

Harmful Algae Report

All data between 9/3/2015 and 9/24/2015

University of Delaware Citizen Monitoring Program

Water Body Tributary Site	Date	Time	Sample Depth	Name	Comment if ID uncertain	Abundance	MC/L
Atlantic Ocean							
RWPM14: Tower Rd Ocean, Delaware Seashore State Park							
	9/3/2015	8:45	Surfc	<i>Akashiwo sanguinea</i> (T)		Very Rare	
				<i>Dinophysis acuminata</i> (T)		Very Rare	
				<i>Ditylum spp.</i> (T)		Very Rare	
				<i>Heterocapsa rotundata</i> (B)		Present	
				<i>Karlodinium veneficum</i> (T)		Present	
				<i>Prorocentrum triestinum</i> (B)		Present	
				<i>Scrippsiella sp.</i> (B)		Present	
	9/17/2015	10:15		<i>Chaetoceros spp.</i> (B)		Present	
				<i>Ditylum spp.</i> (T)		Rare	0.006
				<i>Karenia papilionacea</i> (T)		Very Rare	
				<i>Karlodinium veneficum</i> (T)		Present	
				<i>Prorocentrum triestinum</i> (B)		Rare	0.002
				<i>Pseudo-nitzschia spp.</i> (T)		Very Rare	
				<i>Rhizosolenia spp.</i> (T)		Rare	0.002
				<i>Scrippsiella sp.</i> (B)		Rare	0.001
RWPM8: Cape Henlopen State Park Beach (2)							
	9/10/2015	8:43	Surfc	" <i>Gymnodinoid</i> " sp. (S)	25-40 um Grn	Present	
				<i>Akashiwo sanguinea</i> (T)		Very Rare	
				<i>Amphidinium spp.</i> (T)		Very Rare	
				<i>Chaetoceros spp.</i> (B)		Common	0.125
				<i>Dinophysis acuminata</i> (T)		Very Rare	
				<i>Ditylum spp.</i> (T)		Rare	0.007
				<i>Heterocapsa rotundata</i> (B)		Rare	0.002
				<i>Karenia papilionacea</i> (T)		Very Rare	
				<i>Prorocentrum triestinum</i> (B)		Present	
				<i>Pseudo-nitzschia spp.</i> (T)		Rare	0.003
				<i>Rhizosolenia spp.</i> (T)		Rare	0.001
				<i>Scrippsiella sp.</i> (B)		Rare	0.004
RWPMVIII: Town of Fenwick							
	9/3/2015	8:25	Surfc	<i>Akashiwo sanguinea</i> (T)		Very Rare	
				<i>Dinophysis acuminata</i> (T)		Very Rare	
				<i>Heterocapsa rotundata</i> (B)		Present	
				<i>Karenia papilionacea</i> (T)		Very Rare	
				<i>Karlodinium veneficum</i> (T)		Present	
				<i>Prorocentrum triestinum</i> (B)		Present	
				<i>Scrippsiella sp.</i> (B)		Very Rare	
	9/17/2015	8:47		" <i>Gymnodinoid</i> " sp. (S)	25-40 um Grn	Present	
				<i>Chaetoceros spp.</i> (B)		Present	0.020
				<i>Dinophysis acuminata</i> (T)		Rare	0.002
				<i>Ditylum spp.</i> (T)		Rare	0.005
				<i>Heterocapsa rotundata</i> (B)		Common	0.225
				<i>Karenia papilionacea</i> (T)		Rare	0.001
				<i>Karlodinium veneficum</i> (T)		Present	
				<i>Kryptoperidinium foliaceum</i> (B)		Present	

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University of Delaware Citizen Monitoring Program

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Atlantic Ocean							
RWPMVIII: Town of Fenwick							
	9/17/2015	8:47	Surfc	<i>Prorocentrum scutellum (B)</i>		Very Rare	
				<i>Prorocentrum triestinum (B)</i>		Rare	0.005
				<i>Scrippsiella sp. (B)</i>		Rare	0.002
Broadkill River							
<u>Broadkill River</u>							
BR01: Broadkill river @ PEL dock.							
	9/9/2015	8:45	Net	<i>Heterocapsa rotundata (B)</i>			
			Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
				<i>Karlodinium veneficum (T)</i>		Present	
	9/16/2015		Net	<i>Chaetoceros spp. (B)</i>			
				<i>Ditylum spp. (T)</i>			
			Surfc	<i>Chaetoceros spp. (B)</i>		Present	
				<i>Heterocapsa rotundata (B)</i>		Present	
	9/23/2015		Net	<i>Ditylum spp. (T)</i>			
				<i>Peridinium sp. (B)</i>	25um flat green		
				<i>Rhizosolenia spp. (T)</i>			
			Surfc	<i>Ditylum spp. (T)</i>		Present	
				<i>Peridinium sp. (B)</i>	25um flat green	Present	
				<i>Rhizosolenia spp. (T)</i>		Present	
BR20: Broadkill River at Milton tidal pond							
	9/16/2015	6:30	Surfc	<i>Anabaena spp. (T)</i>		Common	0.250
				<i>Aphanizomenon spp. (T)</i>		Many	6.000
				<i>Microcystis spp. (T)</i>		Abundant	90.000
<u>Diamond Pond</u>							
BR48: Diamond Pond at Spillway							
	9/16/2015	8:15	Surfc	<i>Aphanizomenon spp. (T)</i>		Many	8.875
				<i>Microcystis spp. (T)</i>		Abundant	66.250
<u>Old Mill Creek</u>							
BR21: Old Mill Creek downstream from Red Mill Pond							
	9/16/2015	12:12	Surfc	<i>Chaetoceros spp. (B)</i>		Present	
				<i>Heterocapsa rotundata (B)</i>		Present	
				<i>Kryptoperidinium foliaceum (B)</i>		Present	
<u>Prime Hook Creek</u>							
BR03: Prime Hook Creek at Boat Ramp at Refuge Headquarters							
	9/16/2015	11:43	Surfc	<i>"Gymnodinoid" sp. (B)</i>	25-30 um Lt Grn flat	Many	1.760
				<i>Anabaena spp. (T)</i>		Many	2.125
				<i>Chaetoceros spp. (B)</i>		Many	
				<i>Chattonella subsalsa (T)</i>		Common	0.880
				<i>Chloromorom toxicum (T)</i>		Abundant	57.860
				<i>Gyrodinium instriatum (B)</i>		Many	1.538
				<i>Heterocapsa rotundata (B)</i>		Present	
				<i>Kryptoperidinium foliaceum (B)</i>		Many	1.540
<u>Red Mill Pond</u>							
BR54: Red Mill Pond outlet at Rt 1							
	9/16/2015	10:00	Surfc	<i>(Unknown) (B*)</i>	Thin cyano straight	Very Abundant	246.400
				<i>(Unknown) (B*)</i>	Thin cyano coiled	Very Abundant	127.600
				<i>Aphanizomenon spp. (T)</i>		Abundant	22.000

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Broadkill River							
<u>Red Mill Pond</u>							
BR54: Red Mill Pond outlet at Rt 1							
	9/16/2015	10:00	Surfc	<i>Aphanocapsa sp. (B*)</i>		Abundant	66.000
				<i>Microcystis spp. (T)</i>		Abundant	13.200
<u>Wagamon's Pond</u>							
BR44: Wagamon's Pond on Northern Shoreline, Milton							
	9/17/2015	8:10	Surfc	<i>Aphanizomenon spp. (T)</i>		Many	5.250
				<i>Lyngbya (T)</i>		Present	
				<i>Microcystis spp. (T)</i>		Very Abundant	111.300
				<i>Oscillatoria spp. (B)</i>		Many	1.625
Delaware Bay							
<u>Canary Creek</u>							
BR40: Canary Creek at Pilottown Rd							
	9/15/2015	7:23	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
				<i>Karlodinium veneficum (T)</i>		Present	
<u>Delaware Bay</u>							
DB01: End of Cape Shores pier							
	9/8/2015	7:43	Surfc	"Gymnodinioid" sp. (S)	10-15 um Grn	Present	
				<i>Heterocapsa rotundata (B)</i>		Present	
	9/16/2015	8:56		"Gymnodinioid" sp. (S)	25-40 um Grn	Present	
				"Gymnodinioid" sp. (S)	10-15 um Grn	Present	
				<i>Heterocapsa rotundata (B)</i>		Present	
				<i>Kryptoperidinium foliaceum (B)</i>		Present	
	9/23/2015	8:07		<i>Ditylum spp. (T)</i>		Present	
				<i>Karlodinium veneficum (T)</i>		Present	
				<i>Peridinium sp. (B)</i>	25um flat green	Present	
				<i>Rhizosolenia spp. (T)</i>		Present	
Indian River							
<u>Indian River</u>							
IR04: Warwick Cove							
	9/14/2015	9:58	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
				<i>Karlodinium veneficum (T)</i>		Present	
IR11: Pot Nets Seaside Pier							
	9/14/2015	10:32	Surfc		No HABs found		
IR24: Iron Branch - County road 331 at bridge							
	9/14/2015	9:32	Surfc	<i>Akashiwo sanguinea (T)</i>		Present	
				<i>Gyrodinium instriatum (B)</i>		Many	1.500
				<i>Heterocapsa rotundata (B)</i>		Present	
				<i>Rhizosolenia spp. (T)</i>		Present	
IR36: James Farm, base of Pasture Point Knee deep 150 yds from shore							
	9/15/2015	7:35	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
IR39: North side of Inlet at Wheelchair fishing platform under new bridge.							
	9/10/2015	7:58	Surfc	"Gymnodinioid" sp. (S)	10-15 um Grn	Present	
				<i>Chaetoceros spp. (B)</i>		Present	0.011
				<i>Dinophysis acuminata (T)</i>		Very Rare	
				<i>Ditylum spp. (T)</i>		Rare	0.002
				<i>Heterocapsa rotundata (B)</i>		Present	
				<i>Prorocentrum scutellum (B)</i>		Very Rare	
				<i>Prorocentrum triestinum (B)</i>		Very Rare	

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Indian River							
<u>Vines Creek</u>							
IR38: Vines Lane							
	9/15/2015	8:00	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
<u>White Creek</u>							
IR32: Holly Terrace Acres Canal Dead End, White Creek							
	9/8/2015	8:30	Surfc	<i>Chattonella subsalsa</i> (T)		Common	0.375
				<i>Chloromorom toxicum</i> (T)		Common	0.425
				<i>Heterosigma akashiwo</i> (T)		Present	
				<i>Karlodinium veneficum</i> (T)		Common	0.100
				<i>Kryptoperidinium foliaceum</i> (B)		Common	0.125
	9/14/2015	7:58		<i>Chattonella subsalsa</i> (T)		Present	
				<i>Chloromorom toxicum</i> (T)		Present	
				<i>Gyrodinium instriatum</i> (B)		Present	
				<i>Heterocapsa rotundata</i> (B)		Present	
	9/21/2015	8:43		<i>Chattonella subsalsa</i> (T)		Present	
				<i>Chloromorom toxicum</i> (T)		Common	0.263
				<i>Gyrodinium instriatum</i> (B)		Common	0.188
				<i>Karlodinium veneficum</i> (T)		Present	
				<i>Kryptoperidinium foliaceum</i> (B)		Present	
				<i>V. small, <5 um centrics</i> (B*)		Abundant	77.000
Little Assawoman Bay							
<u>Dirickson Creek</u>							
LA03: Mulberry Landing							
	9/14/2015	7:10	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
LA09: Dirickson Creek at Road 381 bridge.							
	9/14/2015	8:00	Surfc	<i>Chattonella subsalsa</i> (T)		Many	2.250
				<i>Chloromorom toxicum</i> (T)		Common	0.200
				<i>Gyrodinium instriatum</i> (B)		Many	2.690
				<i>Heterocapsa rotundata</i> (B)		Present	
				<i>Heterosigma akashiwo</i> (T)		Present	
				<i>Karlodinium veneficum</i> (T)		Present	
				<i>Kryptoperidinium foliaceum</i> (B)		Present	
<u>Jefferson Creek</u>							
SB10E: Russell Canal east dead end							
	9/8/2015	7:18	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
				<i>Heterosigma akashiwo</i> (T)		Present	
				<i>Karlodinium veneficum</i> (T)		Present	
	9/15/2015	8:04		<i>Chattonella subsalsa</i> (T)		Present	
				<i>Chloromorom toxicum</i> (T)		Common	0.113
				<i>Fibrocapsa japonica</i> (T)		Present	
				<i>Gyrodinium instriatum</i> (B)		Present	
				<i>Heterocapsa rotundata</i> (B)		Common	0.238
				<i>Karlodinium veneficum</i> (T)		Present	
	9/22/2015	7:19		<i>Chloromorom toxicum</i> (T)		Common	0.213
				<i>Eutreptiella sp.</i> (B)		Common	0.175
				<i>Gyrodinium instriatum</i> (B)		Present	
				<i>Heterocapsa rotundata</i> (B)		Present	
				<i>Heterosigma akashiwo</i> (T)		Common	0.263
				<i>Karlodinium veneficum</i> (T)		Present	

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Little Assawoman Bay							
<u>Jefferson Creek</u>							
SB10W: Russell Canal west dead end							
	9/8/2015	7:10	Surfc	<i>Chattonella subsalsa</i> (T)		Common	0.300
				<i>Chloromorom toxicum</i> (T)		Common	0.650
				<i>Fibrocapsa japonica</i> (T)		Common	0.600
				<i>Karlodinium veneficum</i> (T)		Common	0.150
	9/15/2015	8:19		<i>Chattonella subsalsa</i> (T)		Present	
				<i>Chloromorom toxicum</i> (T)		Common	0.125
				<i>Gyrodinium instriatum</i> (B)		Present	
				<i>Heterocapsa rotundata</i> (B)		Common	0.163
				<i>Karlodinium veneficum</i> (T)		Present	
				<i>Kryptoperidinium foliaceum</i> (B)		Present	
				<i>Protoperidinium quinquecorne</i> (B)		Present	
	9/22/2015	7:14		<i>Akashiwo sanguinea</i> (T)		Present	
				<i>Chloromorom toxicum</i> (T)		Common	0.375
				<i>Eutreptiella</i> sp. (B)		Present	
				<i>Gyrodinium instriatum</i> (B)		Present	
				<i>Heterosigma akashiwo</i> (T)		Common	0.125
				<i>Karlodinium veneficum</i> (T)		Present	
<u>Little Assawoman Bay</u>							
LA46: Fenwick Island Tide Gauge							
	9/15/2015	8:50	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
				<i>Karlodinium veneficum</i> (T)		Present	
				<i>Kryptoperidinium foliaceum</i> (B)		Present	
				<i>Protoperidinium quinquecorne</i> (B)		Present	
Rehoboth Bay							
ML: Massey's Landing							
	9/16/2015	10:50	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
<u>Bald Eagle Creek</u>							
RB64: Torquay Canal, west side of Land's End near UD Site #1							
	9/8/2015	8:10	Surfc	<i>Chattonella subsalsa</i> (T)		Common	0.125
				<i>Chloromorom toxicum</i> (T)		Many	1.275
				<i>Fibrocapsa japonica</i> (T)		Many	1.200
				<i>Heterocapsa rotundata</i> (B)		Present	
				<i>Karlodinium veneficum</i> (T)		Common	0.125
	9/14/2015	10:05		<i>Chattonella subsalsa</i> (T)		Present	
				<i>Chloromorom toxicum</i> (T)		Common	0.375
				<i>Heterocapsa rotundata</i> (B)		Present	
				<i>Heterosigma akashiwo</i> (T)		Present	
				<i>Karlodinium veneficum</i> (T)		Present	
	9/21/2015	9:15		<i>Akashiwo sanguinea</i> (T)		Present	
				<i>Chloromorom toxicum</i> (T)		Many	8.910
				<i>Gyrodinium instriatum</i> (B)		Present	
				<i>Heterocapsa rotundata</i> (B)		Present	
				<i>Heterosigma akashiwo</i> (T)		Common	0.638
				<i>Karlodinium veneficum</i> (T)		Present	
				<i>Protoperidinium quinquecorne</i> (B)		Present	
				<i>Scrippsiella</i> sp. (B)		Present	

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Water Body <u>Tributary</u> Site	Date	Time	Sample Depth	Name	Comment if ID uncertain	Abundance	MC/L
Rehoboth Bay							
<u>Guinea Creek</u>							
RB06: Guinea Creek (Winding Creek Village)							
	9/14/2015	11:00	Surfc	<i>Chattonella subsalsa (T)</i>		Present	
				<i>Chloromorium toxicum (T)</i>		Present	
				<i>Gyrodinium instriatum (B)</i>		Present	
				<i>Heterocapsa rotundata (B)</i>		Present	
				<i>Karlodinium veneficum (T)</i>		Present	
<u>Love Creek</u>							
RB34: Love Creek at Rt 24 Bridge							
	9/15/2015	11:03	Surfc	<i>Gyrodinium instriatum (B)</i>		Many	2.875
				<i>Heterocapsa rotundata (B)</i>		Present	
				<i>Kryptoperidinium foliaceum (B)</i>		Common	0.113
				<i>Scrippsiella sp. (B)</i>		Present	

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