Harmful Algal Blooms (HABs) and Recreation Participation

Background¹

Blue-green algae are a natural part of water-based ecosystems. They become a problem when nutrients (phosphorus and nitrogen) are present in concentrations above what would occur naturally. Under these conditions, the algae can “bloom,” or grow very quickly to extreme numbers. Blue-green algae produce toxins which can cause skin reactions, respiratory problems, diarrhea, vomiting or even death if ingested, especially in children or the elderly.

The Kansas Department of Health and Environment (KDHE) samples recreational bodies of water for blue-green algae when alerted of a potential algae bloom. If harmful algal blooms are present, state agencies and other lake managers inform the public of these conditions. When harmful algae blooms are present, marinas, lakeside businesses, and park camping facilities remain open for business, although swim beaches will be closed. Park drinking water and showers are safe and not affected by the algae bloom. It is safe to eat fish caught during a harmful blue-green algae outbreak, as long as the fish is rinsed with clean, potable water and anglers only consume the fillet portion. ¹ Background information borrowed from KDHE.

How do HABs affect participation in recreation (fishing, boating, camping, etc.)?

Data from the 2013 Kansas Licensed Angler Survey

- **Were you aware of HABs?**
  - Yes: 83
  - No: 252
  - Unsure/I don’t know: 1,117

- **Have you recreated at a lake with an HAB advisory or warning?**
  - Yes: 295
  - No: 814
  - Unsure/I don’t know: 295

- **Have you avoided recreating at lakes with an HAB?**
  - Yes: 327
  - No: 432
  - Unsure/I don’t know: 669

Respondents were generally aware of HABs and some chose to recreate at lakes under an advisory or warning. It seems likely that HABs negatively impacted fishing participation because a plurality of respondents avoided recreating at a lake with an HAB.

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In an open-ended response format where respondents could write in an answer, many respondents indicated “no impact” from HABs. However, some respondents elaborated on other negative impacts as indicated in the graph above, such as avoidance, safety concerns, and quality of drinking water.

More research is needed to quantify the impact of HABs on fishing participation specifically because HAB advisories and warnings will continue to be issued that will impact surrounding communities.