

# Harmful Algae Report

All data between 7/28/2017 and 8/11/2017

University of Delaware Citizen Monitoring Program

Water Body Tributary Site	Date	Time	Sample Depth	Name	Comment if ID uncertain	Abundance	MC/L
<b>Atlantic Ocean</b>							
RWPM14: Tower Rd Ocean, Delaware Seashore State Park							
	8/3/2017	10:00	Surfc	<i>Chaetoceros spp. (T)</i>		Rare	
				<i>Heterocapsa rotundata (B)</i>		Present	
				<i>Karlodinium veneficum (T)</i>		Present	
				<i>Prorocentrum minimum (T)</i>		Very Rare	
				<i>Prorocentrum triestinum (B)</i>		Present	
	8/10/2017	9:40		"Gymnodinioid" sp. (S)	10-15 um Grn	Present	
				<i>Chaetoceros spp. (T)</i>		Present	
				<i>Heterocapsa rotundata (B)</i>		Common	0.113
				<i>Prorocentrum triestinum (B)</i>		Rare	
				<i>Rhizosolenia spp. (T)</i>		Rare	
<b>Broadkill River</b>							
<u>Broadkill River</u>							
BR01: Broadkill river @ PEL dock.							
	8/2/2017	9:23	Net	<i>Chaetoceros spp. (T)</i>			
				<i>Kryptoperidinium foliaceum (B)</i>			
				<i>Prorocentrum scutellum (B)</i>			
				<i>Prorocentrum triestinum (B)</i>			
				<i>Scrippsiella sp. (B)</i>			
		9:25	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	8/9/2017	8:50	Net	<i>Akashiwo sanguinea (T)</i>			
				<i>Chaetoceros spp. (T)</i>			
				<i>Heterocapsa rotundata (B)</i>			
				<i>Karlodinium veneficum (T)</i>			
				<i>Prorocentrum triestinum (B)</i>			
				<i>Scrippsiella sp. (B)</i>			
			Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
				<i>Scrippsiella sp. (B)</i>		Present	
BR20: Broadkill River at Milton tidal pond							
	8/9/2017	7:56	Surfc	<i>Microcystis spp. (T)</i>		Many	3.750
<u>Diamond Pond</u>							
BR48: Diamond Pond at Spillway							
	8/9/2017	8:30	Surfc		No HABs found		
<u>Old Mill Creek</u>							
BR21: Old Mill Creek downstream from Red Mill Pond							
	8/9/2017	9:47	Surfc	<i>(Unknown) (B*)</i>	Thin cyano straight	Abundant	34.560
				<i>Aphanizomenon spp. (T)</i>		Abundant	56.470
				<i>Heterosigma akashiwo (T)</i>		Present	
				<i>Microcystis spp. (T)</i>		Very Abundant	119.500
<u>Red Mill Pond</u>							
BR54: Red Mill Pond outlet at Rt 1							
	8/9/2017	10:57	Surfc	<i>(Unknown) (B*)</i>	Thin cyano coiled	Abundant	15.400
				<i>(Unknown) (B*)</i>	Thin cyano straight	Abundant	72.600
				<i>Anabaena spp. (T)</i>		Common	

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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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<b>Broadkill River</b>							
<u>Red Mill Pond</u>							
BR54: Red Mill Pond outlet at Rt 1							
	8/9/2017	10:57	Surfc	<i>Aphanizomenon spp. (T)</i>		Abundant	56.200
				<i>Microcystis spp. (T)</i>		Abundant	50.800
<b>Delaware Bay</b>							
<u>Canary Creek</u>							
BR19: Canary Creek at New Road							
	8/8/2017	9:20	Surfc		No HABs found		
BR40: Canary Creek at Pilottown Rd							
	8/8/2017	7:29	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
				<i>Heterosigma akashiwo (T)</i>		Present	
				<i>Prorocentrum triestinum (B)</i>		Present	
<u>Delaware Bay</u>							
DB01: End of Cape Shores pier							
	8/3/2017	8:52	Surfc	<i>Chaetoceros spp. (T)</i>		Present	
				<i>Heterocapsa rotundata (B)</i>		Present	
				<i>Heterocapsa sp. (B)</i>		Present	
				<i>Karlodinium veneficum (T)</i>		Rare	
				<i>Prorocentrum triestinum (B)</i>		Rare	
				<i>Protoperidinium quinquecorne (B)</i>		Present	
<b>Indian River</b>							
<u>Indian River</u>							
IR02a: Rosedale crabbing pier							
	8/7/2017	10:07	Surfc	<i>Akashiwo sanguinea (T)</i>		Common	0.100
				<i>Gyrodinium instriatum (B)</i>		Common	0.238
				<i>Heterosigma akashiwo (T)</i>		Common	0.138
				<i>Karlodinium veneficum (T)</i>		Present	
				<i>Prorocentrum triestinum (B)</i>		Present	
				<i>Protoperidinium quinquecorne (B)</i>		Present	
IR11: Pot Nets Seaside Pier							
	8/7/2017	10:50	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
				<i>Heterosigma akashiwo (T)</i>		Present	
				<i>Prorocentrum triestinum (B)</i>		Present	
IR24: Iron Branch - County road 331 at bridge							
	8/7/2017	9:32	Surfc	<i>Gyrodinium instriatum (B)</i>		Many	4.400
IR36: James Farm, base of Pasture Point Knee deep 150 yds from shore							
	8/8/2017	7:25	Surfc		No HABs found		
<u>Pepper Creek</u>							
IR51: Pepper Creek, Creekside							
	8/8/2017	9:10	Surfc	<i>Gyrodinium instriatum (B)</i>		Abundant	16.390
				<i>Heterosigma akashiwo (T)</i>		Present	
<u>Vines Creek</u>							
IR38: Vines Lane							
	8/8/2017	7:45	Surfc	<i>Gyrodinium instriatum (B)</i>		Abundant	12.320
				<i>Heterosigma akashiwo (T)</i>		Present	
				<i>Kryptoperidinium foliaceum (B)</i>		Present	
				<i>Scrippsiella sp. (B)</i>		Present	
<u>White Creek</u>							

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<b>Indian River</b>							
<u>White Creek</u>							
IR32: Holly Terrace Acres Canal Dead End, White Creek							
	7/31/2017	8:40	Surfc	<i>Akashiwo sanguinea (T)</i>		Present	
				<i>Gyrodinium instriatum (B)</i>		Common	0.125
				<i>Heterocapsa rotundata (B)</i>		Present	
				<i>Kryptoperidinium foliaceum (B)</i>		Present	
				<i>Protoperidinium quinquecorne (B)</i>		Present	
				<i>Scrippsiella sp. (B)</i>		Common	0.142
	8/7/2017	8:49		<i>Akashiwo sanguinea (T)</i>		Present	
				<i>Chattonella subsalsa (T)</i>		Present	
				<i>Chloromorom toxicum (T)</i>		Common	0.463
				<i>Gyrodinium instriatum (B)</i>		Present	
				<i>Heterocapsa rotundata (B)</i>		Present	
				<i>Heterosigma akashiwo (T)</i>		Present	
				<i>Karlodinium veneficum (T)</i>		Present	
				<i>Kryptoperidinium foliaceum (B)</i>		Common	0.338
				<i>Peridinium sp. (B)</i>	25um flat green	Present	
				<i>Prorocentrum triestinum (B)</i>		Present	
				<i>Protoperidinium quinquecorne (B)</i>		Common	0.113
				<i>Scrippsiella sp. (B)</i>		Present	
<b>Little Assawoman Bay</b>							
<u>Dirickson Creek</u>							
LA03: Mulberry Landing							
	8/8/2017	7:03	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
				<i>Karlodinium veneficum (T)</i>		Present	
LA09: Dirickson Creek at Road 381 bridge.							
	8/8/2017	7:47	Surfc		No HABs found		
<u>Jefferson Creek</u>							
SB10E: Russell Canal east dead end							
	8/1/2017	8:01	Surfc	<i>Chattonella subsalsa (T)</i>		Present	
				<i>Chloromorom toxicum (T)</i>		Present	
				<i>Fibrocapsa japonica (T)</i>		Present	
				<i>Heterocapsa rotundata (B)</i>		Common	0.100
				<i>Karlodinium veneficum (T)</i>		Common	0.200
				<i>Oscillatoria spp. (B)</i>		Common	
				<i>Protoperidinium quinquecorne (B)</i>		Present	
	8/8/2017	7:00		<i>Karlodinium veneficum (T)</i>		Present	
SB10W: Russell Canal west dead end							
	8/1/2017	8:18	Surfc	<i>Chattonella subsalsa (T)</i>		Present	
				<i>Chloromorom toxicum (T)</i>		Present	
				<i>Gyrodinium instriatum (B)</i>		Present	
				<i>Heterocapsa rotundata (B)</i>		Present	
				<i>Karlodinium veneficum (T)</i>		Common	0.250
				<i>Kryptoperidinium foliaceum (B)</i>		Present	
				<i>Leptocylindrus spp. (B*)</i>		Abundant	44.000
	8/8/2017	6:55		<i>Heterocapsa rotundata (B)</i>		Present	
<u>Little Assawoman Bay</u>							
LA46: Fenwick Island Tide Gauge							
	8/8/2017	10:16	Surfc	<i>Fibrocapsa japonica (T)</i>		Present	

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<b>Little Assawoman Bay</b>							
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LA46: Fenwick Island Tide Gauge							
	8/8/2017	10:16	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
				<i>Protoperidinium quinquecorne</i> (B)		Present	
<b>Rehoboth Bay</b>							
<u>Bald Eagle Creek</u>							
RB64: Torquay Canal, west side of Land's End near UD Site #1							
	7/31/2017	12:17	Surfc	<i>Chloromorom toxicum</i> (T)		Present	
				<i>Heterosigma akashiwo</i> (T)		Common	0.563
				<i>Karlodinium veneficum</i> (T)		Present	
	8/7/2017	10:20		<i>Chattonella subsalsa</i> (T)		Common	0.150
				<i>Chloromorom toxicum</i> (T)		Present	
				<i>Gyrodinium instriatum</i> (B)		Present	
				<i>Heterocapsa rotundata</i> (B)		Present	
				<i>Heterosigma akashiwo</i> (T)		Common	0.113
				<i>Karlodinium veneficum</i> (T)		Common	0.213
				<i>Protoperidinium quinquecorne</i> (B)		Present	
				<i>Scrippsiella</i> sp. (B)		Present	
<u>Guinea Creek</u>							
RB06: Guinea Creek (Winding Creek Village)							
	8/7/2017	7:27	Surfc	(Unknown) sp. (B*)	5-15 um grn trdrp flag	Abundant	13.200
				<i>Chattonella subsalsa</i> (T)		Common	0.150
				<i>Gyrodinium instriatum</i> (B)		Present	
				<i>Heterosigma akashiwo</i> (T)		Present	
				<i>Karlodinium veneficum</i> (T)		Common	0.175
				<i>Kryptoperidinium foliaceum</i> (B)		Present	
				<i>Protoperidinium quinquecorne</i> (B)		Present	
<u>Love Creek</u>							
RB34: Love Creek at Rt 24 Bridge							
	8/7/2017	10:00	Surfc	<i>Chloromorom toxicum</i> (T)		Common	0.300
				<i>Gyrodinium instriatum</i> (B)		Common	0.188
				<i>Heterosigma akashiwo</i> (T)		Present	
				<i>Kryptoperidinium foliaceum</i> (B)		Present	
				<i>Prorocentrum triestinum</i> (B)		Present	
RB80: Upper Love Creek at Webb Landing							
	8/9/2017	17:00	Surfc	(Unknown) sp. (B*)	5-10 um Obl/Grn	Abundant	22.000
				<i>Chloromorom toxicum</i> (T)		Common	0.275
				<i>Kryptoperidinium foliaceum</i> (B)		Present	
	8/10/2017	7:15		<i>Heterosigma akashiwo</i> (T)		Present	
				<i>Karlodinium veneficum</i> (T)		Present	

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