

Harmful Algae Report

All data between 5/31/2016 and 6/16/2016

University of Delaware Citizen Monitoring Program

Water Body Tributary Site	Date	Time	Sample Depth	Name	Comment if ID uncertain	Abundance	MC/L
Broadkill River							
<u>Broadkill River</u>							
BR01: Broadkill river @ PEL dock.							
	6/1/2016	8:50	Net	<i>Chaetoceros spp. (T)</i>			
				<i>Heterocapsa rotundata (B)</i>			
				<i>Prorocentrum minimum (T)</i>			
				<i>Rhizosolenia spp. (T)</i>			
			Surfc	<i>Fibrocapsa japonica (T)</i>		Present	
				<i>Prorocentrum minimum (T)</i>		Present	
	6/8/2016	8:45	Net	"Gymnodinoid" sp. (S)	25-40 um Grn		
				<i>Prorocentrum scutellum (B)</i>			
				<i>Rhizosolenia spp. (T)</i>			
			Surfc	"Gymnodinoid" sp. (S)	25-40 um Grn	Present	
				<i>Heterocapsa rotundata (B)</i>		Present	
BR20: Broadkill River at Milton tidal pond							
	6/8/2016	6:30	Surfc		No HABs found		
<u>Diamond Pond</u>							
BR48: Diamond Pond at Spillway							
	6/8/2016	7:00	Surfc		No HABs found		
<u>Old Mill Creek</u>							
BR21: Old Mill Creek downstream from Red Mill Pond							
	6/8/2016	11:40	Surfc		No HABs found		
<u>Prime Hook Creek</u>							
BR03: Prime Hook Creek at Boat Ramp at Refuge Headquarters							
	6/8/2016	11:00	Surfc		No HABs found		
<u>Red Mill Pond</u>							
BR54: Red Mill Pond outlet at Rt 1							
	6/8/2016	12:00	Surfc		No HABs found		
Delaware Bay							
<u>Canary Creek</u>							
BR40: Canary Creek at Pilottown Rd							
	5/31/2016	7:19	Surfc	"Gymnodinoid" sp. (S)	25-40 um Grn	Present	
				<i>Heterocapsa rotundata (B)</i>		Present	
				<i>Karlodinium veneficum (T)</i>		Present	
	6/6/2016	7:33		<i>Heterocapsa rotundata (B)</i>		Present	
				<i>Karlodinium veneficum (T)</i>		Present	
				<i>Rhizosolenia spp. (T)</i>		Present	
<u>Delaware Bay</u>							
DB01: End of Cape Shores pier							
	5/31/2016	8:53	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
				<i>Karlodinium veneficum (T)</i>		Present	
				<i>Prorocentrum minimum (T)</i>		Present	
				<i>Rhizosolenia spp. (T)</i>		Present	
Indian River							
<u>Indian River</u>							

Name subsripts: (B) - nontoxic bloom former; (B*) - nontoxic bloom former reported only at levels > 10 MC/L; (S) - cell similar to a known toxic cell; (T) - potentially toxic cell. MC/L - Million Cells per Liter.

Abundance Levels: Not Found: Looked for, but no cells found; Very Rare: < 0.001 MC/L; Rare 0.001 - 0.01 MC/L; Present: 0.01 - 0.1 MC/L; Common: 0.1 - 1 MC/L; Many: 1 - 10 MC/L; Abundant: 10 - 100 MC/L; Very Abundant: > 100 MC/L.

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Indian River							
<u>Indian River</u>							
IR11: Pot Nets Seaside Pier							
	6/6/2016	10:00	Surfc	"Gymnodinioid" sp. (S)	25-40 um Grn	Present	
				<i>Heterocapsa rotundata</i> (B)		Present	
				<i>Heterosigma akashiwo</i> (T)		Present	
				<i>Karlodinium veneficum</i> (T)		Present	
				<i>Rhizosolenia</i> spp. (T)		Present	
IR24: Iron Branch - County road 331 at bridge							
	6/6/2016	9:16	Surfc		No HABs found		
IR36: James Farm, base of Pasture Point Knee deep 150 yds from shore							
	6/7/2016	7:33	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
				<i>Rhizosolenia</i> spp. (T)		Present	
<u>Pepper Creek</u>							
IR51: Pepper Creek, Creekside							
	6/7/2016	7:55	Surfc	<i>Gyrodinium instriatum</i> (B)		Common	0.425
				<i>Karlodinium veneficum</i> (T)		Present	
				<i>Peridinium</i> sp. (B)	25um flat green	Present	
				<i>Scrippsiella</i> sp. (B)		Present	
<u>Vines Creek</u>							
IR38: Vines Lane							
	6/7/2016	7:45	Surfc		No HABs found		
Little Assawoman Bay							
<u>Dirickson Creek</u>							
LA03: Mulberry Landing							
	6/6/2016	7:17	Surfc	<i>Akashiwo sanguinea</i> (T)		Present	
				<i>Karlodinium veneficum</i> (T)		Present	
				<i>Scrippsiella</i> sp. (B)		Present	
LA09: Dirickson Creek at Road 381 bridge.							
	6/6/2016	7:56	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Present	
<u>Jefferson Creek</u>							
SB10E: Russell Canal east dead end							
	6/7/2016	7:26	Surfc	<i>Chloromorom toxicum</i> (T)		Present	
				<i>Heterocapsa rotundata</i> (B)		Present	
				<i>Karlodinium veneficum</i> (T)		Present	
				<i>Pleurochrysis carterae</i> (B*)		Abundant	19.800
				<i>Prorocentrum minimum</i> (T)		Present	
				<i>Protoperidinium quinquecorne</i> (B)		Present	
SB10W: Russell Canal west dead end							
	6/7/2016	7:45	Surfc	<i>Chloromorom toxicum</i> (T)		Present	
				<i>Heterosigma akashiwo</i> (T)		Common	0.150
				<i>Karlodinium veneficum</i> (T)		Present	
<u>Little Assawoman Bay</u>							
LA46: Fenwick Island Tide Gauge							
	6/7/2016	8:50	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
				<i>Karlodinium veneficum</i> (T)		Present	
Rehoboth Bay							
<u>Bald Eagle Creek</u>							
RB64: Torquay Canal, west side of Land's End near UD Site #1							

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<u>Bald Eagle Creek</u>							
RB64: Torquay Canal, west side of Land's End near UD Site #1							
	5/31/2016	13:25	Surfc	<i>Karlodinium veneficum</i> (T)		Common	0.188
				<i>Prorocentrum minimum</i> (T)		Common	0.863
				<i>Scrippsiella sp.</i> (B)		Present	
	6/7/2016	9:00		<i>Dinophysis acuminata</i> (T)		Many	1.420
				<i>Heterosigma akashiwo</i> (T)		Common	0.688
				<i>Karlodinium veneficum</i> (T)		Present	
	6/14/2016	9:35		<i>Chloromorom toxicum</i> (T)		Common	0.100
				<i>Dinophysis acuminata</i> (T)		Common	0.131
				<i>Eutreptiella sp.</i> (B)		Many	1.780
				<i>Karlodinium veneficum</i> (T)		Common	0.125
				<i>Microcystis spp.</i> (T)		Common	0.625
				<i>Prorocentrum minimum</i> (T)		Common	0.100
				<i>Prorocentrum sp.</i> (T)		Present	
<u>Guinea Creek</u>							
RB06: Guinea Creek (Winding Creek Village)							
	6/7/2016	7:21	Surfc	<i>Chaetoceros spp.</i> (T)		Common	0.250
				<i>Gyrodinium instriatum</i> (B)		Present	
				<i>Heterosigma akashiwo</i> (T)		Present	
				<i>Karlodinium veneficum</i> (T)		Present	
<u>Love Creek</u>							
RB34: Love Creek at Rt 24 Bridge							
	6/8/2016	10:52	Surfc	<i>Gyrodinium instriatum</i> (B)		Common	0.175
				<i>Heterocapsa rotundata</i> (B)		Present	
				<i>Scrippsiella sp.</i> (B)		Present	
RB43: Mulberry Knoll							
	6/8/2016	13:05	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
				<i>Heterosigma akashiwo</i> (T)		Present	
				<i>Karlodinium veneficum</i> (T)		Present	

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