

Harmful Algae Report

All data between 8/14/2014 and 8/29/2014

University of Delaware Citizen Monitoring Program

Water Body Tributary Site	Date	Time	Smpl Dpth	Name	Comment if ID uncertain	Abundance	MC/L
Atlantic Ocean							
RWPM14: Tower Rd Ocean, Delaware Seashore State Park							
	8/27/2014	9:10	Surfc	<i>Akashiwo sanguinea</i> (T)		Very Rare	
	8/27/2014	9:10	Surfc	<i>Dinophysis acuminata</i> (T)		Rare	0.001
	8/27/2014	9:10	Surfc	<i>Karenia papilionacea</i> (T)		Very Rare	
	8/27/2014	9:10	Surfc	<i>Prorocentrum scutellum</i> (B)		Very Rare	
	8/27/2014	9:10	Surfc	<i>Prorocentrum triestinum</i> (B)		Present	0.012
	8/27/2014	9:10	Surfc	<i>Pseudo-nitzschia</i> spp. (T)		Rare	0.002
	8/27/2014	9:10	Surfc	<i>Rhizosolenia</i> spp. (T)		Very Rare	
	8/27/2014	9:10	Surfc	<i>Scrippsiella</i> sp. (B)		Very Rare	
RWPM9: Gordon's Pond (1)							
	8/21/2014	8:45	Surfc	<i>Chaetoceros</i> spp. (T)		Rare	0.001
	8/21/2014	8:45	Surfc	<i>Dinophysis acuminata</i> (T)		Very Rare	
	8/21/2014	8:45	Surfc	<i>Karenia papilionacea</i> (T)		Rare	0.001
	8/21/2014	8:45	Surfc	<i>Prorocentrum scutellum</i> (B)		Rare	0.001
	8/21/2014	8:45	Surfc	<i>Prorocentrum triestinum</i> (B)		Rare	0.003
	8/21/2014	8:45	Surfc	<i>Pseudo-nitzschia</i> spp. (T)		Rare	0.003
	8/21/2014	8:45	Surfc	<i>Rhizosolenia</i> spp. (T)		Rare	0.001
RWPMVIII: Town of Fenwick							
	8/27/2014	8:30	Surfc	<i>Akashiwo sanguinea</i> (T)		Very Rare	
	8/27/2014	8:30	Surfc	<i>Amphidinium</i> spp. (T)		Very Rare	
	8/27/2014	8:30	Surfc	<i>Dinophysis acuminata</i> (T)		Rare	0.001
	8/27/2014	8:30	Surfc	<i>Ditylum</i> spp. (T)		Very Rare	
	8/27/2014	8:30	Surfc	<i>Karenia papilionacea</i> (T)		Very Rare	
	8/27/2014	8:30	Surfc	<i>Prorocentrum scutellum</i> (B)		Rare	0.004
	8/27/2014	8:30	Surfc	<i>Prorocentrum triestinum</i> (B)		Rare	0.007
	8/27/2014	8:30	Surfc	<i>Pseudo-nitzschia</i> spp. (T)		Very Rare	
	8/27/2014	8:30	Surfc	<i>Scrippsiella</i> sp. (B)		Very Rare	
Broadkill River							
BR01: Broadkill river @ PEL dock.							
	8/20/2014	8:50	Net	<i>Heterocapsa rotundata</i> (B)			
	8/20/2014	8:50	Net	<i>Karlodinium veneficum</i> (T)			
	8/20/2014	8:50	Net	<i>Microcystis</i> spp. (T)			
	8/20/2014	8:50	Net	<i>Prorocentrum scutellum</i> (B)			
	8/20/2014	8:50	Net	<i>Prorocentrum triestinum</i> (B)			
	8/20/2014	8:50	Net	<i>Rhizosolenia</i> spp. (T)			
	8/20/2014	8:50	Surfc	<i>Heterocapsa rotundata</i> (B)		Common	0.160
	8/20/2014	8:50	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	8/27/2014	8:50	Net	<i>Dinophysis acuminata</i> (T)			
	8/27/2014	8:50	Net	<i>Fibrocapsa japonica</i> (T)			

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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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Broadkill River							
BR01: Broadkill river @ PEL dock.							
	8/27/2014	8:50	Net	<i>Heterocapsa rotundata</i> (B)			
	8/27/2014	8:50	Net	<i>Heterosigma akashiwo</i> (T)			
	8/27/2014	8:50	Net	<i>Karlodinium veneficum</i> (T)			
	8/27/2014	8:50	Net	<i>Prorocentrum minimum</i> (T)			
	8/27/2014	8:50	Net	<i>Prorocentrum scutellum</i> (B)			
	8/27/2014	8:50	Net	<i>Prorocentrum triestinum</i> (B)			
	8/27/2014	8:50	Net	<i>Rhizosolenia spp.</i> (T)			
	8/27/2014	8:50	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	8/27/2014	8:50	Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
	8/27/2014	8:50	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	8/27/2014	8:50	Surfc	<i>Prorocentrum triestinum</i> (B)		Present	
BR20: Broadkill River at Milton tidal pond							
	8/20/2014	6:30	Surfc	<i>Anabaena spp.</i> (T)		Common	0.120
	8/20/2014	6:30	Surfc	<i>Microcystis spp.</i> (T)		Common	0.630
<u>Diamond Pond</u>							
BR48: Diamond Pond at Spillway							
	8/20/2014	11:17	Surfc	<i>Aphanizomenon spp.</i> (T)		Many	2.125
	8/20/2014	11:17	Surfc	<i>Microcystis spp.</i> (T)		Common	0.625
	8/20/2014	11:17	Surfc	<i>Planktolyngbya sp.</i> (B*)		Very Abundant	123.000
<u>Old Mill Creek</u>							
BR21: Old Mill Creek downstream from Red Mill Pond							
	8/20/2014	12:32	Surfc	<i>Microcystis spp.</i> (T)		Many	1.130
<u>Prime Hook Creek</u>							
BR03: Prime Hook Creek at Boat Ramp at Refuge Headquarters							
	8/20/2014	12:01	Surfc	(Unknown) sp. (B*)	5-15 um grn trdrp flag	Abundant	13.200
	8/20/2014	12:01	Surfc	<i>Amphidinium spp.</i> (T)		Many	1.160
	8/20/2014	12:01	Surfc	<i>Anabaena spp.</i> (T)		Abundant	39.600
	8/20/2014	12:01	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	8/20/2014	12:01	Surfc	<i>Microcystis spp.</i> (T)		Abundant	96.800
	8/20/2014	12:01	Surfc	<i>Protoperdinium quinquecorne</i> (B)		Common	0.160
<u>Wagamon's Pond</u>							
BR44: Wagamon's Pond on Northern Shoreline, Milton							
	8/21/2014	10:00	Surfc	<i>Lyngbya</i> (T)		Present	
Delaware Bay							
DB01: End of Cape Shores pier							
	8/19/2014	10:10	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	8/27/2014	8:17	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	8/27/2014	8:17	Surfc	<i>Prorocentrum triestinum</i> (B)		Present	
<u>Canary Creek</u>							
BR40: Canary Creek at Pilottown Rd							
	8/19/2014	6:45	Surfc	<i>Chattonella subsalsa</i> (T)		Present	

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Delaware Bay							
<u>Canary Creek</u>							
BR40: Canary Creek at Pilottown Rd							
	8/19/2014	6:45	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	8/19/2014	6:45	Surfc	<i>Karodinium veneficum</i> (T)		Present	
Indian River							
IR24: Iron Branch - County road 331 at bridge							
	8/18/2014	10:02	Surfc	<i>Gyrodinium instriatum</i> (B)		Many	4.840
<u>Assawoman Canal</u>							
IR50: Assawoman Canal at N end, Ocean View Marina							
	8/19/2014	7:30	Surfc	<i>Akashiwo sanguinea</i> (T)		Present	
	8/19/2014	7:30	Surfc	<i>Chloromorom toxicum</i> (T)		Present	
	8/19/2014	7:30	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
<u>Bethany Loop Canal</u>							
IR62: Loop Canal, Pa Ave terminus, Bethany Beach							
	8/18/2014	7:45	Surfc	<i>Amphidinium spp.</i> (T)		Present	
	8/18/2014	7:45	Surfc	<i>Chattonella subsalsa</i> (T)		Present	
	8/18/2014	7:45	Surfc	<i>Chloromorom toxicum</i> (T)		Present	
	8/18/2014	7:45	Surfc	<i>Gyrodinium instriatum</i> (B)		Many	3.520
	8/18/2014	7:45	Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
	8/18/2014	7:45	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Present	
	8/18/2014	7:45	Surfc	<i>Protoperidinium quinquecorne</i> (B)		Present	
<u>Indian River</u>							
IR11: Pot Nets Seaside Pier							
	8/18/2014	11:15	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
IR36: James Farm, base of Pasture Point Knee deep 150 yds from shore							
	8/18/2014	8:04	Surfc	<i>Akashiwo sanguinea</i> (T)		Present	
	8/18/2014	8:04	Surfc	<i>Chloromorom toxicum</i> (T)		Present	
	8/18/2014	8:04	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	8/18/2014	8:04	Surfc	<i>Prorocentrum triestinum</i> (B)		Present	
IR39: North side of Inlet at Wheelchair fishing platform under new bridge.							
	8/21/2014	7:05	Surfc	<i>Akashiwo sanguinea</i> (T)		Very Rare	
	8/21/2014	7:05	Surfc	<i>Dinophysis acuminata</i> (T)		Very Rare	
	8/21/2014	7:05	Surfc	<i>Gyrodinium instriatum</i> (B)		Very Rare	
	8/21/2014	7:05	Surfc	<i>Heterocapsa rotundata</i> (B)		Very Rare	
	8/21/2014	7:05	Surfc	<i>Karenia papilionacea</i> (T)		Very Rare	
	8/21/2014	7:05	Surfc	<i>Prorocentrum scutellum</i> (B)		Rare	0.003
	8/21/2014	7:05	Surfc	<i>Prorocentrum triestinum</i> (B)		Rare	0.002
	8/21/2014	7:05	Surfc	<i>Rhizosolenia spp.</i> (T)		Very Rare	
	8/21/2014	7:05	Surfc	<i>Scrippsiella sp.</i> (B)		Very Rare	
<u>Vines Creek</u>							
IR38: Vines Lane							
	8/19/2014	7:50	Surfc	<i>Chloromorom toxicum</i> (T)		Present	

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Indian River							
<u>Vines Creek</u>							
IR38: Vines Lane							
	8/19/2014	7:50	Surfc	<i>Heterocapsa rotundata</i> (B)		Common	0.100
	8/19/2014	7:50	Surfc	<i>Karodinium veneficum</i> (T)		Present	
<u>White Creek</u>							
IR32: Holly Terrace Acres Canal Dead End, White Creek							
	8/18/2014	9:00	Surfc	<i>Chloromorom toxicum</i> (T)		Present	
	8/18/2014	9:00	Surfc	<i>Heterocapsa rotundata</i> (B)		Many	6.600
	8/18/2014	9:00	Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
	8/18/2014	9:00	Surfc	<i>Karodinium veneficum</i> (T)		Present	
	8/18/2014	9:00	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Common	0.100
	8/18/2014	9:00	Surfc	<i>Protoperidinium quinquecorne</i> (B)		Present	
	8/25/2014	8:40	Surfc	<i>Chloromorom toxicum</i> (T)		Present	
	8/25/2014	8:40	Surfc	<i>Heterocapsa rotundata</i> (B)		Common	0.140
	8/25/2014	8:40	Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
	8/25/2014	8:40	Surfc	<i>Karodinium veneficum</i> (T)		Present	
	8/25/2014	8:40	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Common	0.790
	8/25/2014	8:40	Surfc	<i>Scrippsiella sp.</i> (B)		Present	
Little Assawoman Bay							
LA46: Fenwick Island Tide Gauge							
	8/19/2014	8:58	Surfc	<i>Chloromorom toxicum</i> (T)		Present	
	8/19/2014	8:58	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
<u>Assawoman Canal</u>							
LA10: Assawoman Canal S end, Kent Ave Bridge							
	8/18/2014	7:20	Surfc	<i>Chattonella subsalsa</i> (T)		Present	
	8/18/2014	7:20	Surfc	<i>Chloromorom toxicum</i> (T)		Common	0.100
	8/18/2014	7:20	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	8/18/2014	7:20	Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
<u>Dirickson Creek</u>							
LA03: Mulberry Landing							
	8/18/2014	7:33	Surfc	<i>Akashiwo sanguinea</i> (T)		Present	
	8/18/2014	7:33	Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
	8/18/2014	7:33	Surfc	<i>Karodinium veneficum</i> (T)		Present	
LA09: Dirickson Creek at Road 381 bridge.							
	8/18/2014	8:07	Surfc	<i>Akashiwo sanguinea</i> (T)		Present	
	8/18/2014	8:07	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	8/18/2014	8:07	Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
	8/18/2014	8:07	Surfc	<i>Scrippsiella sp.</i> (B)		Present	
<u>Jefferson Creek</u>							
SB10E: Russell Canal east dead end							
	8/19/2014	8:04	Surfc	<i>Chloromorom toxicum</i> (T)		Many	1.450
	8/19/2014	8:04	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	

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Little Assawoman Bay							
<u>Jefferson Creek</u>							
SB10E: Russell Canal east dead end							
	8/19/2014	8:04	Surfc	<i>Heterocapsa rotundata</i> (B)		Common	0.130
	8/19/2014	8:04	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	8/26/2014	7:53	Surfc	<i>Chloromorom toxicum</i> (T)		Many	1.075
	8/26/2014	7:53	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Present	
SB10W: Russell Canal west dead end							
	8/19/2014	8:19	Surfc	<i>Chloromorom toxicum</i> (T)		Common	0.240
	8/19/2014	8:19	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	8/19/2014	8:19	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	8/19/2014	8:19	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	8/26/2014	8:10	Surfc	<i>Chloromorom toxicum</i> (T)		Present	
	8/26/2014	8:10	Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
Rehoboth Bay							
RB07: West Bay Park							
	8/19/2014	9:10	Surfc	<i>Akashiwo sanguinea</i> (T)		Present	
	8/19/2014	9:10	Surfc	<i>Chloromorom toxicum</i> (T)		Present	
	8/19/2014	9:10	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	8/19/2014	9:10	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
<u>Bald Eagle Creek</u>							
RB64: Torquay Canal, west side of Land's End near UD Site #1							
	8/18/2014	8:10	Surfc	<i>Chloromorom toxicum</i> (T)		Common	0.780
	8/18/2014	8:10	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	8/18/2014	8:10	Surfc	<i>Heterosigma akashiwo</i> (T)		Common	0.110
	8/18/2014	8:10	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Present	
	8/25/2014	7:30	Surfc	<i>Chloromorom toxicum</i> (T)		Abundant	16.400
	8/25/2014	7:30	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	8/25/2014	7:30	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	8/25/2014	7:30	Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
	8/25/2014	7:30	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	8/25/2014	7:30	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Present	
<u>Guinea Creek</u>							
RB05: Mouth of Guinea Creek (Pot Nets Creekside)							
	8/18/2014	11:37	Surfc	<i>Akashiwo sanguinea</i> (T)		Present	
	8/18/2014	11:37	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	8/18/2014	11:37	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	8/18/2014	11:37	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
RB06: Guinea Creek (Winding Creek Village)							
	8/18/2014	8:30	Surfc	<i>Heterocapsa rotundata</i> (B)		Common	0.200
	8/18/2014	8:30	Surfc	<i>Heterosigma akashiwo</i> (T)		Common	0.138
	8/18/2014	8:30	Surfc	<i>Karlodinium veneficum</i> (T)		Common	0.150
	8/18/2014	8:30	Surfc	<i>Protoperidinium quinquecorne</i> (B)		Present	

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Rehoboth Bay						
<u>Love Creek</u>						
RB34: Love Creek at Rt 24 Bridge						
	8/18/2014	8:33	Surfc	<i>Gyrodinium instriatum (B)</i>	Common	0.340

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