

# Harmful Algae Report

All data between 8/25/2007 and 10/4/2007

University of Delaware Citizen Monitoring Program

Water Body Tributary Site	Date	Time	Smpl Dpth	Name	Comment if ID uncertain	Abundance	MC/L
<b>Assawoman Bay</b>							
<u>Roy Creek</u>							
BA01: Keenwick on Bay, Roy Creek							
	9/11/2007	9:05	Surfc	<i>Protoperdinium quinquecorne (B)</i>		Present	
<b>Broadkill River</b>							
BR01: Broadkill river @ PEL dock.							
	8/30/2007	13:45	Net	<i>Chaetoceros spp. (T)</i>		Present	
	8/30/2007	13:45	Net	<i>Prorocentrum gracile (B)</i>		Present	
	8/30/2007	13:45	Net	<i>Prorocentrum sp. (T)</i>		Present	
	8/30/2007	13:45	Net	<i>Pseudo-nitzschia spp. (T)</i>		Present	
	8/30/2007	13:45	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	8/30/2007	13:45	Surfc	<i>Heterosigma akashiwo. (T)</i>		Present	
	8/30/2007	13:45	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	9/12/2007	8:30	Net	<i>Chaetoceros spp. (T)</i>		Present	
	9/12/2007	8:30	Net	<i>Heterocapsa rotundata (B)</i>		Present	
	9/12/2007	8:30	Net	<i>Pseudo-nitzschia spp. (T)</i>		Present	
	9/12/2007	8:30	Net	<i>Rhizosolenia spp. (T)</i>		Present	
	9/12/2007	8:30	Net	<i>Scrippsiella sp. (B)</i>		Present	
	9/12/2007	8:30	Surfc	<i>Chaetoceros spp. (T)</i>		Present	
	9/12/2007	8:30	Surfc	<i>Prorocentrum sp. (T)</i>		Present	
	9/12/2007	8:30	Surfc	<i>Scrippsiella sp. (B)</i>		Present	
	9/20/2007	13:45	Net	<i>Chaetoceros spp. (T)</i>		Present	
	9/20/2007	13:45	Net	<i>Ditylum spp. (T)</i>		Present	
	9/20/2007	13:45	Net	<i>Heterocapsa rotundata (B)</i>		Present	
	9/20/2007	13:45	Net	<i>Prorocentrum sp. (T)</i>		Present	
	9/20/2007	13:45	Net	<i>Pseudo-nitzschia spp. (T)</i>		Present	
	9/20/2007	13:45	Net	<i>Rhizosolenia spp. (T)</i>		Present	
	9/20/2007	13:45	Net	<i>Scrippsiella sp. (B)</i>		Present	
	9/20/2007	13:45	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	9/20/2007	13:45	Surfc	<i>Prorocentrum sp. (T)</i>		Present	
	9/20/2007	13:45	Surfc	<i>Rhizosolenia spp. (T)</i>		Present	
	9/27/2007	8:45	Net	<i>Amphidinium spp. (T)</i>		Present	
	9/27/2007	8:45	Net	<i>Chaetoceros spp. (T)</i>		Present	
	9/27/2007	8:45	Net	<i>Ditylum spp. (T)</i>		Present	
	9/27/2007	8:45	Net	<i>Prorocentrum sp. (T)</i>		Present	
	9/27/2007	8:45	Net	<i>Pseudo-nitzschia spp. (T)</i>		Present	
	9/27/2007	8:45	Net	<i>Rhizosolenia spp. (T)</i>		Present	
	9/27/2007	8:45	Surfc	<i>Chaetoceros spp. (T)</i>		Common	0.15
	9/27/2007	8:45	Surfc	<i>Heterocapsa rotundata (B)</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
<b>Broadkill River</b>							
BR01: Broadkill river @ PEL dock.							
	9/27/2007	8:45	Surfc	<i>Rhizosolenia spp. (T)</i>		Present	
<u>Deep Hole Creek</u>							
BR132: 2703 S. Bayshore Drive							
	9/12/2007	6:30	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
<u>Old Mill Creek</u>							
BR21: Old Mill Creek downstream from Red Mill Pond							
	9/12/2007	12:55	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	9/12/2007	12:55	Surfc	<i>Heterosigma akashiwo. (T)</i>		Present	
<b>Delaware Bay</b>							
<u>Canary Creek</u>							
BR19: Canary Creek at New Road							
	9/12/2007	10:03	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
BR40: Canary Creek at Pilottown Rd							
	9/12/2007	9:45	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
<b>Indian River</b>							
<u>Assawoman Canal</u>							
IR50: Assawoman Canal at N end, marina dock							
	9/18/2007	8:51	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	9/18/2007	8:51	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	9/18/2007	8:51	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
<u>Bethany Loop Canal</u>							
IR62: Loop Canal, Pa Ave terminus, Bethany Beach							
	8/28/2007	8:15	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	8/28/2007	8:15	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
	8/28/2007	8:15	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
	8/28/2007	8:15	Surfc	<i>Protooperidinium quinquecorne (B)</i>		Common	0.44
	9/17/2007	9:28	Surfc	<i>Fibrocapsa japonica (T)</i>		Present	
	9/17/2007	9:28	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
	9/17/2007	9:28	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	9/17/2007	9:28	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	9/17/2007	9:28	Surfc	<i>Protooperidinium quinquecorne (B)</i>		Present	
IR64: Bethany Beach canal off dead end at 3rd street East of Evans Rd.							
	9/18/2007	8:09	Surfc	<i>Chattonella subsalsa (T)</i>		Present	
	9/18/2007	8:09	Surfc	<i>Fibrocapsa japonica (T)</i>		Present	
	9/18/2007	8:09	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	9/18/2007	8:09	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	9/18/2007	8:09	Surfc	<i>Protooperidinium quinquecorne (B)</i>		Present	
<u>Indian River</u>							
IR04: Warwick Cove							
	9/10/2007	10:07	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	9/10/2007	10:07	Surfc	<i>Heterosigma akashiwo. (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
<b>Indian River</b>							
<u>Indian River</u>							
IR04: Warwick Cove							
	9/10/2007	10:07	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	9/10/2007	10:07	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Present	
IR07: Holt's Landing State Park							
	8/30/2007	8:32	Surfc	<i>Protoperidinium quinquecorne</i> (B)		Present	
	9/19/2007	8:48	Surfc	<i>Akashiwo sanguineum</i> (B)		Present	
	9/19/2007	8:48	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
IR36B: James Farm, Pasture Point							
	8/29/2007	16:00	Surfc	<i>Chattonella cf. verruculosa</i> (T)		Many	4.20
	8/29/2007	16:00	Surfc	<i>Fibrocapsa japonica</i> (T)		Present	
	8/29/2007	16:00	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
IR39: North side of Inlet at Wheelchair fishing platform under new bridge.							
	8/30/2007	9:13	Net	<i>Chaetoceros spp.</i> (T)		Present	
	8/30/2007	9:13	Net	<i>Ditylum spp.</i> (T)		Present	
	8/30/2007	9:13	Net	<i>Karlodinium veneficum</i> (T)		Present	
	8/30/2007	9:13	Net	<i>Prorocentrum gracile</i> (B)		Present	
	8/30/2007	9:13	Net	<i>Prorocentrum sp.</i> (T)		Present	
	8/30/2007	9:13	Net	<i>Pseudo-nitzschia spp.</i> (T)		Present	
	8/30/2007	9:13	Net	<i>Rhizosolenia spp.</i> (T)		Present	
	8/30/2007	9:13	Surfc	<i>Chaetoceros spp.</i> (T)		Common	0.41
	8/30/2007	9:13	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	8/30/2007	9:13	Surfc	<i>Prorocentrum sp.</i> (T)		Present	
	8/30/2007	9:13	Surfc	<i>Pseudo-nitzschia spp.</i> (T)		Present	
IR68B: Coast Guard Station, IR Inlet by boat							
	8/30/2007	15:00	Surfc	<i>Chaetoceros spp.</i> (T)		Common	0.88
	8/30/2007	15:00	Surfc	<i>Heterosigma akashiwo.</i> (T)		Present	
	8/30/2007	15:00	Surfc	<i>Prorocentrum sp.</i> (T)		Present	
	8/30/2007	15:00	Surfc	<i>Pseudo-nitzschia spp.</i> (T)		Common	0.13
<u>Vines Creek</u>							
IR38: Vines Lane							
	8/29/2007	8:07	Surfc	<i>Akashiwo sanguineum</i> (B)		Present	
	8/29/2007	8:07	Surfc	<i>Chattonella cf. verruculosa</i> (T)		Present	
	8/29/2007	8:07	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	8/29/2007	8:07	Surfc	<i>Heterocapsa rotundata</i> (B)		Many	1.30
	8/29/2007	8:07	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	9/5/2007	7:45	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	9/5/2007	7:45	Surfc	<i>Heterosigma akashiwo.</i> (T)		Present	
	9/5/2007	7:45	Surfc	<i>Scrippsiella sp.</i> (B)		Present	
	9/12/2007	13:30	Surfc	<i>Akashiwo sanguineum</i> (B)		Present	
	9/12/2007	13:30	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	9/12/2007	13:30	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	9/19/2007	7:50	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; 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
<b>Indian River</b>							
<u>Vines Creek</u>							
IR38: Vines Lane							
	9/19/2007	7:50	Surfc	<i>Heterosigma akashiwo. (T)</i>		Common	0.24
	9/19/2007	7:50	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	10/3/2007	7:50	Net	<i>Chaetoceros spp. (T)</i>		Present	
	10/3/2007	7:50	Surfc	<i>Akashiwo sanguineum (B)</i>		Present	
	10/3/2007	7:50	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
<u>White Creek</u>							
IR32: Holly Terrace Acres Canal Dead End, White Creek							
	8/27/2007	8:45	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Abundant	33.50
	8/27/2007	8:45	Surfc	<i>Chattonella subsalsa (T)</i>		Present	
	8/27/2007	8:45	Surfc	<i>Fibrocapsa japonica (T)</i>		Common	0.10
	8/27/2007	8:45	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	8/27/2007	8:45	Surfc	<i>Protoperidinium quinquecorne (B)</i>		Present	
	8/28/2007	8:48	Surfc	<i>Akashiwo sanguineum (B)</i>		Present	
	8/28/2007	8:48	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Abundant	43.60
	8/28/2007	8:48	Surfc	<i>Chattonella subsalsa (T)</i>		Present	
	8/28/2007	8:48	Surfc	<i>Fibrocapsa japonica (T)</i>		Common	0.16
	8/28/2007	8:48	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	8/28/2007	8:48	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	8/28/2007	8:48	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
	8/28/2007	8:48	Surfc	<i>Prorocentrum gracile (B)</i>		Present	
	8/28/2007	8:49	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Abundant	45.80
	8/28/2007	8:49	Surfc	<i>Chattonella subsalsa (T)</i>		Present	
	8/28/2007	8:49	Surfc	<i>Fibrocapsa japonica (T)</i>		Common	0.15
	8/28/2007	8:49	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
	8/28/2007	8:50	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Abundant	32.00
	8/28/2007	8:50	Surfc	<i>Chattonella subsalsa (T)</i>		Present	
	8/28/2007	8:50	Surfc	<i>Fibrocapsa japonica (T)</i>		Common	0.15
	8/28/2007	8:50	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	8/28/2007	8:50	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
	8/28/2007	8:50	Surfc	<i>Prorocentrum gracile (B)</i>		Present	
	8/28/2007	8:50	Surfc	<i>Protoperidinium quinquecorne (B)</i>		Present	
	8/29/2007	8:40	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Abundant	44.20
	8/29/2007	8:40	Surfc	<i>Chattonella subsalsa (T)</i>		Present	
	8/29/2007	8:40	Surfc	<i>Fibrocapsa japonica (T)</i>		Common	0.15
	8/29/2007	8:40	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	8/29/2007	8:40	Surfc	<i>Heterosigma akashiwo. (T)</i>		Present	
	8/29/2007	8:40	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	8/29/2007	8:40	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
	8/29/2007	8:40	Surfc	<i>Protoperidinium quinquecorne (B)</i>		Present	
	8/29/2007	8:40	Surfc	<i>Scrippsiella sp. (B)</i>		Present	
	8/30/2007	8:40	Surfc	<i>"Gymnodinioid" sp. (S)</i>	10-15 um Grn	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
<b>Indian River</b>							
<u>White Creek</u>							
IR32: Holly Terrace Acres Canal Dead End, White Creek							
	8/30/2007	8:40	Surfc	<i>Chattonella cf. verruculosa</i> (T)		Abundant	26.00
	8/30/2007	8:40	Surfc	<i>Chattonella subsalsa</i> (T)		Present	
	8/30/2007	8:40	Surfc	<i>Fibrocapsa japonica</i> (T)		Common	0.13
	8/30/2007	8:40	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	8/30/2007	8:40	Surfc	<i>Heterosigma akashiwo</i> . (T)		Present	
	8/30/2007	8:40	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	8/30/2007	8:40	Surfc	<i>Prorocentrum gracile</i> (B)		Present	
	8/31/2007	8:43	Surfc	" <i>Gymnodinioid</i> " sp. (S)	10-15 um Grn	Present	
	8/31/2007	8:43	Surfc	<i>Chattonella cf. verruculosa</i> (T)		Abundant	17.60
	8/31/2007	8:43	Surfc	<i>Chattonella subsalsa</i> (T)		Present	
	8/31/2007	8:43	Surfc	<i>Fibrocapsa japonica</i> (T)		Present	
	8/31/2007	8:43	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	8/31/2007	8:43	Surfc	<i>Karlodinium veneficum</i> (T)		Common	0.36
	8/31/2007	8:43	Surfc	<i>Prorocentrum gracile</i> (B)		Present	
	9/4/2007	8:52	Surfc	<i>Chattonella cf. verruculosa</i> (T)		Present	
	9/4/2007	8:52	Surfc	<i>Chattonella subsalsa</i> (T)		Present	
	9/4/2007	8:52	Surfc	<i>Cylindrotheca closterium</i> (B*)		Abundant	10.60
	9/4/2007	8:52	Surfc	<i>Fibrocapsa japonica</i> (T)		Common	0.11
	9/4/2007	8:52	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	9/4/2007	8:52	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	9/4/2007	8:52	Surfc	<i>Heterosigma akashiwo</i> . (T)		Present	
	9/4/2007	8:52	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	9/4/2007	8:52	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Common	0.15
	9/4/2007	8:52	Surfc	<i>Prorocentrum gracile</i> (B)		Present	
	9/11/2007	10:22	Surfc	" <i>Gymnodinioid</i> " sp. (S)	10-15 um Grn	Present	
	9/11/2007	10:22	Surfc	<i>Chattonella subsalsa</i> (T)		Present	
	9/11/2007	10:22	Surfc	<i>Cylindrotheca closterium</i> (B*)		Abundant	11.00
	9/11/2007	10:22	Surfc	<i>Fibrocapsa japonica</i> (T)		Common	0.30
	9/11/2007	10:22	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	9/11/2007	10:22	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	9/11/2007	10:22	Surfc	<i>Karlodinium veneficum</i> (T)		Common	0.10
IR59: White Creek - west prong near Food Lion							
	9/19/2007	8:30	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	9/19/2007	8:30	Surfc	<i>Heterocapsa rotundata</i> (B)		Common	0.16
	9/19/2007	8:30	Surfc	<i>Protooperidinium quinquecorne</i> (B)		Present	
IR60A: 4 Cristy Lane, Ocean View; E Branch of White Creek							
	9/19/2007	8:21	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	9/19/2007	8:21	Surfc	<i>Heterocapsa rotundata</i> (B)		Many	4.40
	9/19/2007	8:21	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	9/19/2007	8:21	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Present	
	9/19/2007	8:21	Surfc	<i>Protooperidinium quinquecorne</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; 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
<b>Indian River</b>							
<u>White Creek</u>							
IR71: End of Sandy Cove Road							
	8/30/2007	9:21	Surfc	<i>Chaetoceros spp. (T)</i>		Common	0.12
	8/30/2007	9:21	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	8/30/2007	9:21	Surfc	<i>Pseudo-nitzschia spp. (T)</i>		Present	0.02
<b>Little Assawoman Bay</b>							
LA15B: Red channel marker #12							
	8/27/2007	6:40	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	8/27/2007	6:40	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	9/17/2007	7:15	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
LA35B: Red Channel marker #28, across from Miller Creek							
	8/27/2007	6:28	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	8/27/2007	6:28	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	9/17/2007	7:00	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	9/17/2007	7:00	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
LA42B: Narrows, South of state beach at point							
	8/27/2007	6:32	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	8/27/2007	6:32	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	8/27/2007	6:32	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
<u>Assawoman Canal</u>							
LA10: Assawoman Canal @ Kent Ave Bridge							
	8/27/2007	8:00	Surfc	<i>Akashiwo sanguineum (B)</i>		Present	
	8/27/2007	8:00	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Common	0.47
	8/27/2007	8:00	Surfc	<i>Fibrocapsa japonica (T)</i>		Present	
	8/27/2007	8:00	Surfc	<i>Heterosigma akashiwo. (T)</i>		Present	
	9/17/2007	8:20	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	9/17/2007	8:20	Surfc	<i>Prorocentrum gracile (B)</i>		Present	
	10/1/2007	8:20	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	10/1/2007	8:20	Surfc	<i>Heterosigma akashiwo. (T)</i>		Present	
	10/1/2007	8:20	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
<u>Dirickson Creek</u>							
LA03: Mulberry Landing							
	9/18/2007	8:20	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	9/18/2007	8:20	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	9/18/2007	8:20	Surfc	<i>Karlodinium veneficum (T)</i>		Common	0.10
LA09: Dirickson Creek at Road 381 bridge.							
	9/18/2007	9:28	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	9/18/2007	9:28	Surfc	<i>Chattonella subsalsa (T)</i>		Present	
	9/18/2007	9:28	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	9/18/2007	9:28	Surfc	<i>Heterosigma akashiwo. (T)</i>		Present	
	9/18/2007	9:28	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
LA20: Swann Keys: boat ramp at S end of Blue Teal Rd							
	9/18/2007	9:10	Surfc	<i>Heterocapsa rotundata (B)</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**

Dirickson Creek

LA20: Swann Keys: boat ramp at S end of Blue Teal Rd							
	9/18/2007	9:10	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
LA22B: Dirickson Creek upper section between Williams Creek and the LA09, mid channel near duck blind.							
	8/27/2007	6:50	Surfc	<i>Chattonella cf. verruculosa</i> (T)		Present	
	8/27/2007	6:50	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	8/27/2007	6:50	Surfc	<i>Karlodinium veneficum</i> (T)		Present	

Jefferson Creek

SB10E: SB: Russell Canal east dead end							
	8/27/2007	8:56	Surfc	<i>Akashiwo sanguineum</i> (B)		Present	
	8/27/2007	8:56	Surfc	<i>Chattonella cf. verruculosa</i> (T)		Common	0.25
	8/27/2007	8:56	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	8/27/2007	8:56	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	9/17/2007	9:00	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	9/17/2007	9:00	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	10/1/2007	9:04	Surfc	<i>Akashiwo sanguineum</i> (B)		Present	
	10/1/2007	9:04	Surfc	<i>Chattonella cf. verruculosa</i> (T)		Common	0.24
	10/1/2007	9:04	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	10/1/2007	9:04	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	10/1/2007	9:04	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	10/1/2007	9:04	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Present	
SB10W: SB: Russell Canal west dead end							
	8/27/2007	8:51	Surfc	<i>Chattonella cf. verruculosa</i> (T)		Common	0.34
	8/27/2007	8:51	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	8/27/2007	8:51	Surfc	<i>Scrippsiella sp.</i> (B)		Present	
	9/17/2007	8:48	Surfc	<i>Heterosigma akashiwo.</i> (T)		Present	
	9/17/2007	8:48	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	10/1/2007	8:59	Surfc	<i>Chattonella cf. verruculosa</i> (T)		Present	
	10/1/2007	8:59	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	10/1/2007	8:59	Surfc	<i>Karlodinium veneficum</i> (T)		Present	

Miller Creek

LA31: Double Bridges road bridge at Plantation Park							
	9/18/2007	8:29	Surfc	<i>Anabaena spp.</i> (T)		Common	0.13
	9/18/2007	8:29	Surfc	<i>Chattonella cf. verruculosa</i> (T)		Present	
	9/18/2007	8:29	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	9/18/2007	8:29	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
LA33B: Camp Barnes dock - by boat							
	8/27/2007	6:20	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	8/27/2007	6:20	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	9/17/2007	6:50	Surfc	<i>Chattonella cf. verruculosa</i> (T)		Present	
	9/17/2007	6:50	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	9/17/2007	6:50	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	9/17/2007	6:50	Surfc	<i>Karlodinium veneficum</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
<b>Little Assawoman Bay</b>							
<u>Williams Creek</u>							
LA21: Williams Creek tributary, bridge on Rd 364a							
	9/18/2007	8:50	Surfc	<i>Chattonella cf. verruculosa</i> (T)		Common	0.59
	9/18/2007	8:50	Surfc	<i>Heterocapsa rotundata</i> (B)		Common	0.30
	9/18/2007	8:50	Surfc	<i>Heterosigma akashiwo</i> . (T)		Common	0.15
	9/18/2007	8:50	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	9/18/2007	8:50	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Common	0.32
<b>Rehoboth Bay</b>							
ML: Massey's Landing							
	9/18/2007	10:28	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	9/18/2007	10:28	Surfc	<i>Rhizosolenia spp.</i> (T)		Present	
RB07: West Bay Park							
	9/11/2007	8:30	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	9/11/2007	8:30	Surfc	<i>Prorocentrum gracile</i> (B)		Present	
	9/11/2007	8:30	Surfc	<i>V. small, &lt;5 um centrics</i> (B*)		Abundant	13.20
<u>Arnell Creek</u>							
AC2S: DNREC Site, Arnell Creek, surface sample							
	8/30/2007	10:38	Surfc	<i>Heterosigma akashiwo</i> . (T)		Present	
	8/30/2007	10:38	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	9/5/2007	14:00	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	9/5/2007	14:00	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	9/13/2007	14:22	Surfc	" <i>Gymnodinioid</i> " sp. (S)	10-15 um Grn	Present	
	9/13/2007	14:22	Surfc	( <i>Unknown</i> ) (B*)	<10 um grn sph flag	Abundant	44.00
	9/13/2007	14:22	Surfc	<i>Chattonella cf. verruculosa</i> (T)		Present	
	9/13/2007	14:22	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	9/13/2007	14:22	Surfc	<i>Karlodinium veneficum</i> (T)		Common	0.14
	9/13/2007	14:22	Surfc	<i>V. small, &lt;5 um centrics</i> (B*)		Abundant	17.60
	9/20/2007	13:40	Surfc	<i>Heterocapsa rotundata</i> (B)		Common	0.13
	9/20/2007	13:40	Surfc	<i>Heterosigma akashiwo</i> . (T)		Present	
	9/20/2007	13:40	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	9/20/2007	13:40	Surfc	<i>Pavlova (?) spp.</i> (B*)		Abundant	15.80
	9/20/2007	13:40	Surfc	<i>Protoperidinium quinquecorne</i> (B)		Present	
<u>Bald Eagle Creek</u>							
RB46: Torquay Canal at East bulkhead on Land's End.							
	8/27/2007	9:25	Surfc	" <i>Gymnodinioid</i> " sp. (S)	10-15 um Grn	Present	
	8/27/2007	9:25	Surfc	<i>Akashiwo sanguineum</i> (B)		Present	
	8/27/2007	9:25	Surfc	<i>Chattonella cf. verruculosa</i> (T)		Present	
	8/27/2007	9:25	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	8/27/2007	9:25	Surfc	<i>Heterocapsa rotundata</i> (B)		Common	0.17
	8/27/2007	9:25	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	8/27/2007	9:25	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Present	
	8/27/2007	9:25	Surfc	<i>Scrippsiella sp.</i> (B)		Present	
RB69: Torquay Canal DNREC site. TC1							

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
<b>Rehoboth Bay</b>							
<u>Bald Eagle Creek</u>							
RB69: Torquay Canal DNREC site. TC1							
	8/30/2007	10:05	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	8/30/2007	10:05	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	8/30/2007	10:05	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	8/30/2007	10:05	Surfc	<i>Rhizosolenia spp. (T)</i>		Present	
	9/5/2007	15:00	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	9/5/2007	15:00	Surfc	<i>Heterocapsa rotundata (B)</i>		Common	0.16
	9/5/2007	15:00	Surfc	<i>Heterosigma akashiwo. (T)</i>		Present	
	9/5/2007	15:00	Surfc	<i>Karlodinium veneficum (T)</i>		Common	0.13
	9/5/2007	15:00	Surfc	<i>Prorocentrum gracile (B)</i>		Present	
	9/13/2007	14:55	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	9/13/2007	14:55	Surfc	<i>Chattonella subsalsa (T)</i>		Present	
	9/13/2007	14:55	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
	9/13/2007	14:55	Surfc	<i>Heterocapsa rotundata (B)</i>		Common	0.10
	9/13/2007	14:55	Surfc	<i>Heterosigma akashiwo. (T)</i>		Present	
	9/13/2007	14:55	Surfc	<i>Karlodinium veneficum (T)</i>		Abundant	10.30
	9/13/2007	14:55	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
	9/13/2007	14:55	Surfc	<i>Navicula (small) (B*)</i>		Abundant	77.00
	9/13/2007	14:55	Surfc	<i>Prorocentrum gracile (B)</i>		Present	
	9/13/2007	14:55	Surfc	<i>Scrippsiella sp. (B)</i>		Present	
	9/20/2007	14:15	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	9/20/2007	14:15	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	9/20/2007	14:15	Surfc	<i>Scrippsiella sp. (B)</i>		Present	
<u>Guinea Creek</u>							
RB06: Guinea Creek (Winding Creek Village)							
	9/10/2007	8:30	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
	9/10/2007	8:30	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	9/10/2007	8:30	Surfc	<i>Karlodinium veneficum (T)</i>		Common	0.11
	9/10/2007	8:30	Surfc	<i>Navicula (small) (B*)</i>		Abundant	11.70
RB06A: Guinea Creek @ Rd 298 Bridge							
	9/18/2007	11:14	Surfc	<i>(Unknown) (B*)</i>	5-15 um Clr trdrp	Abundant	13.20
	9/18/2007	11:14	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Common	0.24
	9/18/2007	11:14	Surfc	<i>Chattonella subsalsa (T)</i>		Common	0.45
	9/18/2007	11:14	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	9/18/2007	11:14	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	9/18/2007	11:14	Surfc	<i>Navicula (small) (B*)</i>		Abundant	18.00
<u>Herring Creek</u>							
RB04: Herring Creek, Mid-Section							
	9/18/2007	11:35	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	9/18/2007	11:35	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
	9/18/2007	11:35	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
<b>Rehoboth Bay</b>							
<u>Lewes - Rehoboth Canal</u>							
RB02: Lewes - Rehoboth Canal at Lewes							
	8/28/2007	8:30	Net	<i>Heterocapsa rotundata</i> (B)		Present	
	8/28/2007	8:30	Net	<i>Karlodinium veneficum</i> (T)		Present	
	8/28/2007	8:30	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	8/28/2007	8:30	Surfc	<i>Scrippsiella sp.</i> (B)		Present	
	9/11/2007	8:00	Net	<i>Chaetoceros spp.</i> (T)		Present	
	9/11/2007	8:00	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	9/18/2007	8:00	Net	<i>Chaetoceros spp.</i> (T)		Present	
	9/18/2007	8:00	Net	<i>Heterocapsa rotundata</i> (B)		Present	
	9/18/2007	8:00	Net	<i>Karlodinium veneficum</i> (T)		Present	
	9/18/2007	8:00	Net	<i>Prorocentrum sp.</i> (T)		Present	
	9/18/2007	8:00	Surfc	<i>Anabaena spp.</i> (T)		Common	0.25
	9/18/2007	8:00	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	10/1/2007	8:30	Net	<i>Chaetoceros spp.</i> (T)		Present	
	10/1/2007	8:30	Net	<i>Heterosigma akashiwo.</i> (T)		Present	
	10/1/2007	8:30	Net	<i>Rhizosolenia spp.</i> (T)		Present	
	10/1/2007	8:30	Surfc	<i>Chaetoceros spp.</i> (T)		Present	
<u>Love Creek</u>							
RB34: Love Creek at Rt 24 Bridge							
	8/28/2007	8:55	Surfc	<i>Chattonella cf. verruculosa</i> (T)		Common	0.81
	8/28/2007	8:55	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	8/28/2007	8:55	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	8/28/2007	8:55	Surfc	<i>Heterosigma akashiwo.</i> (T)		Present	
	8/28/2007	8:55	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	9/18/2007	12:03	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	9/18/2007	12:03	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	9/18/2007	12:03	Surfc	<i>Heterosigma akashiwo.</i> (T)		Present	
	9/18/2007	12:03	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	9/18/2007	12:03	Surfc	<i>Pavlova (?) spp.</i> (B*)		Very Abundant	401.00
RLC2S: DNREC site, upper Love Creek							
	8/30/2007	11:06	Surfc	<i>Chattonella cf. verruculosa</i> (T)		Many	3.96
	8/30/2007	11:06	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	8/30/2007	11:06	Surfc	<i>Heterosigma akashiwo.</i> (T)		Present	
	8/30/2007	11:06	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	9/5/2007	12:25	Surfc	<i>(Unknown) sp.</i> (B*)	5-10 um Obl/Grn	Abundant	22.00
	9/5/2007	12:25	Surfc	<i>Chattonella cf. verruculosa</i> (T)		Many	6.20
	9/5/2007	12:25	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	9/5/2007	12:25	Surfc	<i>Heterosigma akashiwo.</i> (T)		Present	
	9/5/2007	12:25	Surfc	<i>Karlodinium veneficum</i> (T)		Present	
	9/13/2007	14:03	Surfc	<i>(Unknown) (B*)</i>	<10 um grn sph flag	Abundant	22.00
	9/13/2007	14:03	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
	9/13/2007	14:03	Surfc	<i>Heterosigma akashiwo.</i> (T)		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
<b>Rehoboth Bay</b>							
<u>Love Creek</u>							
RLC2S: DNREC site, upper Love Creek							
	9/13/2007	14:03	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	9/20/2007	12:40	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	9/20/2007	12:40	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	9/20/2007	12:40	Surfc	<i>Heterosigma akashiwo. (T)</i>		Present	
	9/20/2007	12:40	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	9/20/2007	12:40	Surfc	<i>Pavlova (?) spp. (B*)</i>		Very Abundant	316.00
	9/20/2007	12:40	Surfc	<i>Prorocentrum gracile (B)</i>		Present	
<b>Wagamon's Pond</b>							
BR44: Wagamon's Pond at 202 Lake Drive, Milton							
	9/12/2007	10:45	Surfc	<i>Oscillatoria spp. (B)</i>		Very Abundant	

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**