

HAB MONITORING REPORT

From: 2/4/2019 To: 2/4/2019

Fish and Wildlife Research Institute



Collected by: Harshaw, K.

Collecting agency: FDACS

Sample condition: Live

HAB ID	Location	County	Lat/Lon (DD.dddd)	Time	Depth (m)	Temp (C)	Sal (ppt)	DO (mg/L)	pH	Species	cells/liter
HABW190205-023	Boca Grande Pass Gasparilla Sound (SHA 58)/ Pine Island Sound (SHA 2/4/2019	Lee	26.7117 -82.2583	12:46	0.2	19.40	30.88	8.09	8.17		
	Analyzed by: KellerAbbe, S. on 2/5/2019									<i>Karenia brevis</i>	0
	Comments: Mid rising tide, 60% cloud cover, WNW wind @ 8 mph									<i>Pseudo-nitzschia spp.</i>	0
										<i>Pyrodinium bahamense</i>	0
HABW190205-024	Mondongo Island; W of (Pine Island Sound) Pine Island Sound (SHA 62) 2/4/2019	Lee	26.6798 -82.2196	13:19	0.2	21.10	31.63	9.53	8.27		
	Analyzed by: KellerAbbe, S. on 2/5/2019									<i>Karenia brevis</i>	0
	Comments: Mid rising tide, 60% cloud cover, WNW wind @ 8 mph; collected oysters for screening									<i>Pseudo-nitzschia spp.</i>	0
										<i>Pyrodinium bahamense</i>	0
HABW190205-025	Captiva Pass Pine Island Sound (SHA 62) 2/4/2019	Lee	26.6092 -82.2210	12:27	0.2	17.70	32.99	8.08	8.14		
	Analyzed by: Henschen, K. on 2/5/2019									<i>Karenia brevis</i>	0
	Comments: Mid rising tide, 60% cloud cover, WNW wind @ 8 mph									<i>Pseudo-nitzschia spp.</i>	0
										<i>Pyrodinium bahamense</i>	0
HABW190205-026	Captiva Rocks; SW of (Pine Island Sound) Pine Island Sound (SHA 62) 2/4/2019	Lee	26.5992 -82.1846	11:36	0.2	20.20	31.30	9.54	8.29		
	Analyzed by: Henschen, K. on 2/5/2019									<i>Karenia brevis</i>	0
	Comments: Mid rising tide, 60% cloud cover, WNW wind @ 8 mph; collected oysters for screening									<i>Pseudo-nitzschia spp.</i>	0
										<i>Pyrodinium bahamense</i>	0

NOTE: Blank field = not measured

HAB ID	Location	County	Lat/Lon (DD.ddddd)	Time	Depth (m)	Temp (C)	Sal (ppt)	DO (mg/L)	pH	Species	cells/liter
HABW190205-027	Redfish Pass (Pine Island Sound)	Lee	26.5535 -82.1963	11:12	0.2	18.10	32.72	8.23	8.15		
Pine Island Sound (SHA 62) SEAS #058 2/4/2019 Analyzed by: KellerAbbe, S. on 2/5/2019 Comments: Mid rising tide, 60% cloud cover, WNW wind @ 8 mph											
										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia spp.</i>	2,667
										<i>Pyrodinium bahamense</i>	0
HABW190205-028	Redfish Pass; 1.8 mi E of (Pine Island Sound)	Lee	26.5604 -82.1708	11:17	0.2	18.90	31.41	8.38	8.17		
Pine Island Sound (SHA 62) 2/4/2019 Analyzed by: KellerAbbe, S. on 2/5/2019 Comments: Mid rising tide, 60% cloud cover, WNW wind @ 8 mph											
										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia spp.</i>	0
										<i>Pyrodinium bahamense</i>	0
HABW190205-029	Buck Key; 1.9 mi NE of (Pine Island Sound)	Lee	26.5321 -82.1567	14:11	0.2	20.30	30.15	8.64	8.23		
Pine Island Sound (SHA 62) 2/4/2019 Analyzed by: KellerAbbe, S. on 2/5/2019 Comments: Mid rising tide, 10% cloud cover, WNW wind @ 8 mph											
										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia spp.</i>	0
										<i>Pyrodinium bahamense</i>	0
HABW190205-030	Buck Key; S of (Blind Pass)	Lee	26.4880 -82.1815	10:26	0.2	20.90	28.57	8.42	8.27		
Pine Island Sound (SHA 62) SEAS #319 2/4/2019 Analyzed by: KellerAbbe, S. on 2/5/2019 Comments: Low rising tide, 70% cloud cover, WNW wind @ 8 mph; collected oysters for screening											
										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia spp.</i>	0
										<i>Pyrodinium bahamense</i>	0
HABW190205-031	York Island; W of (Pine Island Sound)	Lee	26.4887 -82.1073	10:12	0.2	19.70	27.17	8.09	8.17		
Pine Island Sound (SHA 62) SEAS #320 2/4/2019 Analyzed by: Markley, L. on 2/5/2019 Comments: Low rising tide, 100% cloud cover, WNW wind @ 8 mph											
										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia spp.</i>	0
										<i>Pyrodinium bahamense</i>	0

NOTE: Blank field = not measured

HAB ID	Location	County	Lat/Lon (DD.dddd)	Time	Depth (m)	Temp (C)	Sal (ppt)	DO (mg/L)	pH	Species	cells/liter
HABW190205-032	Regla Island; W of (Pine Island Sound)	Lee	26.5380 -82.1257	09:53	0.2	20.10	29.54	7.84	8.22		
	Pine Island Sound (SHA 62)										
	SEAS #310										
	2/4/2019										
	Analyzed by: Markley, L. on 2/5/2019									<i>Karenia brevis</i>	0
	Comments: Low rising tide, 100% cloud cover, WNW wind @ 8 mph									<i>Pseudo-nitzschia spp.</i>	0
										<i>Pyrodinium bahamense</i>	0
HABW190205-033	Cork Island; W of (Pine Island Sound)	Lee	26.5767 -82.1347	09:42	0.2	19.80	30.44	8.04	8.15		
	Pine Island Sound (SHA 62)										
	SEAS #302										
	2/4/2019										
	Analyzed by: KellerAbbe, S. on 2/5/2019									<i>Karenia brevis</i>	0
	Comments: Low rising tide, 100% cloud cover, WNW wind @ 8 mph									<i>Pseudo-nitzschia spp.</i>	0
										<i>Pyrodinium bahamense</i>	0
HABW190205-034	Hemp Key; S of (Pine Island Sound)	Lee	26.5902 -82.1561	11:25	0.2	20.40	30.66	7.94	8.31		
	Pine Island Sound (SHA 62)										
	CL1										
	2/4/2019										
	Analyzed by: KellerAbbe, S. on 2/5/2019									<i>Karenia brevis</i>	0
	Comments: Mid rising tide, 60% cloud cover, WNW wind @ 8 mph									<i>Pseudo-nitzschia spp.</i>	0
										<i>Pyrodinium bahamense</i>	0
HABW190205-035	Little Bokeelia Island; N of (Charlotte Harbor)	Lee	26.7050 -82.1837	13:30	0.2	19.20	29.61	8.40	8.12		
	Gasparilla Sound (SHA 58)										
	SEAS #091/Pine Island										
	Sound (SHA 62) SEAS #091										
	2/4/2019										
	Analyzed by: Henschen, K. on 2/5/2019									<i>Karenia brevis</i>	0
	Comments: Mid rising tide, 20% cloud cover, WNW wind @ 8 mph									<i>Pseudo-nitzschia spp.</i>	0
										<i>Pyrodinium bahamense</i>	0

NOTE: Blank field = not measured

HAB MONITORING REPORT

From: 2/4/2019 To: 2/4/2019

Fish and Wildlife Research Institute



Collected by: Volunteer(s)
 Collecting agency: EBAP
 Sample condition: Preserved

HAB ID	Location	County	Lat/Lon (DD.dddd)	Time	Depth (m)	Temp (C)	Sal (ppt)	DO (mg/L)	pH	Species	cells/liter
HABW190205-043 FDEP EBV001 2/4/2019	Matanzas Pass (Estero Bay)	Lee	26.4577 -81.9532	07:03	0.5	20.80	27.80	7.14	7.83		
<p>Analyzed by: Henschen, K. on 2/5/2019</p> <p>Comments: Winds NE @ 0-1 mph, overcast, tide low slack, secchi = 1.1, water color yellow brown</p>											
										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia spp.</i>	0
										<i>Pyrodinium bahamense</i>	0
HABW190205-044 FDEP EBV004 2/4/2019	Carl Johnson Park Boat Ramp (Estero Bay)	Lee	26.3936 -81.8655	06:15	0.5	20.80	31.07	3.88	8.06		
<p>Analyzed by: Henschen, K. on 2/5/2019</p> <p>Comments: Winds 0-1 mph (picked up at 6:20 to 2-4 mph), partly cloudy, air temp 19.6 C, tide low slack, secchi = 1.1, water color green-brown</p>											
										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia spp.</i>	0
										<i>Pyrodinium bahamense</i>	0
HABW190205-045 FDEP EBV005 2/4/2019	Pelican Bay Nature Park Pier (Estero Bay)	Lee	26.3584 -81.8375	07:10	0.5	21.60	27.66	2.45	7.53		
<p>Analyzed by: Villac, M.C. on 2/5/2019</p> <p>Comments: Winds NE @ 2-3 mph, overcast, air temp 20.2 C, tide outgoing, secchi = .375, water color yellow-green</p>											
										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia spp.</i>	3,000
										<i>Pyrodinium bahamense</i>	0
HABW190205-046 FDEP EBV006 2/4/2019	Coon Key; N of (Estero Bay)	Lee	26.4287 -81.8832	07:12	0.5	20.40	30.48	5.55	7.74		
<p>Analyzed by: Villac, M.C. on 2/5/2019</p> <p>Comments: Winds NE @ 2-3 mph, overcast, air temp 20.2 C, tide low slack, secchi = 0.75 m, water color green</p>											
										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia spp.</i>	0
										<i>Pyrodinium bahamense</i>	0
HABW190205-047 FDEP EBV007 2/4/2019	Mound House Dock (Estero Bay)	Lee	26.4462 -81.9272	07:22	0.5	21.20	27.73	6.08	8.13		
<p>Analyzed by: KellerAbbe, S. on 2/5/2019</p> <p>Comments: Winds NE @ 3 mph, overcast, air temp 20.1 C, tide incoming, secchi = 1.2 m, water color green</p>											
										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia spp.</i>	0
										<i>Pyrodinium bahamense</i>	0

NOTE: Blank field = not measured

Description	<i>Karenia brevis</i> 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 \geq 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 *Pseudo-nitzschia* 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. (\geq 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. To learn more about HAB monitoring and research in Florida, please visit MyFWC.com/Research/red-tide 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.



Boca Grande Pass

Little Bokeelia Island; N of

Mondongo Island; W of

Captiva Pass

Captiva Rocks; SW of

Hemp Key; S of

Cork Island; W of

Redfish Pass; 1.8 mi E of

Redfish Pass

Regla Island; W of

Buck Key; 1.9 mi NE of

York Island; W of

Buck Key; S of

Matanzas Pass

Mound House Dock

Coon Key; N of

Carl Johnson Park Boat Ramp

Pelican Bay Nature Park Pier

Lee

Karenia brevis (cells/liter)

- not present/background (0-1,000)
- very low (>1,000-10,000)
- low (>10,000-100,000)
- medium (>100,000-1,000,000)
- high (>1,000,000)

Google earth

Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Image © 2019 TerraMetrics

10 mi

