Found Nemo, Found Dory with DNA in the Seas; Experts Prescribe Way Ahead for New Ocean Science

Organizers of 1st National Conference on Marine Environmental DNA call for official US Government program, investments to speed sampling results, standard sampling / reporting protocols; priority exploration / baseline monitoring sites “It works—get going”

Advanced technologies capable of analyzing DNA in seawater will help answer some of humanity’s oldest, most profound questions and concerns, including “who lives in the sea?” — beginning with species of interest in specific areas, including clownfish (Nemo) and blue tang fish (Dory).

To accelerate the pace towards the potentially far-reaching benefits of these technologies—both environmental and economic—organizers of the 1st US National Conference on Marine Environmental DNA (eDNA) (Nov. 29-30, hosted by The Rockefeller University, New York), today prescribed priority steps for government, researchers, industry and investors, including:

• Initiate marine eDNA observations in key US Exclusive Economic Zone basins, including the Gulfs of Mexico and Maine, Monterey Bay, the California Current area, New York Bight, and the Bering Sea / Arctic
• Establish long-term eDNA observational platforms at multiple sites—these will afford crucial insights, e.g., about effects of human activities
• Systematically address unresolved science questions, observation rules and standard operating procedures, reference standards, and archival capabilities
• Anticipate impacts on existing statutes, regulations, permitting/licensing processes as marine eDNA is introduced as a credible ecosystem census indicator
• Explore the decision-making value of marine eDNA and seize commercial opportunities
• Create a US Government National Ocean Partnership Program (NOPP) for marine eDNA, with multi-year, multi-investor, multi-participant projects


Additional source materials:
* Conference website (https://phe.rockefeller.edu/eDNAmarine2018)
* Conference Program (http://bit.ly/2HzSwoX)

Newly sampled areas ranged from Holy Land waters to Coney Island and the White Shark Cafe.

The meeting of approximately 100 US ocean scientists and associated stakeholders with experience, skill and/or interest in marine eDNA was sponsored by the Monmouth University-Rockefeller University (MURU) Marine Science and Policy Initiative.

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