

# Freshwater HABs News



Barr Lake, CO  
Cyanobacterial bloom  
06/24/2004, Steve Lundt

The United States Global Change Research Program released a new assessment of a growing public health threat, [The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment](#). The influences of weather and climate on human health are significant and varied and some locations will experience new climate-related health threats. For example, areas previously unaffected by toxic algal blooms or waterborne diseases because of cooler water temperatures may face these hazards in the future as increasing water temperatures allow the organisms that cause these health risks to thrive. Even areas that currently experience these health threats may see a shift in the timing of the seasons that pose the greatest risk to human health.

Reference: USGCRP, 2016: *The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment*. Crimmins, A., J. Balbus, J.L. Gamble, C.B. Beard, J.E. Bell, D. Dodgen, R.J. Eisen, N. Fann, M.D. Hawkins, S.C. Herring, L. Jantarasami, D.M. Mills, S. Saha, M.C. Sarofim, J. Trtanj, and L. Ziska, Eds. U.S. Global Change Research Program, Washington, DC, 312 pp.

## **Public Meeting and Webinar: Managing Cyanotoxins in Drinking Water**

On April 29, 2016, the EPA held a public meeting in Chicago, Illinois for interested parties to provide input on lessons learned after the release of the June 2015 *Recommendations for Public Water Systems to Manage Cyanotoxins in Drinking Water*. The agency plans to use this information to inform development of additional tools to support states and/or utilities in managing cyanotoxins in drinking water.

## **Harmful Algal Bloom Research Initiative (HABRI) Progress Report Year 1**

Ohio Sea Grant, on behalf of The Ohio State University, the University of Toledo and the Ohio Department of Higher Education, has released the annual report for the first year of funding for the Harmful Algal Bloom Research Initiative (HABRI), which seeks solutions for harmful algal blooms in Ohio. Initial funding will support 13 collaborative research projects directed at providing the state of Ohio with comprehensive solutions for the HABs that affect Lake Erie, Grand Lake St. Mary's, Buckeye Lake and other fresh water bodies in and around Ohio.

## **Recreational Shellfish Biotoxin Closures**

The Oregon Department of Agriculture and the Oregon Department of Fish and Wildlife announced that the mussel harvesting is closed from the Columbia River South Jetty south to Cascade Head, north of Lincoln City due to high levels of paralytic shellfish toxins (PSP). The closure includes mussels on all beaches, rocks, jetties, and bay entrances. South of Cascade Head to the California border harvesting of mussels remains open.

## **E-book Freshwater Algae in Northwest WA, Volume I. Cyanobacteria**

Open source pdf file with more than 400 pages and active links between the keys, genus descriptions, and annotated high resolution images to help with identification.

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For more information visit EPA's CyanoHABs website at [www.epa.gov/cyanohabs](http://www.epa.gov/cyanohabs)

## **UPCOMING EVENTS**

### **EPA Webinars**

#### **Shedding Light on**

#### **Cyanobacteria**

May 11<sup>th</sup>, 2016

1:00-3:00pm MT

#### **Harmful Algal**

#### **Blooms**

May 18<sup>th</sup>, 2016

3:00-4:00pm ET

#### **Responding to HABs,**

#### **Optimization**

#### **Guidelines, and**

#### **Sampling for Utilities**

May 31<sup>st</sup>, 2016

2:00 to 3:30 ET

### **US Algal Toxin**

### **Conference 2016**

May 9-11, 2016

Akron, Ohio

### **Summer 2016 Field**

### **Courses on Algae**

May – July, 2015

Iowa Lakeside Lab.

### **ASLO 2016**

June 5 – 10, 2016

Santa Fe, NM

### **IAGLR 2016**

June 6 to 10, 2016

Guelph, Ontario

### **17th ICHA**

October 9-14, 2016

Florianapolis, Brazil

### **10<sup>th</sup> ICTC**

October 23-28, 2016

Wuhan, China

### **SETAC 2016**

November 6-10, 2016

Orlando, FL

**Toxins Topical Collection "[Freshwater HABs and Health in a Changing World](#)"**

To submit a manuscript please visit [www.mdpi.com](http://www.mdpi.com) by [registering](#) and [logging in to this website](#).

**RECENTLY PUBLISHED ARTICLES**

**[A prospective study of marine phytoplankton and reported illness among recreational beachgoers in Puerto Rico](#)**

Lin CJ, Wade TJ, Sams EA, Dufour AP, Chapman AD, Hilborn ED. 2016., 2009. Environ Health Perspectives; 124: 477–483

**[Freshwater Algae in Northwest Washington, Volume I, Cyanobacteria](#)**

Matthews, Robin A., 2016. Books and Monographs. Book 6.

**[Do fish and blue-green algae blooms coexist in space and time?](#)**

Małgorzata Godlewska, Katarzyna Izydorczyk, Zbigniew Kaczkowski, Adam Jóźwik, Bronisław Długoszewski, Shaowen Ye, Yuxi Lian, Jean Guillard, Fisheries Research, Volume 173, Part 1, January 2016, Pages 93-100.

**[Cytotoxicity evaluation of large cyanobacterial strain set using selected human and murine in vitro cell models](#)**

Pavel Hrouzek, Aleksandra Kapuścik, Jan Vacek, Kateřina Voráčková, Jindřiška Paichlová, Pavel Kosina, Ludmila Voloshko, Stefano Ventura, Jiří Kopecký, Ecotoxicology and Environmental Safety, Volume 124, February 2016, Pages 177-185

**[The effect of increasing CO2 concentrations on its capture, biomass production and wastewater bioremediation by microalgae and cyanobacteria](#)**

Ana L. Gonçalves, Carla M. Rodrigues, José C.M. Pires, Manuel Simões, Algal Research, Volume 14, March 2016, Pages 127-136

**[Paralytic shellfish toxin biosynthesis in cyanobacteria and dinoflagellates: A molecular overview](#)**

Da-Zhi Wang, Shu-Fei Zhang, Yong Zhang, Lin Lin, Journal of Proteomics, Vol 135, 1 March 2016, Pages 132-140

**[Effect of pH and temperature on the stability of cylindrospermopsin. Characterization of decomposition products](#)**

Michał Adamski, Paweł Żmudzki, Ewelina Chrapusta, Beata Bober, Ariel Kaminski, Kornelia Zabaglo, Ewa Latkowska, J. Bialczyk, Algal Research, Vol 15, April 2016, Pages 129-134

**[Combined effects of toxic cyanobacteria \*Microcystis aeruginosa\* and hypoxia on the physiological responses of triangle sail mussel \*Hyriopsis cumingii\*](#)**

Menghong Hu, Fangli Wu, Mingzhe Yuan, Qigen Liu, Youji Wang, Journal of Hazardous Materials, Volume 306, 5 April 2016, Pages 24-33

**[Increased accumulation of polyhydroxybutyrate in divergent cyanobacteria under nutrient-deprived photoautotrophy: an efficient conversion of solar energy and carbon dioxide to polyhydroxybutyrate by \*Calothrix scytonemicola\* TISTR 8095](#)**

Auratai Kaewbai-ngam, Aran Incharoensakdi, Tanakarn Monshupanee, Bioresource Technology, April 2016

**[Sentinel Animals in a One Health Approach to Harmful Cyanobacterial and Algal Blooms](#)**

Lorraine C. Backer and Melissa Miller. Vet. Sci. 2016, 3 (2), 8

**[Occurrence of microcystins in water, bloom, sediment and fish from a public water supply](#)**

Fatma Gurbuz, Oğuz Y. Uzunmehmetoğlu, Öznur Diler, James S. Metcalf, Geoffrey A. Codd, Science of The Total Environment, Volume 562, 15 August 2016, 860-868

**Useful Resources**

- ✓ [EPA's CyanoHABs Website](#)
- ✓ [USGS Kansas Science Water Center](#)
- ✓ [WHO Cyanobacteria and Cyanotoxins in Drinking Water](#)

**HEALTH ADVISORIES AND POSTINGS**

**[Oregon](#)** – South Umpqua River and Lawson Bar

**[Florida](#)** – *Karenia Brevis* red tide, along Pinellas and Manatee counties in Southwest Florida



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