

Harmful Algae Report

All data between 7/23/2009 and 8/6/2009

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							
	7/28/2009	8:30	Surfc	<i>Chattonella cf. verruculosa</i> (T)		Present	
	7/28/2009	8:30	Surfc	<i>Heterocapsa rotundata</i> (B)		Present	
Atlantic Ocean							
RWPM14: Tower Rd Ocean, Delaware Seashore State Park							
	7/28/2009	8:10	Surfc	<i>Ditylum spp.</i> (T)		Rare	0.001
	7/28/2009	8:10	Surfc	<i>Prorocentrum gracile</i> (B)		Very Rare	
	7/28/2009	8:10	Surfc	<i>Prorocentrum sp.</i> (T)		Very Rare	
	7/28/2009	8:10	Surfc	<i>Pseudo-nitzschia spp.</i> (T)		Very Rare	
RWPM8: Cape Henlopen State Park Beach (2)							
	8/3/2009	7:13	Surfc	<i>Chaetoceros spp.</i> (T)		Rare	0.007
	8/3/2009	7:13	Surfc	<i>Ditylum spp.</i> (T)		Very Rare	
	8/3/2009	7:13	Surfc	<i>Prorocentrum gracile</i> (B)		Very Rare	
	8/3/2009	7:13	Surfc	<i>Prorocentrum minimum</i> (T)		Rare	0.001
	8/3/2009	7:13	Surfc	<i>Rhizosolenia spp.</i> (T)		Very Rare	
	8/3/2009	7:13	Surfc	<i>Scrippsiella sp.</i> (B)		Very Rare	
RWPMIV: Fenwick Island State Park							
	7/28/2009	8:50	Surfc	<i>Chaetoceros spp.</i> (T)		Rare	0.001
	7/28/2009	8:50	Surfc	<i>Dinophysis acuminata</i> (T)		Rare	0.002
	7/28/2009	8:50	Surfc	<i>Ditylum spp.</i> (T)		Rare	0.004
	7/28/2009	8:50	Surfc	<i>Prorocentrum gracile</i> (B)		Rare	0.001
	7/28/2009	8:50	Surfc	<i>Prorocentrum minimum</i> (T)		Rare	0.002
	7/28/2009	8:50	Surfc	<i>Prorocentrum sp.</i> (T)		Rare	0.006
	7/28/2009	8:50	Surfc	<i>Pseudo-nitzschia spp.</i> (T)		Very Rare	
	7/28/2009	8:50	Surfc	<i>Rhizosolenia spp.</i> (T)		Rare	0.005
	7/28/2009	8:50	Surfc	<i>Scrippsiella sp.</i> (B)		Rare	0.002
Broadkill River							
BR01: Broadkill river @ PEL dock.							
	7/29/2009	9:00	Net	<i>Chaetoceros spp.</i> (T)			
	7/29/2009	9:00	Net	<i>Prorocentrum sp.</i> (T)			
	7/29/2009	9:00	Surfc	<i>Chaetoceros spp.</i> (T)		Common	0.100
	8/5/2009	9:00	Net	<i>Chaetoceros spp.</i> (T)			
	8/5/2009	9:00	Net	<i>Dinophysis acuminata</i> (T)			
	8/5/2009	9:00	Net	<i>Oscillatoria spp.</i> (B)			
	8/5/2009	9:00	Net	<i>Prorocentrum sp.</i> (T)			
	8/5/2009	9:00	Net	<i>Rhizosolenia spp.</i> (T)			
	8/5/2009	9:00	Surfc	<i>Chaetoceros spp.</i> (T)		Present	
	8/5/2009	9:00	Surfc	<i>Karlodinium veneficum</i> (T)		Present	

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University of Delaware Citizen Monitoring Program

07-Aug-09

University of Delaware SGMAS, 700 Pilottown Rd, Lewes, DE 19958 (302) 645-4252

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Water Body Tributary Site	Date	Time	Smpl Dpth	Name	Comment if ID uncertain	Abundance	MC/L
Broadkill River							
BR01: Broadkill river @ PEL dock.	8/5/2009	9:00	Surfc	<i>Prorocentrum gracile (B)</i>		Present	
BR20: Broadkill River at Milton tidal pond	7/29/2009	10:10	Surfc	<i>Cylindrospermopsis (T)</i>		Many	9.000
<u>Diamond Pond</u>							
BR48: Diamond Pond	7/30/2009	11:15	Surfc	<i>Lyngbya (T)</i>		Present	
	7/30/2009	11:15	Surfc	<i>Microcystis spp. (T)</i>		Present	
<u>Old Mill Creek</u>							
BR21: Old Mill Creek downstream from Red Mill Pond	7/30/2009	12:20	Surfc		No HABs found		
Delaware Bay							
DB01: End of Cape Shores pier	7/29/2009	11:02	Surfc	<i>Chaetoceros spp. (T)</i>		Common	0.325
	7/29/2009	11:02	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/29/2009	11:02	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	7/29/2009	11:02	Surfc	<i>Prorocentrum gracile (B)</i>		Present	
	7/29/2009	11:02	Surfc	<i>Prorocentrum minimum (T)</i>		Present	
<u>Canary Creek</u>							
BR19: Canary Creek at New Road	7/29/2009	14:10	Surfc	<i>Chaetoceros spp. (T)</i>		Many	4.950
	7/29/2009	14:10	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
BR40: Canary Creek at Pilottown Rd	7/29/2009	9:45	Surfc	<i>Chaetoceros spp. (T)</i>		Common	0.300
	7/29/2009	9:45	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
Indian River							
<u>Assawoman Canal</u>							
IR50: Assawoman Canal at N end, marina dock	7/28/2009	7:30	Surfc	<i>Akashiwo sanguineum (B)</i>		Present	
	7/28/2009	7:30	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	7/28/2009	7:30	Surfc	<i>Heterocapsa rotundata (B)</i>		Common	0.100
	7/28/2009	7:30	Surfc	<i>Prorocentrum gracile (B)</i>		Present	
	7/28/2009	7:30	Surfc	<i>Scrippsiella sp. (B)</i>		Present	
<u>Bethany Loop Canal</u>							
IR62: Loop Canal, Pa Ave terminus, Bethany Beach	7/27/2009	7:50	Surfc	<i>Akashiwo sanguineum (B)</i>		Common	0.112
	7/27/2009	7:50	Surfc	<i>Fibrocapsa japonica (T)</i>		Common	0.175
	7/27/2009	7:50	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
	7/27/2009	7:50	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	7/27/2009	7:50	Surfc	<i>Protooperidinium quinquecorne (B)</i>		Present	
<u>Indian River</u>							
IR04: Warwick Cove							

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Indian River							
<u>Indian River</u>							
IR04: Warwick Cove							
	7/27/2009	9:30	Surfc	<i>Akashiwo sanguineum (B)</i>		Present	
	7/27/2009	9:30	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
	7/27/2009	9:30	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
IR07: Holt's Landing State Park							
	7/28/2009	8:05	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
IR11: Pot Nets Seaside Pier							
	7/27/2009	11:00	Surfc	<i>Akashiwo sanguineum (B)</i>		Present	
	7/27/2009	11:00	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
IR20: Bay Colony							
	7/28/2009	8:15	Surfc	<i>Akashiwo sanguineum (B)</i>		Present	
	7/28/2009	8:15	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	7/28/2009	8:15	Surfc	<i>Protoperidinium quinquecorne (B)</i>		Present	
IR21: Entrance to Boat House Pond, Indian River Bay							
	7/27/2009	7:50	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
IR36B: James Farm, Pasture Point							
	7/28/2009	8:45	Surfc	<i>Akashiwo sanguineum (B)</i>		Present	
	7/28/2009	8:45	Surfc	<i>Protoperidinium quinquecorne (B)</i>		Common	0.238
IR39: North side of Inlet at Wheelchair fishing platform under new bridge.							
	8/3/2009	8:10	Surfc	<i>Chaetoceros spp. (T)</i>		Rare	0.004
	8/3/2009	8:10	Surfc	<i>Dinophysis acuminata (T)</i>		Rare	0.001
	8/3/2009	8:10	Surfc	<i>Ditylum spp. (T)</i>		Very Rare	
	8/3/2009	8:10	Surfc	<i>Prorocentrum gracile (B)</i>		Rare	0.001
	8/3/2009	8:10	Surfc	<i>Prorocentrum minimum (T)</i>		Very Rare	
	8/3/2009	8:10	Surfc	<i>Prorocentrum sp. (T)</i>		Rare	0.002
	8/3/2009	8:10	Surfc	<i>Rhizosolenia spp. (T)</i>		Very Rare	
<u>Vines Creek</u>							
IR38: Vines Lane							
	7/28/2009	7:30	Surfc	<i>Akashiwo sanguineum (B)</i>		Present	
	7/28/2009	7:30	Surfc	<i>Gyrodinium instriatum (B)</i>		Common	0.150
	7/28/2009	7:30	Surfc	<i>Heterosigma akashiwo (T)</i>		Common	0.130
	7/28/2009	7:30	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
	7/28/2009	7:30	Surfc	<i>Prorocentrum minimum (T)</i>		Present	
	8/4/2009	7:45	Surfc	<i>Akashiwo sanguineum (B)</i>		Common	0.110
	8/4/2009	7:45	Surfc	<i>Dinophysis acuminata (T)</i>		Present	
	8/4/2009	7:45	Surfc	<i>Gyrodinium instriatum (B)</i>		Common	0.760
	8/4/2009	7:45	Surfc	<i>Heterocapsa rotundata (B)</i>		Common	0.180
	8/4/2009	7:45	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
	8/4/2009	7:45	Surfc	<i>Prorocentrum minimum (T)</i>		Present	
	8/4/2009	7:45	Surfc	<i>Scrippsiella sp. (B)</i>		Present	
<u>White Creek</u>							
IR32: Holly Terrace Acres Canal Dead End, White Creek							

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Indian River							
<u>White Creek</u>							
IR32: Holly Terrace Acres Canal Dead End, White Creek							
	7/28/2009	10:25	Surfc	<i>Chaetoceros spp. (T)</i>		Common	0.100
	7/28/2009	10:25	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/28/2009	10:25	Surfc	<i>Heterosigma akashiwo (T)</i>		Present	
	7/28/2009	10:25	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
	7/28/2009	10:25	Surfc	<i>Protoperidinium quinquecorne (B)</i>		Common	0.475
	7/28/2009	10:25	Surfc	<i>Scrippsiella sp. (B)</i>		Present	
Lake Gerar							
<u>Lake Gerar</u>							
RL11: Lake Gerar East end							
	8/3/2009	10:15	Surfc	<i>Cylindrospermopsis (T)</i>		Common	0.560
	8/3/2009	10:15	Surfc	<i>Scenedesmus sp. (B*)</i>		Abundant	64.200
	8/3/2009	10:15	Surfc	<i>Snowella (T)</i>		Many	2.500
Little Assawoman Bay							
LA45: Fenwick Island Bayside							
	7/28/2009	8:05	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/28/2009	8:05	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	7/28/2009	8:05	Surfc	<i>Scrippsiella sp. (B)</i>		Present	
<u>Assawoman Canal</u>							
LA10: Assawoman Canal @ Kent Ave Bridge							
	7/27/2009	7:15	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	7/27/2009	7:15	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
<u>Dirickson Creek</u>							
LA03: Mulberry Landing							
	7/27/2009	8:35	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	7/27/2009	8:35	Surfc	<i>Chattonella subsalsa (T)</i>		Present	
	7/27/2009	8:35	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/27/2009	8:35	Surfc	<i>Prorocentrum minimum (T)</i>		Present	
LA09: Dirickson Creek at Road 381 bridge.							
	7/27/2009	9:10	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
	7/27/2009	9:10	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/27/2009	9:10	Surfc	<i>Heterosigma akashiwo (T)</i>		Present	
	7/27/2009	9:10	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	7/27/2009	9:10	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
	7/27/2009	9:10	Surfc	<i>Prorocentrum minimum (T)</i>		Present	
	7/27/2009	9:10	Surfc	<i>Protoperidinium quinquecorne (B)</i>		Common	0.112
<u>Jefferson Creek</u>							
SB10E: Russell Canal east dead end							
	7/28/2009	8:07	Surfc	<i>Akashiwo sanguineum (B)</i>		Present	
	7/28/2009	8:07	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
	7/28/2009	8:07	Surfc	<i>Heterocapsa rotundata (B)</i>		Common	0.125

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Little Assawoman Bay							
<u>Jefferson Creek</u>							
SB10E: Russell Canal east dead end							
	7/28/2009	8:07	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
	7/28/2009	8:07	Surfc	<i>Protopteridinium quinquecorne (B)</i>		Present	
SB10W: Russell Canal west dead end							
	7/28/2009	8:28	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
	7/28/2009	8:28	Surfc	<i>Heterocapsa rotundata (B)</i>		Common	0.138
	7/28/2009	8:28	Surfc	<i>Heterosigma akashiwo (T)</i>		Present	
	7/28/2009	8:28	Surfc	<i>Oscillatoria spp. (B)</i>		Common	0.750
Rehoboth Bay							
ML: Massey's Landing							
	7/27/2009	11:20	Surfc	<i>Chaetoceros spp. (T)</i>		Present	
RB07: West Bay Park							
	7/28/2009	8:30	Surfc	<i>Akashiwo sanguineum (B)</i>		Present	
	7/28/2009	8:30	Surfc	<i>Heterosigma akashiwo (T)</i>		Present	
	7/28/2009	8:30	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
<u>Bald Eagle Creek</u>							
RB46: Torquay Canal at East bulkhead on Land's End.							
	7/27/2009	8:20	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	7/27/2009	8:20	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
	7/27/2009	8:20	Surfc	<i>Heterocapsa rotundata (B)</i>		Common	0.112
	7/27/2009	8:20	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	7/27/2009	8:20	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
<u>Guinea Creek</u>							
RB05: Mouth of Guinea Creek (Pot Nets Creekside)							
	7/27/2009	11:43	Surfc	<i>Akashiwo sanguineum (B)</i>		Present	
	7/27/2009	11:43	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
	7/27/2009	11:43	Surfc	<i>Heterocapsa rotundata (B)</i>		Many	1.100
	7/27/2009	11:43	Surfc	<i>Heterosigma akashiwo (T)</i>		Present	
	7/27/2009	11:43	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
RB06: Guinea Creek (Winding Creek Village)							
	7/27/2009	7:30	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
	7/27/2009	7:30	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/27/2009	7:30	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	7/27/2009	7:30	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
	7/27/2009	7:30	Surfc	<i>Protopteridinium quinquecorne (B)</i>		Present	
<u>Herring Creek</u>							
RB04: Herring Creek, Mid-Section							
	7/28/2009	7:45	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	7/28/2009	7:45	Surfc	<i>Protopteridinium quinquecorne (B)</i>		Present	
<u>Lewes - Rehoboth Canal</u>							
RB02: Lewes - Rehoboth Canal at Lewes							

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Rehoboth Bay							
<u>Lewes - Rehoboth Canal</u>							
RB02: Lewes - Rehoboth Canal at Lewes							
	7/28/2009	8:30	Net		No HABs found		
	7/28/2009	8:30	Surfc	<i>Protoperidinium quinquecorne</i> (B)		Present	
	8/4/2009	8:30	Net	" <i>Gymnodinioid</i> " sp. (S)	25-40 um Grn		
	8/4/2009	8:30	Net	<i>Heterocapsa rotundata</i> (B)			
	8/4/2009	8:30	Net	<i>Karlodinium veneficum</i> (T)			
	8/4/2009	8:30	Net	<i>Prorocentrum gracile</i> (B)			
	8/4/2009	8:30	Net	<i>Prorocentrum sp.</i> (T)			
<u>Love Creek</u>							
RB34: Love Creek at Rt 24 Bridge							
	7/27/2009	8:40	Surfc	<i>Chattonella cf. verruculosa</i> (T)		Common	0.550
	7/27/2009	8:40	Surfc	<i>Gyrodinium instriatum</i> (B)		Present	
	7/27/2009	8:40	Surfc	<i>Heterocapsa rotundata</i> (B)		Common	0.100
	7/27/2009	8:40	Surfc	<i>Kryptoperidinium foliaceum</i> (B)		Present	
	7/27/2009	8:40	Surfc	<i>Prorocentrum minimum</i> (T)		Present	
Silver Lake							
RL02: Silver Lake, Queen Street							
	8/3/2009	9:30	Surfc	<i>Anabaena spp.</i> (T)		Abundant	17.600
	8/3/2009	9:30	Surfc	<i>Aphanizomenon spp.</i> (T)		Very Abundant	774.400
	8/3/2009	9:30	Surfc	<i>Snowella</i> (T)		Abundant	42.900
	8/5/2009	8:30	Surfc	(Unknown) (B*)	Thin cyano filament	Abundant	50.600
	8/5/2009	8:30	Surfc	<i>Anabaena spp.</i> (T)		Abundant	27.500
	8/5/2009	8:30	Surfc	<i>Aphanizomenon spp.</i> (T)		Very Abundant	733.000
	8/5/2009	8:30	Surfc	<i>Planktolyngbya sp.</i> (B*)		Abundant	19.800
	8/5/2009	8:30	Surfc	<i>Snowella</i> (T)		Abundant	91.300

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