

## **Marine Mammal Commission 2015 Annual Meeting Marine Mammal Health Session Summary**

Researchers affiliated with numerous institutions in Charleston integrate their respective specialties with the common goal of investigating marine mammal health. Live-animal health assessments are instrumental in evaluating species-specific and ecosystem health, as evidenced by a recent assessment of the sub-lethal effects of oil on bottlenose dolphins. Dead-stranded animals also yield information ranging from cause of death of individuals to investigations of marine mammal unusual mortality events, some of which are caused by environmental factors that can affect the ecosystem as a whole. In addition, studies on dead-stranded animals provide information regarding, for example, how and where to biopsy sample live animals to monitor exposure to persistent organic pollutants. Tissue samples from both live and dead animals are archived at the National Institute of Standards and Technology's marine mammal tissue bank, making them available for monitoring temporal and spatial trends in contaminants and serving as standards for those analyses. All such studies complement one another and are collaborative in nature, which is essential when unusual mortality events occur.

This session highlighted the strengths in this region for investigating marine mammal health and understanding the connections to ecosystem health. Collaborative research developed by Hollings Marine Lab over the past decade under the Oceans and Human Health Initiative (OHHI) has proven critical for assessments of the effects of various stressors (e.g., chemical pollutants, harmful algal toxins, and infectious diseases). Loss of the OHHI and uncertainty of future funding and infrastructure support is significantly impacting current collaborative efforts for marine mammal health assessments, emergency responses to mass die-offs, and associated analyses including those conducted by the Analytical Response Team. For example, as we heard in the session, this will mean no further elucidation of impacts of chronic low-level domoic acid exposure in *Kogia*.