

Harmful Algae Report

All data between 4/1/2012 and 5/24/2012

University of Delaware Citizen Monitoring Program

Water Body Tributary Site	Date	Time	Smpl Dpth	Name	Comment if ID uncertain	Abundance	MC/L
Assawoman Bay							
<u>Roy Creek</u>							
BA01: Keenwick on Bay, Roy Creek							
	4/3/2012	8:52	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	5/8/2012	8:50	Surfc	<i>Akashiwo sanguinea</i> (T)		Present	
	5/8/2012	8:50	Surfc	<i>Prorocentrum triestinum</i> (B)		Present	
	5/22/2012	8:40	Surfc	<i>Akashiwo sanguinea</i> (T)		Present	
	5/22/2012	8:40	Surfc	<i>Chaetoceros</i> spp. (T)		Present	
Broadkill River							
BR01: Broadkill river @ PEL dock.							
	4/5/2012	8:59	Net	<i>Ditylum</i> spp. (T)			
	4/5/2012	8:59	Net	<i>Heterocapsa rotundata</i> (B)			
	4/5/2012	8:59	Net	<i>Karlodinium veneficum</i> (T)			
	4/5/2012	8:59	Net	<i>Prorocentrum minimum</i> (T)			
	4/5/2012	8:59	Net	<i>Prorocentrum scutellum</i> (B)			
	4/5/2012	8:59	Net	<i>Prorocentrum</i> sp. (T)			
	4/5/2012	8:59	Net	<i>Rhizosolenia</i> spp. (T)			
	4/5/2012	8:59	Surfc	<i>Chaetoceros</i> spp. (T)		Common	0.230
	4/5/2012	8:59	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	4/5/2012	8:59	Surfc	<i>Prorocentrum minimum</i> (T)		Present	
	4/18/2012	8:35	Net	<i>Ditylum</i> spp. (T)			
	4/18/2012	8:35	Net	<i>Heterocapsa triquetra</i> (B)			
	4/18/2012	8:35	Net	<i>Karlodinium veneficum</i> (T)			
	4/18/2012	8:35	Net	<i>Prorocentrum scutellum</i> (B)			
	4/18/2012	8:35	Net	<i>Rhizosolenia</i> spp. (T)			
	4/18/2012	8:35	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	4/18/2012	8:35	Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
	4/18/2012	8:35	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	5/10/2012	8:57	Net	<i>Rhizosolenia</i> spp. (T)			
	5/10/2012	8:57	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	5/10/2012	8:57	Surfc	<i>Prorocentrum scutellum</i> (B)		Present	
	5/16/2012	8:55	Net	<i>Heterocapsa rotundata</i> (B)			
	5/16/2012	8:55	Net	<i>Karlodinium veneficum</i> (T)			
	5/16/2012	8:55	Net	<i>Prorocentrum scutellum</i> (B)			
	5/16/2012	8:55	Net	<i>Rhizosolenia</i> spp. (T)			
	5/16/2012	8:55	Surfc		No HABs found		
	5/23/2012	8:50	Net	<i>Dinophysis acuminata</i> (T)			
	5/23/2012	8:50	Net	<i>Ditylum</i> spp. (T)			
	5/23/2012	8:50	Net	<i>Heterocapsa rotundata</i> (B)			

Name subsripts: (B) - nontoxic bloom former; (B*) - nontoxic bloom former reported only at levels > 10 MC/L; (S) - cell similar to a known toxic cell; (T) - potentially toxic cell. MC/L - Million Cells per Liter.

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.

University of Delaware Citizen Monitoring Program

Water Body Tributary Site	Date	Time	Smpl Dpth	Name	Comment if ID uncertain	Abundance	MC/L
Broadkill River							
BR01: Broadkill river @ PEL dock.							
	5/23/2012	8:50	Net	<i>Heterocapsa triquetra</i> (B)			
	5/23/2012	8:50	Net	<i>Prorocentrum scutellum</i> (B)			
	5/23/2012	8:50	Net	<i>Rhizosolenia</i> spp. (T)			
	5/23/2012	8:50	Net	<i>Scrippsiella</i> sp. (B)			
	5/23/2012	8:50	Surfc	<i>Chaetoceros</i> spp. (T)		Present	
	5/23/2012	8:50	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	5/23/2012	8:50	Surfc	<i>Heterocapsa</i> sp. (B)		Present	
	5/23/2012	8:50	Surfc	<i>Prorocentrum scutellum</i> (B)		Present	
BR20: Broadkill River at Milton tidal pond							
	4/4/2012	7:40	Surfc		No HABS found		
	5/9/2012	7:00	Surfc		No HABS found		
	5/23/2012	11:40	Surfc		No HABS found		
<u>Diamond Pond</u>							
BR48: Diamond Pond							
	4/4/2012	11:05	Surfc		No HABS found		
	5/9/2012	11:32	Surfc		No HABS found		
	5/23/2012	11:25	Surfc		No HABS found		
<u>Old Mill Creek</u>							
BR21: Old Mill Creek downstream from Red Mill Pond							
	4/4/2012	12:20	Surfc	<i>Prorocentrum minimum</i> (T)		Present	
	5/9/2012	12:46	Surfc		No HABS found		
	5/23/2012	12:42	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Present	
<u>Prime Hook Creek</u>							
BR03: Prime Hook Creek at Boat Ramp at Refuge Headquarters							
	4/4/2012	11:55	Surfc	(Unknown) (B*)	<5 um grn sphr flag	Very Abundant	182.000
	4/4/2012	11:55	Surfc	<i>Amphidinium</i> spp. (T)		Present	
	4/4/2012	11:55	Surfc	<i>Heterocapsa rotundata</i> (B)		Abundant	15.800
	4/4/2012	11:55	Surfc	<i>Heterocapsa triquetra</i> (B)		Present	
	4/4/2012	11:55	Surfc	<i>Prorocentrum minimum</i> (T)		Present	
	4/4/2012	11:55	Surfc	<i>Rhizosolenia</i> spp. (T)		Present	
	5/9/2012	12:18	Surfc	(Unknown) (B*)	<5 um grn sphr flag	Very Abundant	178.000
	5/9/2012	12:18	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	5/23/2012	12:15	Surfc	(Unknown) sp. (B*)	5-15 um grn trdrp flag	Very Abundant	174.000
	5/23/2012	12:15	Surfc	<i>Amphidinium</i> spp. (T)		Present	
	5/23/2012	12:15	Surfc	<i>Chattonella</i> cf. <i>verruculosa</i> (T)		Present	
	5/23/2012	12:15	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	5/23/2012	12:15	Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
	5/23/2012	12:15	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Present	
<u>Wagamon's Pond</u>							
BR44: Wagamon's Pond, Milton							
	4/4/2012	10:30	Surfc		No HABS found		

Name subsripts: (B) - nontoxic bloom former; (B*) - nontoxic bloom former reported only at levels > 10 MC/L; (S) - cell similar to a known toxic cell; (T) - potentially toxic cell. MC/L - Million Cells per Liter.

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.

University of Delaware Citizen Monitoring Program

Water Body Tributary Site	Date	Time	Smpl Dpth	Name	Comment if ID uncertain	Abundance	MC/L
Broadkill River							
<u>Wagamon's Pond</u>							
BR44: Wagamon's Pond, Milton							
	5/9/2012	11:00	Surfc		No HABs found		
Delaware Bay							
DB01: End of Cape Shores pier							
	4/3/2012	9:23	Surfc	<i>Ditylum spp. (T)</i>		Present	
	4/3/2012	9:23	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	4/3/2012	9:23	Surfc	<i>Heterocapsa triquetra (B)</i>		Present	
	4/3/2012	9:23	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	4/3/2012	9:23	Surfc	<i>Prorocentrum minimum (T)</i>		Present	
	4/3/2012	9:23	Surfc	<i>Rhizosolenia spp. (T)</i>		Present	
	4/17/2012	8:37	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	4/17/2012	8:37	Surfc	<i>Prorocentrum minimum (T)</i>		Present	
	5/8/2012	8:37	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	5/8/2012	8:37	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	5/22/2012	8:51	Surfc	<i>Chaetoceros spp. (T)</i>		Common	0.100
	5/22/2012	8:51	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	5/22/2012	8:51	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	5/22/2012	8:51	Surfc	<i>Prorocentrum scutellum (B)</i>		Present	
	5/22/2012	8:51	Surfc	<i>Rhizosolenia spp. (T)</i>		Present	
<u>Canary Creek</u>							
BR19: Canary Creek at New Road							
	4/4/2012	15:20	Surfc	<i>Eutreptiella sp. (B)</i>		Abundant	41.000
BR40: Canary Creek at Pilottown Rd							
	4/4/2012	9:00	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	4/4/2012	9:00	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	4/4/2012	9:00	Surfc	<i>Prorocentrum minimum (T)</i>		Present	
	5/9/2012	8:55	Surfc		No HABs found		
Dirickson Pond							
LA38: The Hamlet at Dirickson Pond							
	5/8/2012	8:00	Surfc		No HABs found		
	5/22/2012	8:30	Surfc	<i>Ceratium spp. (T)</i>		Present	
	5/22/2012	8:30	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
Indian River							
<u>Assawoman Canal</u>							
IR50: Assawoman Canal at N end, Ocean View Marina							
	4/3/2012	7:50	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	4/3/2012	7:50	Surfc	<i>Prorocentrum minimum (T)</i>		Present	
	5/8/2012	7:40	Surfc	<i>Chaetoceros spp. (T)</i>		Present	
	5/8/2012	7:40	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	5/8/2012	7:40	Surfc	<i>Prorocentrum minimum (T)</i>		Present	
	5/22/2012	7:45	Surfc	<i>Chaetoceros spp. (T)</i>		Present	

Name subsripts: (B) - nontoxic bloom former; (B*) - nontoxic bloom former reported only at levels > 10 MC/L; (S) - cell similar to a known toxic cell; (T) - potentially toxic cell. MC/L - Million Cells per Liter.

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.

University of Delaware Citizen Monitoring Program

Water Body Tributary Site	Date	Time	Smpl Dpth	Name	Comment if ID uncertain	Abundance	MC/L
Indian River							
<u>Assawoman Canal</u>							
IR50: Assawoman Canal at N end, Ocean View Marina							
	5/22/2012	7:45	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	5/22/2012	7:45	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	5/22/2012	7:45	Surfc	<i>Prorocentrum minimum</i> (T)		Present	
<u>Bethany Loop Canal</u>							
IR62: Loop Canal, Pa Ave terminus, Bethany Beach							
	4/2/2012	8:05	Surfc	<i>Amphidinium spp.</i> (T)		Common	0.190
	4/2/2012	8:05	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	4/2/2012	8:05	Surfc	<i>Heterosigma akashiwo</i> (T)		Many	3.300
	4/2/2012	8:05	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	4/2/2012	8:05	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Present	
	4/2/2012	8:05	Surfc	<i>Prorocentrum minimum</i> (T)		Many	2.900
	5/7/2012	7:55	Surfc	<i>Amphidinium spp.</i> (T)		Present	
	5/7/2012	7:55	Surfc	<i>Dinophysis acuminata</i> (T)		Present	
	5/7/2012	7:55	Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
	5/7/2012	7:55	Surfc	<i>Karlodinium veneficum</i> (T)		Many	7.000
	5/7/2012	7:55	Surfc	<i>Prorocentrum minimum</i> (T)		Common	0.530
	5/21/2012	8:00	Surfc	<i>Amphidinium spp.</i> (T)		Present	
	5/21/2012	8:00	Surfc	<i>Heterosigma akashiwo</i> (T)		Common	0.500
	5/21/2012	8:00	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	5/21/2012	8:00	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Present	
<u>Indian River</u>							
IR04: Warwick Cove							
	4/2/2012	10:05	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	4/2/2012	10:05	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	4/2/2012	10:05	Surfc	<i>Prorocentrum minimum</i> (T)		Many	1.940
	5/7/2012	10:14	Surfc	<i>Karlodinium veneficum</i> (T)		Many	2.400
IR07: Holt's Landing State Park							
	4/3/2012	9:22	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	4/3/2012	9:22	Surfc	<i>Prorocentrum minimum</i> (T)		Present	
	5/8/2012	8:30	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	5/8/2012	8:30	Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
	5/8/2012	8:30	Surfc	<i>Karlodinium veneficum</i> (T)		Common	0.240
	5/8/2012	8:30	Surfc	<i>Prorocentrum minimum</i> (T)		Present	
	5/22/2012	6:50	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	5/22/2012	6:50	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
IR11: Pot Nets Seaside Pier							
	4/2/2012	11:15	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	4/2/2012	11:15	Surfc	<i>Prorocentrum minimum</i> (T)		Present	
	5/7/2012	11:17	Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
IR20: Bay Colony							

Name subsripts: (B) - nontoxic bloom former; (B*) - nontoxic bloom former reported only at levels > 10 MC/L; (S) - cell similar to a known toxic cell; (T) - potentially toxic cell. MC/L - Million Cells per Liter.

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.

University of Delaware Citizen Monitoring Program

Water Body Tributary Site	Date	Time	Smpl Dpth	Name	Comment if ID uncertain	Abundance	MC/L
Indian River							
<u>Indian River</u>							
IR20: Bay Colony							
	4/2/2012	7:55	Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
	4/2/2012	7:55	Surfc	<i>Prorocentrum minimum</i> (T)		Present	
	5/7/2012	7:50	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	5/7/2012	7:50	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	5/21/2012	8:05	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	5/21/2012	8:05	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
IR36: James Farm, base of Pasture Point Knee deep 150 yds from shore							
	4/3/2012	8:30	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
IR36B: James Farm, Pasture Point By Boat							
	5/8/2012	8:20	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	5/8/2012	8:20	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
IR39: North side of Inlet at Wheelchair fishing platform under new bridge.							
	4/19/2012	8:57	Surfc	<i>Karlodinium veneficum</i> (T)		Rare	0.001
	4/19/2012	8:57	Surfc	<i>Prorocentrum minimum</i> (T)		Very Rare	
	4/19/2012	8:57	Surfc	<i>Prorocentrum scutellum</i> (B)		Very Rare	
	4/19/2012	8:57	Surfc	<i>Pseudo-nitzschia</i> spp. (T)		Rare	0.002
	4/19/2012	8:57	Surfc	<i>Rhizosolenia</i> spp. (T)		Present	0.078
	5/21/2012	8:29	Surfc	<i>Chaetoceros</i> spp. (T)		Rare	0.001
	5/21/2012	8:29	Surfc	<i>Prorocentrum micans</i> (B)		Very Rare	
	5/21/2012	8:29	Surfc	<i>Prorocentrum scutellum</i> (B)		Very Rare	
	5/21/2012	8:29	Surfc	<i>Prorocentrum</i> sp. (T)		Very Rare	
	5/21/2012	8:29	Surfc	<i>Protoperidinium quinquecorne</i> (B)		Rare	0.001
	5/21/2012	8:29	Surfc	<i>Pseudo-nitzschia</i> spp. (T)		Very Rare	
	5/21/2012	8:29	Surfc	<i>Rhizosolenia</i> spp. (T)		Very Rare	
<u>Vines Creek</u>							
IR38: Vines Lane							
	4/3/2012	8:15	Surfc		No HABs found		
	4/3/2012	8:15	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	4/3/2012	8:15	Surfc	<i>Heterocapsa triquetra</i> (B)		Present	
	4/3/2012	8:15	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	4/3/2012	8:15	Surfc	<i>Prorocentrum minimum</i> (T)		Common	0.500
	5/8/2012	7:45	Surfc	<i>Gyrodinium instriatum</i> (B)		Common	0.320
	5/8/2012	7:45	Surfc	<i>Karlodinium veneficum</i> (T)		Common	0.720
	5/22/2012	7:15	Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
	5/22/2012	7:15	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Present	
<u>White Creek</u>							
IR32: Holly Terrace Acres Canal Dead End, White Creek							
	4/2/2012	9:28	Surfc	<i>Dinophysis acuminata</i> (T)		Present	
	4/2/2012	9:28	Surfc	<i>Heterocapsa triquetra</i> (B)		Present	
	4/2/2012	9:28	Surfc	<i>Prorocentrum minimum</i> (T)		Common	0.180

Name subsripts: (B) - nontoxic bloom former; (B*) - nontoxic bloom former reported only at levels > 10 MC/L; (S) - cell similar to a known toxic cell; (T) - potentially toxic cell. MC/L - Million Cells per Liter.

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.

University of Delaware Citizen Monitoring Program

Water Body Tributary Site	Date	Time	Smpl Dpth	Name	Comment if ID uncertain	Abundance	MC/L
Indian River							
<u>White Creek</u>							
IR32: Holly Terrace Acres Canal Dead End, White Creek							
	4/17/2012	17:50	Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
	4/17/2012	17:50	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	4/17/2012	17:50	Surfc	<i>Prorocentrum minimum</i> (T)		Abundant	10.100
	4/19/2012	8:25	Surfc	<i>Dinophysis acuminata</i> (T)		Present	
	4/19/2012	8:25	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	4/19/2012	8:25	Surfc	<i>Prorocentrum minimum</i> (T)		Very Abundant	417.000
	4/19/2012	8:25	Surfc	<i>Scrippsiella sp.</i> (B)		Present	
	5/7/2012	9:09	Surfc	<i>Chaetoceros spp.</i> (T)		Common	0.100
	5/7/2012	9:09	Surfc	<i>Dinophysis acuminata</i> (T)		Present	
	5/7/2012	9:09	Surfc	<i>Prorocentrum minimum</i> (T)		Present	
	5/21/2012	8:55	Surfc	<i>Amphidinium spp.</i> (T)		Present	
	5/21/2012	8:55	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	5/21/2012	8:55	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	5/21/2012	8:55	Surfc	<i>Karlodinium veneficum</i> (T)		Common	0.150
	5/21/2012	8:55	Surfc	<i>Prorocentrum minimum</i> (T)		Present	
Little Assawoman Bay							
LA45: Fenwick Island Bayside							
	4/19/2012	7:40	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	4/19/2012	7:40	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	4/19/2012	7:40	Surfc	<i>Prorocentrum minimum</i> (T)		Present	
	5/15/2012	8:25	Surfc	<i>Akashiwo sanguinea</i> (T)		Present	
	5/15/2012	8:25	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	5/22/2012	7:43	Surfc	<i>Chaetoceros spp.</i> (T)		Present	
	5/22/2012	7:43	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	5/22/2012	7:43	Surfc	<i>Prorocentrum triestinum</i> (B)		Present	
<u>Assawoman Canal</u>							
LA10: Assawoman Canal S end, Kent Ave Bridge							
	4/2/2012	7:40	Surfc	<i>Heterocapsa rotundata</i> (B)		Common	0.110
	4/2/2012	7:40	Surfc	<i>Prorocentrum minimum</i> (T)		Present	
	5/7/2012	7:30	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	5/21/2012	7:35	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	5/21/2012	7:35	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
<u>Dirickson Creek</u>							
LA03: Mulberry Landing							
	4/2/2012	8:25	Surfc	<i>Prorocentrum minimum</i> (T)		Present	
	5/7/2012	7:58	Surfc	<i>Akashiwo sanguinea</i> (T)		Present	
	5/21/2012	7:50	Surfc	<i>Akashiwo sanguinea</i> (T)		Present	
	5/21/2012	7:50	Surfc	<i>Chaetoceros spp.</i> (T)		Common	0.210
	5/21/2012	7:50	Surfc	<i>Karlodinium veneficum</i> (T)		Common	0.190
	5/21/2012	7:50	Surfc	<i>Prorocentrum triestinum</i> (B)		Present	

Name subsripts: (B) - nontoxic bloom former; (B*) - nontoxic bloom former reported only at levels > 10 MC/L; (S) - cell similar to a known toxic cell; (T) - potentially toxic cell. MC/L - Million Cells per Liter.

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.

University of Delaware Citizen Monitoring Program

Water Body Tributary Site	Date	Time	Smpl Dpth	Name	Comment if ID uncertain	Abundance	MC/L
Little Assawoman Bay							
<u>Dirickson Creek</u>							
LA09: Dirickson Creek at Road 381 bridge.							
	4/2/2012	9:00	Surfc	<i>Prorocentrum minimum</i> (T)		Present	
	5/7/2012	8:36	Surfc	<i>Chaetoceros</i> spp. (T)		Present	
	5/7/2012	8:36	Surfc	<i>Cryptomonad</i> (an Order) spp. (B*)		Abundant	13.200
	5/7/2012	8:36	Surfc	<i>Gyrodinium instriatum</i> (B)		Common	0.190
	5/7/2012	8:36	Surfc	<i>Heterosigma akashiwo</i> (T)		Common	0.710
	5/7/2012	8:36	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	5/21/2012	8:22	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	5/21/2012	8:22	Surfc	<i>Karlodinium veneficum</i> (T)		Common	0.230
<u>Jefferson Creek</u>							
SB10E: Russell Canal east dead end							
	4/3/2012	7:50	Surfc	<i>Amphidinium</i> spp. (T)		Common	0.200
	4/3/2012	7:50	Surfc	<i>Dinophysis acuminata</i> (T)		Common	0.100
	4/3/2012	7:50	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	4/3/2012	7:50	Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
	4/3/2012	7:50	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	4/3/2012	7:50	Surfc	<i>Prorocentrum minimum</i> (T)		Common	0.880
	5/8/2012	8:00	Surfc	<i>Amphidinium</i> spp. (T)		Present	
	5/8/2012	8:00	Surfc	<i>Chattonella cf. verruculosa</i> (T)		Present	
	5/8/2012	8:00	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	5/22/2012	8:02	Surfc	<i>Amphidinium</i> spp. (T)		Present	
	5/22/2012	8:02	Surfc	<i>Chaetoceros</i> spp. (T)		Present	
	5/22/2012	8:02	Surfc	<i>Chattonella subsalsa</i> (T)		Present	
	5/22/2012	8:02	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	5/22/2012	8:02	Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
	5/22/2012	8:02	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
SB10W: Russell Canal west dead end							
	4/3/2012	8:05	Surfc	<i>Amphidinium</i> spp. (T)		Present	0.075
	4/3/2012	8:05	Surfc	<i>Dinophysis acuminata</i> (T)		Present	0.050
	4/3/2012	8:05	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	4/3/2012	8:05	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	4/3/2012	8:05	Surfc	<i>Heterosigma akashiwo</i> (T)		Common	0.100
	4/3/2012	8:05	Surfc	<i>Karlodinium veneficum</i> (T)		Common	0.150
	4/3/2012	8:05	Surfc	<i>Prorocentrum minimum</i> (T)		Many	1.200
	5/8/2012	8:17	Surfc	<i>Amphidinium</i> spp. (T)		Present	
	5/8/2012	8:17	Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
	5/22/2012	8:15	Surfc	<i>Chaetoceros</i> spp. (T)		Common	0.100
	5/22/2012	8:15	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Present	
Rehoboth Bay							
ML: Massey's Landing							
	4/2/2012	11:35	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	

Name subsripts: (B) - nontoxic bloom former; (B*) - nontoxic bloom former reported only at levels > 10 MC/L; (S) - cell similar to a known toxic cell; (T) - potentially toxic cell. MC/L - Million Cells per Liter.

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.

University of Delaware Citizen Monitoring Program

Water Body Tributary Site	Date	Time	Smpl Dpth	Name	Comment if ID uncertain	Abundance	MC/L
Rehoboth Bay							
ML: Massey's Landing							
	4/2/2012	11:35	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	5/7/2012	11:36	Surfc	<i>Prorocentrum minimum</i> (T)		Present	
	5/21/2012	11:00	Surfc	<i>Heterocapsa triquetra</i> (B)		Present	
RB07: West Bay Park							
	4/3/2012	8:30	Surfc	<i>Heterocapsa rotundata</i> (B)		Common	0.100
	4/3/2012	8:30	Surfc	<i>Heterocapsa triquetra</i> (B)		Present	
	4/3/2012	8:30	Surfc	<i>Prorocentrum minimum</i> (T)		Present	
Bald Eagle Creek							
RB64: Torquay Canal, west side of Land's End near UD Site #1							
	4/2/2012	8:30	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	4/2/2012	8:30	Surfc	<i>Heterocapsa triquetra</i> (B)		Present	
	5/7/2012	8:26	Surfc	<i>Dinophysis acuminata</i> (T)		Common	0.550
	5/7/2012	8:26	Surfc	<i>Heterosigma akashiwo</i> (T)		Common	0.740
	5/7/2012	8:26	Surfc	<i>Karlodinium veneficum</i> (T)		Common	0.110
	5/7/2012	8:26	Surfc	<i>Prorocentrum minimum</i> (T)		Common	0.250
	5/21/2012	9:02	Surfc	<i>Dinophysis acuminata</i> (T)		Present	0.050
	5/21/2012	9:02	Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
	5/21/2012	9:02	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	5/21/2012	9:02	Surfc	<i>Prorocentrum minimum</i> (T)		Common	0.570
Guinea Creek							
RB05: Mouth of Guinea Creek (Pot Nets Creekside)							
	4/2/2012	11:58	Surfc	<i>Prorocentrum minimum</i> (T)		Present	
	5/7/2012	11:56	Surfc	<i>Heterosigma akashiwo</i> (T)		Present	
	5/21/2012	11:20	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	5/21/2012	11:20	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	5/21/2012	11:20	Surfc	<i>Prorocentrum minimum</i> (T)		Present	
RB06: Guinea Creek (Winding Creek Village)							
	4/3/2012	7:30	Surfc	<i>Heterocapsa triquetra</i> (B)		Present	
	4/3/2012	7:30	Surfc	<i>Prorocentrum minimum</i> (T)		Present	
	4/3/2012	7:30	Surfc	<i>Protoperidinium quinquecorne</i> (B)		Present	
	5/7/2012	8:30	Surfc	<i>Chaetoceros spp.</i> (T)		Present	
	5/21/2012	11:47	Surfc	<i>Akashiwo sanguinea</i> (T)		Present	
	5/21/2012	11:47	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	5/21/2012	11:47	Surfc	<i>Karlodinium veneficum</i> (T)		Common	0.950
Herring Creek							
RB04: Herring Creek, Mid-Section							
	4/12/2012	8:30	Surfc	<i>Chaetoceros spp.</i> (T)		Common	0.220
	4/12/2012	8:30	Surfc	<i>Heterocapsa rotundata</i> (B)		Common	0.110
	4/12/2012	8:30	Surfc	<i>Prorocentrum minimum</i> (T)		Present	
	5/9/2012	8:50	Surfc	<i>Chaetoceros spp.</i> (T)		Present	
	5/9/2012	8:50	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	

Name subsripts: (B) - nontoxic bloom former; (B*) - nontoxic bloom former reported only at levels > 10 MC/L; (S) - cell similar to a known toxic cell; (T) - potentially toxic cell. MC/L - Million Cells per Liter.

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.

University of Delaware Citizen Monitoring Program

Water Body Tributary Site	Date	Time	Smpl Dpth	Name	Comment if ID uncertain	Abundance	MC/L
Rehoboth Bay							
<u>Herring Creek</u>							
RB04: Herring Creek, Mid-Section							
	5/9/2012	8:50	Surfc	<i>Heterosigma akashiwo (T)</i>		Present	
	5/22/2012	8:50	Surfc	<i>Akashiwo sanguinea (T)</i>		Present	
	5/22/2012	8:50	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
	5/22/2012	8:50	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	5/22/2012	8:50	Surfc	<i>Heterosigma akashiwo (T)</i>		Present	
	5/22/2012	8:50	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
	5/22/2012	8:50	Surfc	<i>Prorocentrum minimum (T)</i>		Present	
<u>Love Creek</u>							
RB34: Love Creek at Rt 24 Bridge							
	4/2/2012	8:55	Surfc	<i>Prorocentrum minimum (T)</i>		Many	1.300
	5/7/2012	8:45	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	5/7/2012	8:45	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	5/21/2012	9:27	Surfc	<i>Cylindrotheca closterium (B*)</i>		Abundant	19.800
	5/21/2012	9:27	Surfc	<i>Gyrodinium instriatum (B)</i>		Common	0.230
	5/21/2012	9:27	Surfc	<i>Heterosigma akashiwo (T)</i>		Present	
	5/21/2012	9:27	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	5/21/2012	9:27	Surfc	<i>Prorocentrum minimum (T)</i>		Common	0.210

Name subsripts: (B) - nontoxic bloom former; (B*) - nontoxic bloom former reported only at levels > 10 MC/L; (S) - cell similar to a known toxic cell; (T) - potentially toxic cell. MC/L - Million Cells per Liter.

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.

University of Delaware Citizen Monitoring Program