

Harmful Algae Report

All data between 6/17/2015 and 7/1/2015

University of Delaware Citizen Monitoring Program

Water Body Tributary Site	Date	Time	Sample Depth	Name	Comment if ID uncertain	Abundance	MC/L
Atlantic Ocean							
RWPM: Dagsworthy, Dewey Beach							
	6/24/2015	12:15	Surfc	"Gymnodinoid" sp. (S)	25-40 um Grn	Present	
			Surfc	<i>Chaetoceros</i> spp. (B)		Common	0.175
			Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
			Surfc	<i>Karlodinium veneficum</i> (T)		Present	
			Surfc	<i>Prorocentrum scutellum</i> (B)		Present	
			Surfc	<i>Scrippsiella</i> sp. (B)		Present	
RWPM18A: 0.47 miles off Key Box Rd.							
	6/23/2015	13:00	Surfc	"Gymnodinoid" sp. (S)	25-40 um Grn	Abundant	12.100
			Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
			Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
RWPM18B: 0.43 miles off Key Box Rd.							
	6/23/2015	13:30	Surfc	"Gymnodinoid" sp. (S)	25-40 um Grn	Many	6.600
			Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
			Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
			Surfc	<i>Scrippsiella</i> sp. (B)		Present	
RWPM18C: 0.1 miles off Key Box Rd.							
	6/23/2015	14:00	Surfc	"Gymnodinoid" sp. (S)	25-40 um Grn	Abundant	14.300
			Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
			Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
			Surfc	<i>Karlodinium veneficum</i> (T)		Present	
RWPMII: Town of Bethany							
	6/24/2015	11:45	Surfc	"Gymnodinoid" sp. (S)	25-40 um Grn	Not Found	
			Surfc	<i>Chaetoceros</i> spp. (B)		Common	0.150
			Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
			Surfc	<i>Heterocapsa triquetra</i> (B)		Present	
			Surfc	<i>Karlodinium veneficum</i> (T)		Present	
			Surfc	<i>Prorocentrum scutellum</i> (B)		Present	
Broadkill River							
<u>Broadkill River</u>							
BR01: Broadkill river @ PEL dock.							
	6/17/2015	8:50	Net	<i>Ceratium pentagonum</i> (B)			
			Net	<i>Dinophysis acuminata</i> (T)			
			Net	<i>Heterocapsa rotundata</i> (B)			
			Net	<i>Karlodinium veneficum</i> (T)			
			Net	<i>Prorocentrum scutellum</i> (B)			
			Surfc	"Gymnodinoid" sp. (S)	25-40 um Grn	Present	
			Surfc	<i>Ceratium pentagonum</i> (B)		Rare	
			Surfc	<i>Dinophysis acuminata</i> (T)		Rare	
			Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
			Surfc	<i>Heterosigma akashiwo</i> (T)		Rare	
			Surfc	<i>Karlodinium veneficum</i> (T)		Present	
			Surfc	<i>Prorocentrum scutellum</i> (B)		Rare	
	6/24/2015	8:45	Net	<i>Rhizosolenia</i> spp. (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							
<u>Broadkill River</u>							
BR01: Broadkill river @ PEL dock.							
	6/24/2015	8:45	Surfc	"Gymnodinioid" sp. (S)	25-40 um Grn	Present	
			Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
			Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
BR20: Broadkill River at Milton tidal pond							
	6/24/2015	6:10	Surfc	<i>Anabaena</i> spp. (T)		Common	0.313
<u>Diamond Pond</u>							
BR48: Diamond Pond at Spillway							
	6/24/2015	7:30	Surfc	<i>Anabaena</i> spp. (T)		Common	0.250
			Surfc	<i>Microcystis</i> spp. (T)		Many	1.880
<u>Old Mill Creek</u>							
BR21: Old Mill Creek downstream from Red Mill Pond							
	6/24/2015	12:15	Surfc	<i>Anabaena</i> spp. (T)		Common	0.125
			Surfc	<i>Cylindrospermopsis</i> (T)		Common	0.375
			Surfc	<i>Microcystis</i> spp. (T)		Many	3.130
<u>Prime Hook Creek</u>							
BR03: Prime Hook Creek at Boat Ramp at Refuge Headquarters							
	6/24/2015	11:15	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Common	
<u>Red Mill Pond</u>							
BR54: Red Mill Pond outlet at Rt 1							
	6/24/2015	10:15	Surfc	<i>Cylindrospermopsis</i> (T)		Common	0.938
			Surfc	<i>Microcystis</i> spp. (T)		Many	3.750
			Surfc	<i>Snowella</i> spp. (T)		Many	1.250
<u>Wagamon's Pond</u>							
BR44: Wagamon's Pond on Northern Shoreline, Milton							
	7/1/2015	9:30	Surfc	<i>Lyngbya</i> (T)		Present	
Delaware Bay							
<u>Canary Creek</u>							
BR40: Canary Creek at Pilottown Rd							
	6/24/2015	7:13	Surfc		No HABs found		
<u>Delaware Bay</u>							
DB01: End of Cape Shores pier							
	6/23/2015	8:32	Surfc	"Gymnodinioid" sp. (S)	25-40 um Grn	Present	
			Surfc	<i>Chaetoceros</i> spp. (B)		Common	0.100
			Surfc	<i>Heterocapsa rotundata</i> (B)		Common	0.300
			Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
			Surfc	<i>Scrippsiella</i> sp. (B)		Present	
	7/1/2015	8:42	Surfc	"Gymnodinioid" sp. (S)	25-40 um Grn	Present	
			Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
Indian River							
<u>Indian River</u>							
IR04: Warwick Cove							
	6/22/2015	10:04	Surfc	<i>Akashiwo sanguinea</i> (T)		Present	
			Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
			Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
			Surfc	<i>Karlodinium veneficum</i> (T)		Present	

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Indian River							
<u>Indian River</u>							
IR05: Millsboro Dam	6/24/2015	7:50	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
IR11: Pot Nets Seaside Pier	6/22/2015	10:35	Surfc	<i>Heterocapsa rotundata</i> (B)		Common	0.100
			Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
			Surfc	<i>Karlodinium veneficum</i> (T)		Present	
IR24: Iron Branch - County road 331 at bridge	6/22/2015	9:43	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
IR36: James Farm, base of Pasture Point Knee deep 150 yds from shore	6/23/2015	7:50	Surfc		No HABs found		
IR39: North side of Inlet at Wheelchair fishing platform under new bridge.	6/30/2015	8:05	Surfc	"Gymnodinoid" sp. (S)	25-40 um Grn	Present	
			Surfc	<i>Ceratium fusus</i> (B)		Very Rare	
			Surfc	<i>Ceratium pentagonum</i> (B)		Rare	
			Surfc	<i>Ceratium spp.</i> (T)		Very Rare	
			Surfc	<i>Dinophysis acuminata</i> (T)		Rare	
			Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
			Surfc	<i>Prorocentrum scutellum</i> (B)		Rare	
			Surfc	<i>Scrippsiella sp.</i> (B)		Very Rare	
<u>Vines Creek</u>							
IR38: Vines Lane	6/23/2015	7:15	Surfc	<i>Gyrodinium instriatum</i> (B)		Many	1.563
			Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
			Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
			Surfc	<i>Karlodinium veneficum</i> (T)		Present	
			Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Present	
			Surfc	<i>Scrippsiella sp.</i> (B)		Present	
<u>White Creek</u>							
IR32: Holly Terrace Acres Canal Dead End, White Creek	6/22/2015	8:13	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
			Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
			Surfc	<i>Heterosigma akashiwo</i> (T)		Common	0.113
			Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Present	
			Surfc	<i>Protoperidinium quinquecorne</i> (B)		Common	0.113
	6/29/2015	7:05	Surfc	"Gymnodinoid" sp. (S)	25-40 um Grn	Present	
			Surfc	<i>Chattonella subsalsa</i> (T)		Common	0.275
			Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
			Surfc	<i>Heterocapsa rotundata</i> (B)		Many	4.400
			Surfc	<i>Karlodinium veneficum</i> (T)		Present	
			Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Present	
			Surfc	<i>Prorocentrum triestinum</i> (B)		Present	
			Surfc	<i>Protoperidinium quinquecorne</i> (B)		Present	
			Surfc	<i>Scrippsiella sp.</i> (B)		Common	0.125
Little Assawoman Bay							
<u>Dirickson Creek</u>							
LA03: Mulberry Landing	6/22/2015	7:20	Surfc	<i>Akashiwo sanguinea</i> (T)		Present	

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Little Assawoman Bay							
<u>Dirickson Creek</u>							
LA03: Mulberry Landing							
	6/22/2015	7:20	Surfc	<i>Chloromorom toxicum (T)</i>		Present	
			Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
			Surfc	<i>Karlodinium veneficum (T)</i>		Present	
LA09: Dirickson Creek at Road 381 bridge.							
	6/22/2015	8:25	Surfc	<i>Gyrodinium instriatum (B)</i>		Many	1.500
			Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
			Surfc	<i>Heterosigma akashiwo (T)</i>		Present	
			Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
			Surfc	<i>Protoperidinium quinquecorne (B)</i>		Present	
<u>Jefferson Creek</u>							
SB10E: Russell Canal east dead end							
	6/23/2015	7:15	Surfc	<i>Chattonella subsalsa (T)</i>		Present	
			Surfc	<i>Chloromorom toxicum (T)</i>		Many	1.513
			Surfc	<i>Fibrocapsa japonica (T)</i>		Present	
			Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
			Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
			Surfc	<i>Karlodinium veneficum (T)</i>		Common	0.100
			Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
			Surfc	<i>Protoperidinium quinquecorne (B)</i>		Present	
			Surfc	<i>Scrippsiella sp. (B)</i>		Present	
	6/30/2015	7:13	Surfc	<i>Chattonella subsalsa (T)</i>		Common	0.938
			Surfc	<i>Chloromorom toxicum (T)</i>		Common	0.125
			Surfc	<i>Heterosigma akashiwo (T)</i>		Present	
			Surfc	<i>Karlodinium veneficum (T)</i>		Present	
SB10W: Russell Canal west dead end							
	6/23/2015	7:08	Surfc	<i>Chattonella subsalsa (T)</i>		Present	
			Surfc	<i>Chloromorom toxicum (T)</i>		Common	0.100
			Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
			Surfc	<i>Karlodinium veneficum (T)</i>		Present	
			Surfc	<i>Pleurochrysis carterae (B*)</i>		Abundant	11.000
	6/30/2015	7:07	Surfc	<i>Akashiwo sanguinea (T)</i>		Present	
			Surfc	<i>Chattonella subsalsa (T)</i>		Many	1.813
			Surfc	<i>Chloromorom toxicum (T)</i>		Many	1.438
			Surfc	<i>Fibrocapsa japonica (T)</i>		Common	0.125
			Surfc	<i>Karlodinium veneficum (T)</i>		Present	
<u>Little Assawoman Bay</u>							
LA46: Fenwick Island Tide Gauge							
	6/23/2015	8:38	Surfc		No HABs found		
Rehoboth Bay							
ML: Massey's Landing							
	6/17/2015	7:40	Surfc	"Gymnodinioid" sp. (S)	25-40 um Grn	Present	
			Surfc	<i>Ceratium pentagonum (B)</i>		Rare	
			Surfc	<i>Dinophysis acuminata (T)</i>		Rare	
			Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
			Surfc	<i>Heterosigma akashiwo (T)</i>		Present	
			Surfc	<i>Karlodinium veneficum (T)</i>		Present	

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Rehoboth Bay							
ML: Massey's Landing							
	6/17/2015	7:40	Surfc	<i>Prorocentrum scutellum</i> (B)		Present	
			Surfc	<i>Rhizosolenia</i> spp. (T)		Rare	
	6/24/2015	8:45	Surfc	"Gymnodinoid" sp. (S)	25-40 um Grn	Present	
			Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
			Surfc	<i>Karlodinium veneficum</i> (T)		Present	
			Surfc	<i>Scrippsiella</i> sp. (B)		Present	
	6/30/2015	9:30	Surfc	"Gymnodinoid" sp. (S)	25-40 um Grn	Present	
			Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
			Surfc	<i>Karlodinium veneficum</i> (T)		Present	
Bald Eagle Creek							
RB64: Torquay Canal, west side of Land's End near UD Site #1							
	6/22/2015	8:50	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
			Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
			Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
			Surfc	<i>Karlodinium veneficum</i> (T)		Present	
			Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Present	
	6/29/2015	9:15	Surfc	<i>Chattonella subsalsa</i> (T)		Many	5.500
			Surfc	<i>Chloromorom toxicum</i> (T)		Present	
			Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
			Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
			Surfc	<i>Karlodinium veneficum</i> (T)		Present	
			Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Present	
			Surfc	<i>Scrippsiella</i> sp. (B)		Present	
Guinea Creek							
RB06: Guinea Creek (Winding Creek Village)							
	6/22/2015	7:00	Surfc	<i>Anabaena</i> spp. (T)		Many	1.880
			Surfc	<i>Heterosigma akashiwo</i> (T)		Common	0.625
			Surfc	<i>Karlodinium veneficum</i> (T)		Present	
Love Creek							
RB34: Love Creek at Rt 24 Bridge							
	6/23/2015	11:00	Surfc	<i>Gyrodinium instriatum</i> (B)		Common	0.125

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