

As anthropogenic influences are becoming more obvious within our environment, microplastics still seem to be a great unknown. Sapelo Island, a Georgia barrier island that is mostly uninhabited with the exception of a small Gullah town, is one of almost many places in the aquatic system where the prevalence of microplastics is virtually unknown. By collecting water and soil samples at sites throughout Sapelo Island, a better understating of the presence of microplastics on the island can be achieved. Microplastics, which are plastic pieces less than 5 mm in size, can come in many different forms such as fibers, crushed hard plastics, and microbeads. This wide variation in shape, plus their potential to come in virtually any color makes them sometimes difficult to identify. Luckily, microplastics can be melted for identification through the use of a hot needle. Determining the abundance of microplastics on Sapelo Island would make it easier understand how they are affecting the health of an ecosystem being exposed to microplastics. The findings have shown that microplastics do have a presence on Sapelo Island. Preliminary results for soil samples showed that there was an average of 3.63 microplastics per gram. Preliminary results for water samples showed that there was an average of 2.95 microplastics/100 ml of water. Further data are being analyzed to determine the effects of Hurricane Dorian, which stalled off of the Southeastern US coast, on microplastic levels.