HAB MONITORING REPORT

From: 5/1/2023 To: 5/1/2023

Collected by: Volunteer(s)
Collecting agency: FDEP-CHAP
Sample condition: Preserved

Fish and Wildlife Research Institute

CONSERVATION CONFER

HAB ID Original ID Sample Date	Location	County	Lat/Lon (DD.dddd)	Time)	Depth (m)	Temp (C)	Sal (ppt)	DO (mg/L)	pН	Species	cells/lite
HABW230502-015 FDEP LBV006 5/1/2023	Placida Road Bridge (Buck Creek)	Charlotte	26.8904 -82.3090	07:15	0.3	24.50	34.34	2.44	7.29		
	Henschen, K. on 5/2/2023									Karenia brevis	0
Comments: Wind W @ 8-12 mph, partly cloudy skies, air 21.1 C, tide										Pseudo-nitzschia spp.	0
ļ	high slack, secchi > B, water green									Pyrodinium bahamense	0
HABW230502-016 FDEP GSV002 5/1/2023	Placida Fishing Pier (Gasparilla Sound)	Charlotte	26.8271 -82.2672	06:36	0.5	25.00	36.00	4.92	8.02		
Analyzed by:	Henschen, K. on 5/2/2023									Karenia brevis	0
	Wind NW @ 8-12 mph, sunny, air 23.9 C, tide incomin	g,								Pseudo-nitzschia spp.	40,333
:	secchi = 1.3 m, water green brown									Pyrodinium bahamense	0
HABW230502-019 FDEP GSV006 5/1/2023	Little Gasparilla Island; E of (Placida Harbor)	Charlotte	26.8349 -82.2909	07:00	0.5	24.90	36.25	4.84	8.19		
	Henschen, K. on 5/2/2023									Karenia brevis	0
	Wnd WNW @ 10 mph, partly cloudy skies, air 21.1 C,	tide								Pseudo-nitzschia spp.	4,667
!	incoming, secchi > B, water light brown and clear									Pyrodinium bahamense	0
HABW230502-020 FDEP CHV009 5/1/2023	Burnt Store Marina (Charlotte Harbor)	Lee	26.7614 -82.0611	06:57	0.5	24.80	31.19	3.32	7.54		
Analyzed by:	Conte, Camden on 5/2/2023									Karenia brevis	0
	Wind NW @ 8-12 mph, partly cloudy skies, 0.04"									Pseudo-nitzschia spp.	5,333
	precipitaiton in last 24 hrs, air 21 C, tide low slack, sec 1.1 m, water dark brown	chi =								Pyrodinium bahamense	0
HABW230502-021 FDEP CHV006 5/1/2023	Gilchrist Park Pier (Peace River)	Charlotte	26.9340 -82.0575	06:50	0.5	24.50	25.27	6.57	7.77	·	
	Conte, Camden on 5/2/2023									Karenia brevis	0
	Wind W @ 4-7 mph, partly cloudy skies, 1.2" precipital									Pseudo-nitzschia spp.	0
	last 24 hrs, air 20.1 C, tide outgoing, secch > B, water brown	aark								Pyrodinium bahamense	0

HAB ID	Location	County	Lat/Lon		Depth	Temp	Sal	DO	рН	Species	cells/liter
Original ID			(DD.dddd)	(m)	(C)	(ppt)	(mg/L)			
Sample Date											
HABW230502-022 FDEP CHV007 5/1/2023	Punta Gorda Boat Ramp (Charlotte Harbor)	Charlotte	26.9092 -82.0953	07:25	0.5	26.10	28.99	3.82	7.60		
	Conte, Camden on 5/2/2023 Wind W @ 4-7 mph, partly cloudy skies, 0.2" precipital last 24 hrs, air 21.2 C, tide outgoing-low slack, secchim, water yellow brown									Karenia brevis Pseudo-nitzschia spp. Pyrodinium bahamense	0 37,000 0
HABW230502-023 FDEP GSV005B 5/1/2023		Charlotte	26.8553 -82.2903	07:00	0.5	28.30	35.37	2.90	7.09		
	Conte, Camden on 5/2/2023 Wind NE @ 0-1 mph, sunny, 0.5" precipitation in last air 22 C, tide low slack, secchi = 0.6 m, water green l									Karenia brevis Pseudo-nitzschia spp. Pyrodinium bahamense	0 0 0
HABW230502-027 FDEP LBV007 5/1/2023	Don Pedro Island State Park (Kettle Harbor)	Charlotte	26.8558 -82.3031	06:40	0.5	26.70	36.60	7.83	7.95		
	Conte, Camden on 5/2/2023 Winds NW at 12mph, partly cloudy skies, air temp= 2 secchi ave= 3.0m, green/brown water color.	21.6C,								Karenia brevis Pseudo-nitzschia spp. Pyrodinium bahamense	1,667 29,667 0
HABW230502-028 FDEP LBANG1 5/1/2023	Ainger Creek Park; N of	Charlotte	26.9305 -82.3363	06:50	0.5	24.50	32.06	2.03	7.69		
	Mahank, Shelby on 5/2/2023 Winds NW at 8-12mph, partly cloudy skies, air temp= secchi ave= >B, yellow/green water color.	= 21.1C,								Karenia brevis Pseudo-nitzschia sp. Pyrodinium bahamense	0 2,667 0
HABW230502-029 FDEP GSV001 5/1/2023	Coral Creek Fishing Pier	Charlotte	26.8339 -82.2650	06:50	0.5	24.40	37.38	3.47	7.53		
	Mahank, Shelby on 5/2/2023 Winds NW at 8-12mph, partly cloudy skies, air temp= secchi ave= 1.5m, medium brown water color.	= 20.2C,								Karenia brevis Pseudo-nitzschia sp. Pyrodinium bahamense	0 1,333 0
HABW230502-030 FDEP MPV004 5/1/2023	Dawson Canal; E of (Matlacha Pass)	Lee	26.5022 -82.0619	06:55	0.5	25.10	28.51	5.60	8.18		
Analyzed by:	Henschen, K. on 5/2/2023 Winds NW at 4-7mph, partly cloudy skies, air temp= secchi ave= 2.1m, yellow/brown water color.	21.2C,								Karenia brevis Pseudo-nitzschia spp. Pyrodinium bahamense	0 8,333 0

NOTE: Blank field = not measured

HAB ID	Location	County	Lat/Lon (DD.dddd		Depth	Temp	Sal (nnt)	DO (mg/L)	pН	Species	cells/liter
Original ID			(DD.dddd	1)	(m)	(C)	(ppt)	(mg/L)			
Sample Date											
HABW230502-031 FDEP LBV005 5/1/2023	Ski Alley (Lemon Bay)	Charlotte	26.9111 -82.3522	07:23	0.5	25.20	35.51	3.90	8.04		
Comments: Wind	schen, K. on 5/2/2023 ds NW at 8-12mph, partly cloudy skies, air tem hi ave= 1.1m, yellow/brown water color.	p= 23.3C,								Karenia brevis Pseudo-nitzschia spp. Pyrodinium bahamense	0 50,667 0
HABW230502-032 FDEP CHV010 5/1/2023	Bokeelia Fishing Pier (Charlotte Harbor)	Lee	26.7067 -82.1637	07:10	0.5	24.40	34.59	5.21	8.01		
Comments: Wind	ank, Shelby on 5/2/2023 ds NW 8-12mph, partly cloudy skies, air temp= hi ave=>B, green/brown water color,	21.8C,								Karenia brevis Pseudo-nitzschia spp. Pyrodinium bahamense	0 206,333 0

NOTE: Blank field = not measured

Description	Karenia brevis abundance	Possible effects (<i>Karenia brevis</i> only)
NOT PRESENT - BACKGROUND	0 - 1,000 cells/L	no effects anticipated
VERY LOW	> 1,000 - 10,000 cells/L	possible respiratory irritation; shellfish harvesting closures ≥ 5,000 cells/L
LOW	> 10,000 - 100,000 cells/L	respiratory irritation; possible fish kills; probable detection of surface chlorophyll by satellites at upper range of cell abundance
MEDIUM	> 100,000 - 1,000,000 cells/L	respiratory irritation; probable fish kills; detection of surface chlorophyll by satellites
HIGH	> 1,000,000 cells/L	as above, plus water discoloration

The above report is distributed by the Harmful Algal Bloom (HAB) Group at the Fish and Wildlife Research Institute of the Florida Fish and Wildlife Conservation Commission. The report is intended to (1) provide timely information on HABs in Florida waters to partner agencies and (2) facilitate communication among individuals who direct response activities to address public health concerns. We report on the abundance of *Karenia brevis*, *Pyrodinium bahamense* and *Pseudonitzschia* species. *Karenia brevis*, the Florida red tide organism, produces neurotoxins called brevetoxins that can kill fish and other marine life. Brevetoxins may cause respiratory irritation in beachgoers and Neurotoxic Shellfish Poisoning in humans that consume contaminated shellfish. *Pyrodinium bahamense* produces saxitoxins that can cause Paralytic Shellfish Poisoning or Saxitoxin Puffer Fish Poisoning in humans if contaminated shellfish or puffer fish are consumed. Some, but not all, species of *Pseudo-nitzschia* produce domoic acid, which can cause Amnesic Shellfish Poisoning in humans if contaminated shellfish are consumed. Blooms of *Pseudo-nitzschia* spp. (≥ 1,000,000 cells/L) frequently occur in Florida's marine and estuarine waters. For information on red tide related human health issues, please refer to the Department of Health Aquatic Toxins Program.

State-wide status reports of *Karenia brevis* abundance including interactive Google Maps are provided weekly by our group. Shellfish harvesting area status maps are provided by the Division of Aquaculture. Gulf Coast beach conditions can be found at Mote Marine Laboratory's Beach Conditions Report. A full list of red tide related hotlines and information sources can be found here. Data for other species can be requested at any time by sending an inquiry to HABData@MyFWC.com/Research/redtide and Facebook.com/FLHABs.

DISCLAIMER: While every practical step has been taken to provide accurate information in these reports, the need for rapid distribution precludes extensive review. Further, reports are generated with limited interpretation and do not necessarily reflect all scientific observations.

