



# **Harmful Algae Bloom 2012 Overview**

## **October 18, 2012**

# Algae Sampling Began Early

**The first HAB observation report was submitted May 14, 2012**

**46 requests to sample were submitted through September 30, with 40 lakes actually sampled**

**24 lakes were under an advisory or warning**

**17 counties contained lakes with advisories or warnings**



# The WHO Framework

- **Two-Tier system based on microcystin OR blue-green cell counts established through Secretary's Guidance Document:**
  - **Advisory**
    - **>20,000 BG Cells/mL**
    - **4 ug/L microcystins**
  - **Warning**
    - **>100,000 BG Cells/mL**
    - **20 /L microcystins**

# Summary of this Summer's Blooms



Our Vision – Healthy Kansans Living in Safe and Sustainable Environments



# Infrared Photo



Our Vision – Healthy Kansans Living in Safe and Sustainable Environments



# Illnesses and Deaths

- 2011 – 5 dog deaths confirmed, 2 illnesses
- 2011 – 7 confirmed, 5 probable, 1 suspect human illnesses (rashes and gastro-intestinal)
- 2012 – ZERO dog deaths or illnesses reported
- 2012 – Two confirmed human illnesses
- 2012 – 22 confirmed cattle deaths (stock ponds) with another 20+ unconfirmed

# Successes in 2012

- Lake Meade Experience – Diana Lehmann
- Successful Partnership
- HAB Web Page: On-Line Reporting for observations, human illnesses and animal illnesses & information
- Database Management System for tracking
- Effective Communication Strategies

# Floating wetlands and gardens

**Uptake of nutrients to reduce Harmful Algal Blooms.**



**Growth of root system**

Beemats.

Photo from



**Our Mission: To protect and improve the health and environment of all Kansans.**



# Partnerships are Critical

- KS Wildlife, Parks and Tourism
- Army Corps of Engineers
- KDHE BOW, BEFS, BEH
- USGS
- KS Water Office
- Local lake managers and officials
- Kansas State University Vet School

# Partnerships

- Weekly conference calls conducted regarding recent sampling results and future sampling locations
- Answered questions from partners or local lake managers
- KDHE Advisories or Warnings
- Observations/Samples collected by KWPT or ACOE when requested

# Public On Line Reporting System

- KDHE website featured HAB web page information, current status and
- On-line reporting for observations
- On-line reporting for human illnesses
- On-line reporting for animal illnesses
- <http://www.kdheks.gov/algae-illness/index.htm>

# Internal Database Management System

Validation of observational reports

Task Management for sampling activities

Maps of Kansas lakes for sampling locations

Calculates status/changes status notification on website; tracks analytical data

Reporting tools including current and historical information

Contact information for lake managers and interested stakeholders

Time-saving and efficient!

# Communications

- Weekly news release through KDHE Public Information Office coordinated with KWP&T and ACOE
- Kansas Health Alert Network Distribution
- Web page (list of Advisories and Warnings plus mapping)
- Toll free HAB Hotline
- Facebook featuring Odin

# Facebook Success

- Introduction of “Odin” increased Facebook by 1,300% in one week
- Messages picked up by Veterinarian Clinician’s Journal
- Lakeline Magazine

# Facebook Messages



# Facebook Messages



Check to see if there are any HAB advisories or warnings at your favorite lake at [www.kdheks.gov](http://www.kdheks.gov). Safe Kids Kansas and Odin remind everyone to please be safe at the lake and with fireworks this holiday week.



# Facebook Messages



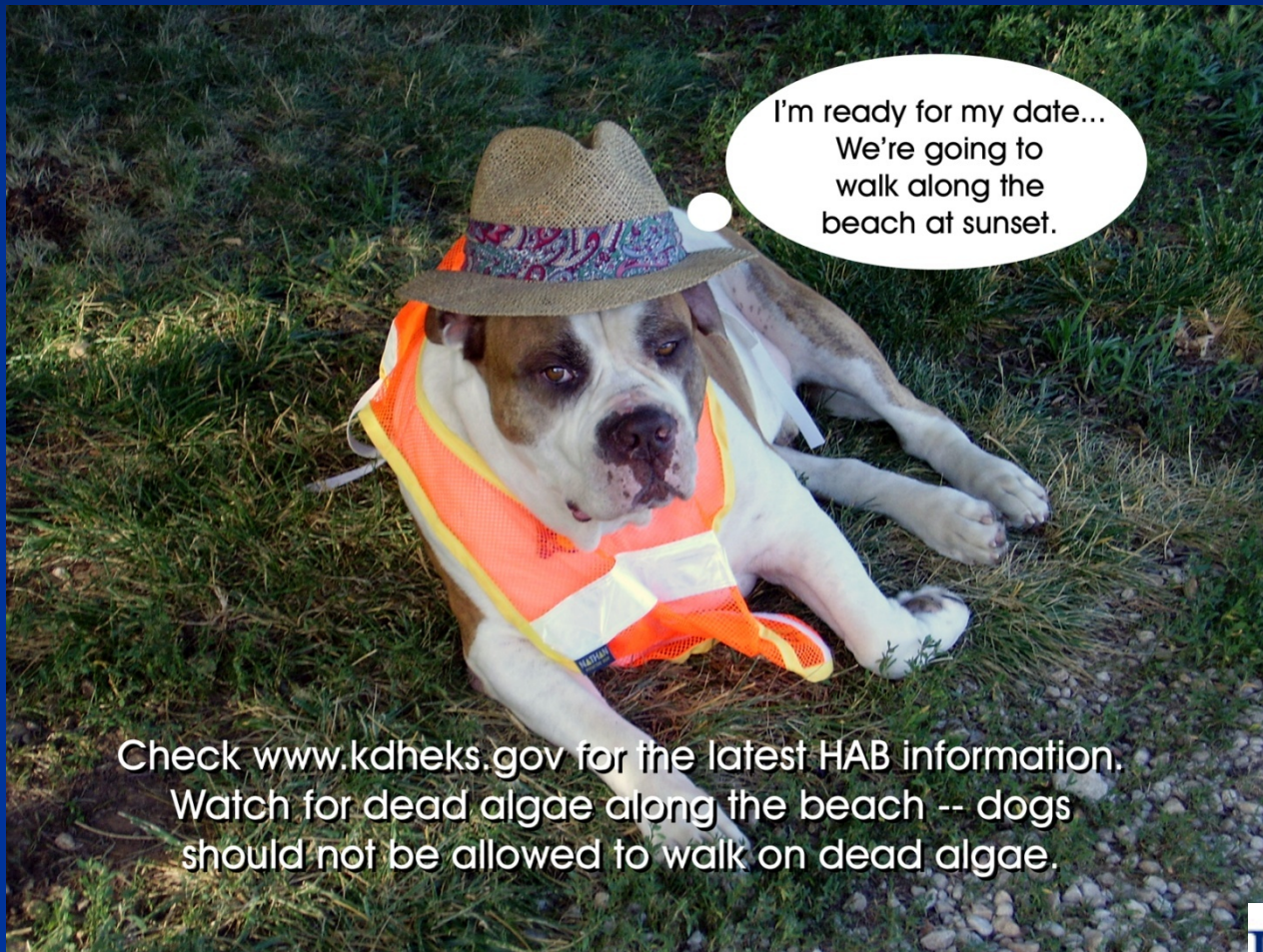
# Facebook Messages



Our Vision – Healthy Kansans Living in Safe and Sustainable Environments



# Facebook Messages



Check [www.kdheks.gov](http://www.kdheks.gov) for the latest HAB information.  
Watch for dead algae along the beach -- dogs should not be allowed to walk on dead algae.

# Facebook Messages



Going horseback riding at the lake today. Got my saddle and horse ready to go. Better check the HAB website because I don't want my buddy to drink lake water and get sick.

Humans can get sick from the toxins produced by HAB; horses and cattle can get sick or even die from it.

# Facebook Messages



As the Labor Day holiday approaches,  
be sure to check the list of lakes under advisories or  
warnings at the HAB website at  
<http://www.kdheks.gov/algae-illness/index.htm>  
and have a safe weekend!



# Facebook Messages

I hope to catch  
the big one!



In the event of a lake advisory or warning,  
clean fish using potable water and  
eat only the fillets, discard other parts in the trash

# Kansas Dept of Health and Environment

## ■ Harmful Algae Bloom Team

- Ed Carney
- Patricia Haines-Lieber
- Mike Butler
- Eva Hays
- Tom Stiles
- Diana Lehmann
- Rex Cox
- Dan Clair
- April Dixon
- KDHE District Office Staff
- Tom Langer
- KDHE IT staff Marvin Bush, AJ Thomas and Nolita LaVoie
- Farah Ahmed & Henri Menager
- Janet Neff
- Shelley Bearman
- KDHE Public Info Office
- <http://www.kdheks.gov/algae-illness/index.htm>



[www.kdheks.gov](http://www.kdheks.gov)

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