

## The RV Savannah: Rivers to

Reefs Mary Thaler

The invitation to come aboard the RV Savannah was accepted with great enthusiasm, a once in a lifetime opportunity I did not want to pass up. The expedition would take us out to Gray's Reef National Marine Sanctuary (GRNMS) to learn more about how our watersheds impact the reef. The plan was to submerge an ROV (remote operated vehicle) down to the ocean bottom to see the reef and to learn about Georgia's coastal marine ecosystem on our way to Gray's Reef. The reef is located just 19-20 miles offshore of Sapelo Island.

Cathy Sakas and Jody Patterson from the GRNMS Foundation are true ambassadors of our coastal waters and a wealth of information about coastal processes and ecosystems. The coast of Georgia encompasses a broad range of saltwater ecosystems, with estuaries and marshlands comprising a 100-miles of the Georgia coastline. Cathy Sakas explained the unique difference of the coastline of Georgia, or what is often referred to as the "Georgia Bight" compared to other coastlines. The Altamaha River is one of the tributaries to the life at Gray's Reef. We learned there was a study conducted using Rhodamine (red dye) to determine how far the river carried its nutrients and pollutants. This study showed the river carried its nutrient rich sediment and fresh water to the coast and ended up at the reef. Gray's Reef covers 22 square miles and is a "live-bottom" reef which sits on the coastal shelf. Part of our voyage was the opportunity to deploy an ROV (remote operated vehicle) to see Gray's Reef in "real time" while we stayed high and dry on board the ship. This was something I could not wait to see, but unfortunately the weather caused us to abandon the mission due to high winds and surf. This was a little disappointing, but thanks to technology, there is footage from previous ROV dives at the reef. Cathy also told us about a 36000-year-old whale bone which was discovered at the reef. The great diversity of species which lives out at the reef depends on the research and studies done to maintain the healthy waters the reef occupies.

Although our plans to go to Gray's Reef were derailed due to high winds and surf, it did not stop us from engaging and learning about the contributions the watersheds and sea creatures make on the reef. The experience of getting to be aboard the RV Savannah is enlightening. The crew is a well-oiled vessel and work seamlessly to collect data and share knowledge with those around. I look forward to imparting the knowledge gained with future marine enthusiasts. I grew up on the coast and learn something new every time I go out on these educational excursions.