

**Texas Master Naturalist Program
Cradle of Texas Chapter
General Meeting and Advanced Training
Wednesday, January 11, 2017
Texas AgriLife Extension Building
21017 County Road 171
Angleton, Texas 77515-8903**



8:30 AM – 9:00 AM	Fun and Fellowship Snack Team: TBA: Nature Notes: TBA
9:00 AM – 9:50 AM	General Meeting <i>This meeting is approved for 1.00 hour Volunteer Time.</i>
10:15 AM – 12:00 PM	Program: “Artificial reef program”. Speaker: Dr. Brooke Shipley, Texas Parks & Wildlife Department <i>This program is approved for Advanced Training. Approved AT hours will be announced at the meeting.</i>



Dr. Brooke Shipley is the Artificial Reef Chief Scientist and GIS (geographic information system) Analyst for the Texas Parks and Wildlife Department.

Shipley graduated from Baylor University in 1997 and completed her master’s degree through the Department of Wildlife and Fisheries Sciences at Texas A&M University in 2000. In 2008, she received her Ph.D. through the Department of Marine Sciences from the University of South Alabama. She has been with the Artificial Reef Program since 2009.

I wear two hats within the program. I tend to switch between biological monitoring and assessment and GIS analysis several times a day. Currently, I am working on a TPWD Management Data Series publication, which requires an extensive amount of work in the biological monitoring database and within the GIS maps. I also create all of the GIS maps we use to help us pinpoint and monitor our reef sites. I am also responsible for maintaining the community map that our program uses on a daily basis. Nearly all of the GIS maps that our program uses for operations come from my desk.

Additionally, I’m often in the field with the Artificial Reef team. We are responsible for the actual monitoring of the reef sites, and some of our structures are in waters that are quite deep. Recently, I completed helicopter flight training, and I am now certified for decompression dives down to 160 feet.

I come from a family of mathematicians and engineers and I’m the only scientist in three

generations but I still love math and order.

I find it fascinating to make comparisons and analyses between differing reef structures and regions within our vast Texas waters. enjoy combining my love of math and science through the use of models. We rely on these models to describe the ecosystem being studied and even make predictions.



Our program is truly one of the most unique programs I have ever been involved with. We have the ability to follow a single structure from the day it becomes a reef. This means that over the years we can follow the community and colonization of the reef site and determine the health of an ecosystem over time. It is truly amazing!

I am fortunate to go diving with the program on nearly every trip we take. We take biological monitoring trips four days per month from March through October. We dive multiple times each day and come back to shore exhausted. In our off-season, we continue to train and dive in local lakes and occasionally in pools. On one of my dives with the program, I was lucky enough to see a whole school of hammerhead sharks swim past me early one spring. Hammerheads migrate through the area in the winter, and it was highly unusual to see them at the time.

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