

Harmful Algae Report

All data between 7/10/2008 and 7/24/2008

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							
	7/15/2008	9:08	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	7/15/2008	9:08	Surfc	<i>Heterocapsa rotundata (B)</i>		Common	0.13
	7/15/2008	9:08	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
Atlantic Ocean							
RWPM14: Tower Rd Ocean, Delaware Seashore State Park							
	7/10/2008	11:54	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/10/2008	11:54	Surfc	<i>Rhizosolenia spp. (T)</i>		Present	
	7/24/2008	12:51	Surfc	<i>Ceratium spp. (T)</i>		Present	
	7/24/2008	12:51	Surfc	<i>Rhizosolenia spp. (T)</i>		Present	
RWPM8: Cape Henlopen State Park Beach (2)							
	7/17/2008	11:00	Surfc	<i>Ceratium spp. (T)</i>		Present	
	7/17/2008	11:00	Surfc	<i>Rhizosolenia spp. (T)</i>		Present	
RWPMIV: Fenwick Island State Park							
	7/10/2008	9:51	Surfc		No HABs found		
	7/24/2008	10:28	Surfc	<i>Ceratium spp. (T)</i>		Present	
	7/24/2008	10:28	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	7/24/2008	10:28	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/24/2008	10:28	Surfc	<i>Prorocentrum micans (B)</i>		Present	
	7/24/2008	10:28	Surfc	<i>Prorocentrum minimum (T)</i>		Present	
	7/24/2008	10:28	Surfc	<i>Rhizosolenia spp. (T)</i>		Present	
Broadkill River							
BR01: Broadkill river @ PEL dock.							
	7/16/2008	9:00	Net	<i>Ceratium spp. (T)</i>		Present	
	7/16/2008	9:00	Net	<i>Prorocentrum micans (B)</i>		Present	
	7/16/2008	9:00	Net	<i>Prorocentrum sp. (T)</i>		Present	
	7/16/2008	9:00	Net	<i>Rhizosolenia spp. (T)</i>		Present	
	7/16/2008	9:00	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/16/2008	9:00	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	7/23/2008	9:00	Net	<i>Chaetoceros spp. (T)</i>		Present	
	7/23/2008	9:00	Net	<i>Heterocapsa rotundata (B)</i>		Present	
	7/23/2008	9:00	Net	<i>Karlodinium veneficum (T)</i>		Present	
	7/23/2008	9:00	Net	<i>Oscillatoria spp. (B)</i>		Present	
	7/23/2008	9:00	Net	<i>Prorocentrum micans (B)</i>		Present	
	7/23/2008	9:00	Net	<i>Prorocentrum sp. (T)</i>		Present	
	7/23/2008	9:00	Net	<i>Rhizosolenia spp. (T)</i>		Present	
	7/23/2008	9:00	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/23/2008	9:00	Surfc	<i>Karlodinium veneficum (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; Present: < 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							
BR20: Broadkill River at Milton tidal pond							
	7/16/2008	11:07	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Common	0.10
	7/16/2008	11:07	Surfc	<i>Oscillatoria</i> spp. (B)		Common	0.30
<u>Old Mill Creek</u>							
BR21: Old Mill Creek downstream from Red Mill Pond							
	7/16/2008	13:00	Surfc	<i>Chaetoceros</i> spp. (T)		Present	
	7/16/2008	13:00	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	7/16/2008	13:00	Surfc	<i>Heterosigma akashiwo</i> . (T)		Common	0.66
	7/16/2008	13:00	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	7/16/2008	13:00	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Present	
<u>Prime Hook Creek</u>							
BR02: Prime Hook NWR Petersfield Ditch water control structure, 50m N of Rt 16.							
	7/16/2008	11:47	Surfc		No HABs found		
BR03: Prime Hook Creek at Boat Ramp at Refuge Headquarters							
	7/16/2008	12:07	Surfc	<i>Anabaena</i> spp. (T)		Common	0.19
	7/16/2008	12:07	Surfc	<i>Chaetoceros</i> spp. (T)		Common	0.17
Delaware Bay							
<u>Canary Creek</u>							
BR19: Canary Creek at New Road							
	7/16/2008	8:56	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	7/16/2008	8:56	Surfc	<i>Heterosigma akashiwo</i> . (T)		Common	0.20
	7/16/2008	8:56	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Present	
Indian River							
<u>Assawoman Canal</u>							
IR50: Assawoman Canal at N end, marina dock							
	7/15/2008	8:53	Surfc	<i>Akashiwo sanguineum</i> (B)		Present	
	7/15/2008	8:53	Surfc	<i>Chattonella</i> cf. <i>verruculosa</i> (T)		Present	
	7/15/2008	8:53	Surfc	<i>Chattonella subsalsa</i> (T)		Present	
	7/15/2008	8:53	Surfc	<i>Prorocentrum gracile</i> (B)		Present	
<u>Bethany Loop Canal</u>							
IR62: Loop Canal, Pa Ave terminus, Bethany Beach							
	7/15/2008	8:35	Surfc	<i>Amphidinium</i> spp. (T)		Present	
	7/15/2008	8:35	Surfc	<i>Anabaena</i> spp. (T)		Common	0.19
	7/15/2008	8:35	Surfc	<i>Chattonella</i> cf. <i>verruculosa</i> (T)		Many	5.10
	7/15/2008	8:35	Surfc	<i>Chattonella subsalsa</i> (T)		Common	0.15
	7/15/2008	8:35	Surfc	<i>Fibrocapsa japonica</i> (T)		Common	0.15
	7/15/2008	8:35	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	7/15/2008	8:35	Surfc	<i>Heterocapsa rotundata</i> (B)		Common	0.11
	7/15/2008	8:35	Surfc	<i>Karlodinium veneficum</i> (T)		Common	0.20
	7/15/2008	8:35	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Present	
	7/22/2008	8:36	Surfc	(Unknown) sp. (B*)	5-15 um Grn trdrp	Abundant	55.00
	7/22/2008	8:36	Surfc	<i>Chattonella</i> cf. <i>verruculosa</i> (T)		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; Present: < 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>Bethany Loop Canal</u>							
IR62: Loop Canal, Pa Ave terminus, Bethany Beach							
	7/22/2008	8:36	Surfc	<i>Chattonella subsalsa (T)</i>		Many	3.90
	7/22/2008	8:36	Surfc	<i>Fibrocapsa japonica (T)</i>		Many	1.80
	7/22/2008	8:36	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
	7/22/2008	8:36	Surfc	<i>Heterocapsa rotundata (B)</i>		Common	0.11
	7/22/2008	8:36	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	7/22/2008	8:36	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Common	0.10
	7/22/2008	8:36	Surfc	<i>Protoperidinium quinquecorne (B)</i>		Present	
IR64: Bethany Beach canal off dead end at 3rd street East of Evans Rd.							
	7/15/2008	8:43	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	7/15/2008	8:43	Surfc	<i>Fibrocapsa japonica (T)</i>		Present	
<u>Indian River</u>							
IR04: Warwick Cove							
	7/14/2008	10:00	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	7/14/2008	10:00	Surfc	<i>Gyrodinium instriatum (B)</i>		Common	0.10
	7/14/2008	10:00	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/14/2008	10:00	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
IR07: Holt's Landing State Park							
	7/16/2008	8:54	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	7/16/2008	8:54	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/16/2008	8:54	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
IR11: Pot Nets Seaside Pier							
	7/15/2008	7:30	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
IR20: Bay Colony							
	7/14/2008	8:15	Surfc	<i>Heterocapsa rotundata (B)</i>		Common	0.10
	7/14/2008	8:15	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
IR21: Entrance to Boat House Pond, Indian River Bay							
	7/14/2008	7:10	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	7/14/2008	7:10	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
	7/14/2008	7:10	Surfc	<i>Protoperidinium quinquecorne (B)</i>		Present	
IR39: North side of Inlet at Wheelchair fishing platform under new bridge.							
	7/17/2008	8:20	Net	<i>Ceratium spp. (T)</i>		Present	
	7/17/2008	8:20	Net	<i>Dinophysis acuminata (T)</i>		Present	
	7/17/2008	8:20	Net	<i>Karlodinium veneficum (T)</i>		Present	
	7/17/2008	8:20	Net	<i>Prorocentrum micans (B)</i>		Present	
	7/17/2008	8:20	Net	<i>Prorocentrum sp. (T)</i>		Present	
	7/17/2008	8:20	Net	<i>Rhizosolenia spp. (T)</i>		Present	
	7/17/2008	8:20	Surfc	<i>Ceratium spp. (T)</i>		Present	
	7/17/2008	8:20	Surfc	<i>Chaetoceros spp. (T)</i>		Present	
	7/17/2008	8:20	Surfc	<i>Rhizosolenia spp. (T)</i>		Present	

Vines Creek

IR38: Vines Lane

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; Present: < 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>Vines Creek</u>							
IR38: Vines Lane							
	7/15/2008	6:45	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Common	0.47
	7/15/2008	6:45	Surfc	<i>Gyrodinium instriatum (B)</i>		Common	0.19
	7/15/2008	6:45	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/15/2008	6:45	Surfc	<i>Karlodinium veneficum (T)</i>		Common	0.10
	7/15/2008	6:45	Surfc	<i>Prorocentrum minimum (T)</i>		Present	
	7/22/2008	7:30	Surfc	<i>Akashiwo sanguineum (B)</i>		Present	
	7/22/2008	7:30	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Common	0.14
	7/22/2008	7:30	Surfc	<i>Cylindrotheca closterium (B*)</i>		Abundant	56.00
	7/22/2008	7:30	Surfc	<i>Gyrodinium instriatum (B)</i>		Many	2.50
	7/22/2008	7:30	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/22/2008	7:30	Surfc	<i>Karlodinium veneficum (T)</i>		Common	0.13
	7/22/2008	7:30	Surfc	<i>Prorocentrum minimum (T)</i>		Present	
<u>White Creek</u>							
IR32: Holly Terrace Acres Canal Dead End, White Creek							
	7/15/2008	9:44	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Common	0.39
	7/15/2008	9:44	Surfc	<i>Chattonella subsalsa (T)</i>		Abundant	12.30
	7/15/2008	9:44	Surfc	<i>Fibrocapsa japonica (T)</i>		Present	
	7/15/2008	9:44	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	7/15/2008	9:44	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
	7/15/2008	9:44	Surfc	<i>Protooperidinium quinquecorne (B)</i>		Present	
IR59: White Creek - west prong near Food Lion							
	7/16/2008	8:41	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	7/16/2008	8:41	Surfc	<i>Chattonella subsalsa (T)</i>		Present	
	7/16/2008	8:41	Surfc	<i>Gyrodinium instriatum (B)</i>		Common	0.21
	7/16/2008	8:41	Surfc	<i>Heterosigma akashiwo. (T)</i>		Present	
	7/16/2008	8:41	Surfc	<i>Protooperidinium quinquecorne (B)</i>		Many	2.64
IR60A: Ocean View; E Branch of White Creek							
	7/16/2008	8:20	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/16/2008	8:20	Surfc	<i>Heterosigma akashiwo. (T)</i>		Present	
	7/16/2008	8:20	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
	7/16/2008	8:20	Surfc	<i>Protooperidinium quinquecorne (B)</i>		Common	0.10

Little Assawoman Bay

Assawoman Canal

LA10: Assawoman Canal @ Kent Ave Bridge

7/14/2008	8:15	Surfc	<i>Akashiwo sanguineum (B)</i>	Present
7/14/2008	8:15	Surfc	<i>Chattonella cf. verruculosa (T)</i>	Present
7/14/2008	8:15	Surfc	<i>Chattonella subsalsa (T)</i>	Present
7/14/2008	8:15	Surfc	<i>Heterocapsa rotundata (B)</i>	Present
7/14/2008	8:15	Surfc	<i>Heterosigma akashiwo. (T)</i>	Present
7/14/2008	8:15	Surfc	<i>Karlodinium veneficum (T)</i>	Present
7/14/2008	8:15	Surfc	<i>Prorocentrum minimum (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; Present: < 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>Assawoman Canal</u>							
LA10: Assawoman Canal @ Kent Ave Bridge							
	7/14/2008	8:15	Surfc	<i>Protoperidinium quinquecorne (B)</i>		Present	
<u>Dirickson Creek</u>							
LA03: Mulberry Landing							
	7/14/2008	8:33	Surfc	<i>Chattonella subsalsa (T)</i>		Present	
	7/14/2008	8:33	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
	7/14/2008	8:33	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/14/2008	8:33	Surfc	<i>Heterosigma akashiwo. (T)</i>		Present	
	7/14/2008	8:33	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
LA09: Dirickson Creek at Road 381 bridge.							
	7/14/2008	9:17	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Common	0.16
	7/14/2008	9:17	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
	7/14/2008	9:17	Surfc	<i>Heterocapsa rotundata (B)</i>		Common	0.13
	7/14/2008	9:17	Surfc	<i>Heterosigma akashiwo. (T)</i>		Present	
	7/14/2008	9:17	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
	7/22/2008	8:28	Surfc	<i>Amphidinium spp. (T)</i>		Present	
	7/22/2008	8:28	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	7/22/2008	8:28	Surfc	<i>Heterocapsa rotundata (B)</i>		Many	5.20
	7/22/2008	8:28	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	7/22/2008	8:28	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
	7/22/2008	8:28	Surfc	<i>Protoperidinium quinquecorne (B)</i>		Present	
LA20: Swann Keys: boat ramp at S end of Blue Teal Rd							
	7/15/2008	8:52	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
	7/15/2008	8:52	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/15/2008	8:52	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	7/15/2008	8:52	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
<u>Jefferson Creek</u>							
SB07: Layton Canal, South Bethany							
	7/15/2008	7:17	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	7/15/2008	7:17	Surfc	<i>Chattonella subsalsa (T)</i>		Present	
	7/15/2008	7:17	Surfc	<i>Fibrocapsa japonica (T)</i>		Present	
	7/15/2008	7:17	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/15/2008	7:17	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
SB10E: Russell Canal east dead end							
	7/15/2008	8:27	Surfc	<i>Fibrocapsa japonica (T)</i>		Common	0.16
	7/15/2008	8:27	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
	7/15/2008	8:27	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/22/2008	8:23	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	7/22/2008	8:23	Surfc	<i>Fibrocapsa japonica (T)</i>		Present	
	7/22/2008	8:23	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
	7/22/2008	8:23	Surfc	<i>Heterocapsa rotundata (B)</i>		Common	0.17
	7/22/2008	8:23	Surfc	<i>Karlodinium veneficum (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; Present: < 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>Jefferson Creek</u>							
SB10W: Russell Canal west dead end							
	7/15/2008	9:15	Surfc	<i>Chattonella cf. verruculosa</i> (T)		Present	
	7/15/2008	9:15	Surfc	<i>Fibrocapsa japonica</i> (T)		Common	0.30
	7/15/2008	9:15	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	7/15/2008	9:15	Surfc	<i>Heterosigma akashiwo</i> . (T)		Present	
	7/15/2008	9:15	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	7/22/2008	8:16	Surfc	<i>Chattonella cf. verruculosa</i> (T)		Present	
	7/22/2008	8:16	Surfc	<i>Heterocapsa rotundata</i> (B)		Common	0.10
	7/22/2008	8:16	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
<u>Miller Creek</u>							
LA31: Double Bridges road bridge at Plantation Park							
	7/15/2008	8:14	Surfc	<i>Anabaena spp.</i> (T)		Common	0.56
	7/15/2008	8:14	Surfc	<i>Chattonella cf. verruculosa</i> (T)		Present	
	7/15/2008	8:14	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	7/15/2008	8:14	Surfc	<i>Heterocapsa rotundata</i> (B)		Common	0.41
	7/15/2008	8:14	Surfc	<i>Karlodinium veneficum</i> (T)		Common	0.35
	7/15/2008	8:14	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Present	
<u>Williams Creek</u>							
LA21: Williams Creek tributary, bridge on Rd 364a							
	7/14/2008	9:03	Surfc	<i>Chattonella cf. verruculosa</i> (T)		Present	
	7/14/2008	9:03	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	7/14/2008	9:03	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	7/14/2008	9:03	Surfc	<i>Heterosigma akashiwo</i> . (T)		Many	2.42
	7/14/2008	9:03	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	7/14/2008	9:03	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Present	
	7/14/2008	9:03	Surfc	<i>Protooperidinium quinquecorne</i> (B)		Common	0.22
	7/22/2008	8:42	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	7/22/2008	8:42	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	7/22/2008	8:42	Surfc	<i>Heterosigma akashiwo</i> . (T)		Abundant	98.00
	7/22/2008	8:42	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	7/22/2008	8:42	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Common	0.13
	7/22/2008	8:42	Surfc	<i>Protooperidinium quinquecorne</i> (B)		Present	
Rehoboth Bay							
ML: Massey's Landing							
	7/14/2008	11:52	Surfc		No HABs found		
RB07: West Bay Park							
	7/15/2008	8:30	Surfc	<i>Heterosigma akashiwo</i> . (T)		Common	0.14
	7/15/2008	8:30	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	7/15/2008	8:30	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Present	
<u>Arnell Creek</u>							
AC2S: DNREC Site, Arnell Creek, surface sample							

Name subscripts: (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; Present: < 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>Arnell Creek</u>							
AC2S: DNREC Site, Arnell Creek, surface sample							
	7/10/2008	9:28	Surfc	<i>(Unknown) sp. (B*)</i>	5-15 um Grn trdrp	Abundant	14.30
	7/10/2008	9:28	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Common	0.57
	7/10/2008	9:28	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/10/2008	9:28	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	7/17/2008	9:30	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/17/2008	9:30	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	7/17/2008	9:30	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
	7/17/2008	9:30	Surfc	<i>Protoperidinium quinquecorne (B)</i>		Present	
	7/23/2008	13:55	Surfc	<i>(Unknown) sp. (B*)</i>	5-15 um Grn trdrp	Abundant	13.20
	7/23/2008	13:55	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	7/23/2008	13:55	Surfc	<i>Chattonella subsalsa (T)</i>		Present	
	7/23/2008	13:55	Surfc	<i>Heterocapsa rotundata (B)</i>		Common	0.14
	7/23/2008	13:55	Surfc	<i>Heterosigma akashiwo. (T)</i>		Present	
	7/23/2008	13:55	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	7/23/2008	13:55	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
	7/23/2008	13:55	Surfc	<i>Navicula (small) (B*)</i>		Abundant	15.40
<u>Bald Eagle Creek</u>							
RB69: Torquay Canal DNREC site. TC1							
	7/10/2008	8:55	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/10/2008	8:55	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
	7/17/2008	8:55	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	7/23/2008	14:25	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Many	4.20
	7/23/2008	14:25	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/23/2008	14:25	Surfc	<i>Karlodinium veneficum (T)</i>		Common	0.15
	7/23/2008	14:25	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
<u>Guinea Creek</u>							
RB05: Mouth of Guinea Creek (Pot Nets Creekside)							
	7/14/2008	12:12	Surfc	<i>Amphidinium spp. (T)</i>		Present	
	7/14/2008	12:12	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	7/14/2008	12:12	Surfc	<i>Heterocapsa rotundata (B)</i>		Common	0.10
	7/14/2008	12:12	Surfc	<i>Heterosigma akashiwo. (T)</i>		Present	
	7/14/2008	12:12	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	7/14/2008	12:12	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
	7/14/2008	12:12	Surfc	<i>Scrippsiella sp. (B)</i>		Present	
RB06: Guinea Creek (Winding Creek Village)							
	7/14/2008	7:00	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
	7/14/2008	7:00	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/14/2008	7:00	Surfc	<i>Heterosigma akashiwo. (T)</i>		Present	
	7/14/2008	7:00	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	7/14/2008	7:00	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
	7/14/2008	7:00	Surfc	<i>Prorocentrum minimum (T)</i>		Present	

Name subscripts: (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; Present: < 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>Guinea Creek</u>							
RB06A: Guinea Creek @ Rd 298 Bridge							
	7/14/2008	12:29	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Common	0.14
	7/14/2008	12:29	Surfc	<i>Chattonella subsalsa (T)</i>		Present	
	7/14/2008	12:29	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/14/2008	12:29	Surfc	<i>Heterosigma akashiwo. (T)</i>		Present	
	7/14/2008	12:29	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
<u>Lewes - Rehoboth Canal</u>							
RB02: Lewes - Rehoboth Canal at Lewes							
	7/15/2008	8:30	Net	<i>Rhizosolenia spp. (T)</i>		Present	
	7/15/2008	8:30	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/15/2008	8:30	Surfc	<i>Rhizosolenia spp. (T)</i>		Present	
	7/21/2008	8:30	Net	<i>Rhizosolenia spp. (T)</i>		Present	
	7/21/2008	8:30	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
<u>Love Creek</u>							
RB34: Love Creek at Rt 24 Bridge							
	7/15/2008	11:40	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	7/15/2008	11:40	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
	7/15/2008	11:40	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/15/2008	11:40	Surfc	<i>Heterosigma akashiwo. (T)</i>		Present	
	7/15/2008	11:40	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
RLC2S: DNREC site, upper Love Creek							
	7/10/2008	10:10	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Common	0.21
	7/10/2008	10:10	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
	7/10/2008	10:10	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/10/2008	10:10	Surfc	<i>Heterosigma akashiwo. (T)</i>		Present	
	7/17/2008	10:04	Surfc	<i>Gyrodinium instriatum (B)</i>		Common	0.19
	7/17/2008	10:04	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/17/2008	10:04	Surfc	<i>Karlodinium veneficum (T)</i>		Common	0.16
	7/17/2008	10:04	Surfc	<i>Prorocentrum minimum (T)</i>		Present	
	7/23/2008	13:25	Surfc	<i>(Unknown) sp. (B*)</i>	5-15 um Grn trdrp	Abundant	77.00
	7/23/2008	13:25	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
	7/23/2008	13:25	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/23/2008	13:25	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	7/23/2008	13:25	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
	7/23/2008	13:25	Surfc	<i>Navicula (small) (B*)</i>		Abundant	15.40

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; Present: < 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