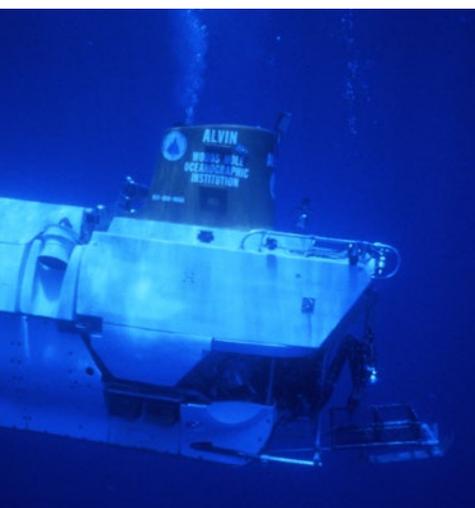


2015 NOSB® Theme

The Science of Oil in the Ocean

Oil is a naturally occurring substance that has a major role in ocean ecosystems and human society. Having formed in sediment buried deep beneath the seafloor, oil—along with methane and hydrogen sulfide—naturally escapes through seeps from the seafloor into the ocean environment, supporting organisms that are well-adapted to this harsh environment. An unnatural amount of oil introduced into the environment, such as through industry oil spills, can have serious impacts on organisms and the environment, as well as humans and the economy.

The Gulf of Mexico is full of natural oil seeps. It is also a region important for oil energy resources and production and further challenged by coastal erosion, “dead zones,” and extreme weather (2015 is also the 10th anniversary of Hurricane Katrina). This makes our theme particularly relevant to the Gulf region, which will serve as the backdrop to our 2015 National Finals, hosted by the University of Southern Mississippi’s Gulf Coast Research Laboratory. Coinciding with the fifth anniversary of the Deepwater Horizon oil spill in 2010, this is also a timely topic for the region.



Our “science of oil in the ocean” theme includes many science disciplines and will encourage increased awareness and understanding of topics such as:

- the origins of oil in the ocean;
- transport, breakdown, and remediation of oil in the ocean;
- the impact of oil on organisms, ecosystems, and humans; and
- policy related to oil production, spills, and restoration.

The theme encompasses all major STEM areas: physical oceanography and mathematical modeling, including the way oil is transported through an ocean system; chemistry, particularly the way oil changes as it is weathered or degraded; geology, in the origins of oil and natural seeps; biology and ecology, in the impact that oil has on organisms and an ecosystem and as a food source for microorganisms; and engineering and

technology, in terms of the solutions needed to extract oil from the seafloor or to mitigate spills. Oil production and use are an inherent aspect of our present society, but is not without impact on humans and our ocean and is, ultimately, a finite resource. Informed students and citizens can lead our country to more sustainable energy use and resource conservation.

2015 Regional Bowls: February 7th and 28th, Across the Nation

2015 National Finals: April 23 – 26, Ocean Springs, Mississippi

Please visit www.NOSB.org for more information.

