Akashiwo sanguinea Blooms in Coastal Georgia: Insights from high-resolution monitoring efforts

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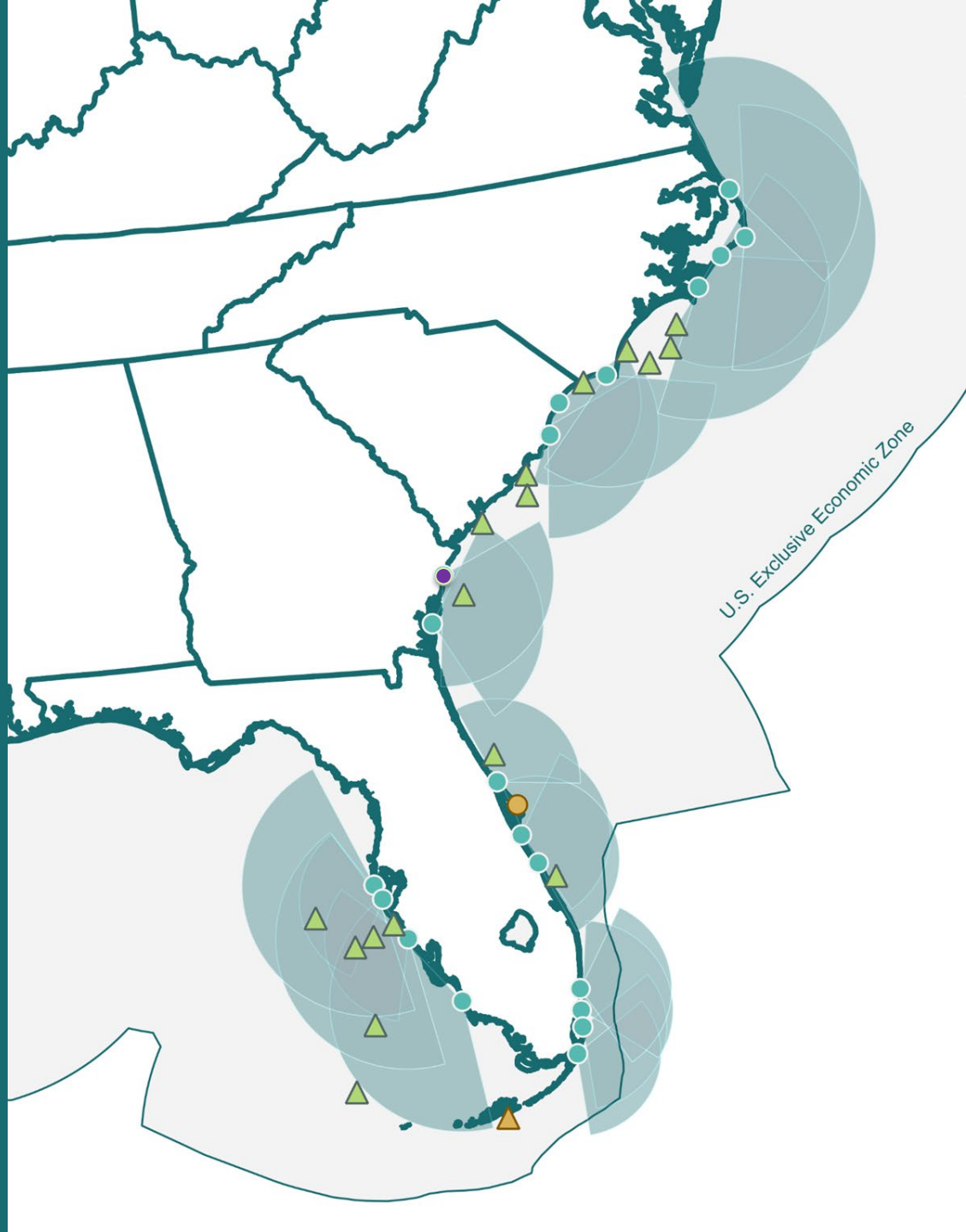
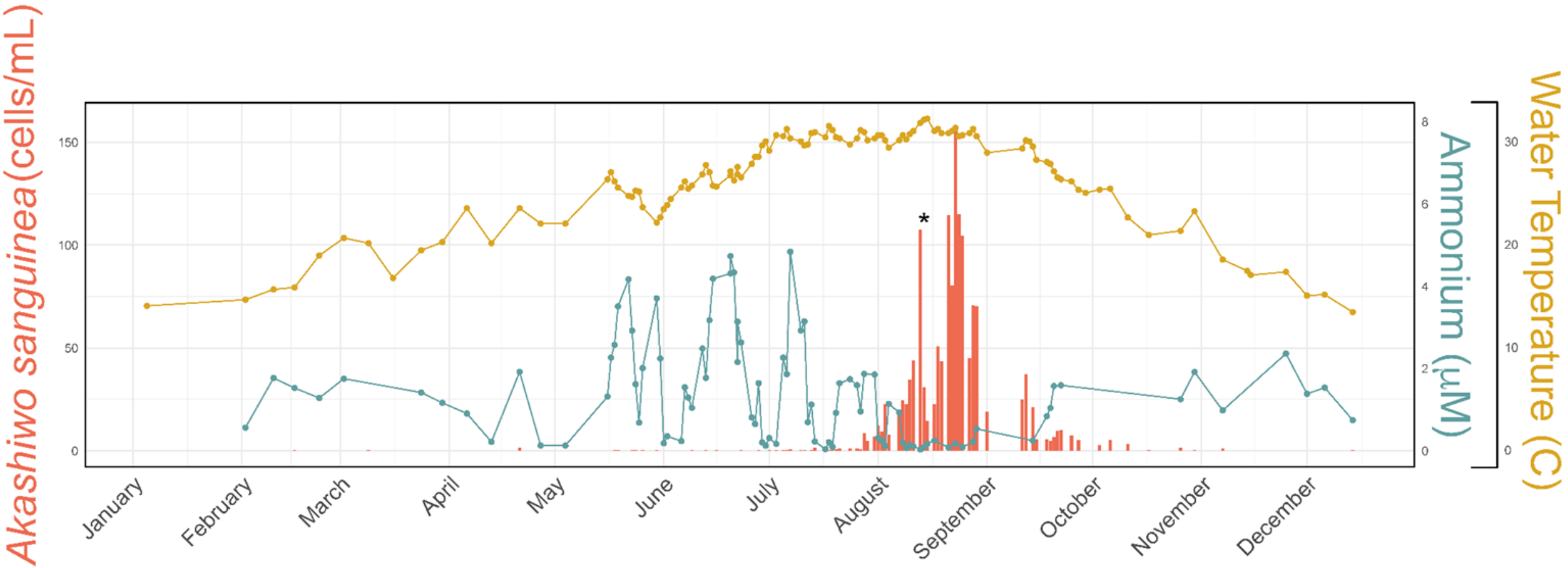


Overview


Akashiwo sanguinea (cells/mL)
150
100
50
0
*
8
6
4
2
0
Ammonium (µM)
30
20
10
0
Water Temperature (C)
January
February
March
April
May
June
July
August
September
October
November
December

Accomplishments

- Established monitoring program for HABs in the SRE
- Identified seasonal patterns of *Akashiwo* abundance; captured a bloom and subsequent larval oyster failure
- Began gene expression analysis of samples collected before, during, and after bloom
- Engaged with public, citizen scientists, and other stakeholders
- Presented findings at national conferences, received grant and travel support

Accomplishments

SECOORA | IOOS

HOME OBSERVATIONS AND DATA NEWS NETWORKS IMPACT ABOUT US GET INVOLVED

Georgia Harmful Algal Blooms

SECOORA funds a project that incorporates high-resolution, quantitative Harmful Algal Bloom (HAB) monitoring in the Skidaway River Estuary to determine environmental conditions conducive to HAB formation in Georgia estuaries. This project builds upon NOAA's existing citizen science-based initiative, the Phytoplankton Monitoring Network.

HARMFUL ALGAL BLOOMS IN GEORGIA | MONITORING EFFORTS | DAILY COUNTS | FREQUENTLY ASKED QUESTIONS

Date	Cells	Cells/ml
2/16/24	1	0.26

Above is the recorded *Akashiwo sanguinea* cell densities shown in near real-time. The information provided includes the date of the data point, the total number of *Akashiwo* cells counted, and the concentration of cells per milliliter of water sampled. It is hypothesized that a count of 100 cells/mL could be an indication of poor water conditions, but more research is needed to define the exact levels that cause harm.

Looking Ahead

- Continue monitoring for another year, with daily sampling in summer
- Analyze data to further understand drivers of *Akashiwo* blooms
- Complete metatranscriptomic analysis to understand molecular mechanisms of bloom formation and decline
- Strengthen engagement with stakeholders, including connecting with commercial oyster growers in Georgia