

Harmful Algae Report

All data between 5/30/2009 and 6/17/2009

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							
	6/9/2009	8:50	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
Broadkill River							
BR01: Broadkill river @ PEL dock.							
	6/2/2009	9:00	Net	<i>Heterocapsa rotundata (B)</i>			
	6/2/2009	9:00	Net	<i>Pseudo-nitzschia spp. (T)</i>			
	6/2/2009	9:00	Net	<i>Rhizosolenia spp. (T)</i>			
	6/2/2009	9:00	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	6/2/2009	9:00	Surfc	<i>Rhizosolenia spp. (T)</i>		Present	
	6/11/2009	9:00	Net	<i>Chaetoceros spp. (T)</i>			
	6/11/2009	9:00	Net	<i>Dinophysis acuminata (T)</i>			
	6/11/2009	9:00	Net	<i>Karlodinium veneficum (T)</i>			
	6/11/2009	9:00	Net	<i>Prorocentrum sp. (T)</i>			
	6/11/2009	9:00	Net	<i>Rhizosolenia spp. (T)</i>			
	6/11/2009	9:00	Net	<i>Scrippsiella sp. (B)</i>			
	6/11/2009	9:00	Surfc	<i>Prorocentrum minimum (T)</i>		Present	
	6/17/2009	9:00	Net	<i>Ceratium spp. (T)</i>			
	6/17/2009	9:00	Net	<i>Dinophysis acuminata (T)</i>			
	6/17/2009	9:00	Net	<i>Prorocentrum sp. (T)</i>			
	6/17/2009	9:00	Surfc	<i>Prorocentrum sp. (T)</i>		Present	
BR20: Broadkill River at Milton tidal pond							
	6/10/2009	9:15	Surfc	<i>Aphanizomenon spp. (T)</i>		Abundant	11.250
<u>Old Mill Creek</u>							
BR21: Old Mill Creek downstream from Red Mill Pond							
	6/10/2009	12:30	Surfc		No HABs found		
<u>Prime Hook Creek</u>							
BR03: Prime Hook Creek at Boat Ramp at Refuge Headquarters							
	6/10/2009	12:05	Surfc		No HABs found		
Delaware Bay							
DB01: End of Cape Shores pier							
	6/2/2009	13:17	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	6/2/2009	13:17	Surfc	<i>Heterocapsa triquetra (B)</i>		Present	
	6/2/2009	13:17	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	6/2/2009	13:17	Surfc	<i>Prorocentrum minimum (T)</i>		Present	
	6/2/2009	13:17	Surfc	<i>Rhizosolenia spp. (T)</i>		Present	
<u>Canary Creek</u>							
BR19: Canary Creek at New Road							

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; Very Rare: < 0.001 MC/L; Rare 0.001 - 0.01 MC/L; Present: 0.01 - 0.1 MC/L; Common: 0.1 - 1 MC/L; Many: 1 - 10 MC/L; Abundant: 10 - 100 MC/L; Very Abundant: > 100 MC/L.

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Delaware Bay							
<u>Canary Creek</u>							
BR19: Canary Creek at New Road	6/10/2009	13:21	Surfc		No HABs found		
BR40: Canary Creek at Pilottown Rd	6/10/2009	9:30	Surfc	<i>Chaetoceros spp. (T)</i>		Common	0.825
	6/10/2009	9:30	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	6/10/2009	9:30	Surfc	<i>Rhizosolenia spp. (T)</i>		Present	
Indian River							
<u>Assawoman Canal</u>							
IR50: Assawoman Canal at N end, marina dock	6/8/2009	8:10	Surfc	<i>Heterosigma akashiwo (T)</i>		Present	
	6/8/2009	8:10	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
<u>Bethany Loop Canal</u>							
IR62: Loop Canal, Pa Ave terminus, Bethany Beach	6/8/2009	7:50	Surfc	<i>Protoperidinium quinquecorne (B)</i>		Present	
<u>Indian River</u>							
IR04: Warwick Cove	6/8/2009	10:06	Surfc	<i>Heterosigma akashiwo (T)</i>		Present	
IR07: Holt's Landing State Park	6/9/2009	7:40	Surfc	<i>Skeletonema spp. (B*)</i>		Abundant	17.800
IR11: Pot Nets Seaside Pier	6/8/2009	11:05	Surfc		No HABs found		
IR20: Bay Colony	6/8/2009	8:00	Surfc		No HABs found		
IR21: Entrance to Boat House Pond, Indian River Bay	6/8/2009	7:05	Surfc	<i>Skeletonema spp. (B*)</i>		Abundant	32.300
IR36B: James Farm, Pasture Point	6/9/2009	7:22	Surfc	<i>Pseudo-nitzschia spp. (T)</i>		Present	
<u>Vines Creek</u>							
IR38: Vines Lane	6/2/2009	8:00	Surfc	<i>Akashiwo sanguineum (B)</i>		Present	
	6/2/2009	8:00	Surfc	<i>Chaetoceros spp. (T)</i>		Present	
	6/2/2009	8:00	Surfc	<i>Prorocentrum minimum (T)</i>		Present	
	6/2/2009	8:00	Surfc	<i>Scrippsiella sp. (B)</i>		Present	
	6/9/2009	7:30	Net	<i>Heterocapsa rotundata (B)</i>			
	6/9/2009	7:30	Net	<i>Rhizosolenia spp. (T)</i>			
	6/9/2009	7:30	Surfc	<i>Anabaena spp. (T)</i>		Common	0.140
	6/9/2009	7:30	Surfc	<i>Gyrodinium instriatum (B)</i>		Common	0.400
	6/9/2009	7:30	Surfc	<i>Prorocentrum minimum (T)</i>		Present	
	6/16/2009	7:30	Net	<i>Karlodinium veneficum (T)</i>			
	6/16/2009	7:30	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	6/16/2009	7:30	Surfc	<i>Heterosigma akashiwo (T)</i>		Present	
	6/16/2009	7:30	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	

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Indian River							
<u>Vines Creek</u>							
IR38: Vines Lane							
	6/16/2009	7:30	Surfc	<i>Prorocentrum minimum (T)</i>		Present	
<u>White Creek</u>							
IR32: Holly Terrace Acres Canal Dead End, White Creek							
	6/9/2009	10:10	Surfc	<i>Akashiwo sanguineum (B)</i>		Present	
	6/9/2009	10:10	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Many	1.200
	6/9/2009	10:10	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
	6/9/2009	10:10	Surfc	<i>Heterosigma akashiwo (T)</i>		Many	1.350
	6/9/2009	10:10	Surfc	<i>Karlodinium veneficum (T)</i>		Many	7.700
	6/9/2009	10:10	Surfc	<i>Prorocentrum minimum (T)</i>		Abundant	25.600
	6/9/2009	10:10	Surfc	<i>Protoperidinium quinquecorne (B)</i>		Present	
	6/9/2009	10:10	Surfc	<i>Scrippsiella sp. (B)</i>		Present	
	6/11/2009	11:45	Surfc	<i>Chattonella cf. verruculosa (T)</i>		Present	
	6/11/2009	11:45	Surfc	<i>Chattonella subsalsa (T)</i>		Present	
	6/11/2009	11:45	Surfc	<i>Heterosigma akashiwo (T)</i>		Common	0.895
	6/11/2009	11:45	Surfc	<i>Karlodinium veneficum (T)</i>		Many	4.180
	6/11/2009	11:45	Surfc	<i>Prorocentrum minimum (T)</i>		Abundant	50.820
	6/11/2009	11:45	Surfc	<i>Scrippsiella sp. (B)</i>		Present	
Little Assawoman Bay							
LA45: Fenwick Island Bayside							
	6/9/2009	8:02	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	6/9/2009	8:02	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
<u>Assawoman Canal</u>							
LA10: Assawoman Canal @ Kent Ave Bridge							
	6/8/2009	7:30	Surfc		No HABs found		
<u>Dirickson Creek</u>							
LA03: Mulberry Landing							
	6/8/2009	8:18	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
LA09: Dirickson Creek at Road 381 bridge.							
	6/8/2009	8:50	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
<u>Jefferson Creek</u>							
SB10E: Russell Canal east dead end							
	6/9/2009	8:25	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
SB10W: Russell Canal west dead end							
	6/9/2009	8:33	Surfc	<i>Karlodinium veneficum (T)</i>		Common	0.238
	6/9/2009	8:33	Surfc	<i>Pleurochrysis carterae (B*)</i>		Abundant	11.000
	6/9/2009	8:33	Surfc	<i>Prorocentrum minimum (T)</i>		Present	
	6/9/2009	8:33	Surfc	<i>Protoperidinium quinquecorne (B)</i>		Present	
Rehoboth Bay							
ML: Massey's Landing							
	6/8/2009	11:20	Surfc	<i>Chaetoceros spp. (T)</i>		Present	
RB07: West Bay Park							

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Rehoboth Bay							
RB07: West Bay Park							
	6/9/2009	8:30	Surfc		No HABs found		
<u>Bald Eagle Creek</u>							
RB46: Torquay Canal at East bulkhead on Land's End.							
	6/8/2009	9:07	Surfc	<i>Gyrodinium instriatum (B)</i>		Present	
	6/8/2009	9:07	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	6/8/2009	9:07	Surfc	<i>Kryptoperidinium foliaceum (B)</i>		Present	
<u>Guinea Creek</u>							
RB05: Mouth of Guinea Creek (Pot Nets Creekside)							
	6/8/2009	11:42	Surfc		No HABs found		
RB06: Guinea Creek (Winding Creek Village)							
	6/8/2009	12:05	Surfc	<i>Heterosigma akashiwo (T)</i>		Present	
	6/8/2009	12:05	Surfc	<i>Scrippsiella sp. (B)</i>		Present	
<u>Lewes - Rehoboth Canal</u>							
RB02: Lewes - Rehoboth Canal at Lewes							
	6/1/2009	8:30	Net	<i>Heterocapsa rotundata (B)</i>			
	6/1/2009	8:30	Net	<i>Prorocentrum sp. (T)</i>			
	6/1/2009	8:30	Net	<i>Pseudo-nitzschia spp. (T)</i>			
	6/1/2009	8:30	Net	<i>Rhizosolenia spp. (T)</i>			
	6/1/2009	8:30	Surfc	<i>Prorocentrum gracile (B)</i>		Present	
	6/1/2009	8:30	Surfc	<i>Prorocentrum minimum (T)</i>		Present	
	6/1/2009	8:30	Surfc	<i>Rhizosolenia spp. (T)</i>		Present	
	6/9/2009	8:30	Net	<i>Chaetoceros spp. (T)</i>			
	6/9/2009	8:30	Net	<i>Prorocentrum sp. (T)</i>			
	6/9/2009	8:30	Net	<i>Rhizosolenia spp. (T)</i>			
	6/9/2009	8:30	Net	<i>Scrippsiella sp. (B)</i>			
	6/9/2009	8:30	Surfc	<i>Heterocapsa rotundata (B)</i>		Present	
	6/16/2009	8:30	Net	<i>Chaetoceros spp. (T)</i>			
	6/16/2009	8:30	Surfc		No HABs found		
<u>Love Creek</u>							
RB34: Love Creek at Rt 24 Bridge							
	6/8/2009	9:35	Surfc	<i>Heterosigma akashiwo (T)</i>		Present	
	6/8/2009	9:35	Surfc	<i>Karlodinium veneficum (T)</i>		Present	
	6/8/2009	9:35	Surfc	<i>Protoperidinium quinquecorne (B)</i>		Present	

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