NOAA GLERL begins analyzing Lake Erie algal toxins in near real-time
NOAA’s Great Lakes Environmental Research Laboratory (GLERL) deployed in 2016 the first Environmental Sample Processor (ESP), an autonomous robotic instrument that works as a ‘lab in a can’ in aquatic environments to collect water samples and analyze them for algal toxins in a freshwater system. This tool can provide drinking water managers with data on algal toxicity in near real-time before the water reaches municipal water intakes.

HAB Tracker Daily Forecast with 3-dimensional predictions of bloom extent
NOAA’s GLERL developed HAB Tracker, an experimental forecasting tool to aid local managers in decision-making on HABs, that incorporates real-time data with modeling to produce daily updated 5-day forecasts of potential bloom distribution and movement.

EPA’s HABs You Tube Videos
The USEPA released a series of videos to increase awareness regarding the adverse effects of nutrient pollution and HABs.

Algal Blooms Can Harm Your Health Video
Algal blooms are not only unsightly; they can make you or your pet sick. Stay healthy by avoiding contact with water that might have an algal bloom. When in doubt, stay out and keep your pet out of the waterway.

You Can Prevent Nutrient Pollution Video
Nutrient pollution occurs when too much nitrogen or phosphorus enters a waterway, and is often caused by human activities. This can harm the waterway and aquatic life, and produce unsightly and sometimes harmful algal blooms. Do your part to protect our waterways from nutrient pollution.

EPA and FDA Issue Updated Advice on Eating Fish and Shellfish
EPA and FDA jointly released a final updated advice about eating fish and shellfish to help women who are pregnant or may become pregnant, breastfeeding mothers and parents of young children, make informed choices when consuming fish that are healthy and safe to eat regarding methylmercury.

Algae Bloom in the Arabian Sea
A *Noctiluca scintillans* species bloom is currently across the Arabian Sea, off the coast of Muscat, the capital of Oman, and spread all the way to India. To read more go to: https://apnews.com/tag/Algae

“Great Lakes HABs modeling” Webinar
Copy of the slides and recording of the webinar is now available on the HABs Collaboratory website. The HABs Collaboratory will be hosting an in-person meeting on May 15th at NOAA-GLERL in Ann Arbor.

This newsletter was created by Dr. Lesley V. D’Anglada, Office of Water, U.S. EPA. To see previous editions of this newsletter, go to Freshwater HABs Newsletter and for more information, please visit the USEPA’s CyanoHABs Website.
HABs, BEACH CLOSURES and HEALTH ADVISORIES, FEBRUARY 2017

⚠️ Oregon : South Umpqua River - Permanent Advisory

RECENTLY PUBLISHED REPORTS

Environment Canada’s Lake of the Woods Science Initiative 2008 to 2011 - Summary
March 7th, 2017

Human Health Effects of Cyanobacterial Toxins in the Great Lakes Region: A Science and Monitoring Assessment
February 27th, 2017

RECENTLY PUBLISHED ARTICLES

The impact of pre-oxidation with potassium permanganate on cyanobacterial organic matter removal by coagulation

Distribution of isoforms of ferredoxin-NADP+ reductase (FNR) in cyanobacteria in two growth conditions

Engineering Escherichia coli to bind to cyanobacteria

Toxins Journal Topical Collection
"Freshwater HABs and Health in a Changing World"
Manuscripts on cyanobacterial exposure assessment; health outcomes; outbreak investigations; wild and domestic animal poisonings; toxicology of cyanobacterial toxins in animals and humans, production of toxins in the environment, absorption, distribution, and elimination of toxins in animals and humans, and the control of toxins in the built and natural environment, are invited.
Go to www.mdpi.com and register to login and to submit a manuscript.

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