

Oregon Harmful Algae Bloom Program

2010 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 Centers for Disease Control and Prevention.

Highlights this year:

- Improved the advisory process based on lessons learned from Year 1 of the grant and realized performance gains.
- Enhanced communications with partners and stakeholders through site visits and lake management surveys.
- HABS staff responded to numerous newspaper and radio inquiries, thereby furthering public outreach regarding HABS issues.
- As a result of OR-HABS staff outreach efforts, there is increased awareness regarding algae-related poisonings in animals among veterinarians. The dog safety poster was responsible for alerting a veterinarian to the possible cause of the 2010 dog-death which led to a subsequent meeting of local-area veterinarians.
- Developed a permanent advisory sign for posting at lake access points and/or recreational use areas.
- 4 suspected human and 1 confirmed animal exposure to freshwater HABS were investigated. The human health concerns included rash, nausea, vomiting and dizziness. The animal exposure occurred in the South Umpqua River where a young Labrador retriever died from anatoxin poisoning.

Figure 1. 2010 Advisories, numbered chronologically

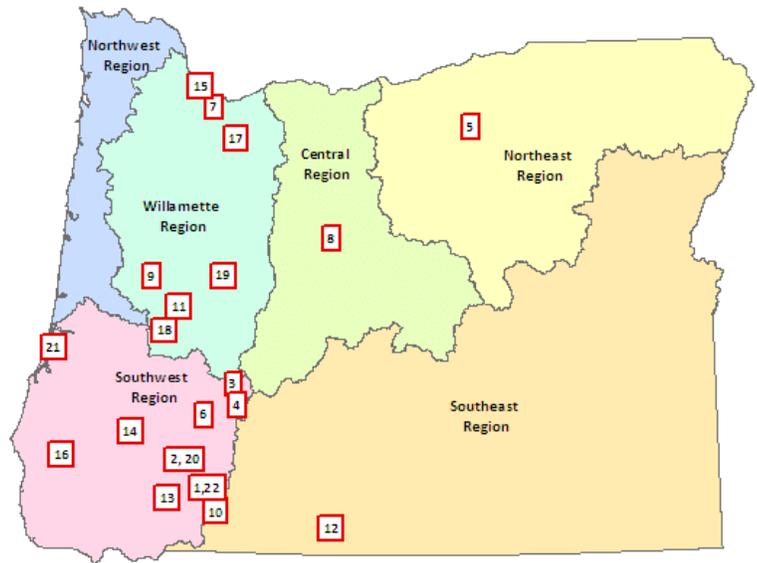
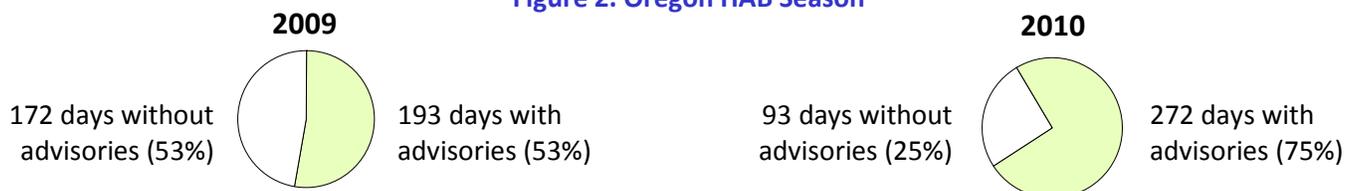


Table 1. 2010 Advisories by waterbody, date and region

#	Waterbody	Region	Start	End	Duration
1	Willow Lake	Southwest	4/21	8/19	120
2	Lost Creek Lake	Southwest	6/04	6/22	18
3	Lemolo Lake	Southwest	7/01	8/02	32
4	Diamond Lake	Southwest	7/15	8/03	19
5	Willow Creek Reservoir	Northeast	7/15	11/05	113
6	Fish Lake - Douglas	Southwest	7/19	8/23	35
7	Fairview Lake	Willamette	7/27	1/18	175
8	Haystack Reservoir	Central	8/04	12/13	131
9	Golden Gardens Pond	Willamette	8/05	10/14	70
10	Fish Lake - Jackson	Southwest	8/09	8/23	14
11	Dexter Reservoir	Willamette	8/11	9/20	40
12	Gerber Reservoir	Southeast	8/19	12/01	104
13	Whetstone Pond	Southwest	8/24	9/09	16
14	S. Umpqua River	Southwest	8/24	12/08	106
15	Blue Lake	Willamette	8/26	10/05	40
16	Sru Lake	Southwest	8/30	10/05	36
17	North Fork Reservoir	Willamette	9/02	9/14	12
18	Dorena Reservoir	Willamette	9/10	10/04	24
19	Blue River Reservoir	Willamette	9/10	10/05	25
20	Lost Creek Lake	Southwest	9/20	01/04	106
21	Tenmile Lake	Southwest	9/23	01/13	112
22	Willow Lake	Southwest	10/12	12/15	64
Total					1,412

In 2010, bloom season extended from April to January. Advisories were in effect for 272 days vs. 193 days in 2009.

Figure 2. Oregon HAB Season



During the 2010 season, 22 advisories were issued. They were in effect for a total of 1,412 days (advisory-days). The number of advisories has increased from 6 in 2005 to 22 advisories in 2010, as shown in Table 2 and Figure 3. 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. HAB Advisories & Advisory-days

Year	Number of Advisories	Advisory-days
2005	6	162
2006	8	191
2007	8	311
2008	14	732
2009	21	727
2010	22	1,412

Note: Dominant species - Anabaena flos-aquae, all years.

Figure 3. HAB Advisories & Advisory-days

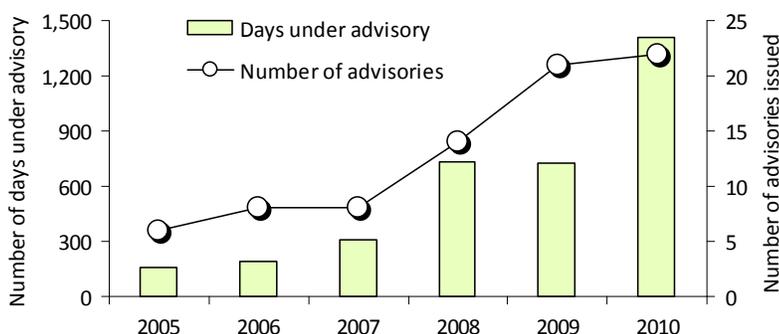
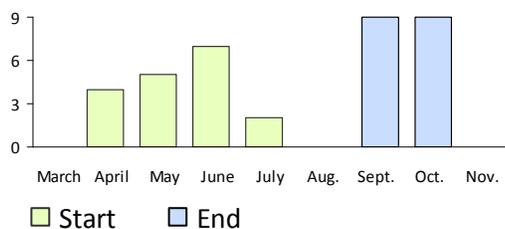
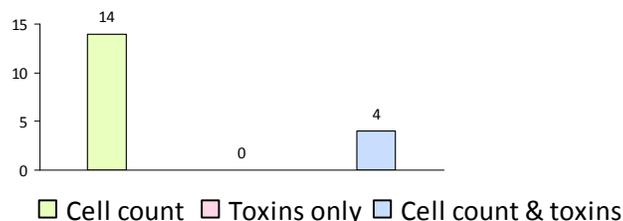


Figure 4. Waterbody Manager Survey Results

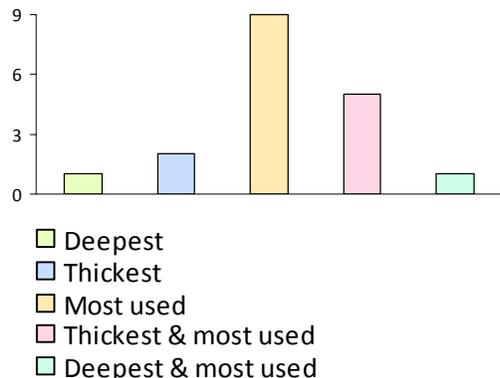
When does the monitoring season start?
When does it usually end?



What tests are you doing at this waterbody?



How are sampling locations selected?



Suggestions for the HABS Program?

