Oregon Harmful Algae Bloom Program

2009 Bloom Season Recap

Goals:

The Harmful Algae Bloom program is working to gain a better understanding about the occurrence of toxic algal blooms in Oregon and their impact on human health. Funding is through a five-year federal grant from the U.S. Centers for Disease Control and Prevention.

Accomplishments this year:

- Curtis Cude provided testimony on HAB issues to the Oregon Legislature.
- The first task force meeting occurred in March 2009 to increase collaboration among federal and state partners.
- HABS staff responded to numerous newspaper and radio inquiries, thereby furthering public outreach regarding HABs issues.
- 18 human and 10 animal exposures to HABs were investigated. These exposures ranged from health concerns that were not likely associated to HABs to our most significant incident of the summer which was a confirmed HABs-related animal death.
- Two articles were published: one for the Oregon CD Summary (distributed to 16,000 medical providers statewide) and the other for the Oregon Veterinary Medical Association.
- The program research analyst established the HABISS data tracking system for Oregon.
- The Oregon PH Laboratory has developed capacity for toxin testing (microcystin), species identification and enumeration. More details soon...

Figure 1. 2009 Advisories, numbered chronologically

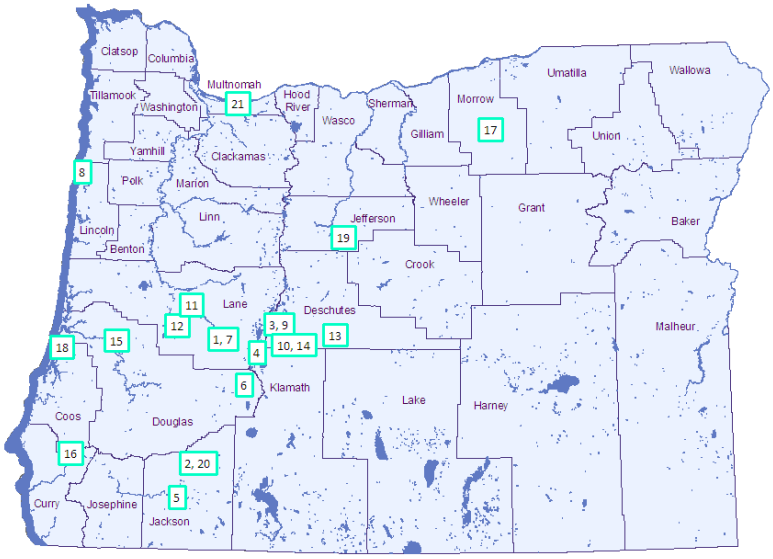
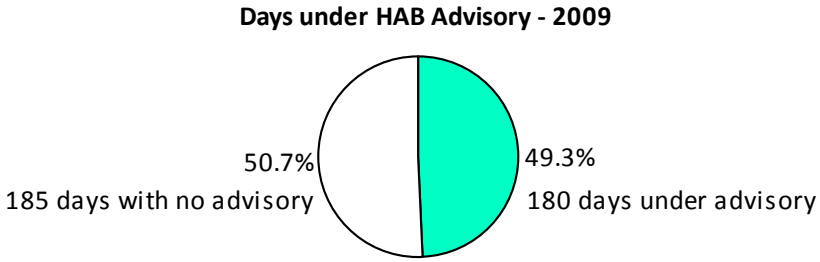


Table 1. 2009 Advisories by waterbody, date and county

#	Waterbody Name	County	Start	End	Duration
1	Hill Creek Reservoir	Lane	5/21	6/16	26 days
2	Lost Creek Lake	Jackson	6/15	6/29	14 days
3	Crane Prairie Reservoir	Deschutes	6/18	7/09	21 days
4	Odell Lake	Klamath	7/22	8/12	21 days
5	Whetstone Pond	Jackson	7/23	9/09	48 days
6	Lemolo Lake	Douglas	7/23	8/18	26 days
7	Hill Creek Reservoir	Lane	7/30	8/31	32 days
8	Devils Lake	Lincoln	7/31	9/08	39 days
9	Crane Prairie Reservoir	Deschutes	7/31	8/12	12 days
10	Wickiup Reservoir	Deschutes	8/12	8/31	19 days
11	Dexter Reservoir	Lane	8/13	9/28	46 days
12	Dorena Reservoir	Lane	8/13	10/23	71 days
13	Paulina Lake	Deschutes	8/27	9/21	25 days
14	Wickiup Reservoir	Deschutes	9/02	9/25	23 days
15	Elk Creek @ Umpqua R.	Douglas	9/04	9/22	18 days
16	Sru Lake	Coos	9/09	11/30	82 days
17	Willow Creek lake	Morrow	9/11	10/19	38 days
18	Tenmile Lake	Coos	9/18	11/30	73 days
19	Haystack Reservoir	Jefferson	9/18	11/02	45 days
20	Lost Creek Lake	Jackson	9/18	10/13	25 days
21	Blue Lake	Multnomah	10/14	11/06	23 days

During 2009, there were advisories in effect for 180 days. During the bloom season, which extended from May 21 to December 1, there were only 13 days without an advisory (July 9 – July 22). See figure 2.

Figure 2. 2009 Days under HAB Public Health Advisory



There were 21 health advisories issues during the 2009 bloom season. These advisories were in effect for a total of 727 days (advisory-days). The number of public health advisories issued per year has increased from 6 advisories in 2005 to 21 advisories in 2009.

Table 2 and Figure 3 show the number of advisories over the past five years. This increase could indicate that cyanobacteria blooms are increasing in severity but may also reflect enhanced surveillance efforts among local, state and federal partners.

Table 2. Harmful Algal Bloom Advisories by year

Year	Number of Advisories	Advisory-days
2005	6	162
2006	8	191
2007	8	311
2008	14	732
2009	21	727

Note: Anabaena flos-aquae was the dominant species, by cell count, in all years.

Figure 3. Oregon HAB advisories: Number of advisories and total advisory-days, by year