with culverts are ideal locations to find them. If you look long and hard enough, you can find the hotspots where most coyotes that travel from long distances cross at the same place. Also, wherever there is a large availability of prey, coyotes will congregate there and keep coming back year after year. For example, I trapped a 3,500-acre place one year and caught 42. This area was where the base of the hills meet the Delta. Corn, cotton, and soybean fields were harvested, so it was all open land except for the drainage ditches and the crossings. I bypassed this place the next year and worked further west. I caught a good many over there and had gotten tired and ready to quit, but as I came back closer to home, I arrived at that hotspot I had bypassed earlier. I rode through the area and saw plenty of tracks, so I tried it. I set it up over the next few days, and in only two weeks, I had caught 32 total. I caught 70-plus coyotes from that same spot in two years. Now, every year when I go by that area, there are two to three hotspots that I always set traps in, and they always produce coyotes. It is common to make multiple catches at these hotspots year after year. The most I have caught out of one set was seven over a three-week period. The most I caught in one night was 11, but there was an extremely high concentration of them in the area at that time. Never think that you have caught them all from a certain place because that is impossible, but you can thin the numbers down in each spot and see a significant increase in the small animal population.

Long Distance Coyotes

To give you an idea of how far they will travel, a trapper in Louisiana decided to do his own experiment. He bought 10 fluorescent orange dog collars with his name and number on them, put them on the coyotes he had caught, and then released them from the exact spot he caught them. Over the next two years, he had seven to eight people call him, saying they had accidentally killed his pet coyote. Three were in the five-to-10-mile range, several were in the 25-mile range, and one was killed 65 miles from where he was caught.



Do coyotes have a home range? The answer is yes, but the distance they will travel is shocking.

Tools, Techniques and Timing

To catch coyotes, you need good equipment like quality traps, lures, bait and access. As far as the traps go, any double-coiled spring trap from size #1.75 to #3 or up will hold a coyote. When setting traps to catch coyotes, there are dirt hole sets, flat sets, post sets, walk-through sets and punch hole sets. I like to use 75% dirt hole sets and 25% punch hole sets. A punch hole set is a flat set with a hole punched in the ground for the bait and/or lure. I use four punch holes with a flat set. With a dirt hole set, I use an electric drill with a two-inch bit. I drill the hole as deep as I can, roughly 8-10" with the trap bedded 9-10" back with a little offset to the left or right from the center. The objective of this set is to get him to think something else has come there and buried food. The wind is the biggest factor in putting out

Ronnie Davis is a retired farmer from Tippo, MS, who currently lives near Cascilla, with his wife Andrea Brasher Davis. He is a passionate outdoorsman, hunter, fisherman, trapper and conservationist who enjoys these endeavors with his friends and family.



your sets. If he cannot smell it, he is not coming to it. The longer you can get him to hang around a set, the odds increase dramatically of catching him. Any clump of grass from fist size to football size is plenty. Coyotes do not like to be forced to move through a spot and are extremely cautious creatures. The number one thing when placing sets is the bedding of the trap. It must be placed correctly and be ROCK-SOLID. If it moves under his feet, he is gone! That is unless he comes back and digs the trap up! It happens to me every year and will happen to you if you try to trap one of these intelligent creatures. My catch ratio goes up considerably after Christmas in January and February. Coyotes get hungrier and move

a lot more during the wintry weather. Another factor is that their breeding season starts in late January/early February. A coyote that is caught leaving a catch circle seems to produce more coyotes that are looking for females.

The Catch

Expect to catch coyotes of all assorted sizes and color phases that range from grey to reddish brown and sometimes even black! I have even caught one that had blue eyes. The size of coyotes in the Delta differs dramatically from those in other areas. Most





Delta coyotes I have caught range from 18-25lbs, but I have caught some monsters that pushed up into the upper 40-pound range and even one giant over 55lbs!

End of the Trapline

Have patience; eventually, one will come by and work the set. It is an addictive game that I wish more people participated in. Start riding and looking if you are interested in giving this a shot. It is not that hard to figure out. If you ever catch that first one, you can catch more!

Habitat Fisheries Enhancement in Action

BY PARKER FREW

Delta Wildlife Staff

ince 1990, Delta Wildlife has been dedicated to enhancing and conserving wildlife in the Mississippi Delta. Conservation is a critical component of Delta Wildlife's efforts. However, conservation only sustains existing wildlife habitats and populations. To truly improve wildlife habitat and provide an opportunity for wildlife populations to grow, you must do more than conserve what exists. In 2023, Delta Wildlife Inc. partnered

with the TC Energy Foundation to create an opportunity to supply lakes in need throughout the Mississippi Delta with artificial fisheries habitat. The TC Energy Foundation is the charitable arm of TC Energy, a leading energy infrastructure company that operates in North America. The foundation is committed to supporting projects that promote environmental stewardship, education and community development.

Historic natural events in the Mississippi Delta, such as flooding and drought, have decreased habitat dramatically over the last 20 years. Long periods of sustained flooding and drought have proved detrimental to native habitats used for protection and spawning. Delta Wildlife will place artificial structures through this project to provide added security and critical areas for feeding and spawning. Delta Wildlife staff will be placing structures in five lakes throughout the Delta throughout the remainder of the year. Prey species often look for "cover" from their predators in the form of habitat. Artificial habitats can provide shade for fish, which can provide relief from the extreme summer heat. Larger sport fish can use these artificial habitats as ambush points. Artificial fish habitats are the easiest and cleanest way to provide fish a safe home and are often more productive than natural habitats. A "natural" supplement for fish habitat, such as a spent holiday tree or trimmings from a nearby source, is not always ideal. Because it is an organic product, over time, it will begin to break down and decompose. This leads to higher nutrient loads in the water, which promote and increase algae and weed

growth. These factors are direct contributors to lower water quality and clarity. Because of this partnership, Delta Wildlife Staff will be placing

artificial structures in a total of five different bodies of water in the Mississippi Delta. Sixty-eight MossBack Fish Habitat structures will be placed throughout these lakes. The lakes that have been selected are:

- Moon Lake Coahoma County
- Horseshoe Lake Holmes County
- Lake Whittington Bolivar County
- Lake Ferguson Washington County
- Lake Washington Washington County

The types of structures have been specifically chosen to address current problems for each body of water. Throughout the span of a year, fish undergo varying cycles and have distinct dietary preferences. While spawning, they tend to gather in specific locations, and for seeking cover, they have different tendencies. Additionally, they have varying levels of tolerance towards temperature and oxygen levels. Prey species can benefit tremendously from cover in the form of artificial habitat. These structures will act as a sanctuary for fry and forage while providing critical ambush points for our larger sport fish.



MossBack's Fish Habitat Structure provides excellent long-term benefits for local gamefish.

Unlike most artificial habitats, MossBack Artificial Habitats have explicitly been selected because of their comparable features to natural cover. Textured surfaces on each piece will help promote algae growth, eventually becoming a food source for smaller fish. The V-shaped limbs also serve as capture points for sediment and other plantlike growth.

Overall, the partnership between Delta Wildlife Inc. and the TC Energy Foundation is a positive step toward improving the ecological health of the Delta region. Delta Wildlife hopes to partner with the TC Energy Foundation for many years. Both organizations have the same goal: protecting our most crucial resources today and now. The Fisheries Habitat Project will significantly benefit the environment, the local community and the fish populations in the region. With ongoing support and collaboration, the project has the potential to make a lasting impact on the region's ecological health and sustainability.

Overwintering Reptiles in the Mississippi Delta

BY STEELE HENDERSON

Delta Wildlife Staff

1. Overwintering: A Survival Strategy

Overwintering is a crucial survival strategy for reptiles in the Mississippi Delta that involves various adaptations to help conserve energy and avoid extreme cold. By adopting specific behaviors and habits, reptiles increase their chances of survival until the return of warmer temperatures.

2. Hibernation: A State of Slumber

Hibernation is a state of prolonged sleep or dormancy. Reptiles actively seek suitable locations such as burrows, logs or rock crevices, where they hunker down and reduce their metabolic rate significantly. This decrease in metabolic activity allows them to conserve energy and endure the colder months with limited food availability.

3. Brumation: Slowing Down without Sleep

Brumation is a state of decreased activity rather than true sleep. Unlike hibernators, reptiles such as lizards and some turtle species, including sliders and painted turtles, engage in brumation during winter. They locate shelter in underground tunnels or hidden spots where they slow down their bodily functions and minimize movement. Brumation allows them to conserve energy while remaining somewhat alert.

4. Seeking Thermal Refuges

Reptiles are skilled at finding thermal refuges that provide stable temperatures to regulate body heat. Snakes, for example, often seek old mammal burrows or rotting logs where the internal temperature remains constant. Whereas turtles bury themselves in mud or seek deeper water bodies to find more stable and warmer environments.

5. Reduced Metabolic Rates

One of the key strategies reptiles employ during overwintering is reducing their metabolic rates. By slowing down their physiological processes, reptiles conserve energy and endure limited food availability. This decreased metabolic rate allows them to survive for months without feeding, relying on stored energy reserves.

6. Limited Movement and Activity

Overwintering reptiles exhibit reduced movement and activity levels. This behavior helps conserve energy and avoid unnecessary exposure to the cold. Snakes, for instance, may only emerge from shelters during warmer periods to briefly bask in the sunlight before retreating to their hiding spots. By minimizing movements, reptiles can conserve precious energy resources.

7. Cold Tolerance and Adaptations

Reptiles have evolved various adaptations to tolerate colder temperatures. Some species possess antifreeze compounds in their blood



that prevent ice formation and protect their cells from damage. This adaptation allows reptiles to survive in freezing conditions without harm. Additionally, reptiles have the ability to regulate their body temperature by selecting microhabitats with suitable thermal conditions, such as basking in sunlight or seeking shelter in warmer areas.

8. Behavioral Differences among Species

Different reptile species exhibit unique overwintering behaviors. For example, some snakes, like the Eastern Hognose and Rat snake, may gather in communal hibernation sites, where multiple individuals share a single shelter. Other species, such as the Cottonmouth, prefer solitary hibernation.

9. Emerging from Overwintering

As spring arrives and temperatures begin to rise, overwintering reptiles emerge from their hibernation or brumation sites. They gradually regain their activity levels, seeking food and suitable mates. This period of emergence is crucial for the reproductive success of these reptiles, as they need to replenish their energy reserves and engage in reproductive behaviors.

10. Conservation Implications

Understanding the behaviors and habits of overwintering reptiles has significant conservation implications. Protecting their hibernation or brumation sites, maintaining suitable habitats and minimizing disturbances during winter are crucial steps toward preserving populations. By implementing conservation measures that consider the unique requirements of overwintering reptiles, we can ensure their continued presence and contribute to the overall biodiversity and ecological health of the Delta.

The behaviors and habits of overwintering reptiles in the Mississippi Delta showcase remarkable adaptations for survival during the colder months.







When I Grow Up, I Want to be a...

BY JODY ACOSTA

Delta Wildlife Staff

ow many times have you heard the title of this article in conversation with your child answered? I want to be a.... fireman, policeman, doctor, Nuisance and Invasive Species Program Manager for Delta Wildlife, a baseball player, a ballerina, etc... I feel like that answer changes as the child grows and is able to experience more of life's offerings until they find something that really pique their interests!

What if you have a child who loves the idea of digging up dinosaur bones or, perhaps, they are obsessed with "cool rocks" as many of us were as children? Maybe they've gone looking for Native American artifacts with you and found a point that is their prized possession? What if there was a way to grow that love and give them a glimpse into what it would be like to make their career out of their lifelong hobby, which could lead to answering those questions with "I want to be a geologist; I want to be a paleontologist; or I want to be an

Let me take you on a little stroll down memory lane from when the earth was on fire, also known as late July of this year.

Picture this, Delta Wildlife has a booth set up at the Mississippi Ag and Outdoor Expo at the Trademart building, my lovely daughters are both bored to tears from "working" in said booth and decided

to take their mom on an adventure to make their rounds looking at the different exhibitors and booths. My replacement for manning said booth arrives so I strike out as quickly as possible to find them and hopefully dissuade them from spending all of our money. Where do I find them? At a booth with all kinds of stuff right up our alley from kayaks to Native American artifacts to fossils dating back millions of years! I am excited at this point, hopeful that our trips to the farm are paying off and they are truly hooked on that type of thing!

I walked up just in time to tell my youngest daughter, "Please do not drop that point," which looked like a Clovis-type point she was gleefully handling, and who do I notice working the booth? None other than my long time Facebook friend and consultant of all things rocks and artifacts, Mr. James Starnes. Mr. Starnes is a Registered Professional Geologist and the research director for the Surface Geology and the Surface Geologic mapping programs for the State's Geological Survey under MDEQ. His department is charged with the study of the state's geology, which includes rocks, fossils and geoarchaeological resources among other things.

We finally get a chance to shake hands after feeling like I had known him for years after several conversations through Facebook messenger along with being members of several of the same groups

on Facebook, and he starts telling me about the cool program they are offering for kids in partnership with Mississippi State Extension. He was approached by the MSU Extension Service to enhance their outdoor program with a club to expand teaching into earth science and archaeology. The subject matter is designed to help foster 4-H children's love of the outdoors and natural curiosity for discovery. I am a sucker for anything and everything that gets kids interested in ANYTHING other than electronics and phones and watching kids do fun stuff on YouTube videos, versus getting out and actually doing fun stuff themselves, so I was soaking it all up, and thought immediately, "I need to do an article on this because I had no idea this was a thing!" The program is new, but they are eager to grow it and hopefully offer it in all 82 counties of our Great State. What an undertaking, but in speaking with James and the Extension agents present at their booth, I could feel an intense desire to make that a reality, and I have no doubt it will happen. You can really tell when people are passionate about a subject; when you end a conversation and are excited about the opportunities they've laid out and hoping there is a way to get involved. I 100% was ecstatic about this opportunity and still am to this day.

Fast forward a couple more hot and dusty months and here we are, me writing an article that you are now reading about something really cool for the youth of our state as well as parents and those looking to volunteer to serve the next generation of conservation-minded stewards of the state!

So, what is this really cool thing, and why am I excited about it? Mr. Starnes sent me an excellent synopsis of the program that is below:

Intro to the "GAC"

The Mississippi 4-H Geo-Arch Club (GAC) is an effort by Mississippi State University Extension to expand 4-H programming within the area of environmental science. Geology is the basis for the environment, and civilization develops on the principle of the environment and its resources. Mississippi has a rich and diverse geology, natural history and cultural heritage. Fostering curiosity about the world around us, its natural and cultural history and how it relates to our environment is a fundamental part of scientific learning.

Programming about interesting landforms, rocks, fossils and artifacts is a staple as popular subject matter across many forms of en-



Agriculture Commissioner Andy Gipson visits the 4-H booth with MDEQ Research Director James Starnes.



tertainment media today. These places and things exist everywhere, even in our own back yards, many of which have yet to be discovered. They are intimately connected to our environment, and by developing a basic knowledge base, we begin to look at every aspect of our world through a lens of a completely new understanding of it.

Geology, natural and cultural history can be observed anywhere by anyone, at any time. Because it is the world around us, any outdoor activity can be turned into a learning experience involving these disciplines, from simply making an observation and asking questions to making a collection. Learning exercises can take place both independently and collectively. Taking time during other 4-H activities to make GAC observations or to make collections will only enhance these other programs' breadth of learning. Learning by the GAC in this multifaceted way will have innumerable positive impacts to Mississippians of any background or socioeconomic situation, both in the classroom and throughout their daily lives, by fostering intellectual curiosity about the world around them and its history.

The purpose of Mississippi 4-H GAC is to help youth develop skills and knowledge in the understanding and awareness of their natural and cultural world around them and its history. Participants will experience this through a wide exposure to the natural and cultural science integrated through diverse learning methods of both the classroom, independent study and field exercises. They will develop the observation skills to ask the right questions and recognize important geological and archeological resources to answer questions about the world around them and its deeper past.

Students will have opportunities to learn about rocks, fossils, artifacts, history and the environment. These interactive activities will enhance a club member's environmental stewardship and increase their appreciation of Mississippi's natural and cultural history.

Mississippi 4-H GAC has the potential to appeal to a wide array of Mississippi citizens because of the breadth of topics including science, history and the environment through highly engaging activities. This

club should create interest and provide a quality learning experience in any county, community or school. Most activities range from 30-90 minutes of instruction; some can be done by independent learning activities, and all can be readily incorporated as an aspect into most any other 4-H activity.

Because of the knowledge and skills developed by these learning experiences, Mississippi 4-H GAC will be a life-long asset.

Curriculum and Programs

While I don't want to offer too many spoilers, I do think the curriculum is amazing! It appears to be broken down by different areas of study such as geology, archaeology, paleontology, and each segment or section of the curriculum includes awesome hands-on learning opportunities for kids. Some are independent learning opportunities capped off with a field trip, others are more classroom oriented, but one thing that really stuck out is that they all seem to be available and appropriate for children of all ages. With that said, there may be some activities where young kids will need a little more supervision than the older kids, but luckily for us parents, this is a parent or guardian activity to do with our children. What better way to instill a love for the sciences than by getting yourself involved in an enjoyable opportunity to spend time with those you love! It's a win-win!

How To Get Involved

So, does this all seem interesting to you? How do you sign your kids up? How do you volunteer?

Within one year of participating in the Mississippi 4-H GAC, the goal is all participating 4-H'ers will be proficient at recognizing and preliminary identification of different rocks, fossils and types of artifacts, a general understanding of what they can tell us about the past environment and deeper history of an area, make a scientific collection and properly document their finds, and have basic familiarity of the techniques and tools used in the field and site excavations.

4-H Agents, Extension specialists, adult volunteers with a basic physical or earth science background are needed to serve as instructors, but even if you do not have the desired background, there are opportunities to help by promoting the program, assisting with field days or camps. One great thing about volunteering is you may not have the skill set for instructing on the lesson, but you could offer your services as a photographer if you are into photography, you could offer to provide lunch or a meal if you are involved in catering or the restaurant world, you could host a field trip on your land if you know you have a location that would benefit the curriculum as a site





Mariella and Everleigh take turns holding our state fossil, the prehistoric fossil whale Zygorhiza kochii from the late Eocene Yazoo Clay.

of archaeologic significance or maybe even a hunting camp facility with a nice meeting place. When programs like this are growing, there is always a need for volunteers, so if you are interested in helping out, contact your local MSU Extension office or Mr. Reid Nevins in the State 4-H Office (Email: reid.nevins@msstate.edu) for more information and to get them signed up in 4-H in the county they live in as a first step to getting involved!

Lastly, I feel a thank you to the following people and all of those who are not named but involved in the development of the Mississippi Geo-Arc Club is more than appropriate. The following people have provided instructional content during the development of the curriculum. I would like to personally thank them for their efforts and involvement in ensuring that the youth of our state have opportunities to grow their love for the sciences, the outdoors and conservation.

- Geologist James E. Starnes RPG; MDEQ, Office of Geology (State Survey); geology, paleontology, geoarchaeology
- Anna Reginelli; Mississippi Archaeological Association, Delta Chapter President, Chairman of the L.B. Jones Artifact Collections Trust; southeastern archaeology
- Jonathan Leard RPG; MDEQ, Office of Geology (State Survey); geology, paleontology, geoarchaeology
- Amanda Mayo (4-H member), MSU Geology Department; geology, paleontology
- Dr. Jimi Hardin, MSU Cobb Institute of Archaeology; archae-
- Mr. Jim McAdory, MSU Extension Agent, Winston County

The Cold Rising Water

BY PARKER FREW Delta Wildlife Staff

here's no such thing as bad weather, only inappropriate clothing." This is one of my favorite quotes when it comes to those first fishing trips in late winter and early spring. We all have hopes of those beautiful days where everything seems to be "Sunny and 75." More times than not, this is far from the case. I tend to fish all the way through all 12 months, but for most, fishing begins momentarily right after hunting season ends. Historically here in the Delta, we seem to get our coldest days between January through early March. These are some of the absolute best times to fish, but for a lot of us, these are also the best days for a good long nap in the chair in front of the fireplace. We really tend to start dispersing to the lake around late March and early April. Just as the water begins to warm and the days become longer, we usually always get slammed with a six-inch spring rain followed by a rising river and below-average temperatures. This can absolutely mess up all types of preconceived fishing notions if you are not prepared to change.

Bundle Up and Be Prepared

I used to be the world's worst when it came to being dressed for the conditions. We all want it to be warm and nice outside, but we can't determine what season we want on a given day. When you are cold or wet and miserable, you will fish just like you are miserable. Dress in layers. You can always bring it with

you and take it off throughout the day. Having it at home and not wearing it means you might as well just not have it at all. Stay warm, and be as comfortable as possible. Cold, wet days can be some of the absolute best days for fishing. Once you are comfortable, you can focus on the catching part of bass fishing.

Follow the Water

I like to make things as simple as possible when it comes to bass fishing. The simpler I can make something, the more likely I am to understand it and believe in it. As a general rule, I tend to match the conditions to the movement of fish. When the water begins to rise, so do the fish. Fish do not like to float around in the middle of absolutely nothing. They will almost always relate to something. In the spring, a lot of the time they will follow the water line as long as it continues to rise. Fish will literally vacate an area and move hundreds and hundreds of yards in a single day. Stay on top of them. This can mean digging to access areas that you have never fished in your entire life. As water finds new ground, it brings in tons of forage for small bait fish and bluegill. These areas tend to also warm much faster than deep areas of the lake. Small backwater pockets that seem small compared to the main water can be some of the absolute best honey holes ever this time of year.



Get Shallow and Then Get Shallower

One of the most amazing things you will see as a bass fisherman is just how shallow fish can live. Bass love to go up as far as possible in the spring. Whether you have muddy, rising water, or crystal clear water flooding through submerged bushes, fish will get shallow. They are curious about new areas just as we are. When water temperatures start to hover around the high 50s to low 60s, this is when you can find fish literally almost living on land. Don't be afraid to fish 6-18 inches of water. One of the best things you will ever see is a bass streak violently across water only inches deep as soon as your bait gets anywhere near it. This column of water tends to be overlooked in a lot of cases. Typically, bass anglers will target water with visible targets located in 2-3 feet of water. In a lot of people's eyes, this is "shallow." A crawfish or a small bluegill only needs enough water to cover its back. Bass are actively targeting these types of bait so they will push as shallow as they absolutely can. It can be a hard concept to grasp at first, but once you see it, you will be absolutely obsessed with digging to new areas.

Cover Water

In the late winter to early spring months, bass tend to group up and move around a lot. These fish are actively searching for new

areas to spawn or feed. When looking for them, it is important to set a limit on how long you focus on one area. Typically, when you find these fish, they can be easy to catch. The key part is simply finding them. If you have caught a few and bites begin to get very slow, don't lose hope. Most of the time they did not quit feeding, they simply just kept moving. You may be able to come right back to the same area later and do it all over again but for the time being, look for other areas that replicate this one spot. Use baits that allow you to cover water, and then slow down and pick it apart with a slower bait once you have located them.

The Fall

Just as the water came up like a rocket, it can fall like one, too. In a normal situation, a river system or lake will rise in the early spring and begin to fall shortly after. When water levels start to fall, this is when I switch to a completely different mindset. Just as I mentioned before, bass tend to follow water movement so they will move to a deeper area of the water column. This is when I start to target "ambush areas." All of the bait that once moved so shallow will now begin to move right back out deep. Bass tend to set up in areas where they can somewhat avoid the current but be close enough that they can catch a bite to eat as it comes by. This is when main channel drains or cuts begin to be a huge player. Ditches or pipes that simply neck down all of the water draining through an area can be an absolute bass factory. Bass will pile up on the downstream side and begin to gorge themselves. These can be some of the most fun days on the water you will ever have.

So when it comes to gearing up for those first bass fishing trips of the year, be prepared for what Mother Nature throws at you. As bad



as we all want it to be, it is just not quite summer yet. We are going to have cold days that bring a constantly changing water system. Get out of your comfort zone and search for new areas. Bass do not have day jobs so they have a lot of time to swim as free as they please. Get shallow, and find areas that provide cover and food for these curious bass. And last but not least, stay ahead of them when things start to return to normal. Position yourself to intercept bass as they come back to their summertime haunts. Late winter and spring can provide you with some of the absolute worst conditions possible but don't let this deter you one bit. Walk across that boat ramp bundled up like Ralphie's little brother and go catch them!



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