



March 19, 2018

To South Carolina State Legislators:

I have been fortunate to work with wildlife in the marine environment for the last 18 years via my role as veterinarian with the South Carolina Department of Natural Resources (retired November, 2017). Having spent much time on the water and interacting with marine species, I have great concerns regarding the tremendous volume of garbage (especially plastics) that humans are putting in the marine system.

Unfortunately, I have seen first-hand the frequent and significant impacts (usually fatal) on multiple marine species that have ingested or become entangled in plastic debris that has entered the marine system:

- Pygmy Sperm whales that have ingested plastic bags thinking they were their normal prey species (squid)
- Leatherback and Loggerhead sea turtles that have ingested plastic bags mistakenly thinking they were normal prey items (jellyfish)
- Bottlenose dolphins entangled in plastic debris
- Horseshoe crabs entangled and entrapped in plastic bags
- Seabirds with plastic debris in their intestines mistakenly eaten as prey items
- Fish entangled in “six pack rings”

In addition to my many personal observations, a fellow scientist in Florida has discovered that more than 60 % of juvenile Loggerhead hatchlings have ingested plastic particles while foraging in the open ocean in the first few months of life.

Once plastics enter the system they are long-lived and have both obvious and more discreet long-term impacts. Studies at the Citadel have documented the level of microplastics in our estuaries with potential impacts on both wildlife and human health. The discarded plastics don't just “go away” as they break down: they break down into smaller particles and potentially enter the food chain of both wildlife and humans.

I encourage you allow plastic bag restrictions to remain with local government and join in an effort to educate our population in South Carolina on the impacts humans are unknowingly having on our coasts, oceans and the animals (wildlife and human) that depend on these healthy ecosystems.

Respectfully,

Dr. Al Segars
Marine Scientist and Veterinarian