

# Harmful Algae Report

All data between 6/1/2017 and 6/16/2017

University of Delaware Citizen Monitoring Program

Water Body Tributary Site	Date	Time	Sample Depth	Name	Comment if ID uncertain	Abundance	MC/L
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## Broadkill River

### Broadkill River

BR01: Broadkill river @ PEL dock.

	6/7/2017	8:50	Net	"Gymnodinioid" sp. (S) <i>Dinophysis acuminata</i> (T) <i>Prorocentrum micans</i> (B) <i>Prorocentrum minimum</i> (T) <i>Prorocentrum scutellum</i> (B) <i>Pseudo-nitzschia</i> spp. (T) <i>Rhizosolenia</i> spp. (T) <i>Scrippsiella</i> sp. (B)	25-40 um Grn		
			Surfc	"Gymnodinioid" sp. (S) <i>Heterocapsa rotundata</i> (B) <i>Kryptoperidinium foliaceum</i> (B) <i>Prorocentrum minimum</i> (T)	25-40 um Grn	Present Present Present Common	0.188
	6/14/2017	8:45	Net	"Gymnodinioid" sp. (S) <i>Chaetoceros</i> spp. (T) <i>Heterocapsa rotundata</i> (B) <i>Karlodinium veneficum</i> (T) <i>Scrippsiella</i> sp. (B)	25-40 um Grn		
			Surfc	"Gymnodinioid" sp. (S) <i>Heterocapsa rotundata</i> (B) <i>Karlodinium veneficum</i> (T) <i>Prorocentrum triestinum</i> (B) <i>Scrippsiella</i> sp. (B)	25-40 um Grn	Common Present Present Present Present	0.100

BR20: Broadkill River at Milton tidal pond

	6/14/2017	6:30	Surfc		No HABs found		
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### Diamond Pond

BR48: Diamond Pond at Spillway

	6/14/2017	7:15	Surfc		No HABs found		
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### Old Mill Creek

BR21: Old Mill Creek downstream from Red Mill Pond

	6/14/2017	10:15	Surfc	<i>Amphidinium</i> spp. (T) <i>Heterosigma akashiwo</i> (T) <i>Kryptoperidinium foliaceum</i> (B) <i>Microcystis</i> spp. (T)		Present Present Present Abundant	23.300
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### Red Mill Pond

BR54: Red Mill Pond outlet at Rt 1

	6/14/2017	10:28	Surfc	<i>Anabaena</i> spp. (T) <i>Microcystis</i> spp. (T)		Common Abundant	59.000
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## Delaware Bay

### Canary Creek

BR19: Canary Creek at New Road

	6/12/2017	9:57	Surfc	<i>Karlodinium veneficum</i> (T) <i>Kryptoperidinium foliaceum</i> (B)		Present Present	
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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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Water Body Tributary Site	Date	Time	Sample Depth	Name	Comment if ID uncertain	Abundance	MC/L
<b>Delaware Bay</b>							
<u>Canary Creek</u>							
BR40: Canary Creek at Pilottown Rd							
	6/14/2017	6:48	Surfc	"Gymnodinioid" sp. (S)	25-40 um Grn	Present	
				<i>Fibrocapsa japonica</i> (T)		Present	
				<i>Heterocapsa rotundata</i> (B)		Present	
				<i>Heterosigma akashiwo</i> (T)		Present	
<u>Delaware Bay</u>							
DB01: End of Cape Shores pier							
	6/6/2017	8:37	Surfc	"Gymnodinioid" sp. (S)	25-40 um Grn	Present	
				<i>Dinophysis acuminata</i> (T)		Present	
				<i>Heterocapsa lanceolata</i> (B)		Present	
				<i>Heterocapsa rotundata</i> (B)		Common	0.175
				<i>Heterosigma akashiwo</i> (T)		Present	
				<i>Karlodinium veneficum</i> (T)		Present	
				<i>Prorocentrum minimum</i> (T)		Present	
	6/12/2017	8:43		<i>Chaetoceros</i> spp. (T)		Present	
				<i>Heterocapsa rotundata</i> (B)		Present	
<b>Indian River</b>							
<u>Indian River</u>							
IR02a: Rosedale crabbing pier							
	6/12/2017	9:30	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
				<i>Karlodinium veneficum</i> (T)		Present	
IR11: Pot Nets Seaside Pier							
	6/12/2017	10:20	Surfc	"Gymnodinioid" sp. (S)	25-40 um Grn	Present	
				<i>Heterocapsa rotundata</i> (B)		Present	
				<i>Heterosigma akashiwo</i> (T)		Present	
				<i>Prorocentrum minimum</i> (T)		Present	
IR24: Iron Branch - County road 331 at bridge							
	6/12/2017	9:08	Surfc	<i>Gyrodinium instriatum</i> (B)		Many	3.850
IR36: James Farm, base of Pasture Point Knee deep 150 yds from shore							
	6/13/2017	7:35	Surfc		No HABs found		
<u>Vines Creek</u>							
IR38: Vines Lane							
	6/13/2017	8:40	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
<u>White Creek</u>							
IR32: Holly Terrace Acres Canal Dead End, White Creek							
	6/5/2017	8:17	Surfc	<i>Gyrodinium instriatum</i> (B)		Common	0.225
				<i>Heterocapsa lanceolata</i> (B)		Present	
				<i>Heterosigma akashiwo</i> (T)		Present	
				<i>Karlodinium veneficum</i> (T)		Present	
				<i>Peridinium</i> sp. (B)	25um flat green	Present	
				<i>Prorocentrum minimum</i> (T)		Present	
				<i>Protoperidinium quinquecorne</i> (B)		Present	
	6/12/2017	8:25		<i>Chaetoceros</i> spp. (T)		Present	
				<i>Gyrodinium instriatum</i> (B)		Common	0.475
				<i>Heterosigma akashiwo</i> (T)		Common	0.125
				<i>Peridinium</i> sp. (B)	25um flat green	Present	
				<i>Prorocentrum triestinum</i> (B)		Present	
				<i>Protoperidinium quinquecorne</i> (B)		Present	

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<b>Indian River</b>							
<u>White Creek</u>							
IR32: Holly Terrace Acres Canal Dead End, White Creek							
	6/12/2017	8:25	Surfc	<i>Scrippsiella sp. (B)</i>		Present	
<b>Little Assawoman Bay</b>							
<u>Dirickson Creek</u>							
LA03: Mulberry Landing							
	6/13/2017	6:54	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
				<i>Prorocentrum triestinum (B)</i>		Present	
LA09: Dirickson Creek at Road 381 bridge.							
	6/13/2017	7:48	Surfc	<i>Gyrodinium instriatum (B)</i>		Many	2.200
				<i>Kryptoperidinium foliaceum (B)</i>		Present	
				<i>Protoperidinium quinquecorne (B)</i>		Present	
<u>Jefferson Creek</u>							
SB10E: Russell Canal east dead end							
	6/6/2017	7:55	Surfc	<i>Chaetoceros spp. (T)</i>		Common	0.125
				<i>Chattonella subsalsa (T)</i>		Present	
				<i>Karlodinium veneficum (T)</i>		Present	
				<i>Scrippsiella sp. (B)</i>		Present	
	6/13/2017	7:15		<i>Gyrodinium instriatum (B)</i>		Present	
				<i>Heterosigma akashiwo (T)</i>		Present	
				<i>Karlodinium veneficum (T)</i>		Present	
				<i>Prorocentrum minimum (T)</i>		Present	
SB10W: Russell Canal west dead end							
	6/6/2017	8:16	Surfc	<i>Chaetoceros spp. (T)</i>		Present	
				<i>Chattonella subsalsa (T)</i>		Present	
	6/13/2017	7:20		<i>Karlodinium veneficum (T)</i>		Present	
				<i>Protoperidinium quinquecorne (B)</i>		Present	
<u>Little Assawoman Bay</u>							
LA46: Fenwick Island Tide Gauge							
	6/13/2017	9:40	Surfc	<i>Chaetoceros spp. (T)</i>		Common	0.100
				<i>Heterocapsa rotundata (B)</i>		Present	
				<i>Prorocentrum triestinum (B)</i>		Present	
<b>Rehoboth Bay</b>							
<u>Bald Eagle Creek</u>							
RB64: Torquay Canal, west side of Land's End near UD Site #1							
	6/5/2017	8:55	Surfc	<i>Akashiwo sanguinea (T)</i>		Rare	
				<i>Cochlodinium sp. (T)</i>		Rare	
				<i>Gyrodinium instriatum (B)</i>		Rare	
				<i>Heterocapsa rotundata (B)</i>		Present	
				<i>Heterosigma akashiwo (T)</i>		Present	
				<i>Karlodinium veneficum (T)</i>		Present	
				<i>Kryptoperidinium foliaceum (B)</i>		Present	
				<i>Prorocentrum minimum (T)</i>		Rare	
				<i>Prorocentrum triestinum (B)</i>		Many	1.125
				<i>Scrippsiella sp. (B)</i>		Rare	
	6/12/2017	10:40		<i>Heterocapsa rotundata (B)</i>		Present	
				<i>Karlodinium veneficum (T)</i>		Present	
				<i>Prorocentrum triestinum (B)</i>		Abundant	15.400

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<b>Rehoboth Bay</b>							
<u>Guinea Creek</u>							
RB06: Guinea Creek (Winding Creek Village)							
	6/12/2017	7:39	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
				<i>Karlodinium veneficum (T)</i>		Present	
<u>Love Creek</u>							
RB34: Love Creek at Rt 24 Bridge							
	6/12/2017	10:02	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
				<i>Heterosigma akashiwo (T)</i>		Present	
				<i>Scrippsiella sp. (B)</i>		Present	
<u>Rehoboth Bay</u>							
RB38: Joy Beach							
	6/15/2017	11:51	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
				<i>Karlodinium veneficum (T)</i>		Present	
				<i>Kryptoperidinium foliaceum (B)</i>		Present	
				<i>Prorocentrum triestinum (B)</i>		Common	0.125
				<i>Scrippsiella sp. (B)</i>		Rare	
<b>Rehoboth Beach</b>							
<u>Lake Gerar</u>							
RL10: Lake Gerar bridge							
	6/5/2017	12:15	Surfc		No HABs found		
<u>Silver Lake</u>							
RL01: Silver Lake, Lake Drive Bridge							
	6/5/2017	12:40	Surfc	<i>(Unknown) (B*)</i>	Thin cyano straight	Abundant	52.800
				<i>Aphanizomenon spp. (T)</i>		Very Abundant	110.000

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