

HAB MONITORING REPORT

From: 1/6/2020 To: 1/6/2020

Fish and Wildlife Research Institute



Collected by: Benjasirichai, P.

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
HABW200107-001 Original ID Sample Date Pine Island Sound (SHA 62) 1/6/2020	Captiva Rocks; SW of (Pine Island Sound)	Lee	26.5992 -82.1846	11:31	0.2	18.40	32.90	8.10	8.20		
Analyzed by: KellerAbbe, S. on 1/7/2020 Comments: SW winds 9mph; rising mid tide										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia spp.</i>	45,333
										<i>Pyrodinium bahamense</i>	0
HABW200107-002 Original ID Sample Date Pine Island Sound (SHA 62) 1/6/2020	Redfish Pass; 1.8 mi E of (Pine Island Sound)	Lee	26.5604 -82.1708	11:21	0.2	19.20	33.30	7.90	8.00		
Analyzed by: KellerAbbe, S. on 1/7/2020 Comments: SW winds 9mph; rising mid tide										<i>Karenia brevis</i>	333
										<i>Pseudo-nitzschia spp.</i>	23,000
										<i>Pyrodinium bahamense</i>	0
HABW200107-003 Original ID Sample Date Pine Island Sound (SHA 62) 1/6/2020	Buck Key; 1.9 mi NE of (Pine Island Sound)	Lee	26.5321 -82.1567	11:14	0.2	18.90	31.90	7.50	8.10		
Analyzed by: Henschen, K. on 1/7/2020 Comments: SW winds 9mph; rising mid tide										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia spp.</i>	38,333
										<i>Pyrodinium bahamense</i>	0
HABW200107-004 Original ID Sample Date Pine Island Sound (SHA 62) SEAS #310 1/6/2020	Regla Island; W of (Pine Island Sound)	Lee	26.5380 -82.1257	10:21	0.2	17.30	31.30	7.50	8.20		
Analyzed by: Henschen, K. on 1/7/2020 Comments: SW wind 9mph; rising mid tide										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia spp.</i>	12,667
										<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
HABW200107-005	Cork Island; W of (Pine Island Sound)	Lee	26.5767 -82.1347	10:10	0.2	18.50	32.20	7.40	8.00		
	Pine Island Sound (SHA 62)										
	SEAS #302										
	1/6/2020										
	Analyzed by: Villac, M.C. on 1/7/2020									<i>Karenia brevis</i>	0
	Comments: SW wind 9mph; rising mid tide; collected clams for MB (30x animals)									<i>Pseudo-nitzschia spp.</i>	71,000
										<i>Pyrodinium bahamense</i>	0
HABW200107-006	Hemp Key; S of (Pine Island Sound)	Lee	26.5902 -82.1561	12:12	0.2	18.80	32.60	8.00	8.10		
	Pine Island Sound (SHA 62)										
	CL1										
	1/6/2020										
	Analyzed by: Villac, M.C. on 1/7/2020									<i>Karenia brevis</i>	0
	Comments: SW wind 9mph; rising mid tide; collected clams for MB (30x animals)									<i>Pseudo-nitzschia spp.</i>	172,333
										<i>Pyrodinium bahamense</i>	0
HABW200107-007	Chino Island; E of (Pine Island Sound)	Lee	26.5036 -82.1238	12:12	0.2	18.40	30.40	9.30	8.20		
	1/6/2020										
	Analyzed by: Thurmond, R. on 1/7/2020									<i>Karenia brevis</i>	0
	Comments: SW wind 9mph; rising mid tide; collected oysters for MB (45x animals)									<i>Pseudo-nitzschia spp.</i>	4,667
										<i>Pyrodinium bahamense</i>	0

NOTE: Blank field = not measured

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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
HABW200107-021 FDEP EBV001 1/6/2020	Matanzas Pass (Estero Bay)	Lee	26.4577 -81.9532	06:24	0.5	19.90	29.92	5.65	8.08		
<p>Analyzed by: Thurmond, R. on 1/7/2020</p> <p>Comments: Wind N @ 4-7 mph, sunny, air temp 9.6 C, tide incoming, secchi = 1.05, water color yellow-green</p>											
										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia spp.</i>	4,000
										<i>Pyrodinium bahamense</i>	0
HABW200107-022 FDEP EBV003 1/6/2020	Estero River; mouth of (Estero Bay)	Lee	26.4294 -81.8580	07:16	0.5	16.50	24.39	15.33	7.59		
<p>Analyzed by: Thurmond, R. on 1/7/2020</p> <p>Comments: Wind W - SW @ 2-3 mph, air temp 10.1 C, tide incoming, secchi = 0.35 m, water color green-brown; little to no Lugols</p>											
										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia spp.</i>	5,333
										<i>Pyrodinium bahamense</i>	0
HABW200107-023 FDEP EBV004 1/6/2020	Carl Johnson Park Boat Ramp (Estero Bay)	Lee	26.3936 -81.8655	06:53	0.5	17.00	31.23	5.95			
<p>Analyzed by: Henschen, K. on 1/7/2020</p> <p>Comments: Wind NNE @ 2-3 mph, sunny, air temp 11.8 C, tide incoming, secchi = 0.9 m, water color green brown</p>											
										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia spp.</i>	3,667
										<i>Pyrodinium bahamense</i>	0
HABW200107-024 FDEP EBV006 1/6/2020	Coon Key; N of (Estero Bay)	Lee	26.4287 -81.8832	07:15	0.5	18.70	29.94	5.90	7.97		
<p>Analyzed by: Henschen, K. on 1/7/2020</p> <p>Comments: Wind NE @ 4-7 mph, sunny, air temp 9.9 C, tide low slack, secchi = 0.75 m, water color medium brown</p>											
										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia spp.</i>	6,667
										<i>Pyrodinium bahamense</i>	0
HABW200107-025 FDEP EBV007 1/6/2020	Mound House Dock (Estero Bay)	Lee	26.4462 -81.9272	06:50	0.5	19.50	29.21	6.19	7.90		
<p>Analyzed by: KellerAbbe, S. on 1/7/2020</p> <p>Comments: Wind N @ 4-7 mph, sunny, air temp 8.7 C, tide incoming, secchi = 1.4 m, water color green brown</p>											
										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia sp.</i>	667
										<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
HABW200107-026	Estero River; upstream	Lee	26.4386 -81.8400	08:00	0.5	18.90	1.89	5.16	7.99		
FDEP EBERS2											
1/6/2020											
Analyzed by: KellerAbbe, S. on 1/7/2020										<i>Karenia brevis</i>	0
Comments: Wind N @ 0 - 1 mph, sunny, air temp 9.2 C, tide incoming (very low tide), secchi = 1.6 m, water color green brown										<i>Pseudo-nitzschia spp.</i>	0
										<i>Pyrodinium bahamense</i>	0

HAB MONITORING REPORT

From: 1/6/2020 To: 1/6/2020

Fish and Wildlife Research Institute



Collected by: Kowitch, L.

Collecting agency: PC

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
HABW200107-016	Big Carlos Pass	Lee	26.4031 -81.8828	08:40	0.4	12.00					
1/6/2020											
Analyzed by: Henschen, K. on 1/7/2020										<i>Karenia brevis</i>	0
Comments: Very murky water										<i>Pseudo-nitzschia spp.</i>	13,000
										<i>Pyrodinium bahamense</i>	0
HABW200107-017	Hogue Channel	Lee	26.3531 -81.8519	08:55	0.4	12.00					
1/6/2020											
Analyzed by: KellerAbbe, S. on 1/7/2020										<i>Karenia brevis</i>	0
Comments:										<i>Pseudo-nitzschia spp.</i>	4,667
										<i>Pyrodinium bahamense</i>	0

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/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.



Captiva Rocks; SW of

Hemp Key; S of

Cork Island; W of

Redfish Pass; 1.8 mi E of

Regla Island; W of

Buck Key; 1.9 mi NE of

Chino Island; E of

Lee

Matanzas Pass

Mound House Dock

Estero River; upstream

Coon Key; N of

Estero River; mouth of

Big Carlos Pass

Carl Johnson Park Boat Ramp

Hogue Channel

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

