

University of Massachusetts Boston
Division of Marine Operations
Department of Environmental, Earth and Ocean Sciences



Head of the Harbor
The Boston Harbor Pump-out Boat

Annual Report

November, 2011

Pump-out Services, Research, Education and Outreach

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On-Call Operations

The Boston Harbor Pumpout Boat, *Head of the Harbor (HotH)*, began its third active season on May 1, 2011 and provided weekly services until the end of October. Awareness and usage of the free pumpout service has continued to increase throughout the No Discharge Zone.

The *HotH* was active responding to service requests on 100 days during which 355 pump-outs were carried out. On average the boat performed 3.5 pump-outs and pumped 472 gallons per day. Of the 42 different commercial vessels serviced, 16 were put on regular weekly and bi-weekly schedules. Private vessels were also assisted when pump-out facilities were not operational. The total volume of waste pumped during the 2011 season was **47, 195** gallons.

During the peak months of June, July, and August (Fig. 1) 4-5 service requests/week were received from recreational boaters, marinas and private yachts. The *HotH* continued to assist non-commercial vessels when nearby public pump-out facilities were not operating or when other facilities were not adequate for servicing vessels with large holding tanks. The breakdown of both shore-side facilities and mobile pump-out boats throughout the “No-Discharge Area” led to increased demand for support from the *HotH*. Duration of breakdowns varied and private vessels were encouraged to use and given directions to recreational pump-out facilities. Special consideration was taken in circumstances involving disabled vessels and non-motorized house boats. For comparison, all three seasons of *HotH* activities are presented in Fig. 3 and Table 1.

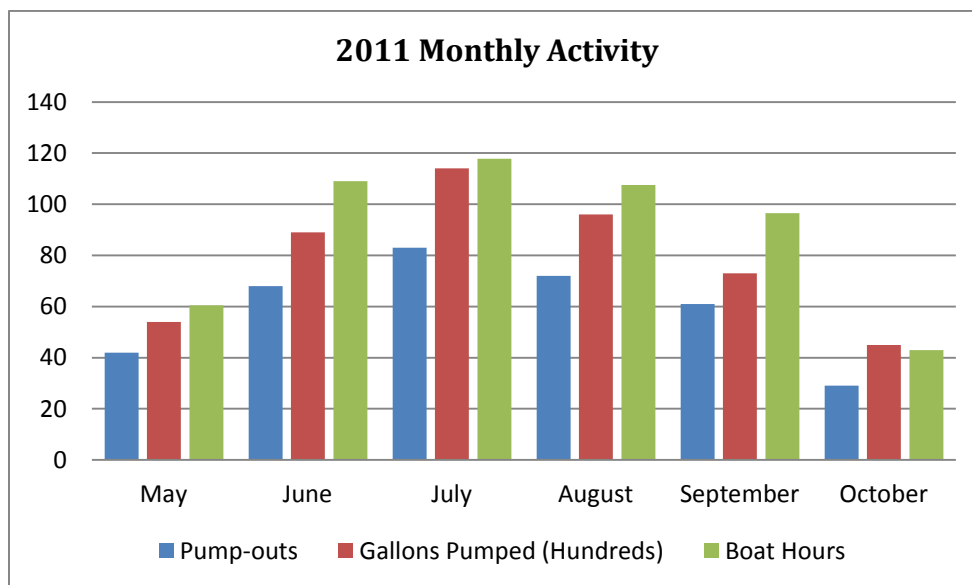


Figure 1: Displaying the monthly *HotH* activity throughout the season 2011.

The *HotH* relied heavily on shore side pump-out facilities at Marina Bay and Mystic Marine and Fuel for discharging waste. The intended discharge location at the EDIC dock in the Black Falcon Terminal was not used during 2011 because the location is occupied by Boston Police Department vessels. Furthermore, it has been determined that using the *HotH's* onboard diaphragm pump to discharge waste is not an optimal method for discharging the vessel when such action requires pumping against gravity to a discharge pipe above sea level.

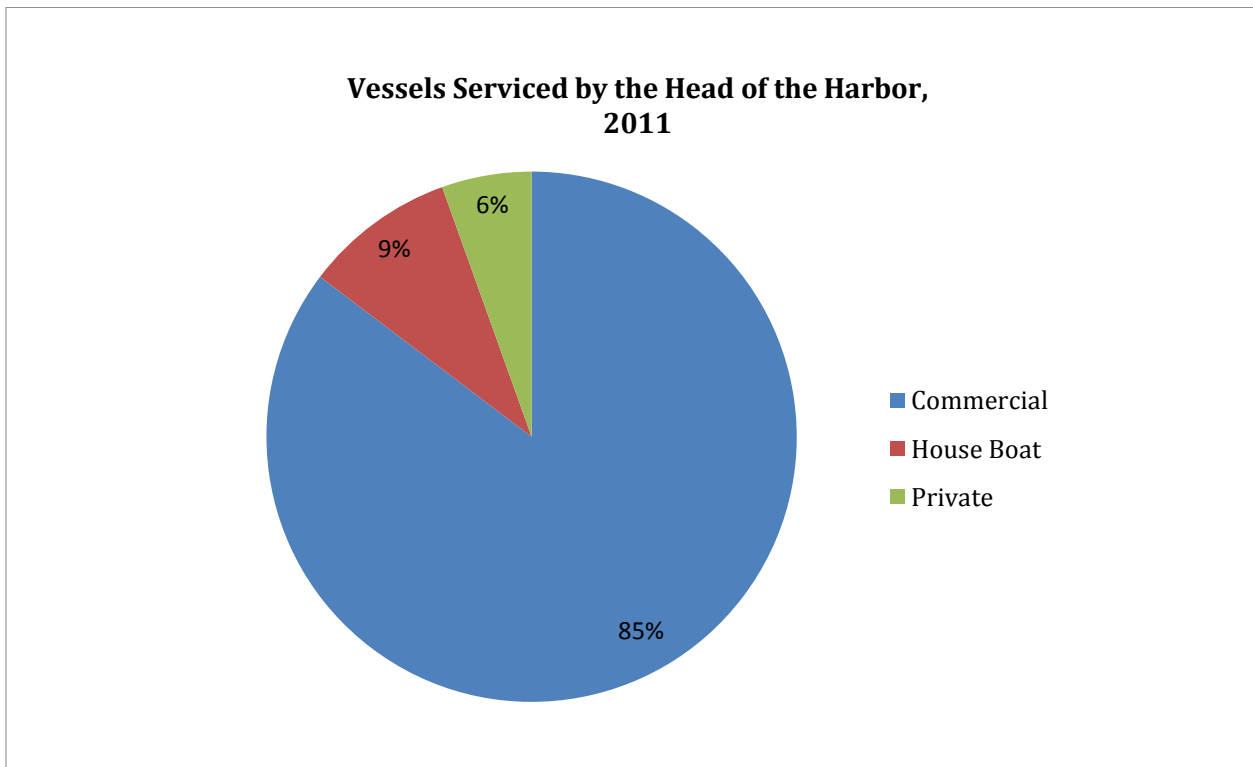


Figure 2: 2011 Pump outs performed on different vessel types. Percentages are derived from the total number of 355 total pump-outs performed.

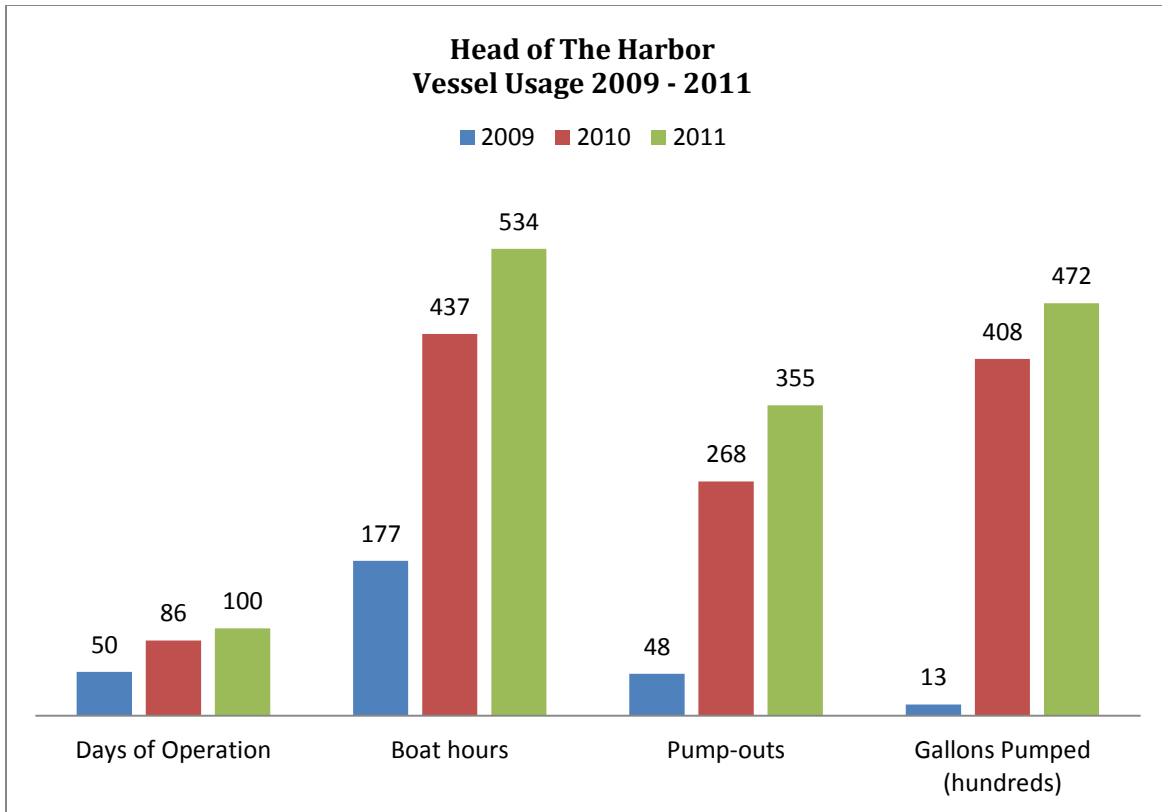


Figure 3: Comparison of usage of the *HotH* from 2009 through 2011 showing active days, boat hours, pump-outs performed and hundreds of gallons pumped.

Table 1: Comparison of total days of operation, engine hours, pump-out services completed and gallons of waste pumped by the *HotH* since 2009.

Season	Days of service (May – October)	Boat Hours	Pump-outs executed	Gallons of Waste Pumped
2009	50	177	48	12,860
2010	86	436.8	268	40,820
2011	100	534	355	47,195

Education, Research and Outreach

- Research: 6/21/2011, Supported UMass Graduate Students onboard *HotH* to monitor Boston Harbor sediment as part of a multi-year research grant.
- Education: 7/10/2011 – 8/19/2011, students hired as part of The Mayor's Boston Summer Jobs Campaign through the Boston Private Industry Council (PIC), were taken aboard the *HotH* for work experience and education.
- Education: 7/21/2011, UMass students participating in the Introduction to Biomimicry course were taken to Spectacle Island via the *HotH* for a field day visit.

- Research: 8/2/2011, Collaborated with MIT Postdoctoral students studying invasive species and fouling communities in Boston Harbor and helped in sample collections.
- Education: 9/21 – 10/31, collaboration with Green Ambassador Apprenticeship program at Thompson Island, to mentor and supervise a high school apprentice.
- Outreach: *HotH* acted as back-up for various marinas when pump-out facilities were not operational or were inadequate. Marinas assisted included: Shipyard Quarters Marina, Boston Shipyard Marina, Boston Waterboat Marina, The Marina at Rowes Wharf, Yacht Haven and Constitution Marina.
- Outreach: Boaters were surveyed with questionnaires designed to gauge the general understanding of “No Discharge Area” regulations and the locations of pump-out facilities.
- Research: *HotH* continued to facilitate the research efforts of the ***Green Boston Harbor Project (www.gbh.umb.edu)***. Research initiatives included invasive species and water quality monitoring as well as boater surveys. Invasive species were monitored throughout the harbor at sites including Rowes Wharf, Mystic Marine and Fuel, Spectacle Island and Lovells Island (Fig. 4). Sites were visited twice a month for the replacement of sampling apparatus and collection of data. Data provided by the Massachusetts Water Resources Authority (MWRA) is being used to study how water quality impacts invasive species settlement.

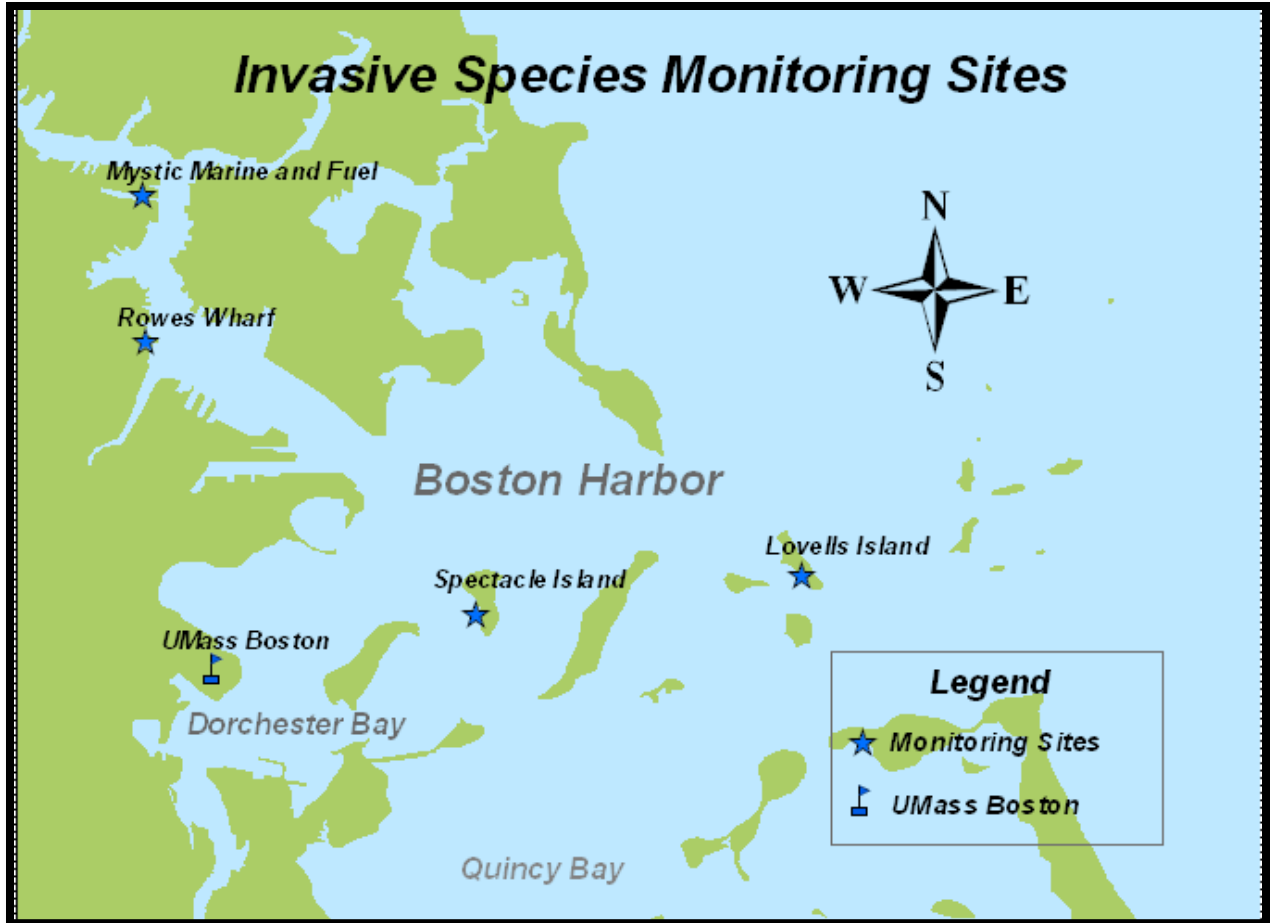


Figure 4: Four monitoring sites (blue starts) for invasive species and water quality, as part of the Green Boston Harbor Project (GBH)

Special Events

Over the course of this season we were able to participate in many events throughout the Harbor. Our presence at these events helped raise awareness of the “No Discharge Area” as well as offer increased visibility for this program by showcasing the *HotH*. A partial list of events includes:

- 8/8/2011: Thompson Island soft-shell clam planting assistance – The *HotH* assisted and transported students and scientists working to seed soft-shell clams on Thompson Island.
- 10/19/2011: Boston Harbor Island Science Symposium – Graduate students Chris McIntyre presented his research on marine invasive species at the fourth science symposium of the National Parks Service, Boston Harbor Islands, hosted by the Harvard Kennedy School. (<http://www.nps.gov/boha/parkmgmt/sciencesymposia.htm>)

In the News

The *HotH* was covered in a recent issue of *Workboat Magazine* in the third of a three-part segment addressing No Discharge Zone or Area (NDZ).

“A recent trip up to Everett, Mass., resulted in an unanticipated 10-day stay in Boston Harbor, which was granted NDZ status in July 2008. It wasn’t long before my engineer informed me that our treated sewage holding tank was filling up fast. But instead of being forced to leave our anchored barge and head off in search of a sewage connection, we found a better alternative: The sewage connection would come to us.

Head of the Harbor is a beautiful, sleek 31-footer powered by four-stroke outboards. The boat is operated for the city of Boston by the Marine Operations Department at the University of Massachusetts-Boston. Monday through Friday from May through October, they will show up at your boat location within the Boston Harbor NDZ and pump out any commercial vessel free of charge. Yes, absolutely free. The service was fast and convenient, the paperwork minimal, and the crew downright friendly. It was exactly what a visiting tugboat that couldn’t “hold it in” anymore was looking for.

From an economic and environmental standpoint (engine-hour wear and tear, wasted fuel and air pollution) in a large harbor with steady transient traffic, it makes much more sense to have a small, light vessel that burns cleaner fuel make the rounds when and where it’s needed, rather than have bigger commercial vessels running around all the time in search of a sewage connection”; By Joel Milton (<http://www.workboat.com/newsdetail.aspx?id=11203>).

2011 Service Log

Date	Hours	Vessels Serviced	Gallons	Location	Discharge Location
5/3/2011	4.5	Boston Belle	200	Marina Bay	Mystic Marine
		Scappare	60	Marina Bay	
5/4/2011	3	Lexington	780	Commonwealth Pier	Mystic Marine
5/6/2011	5	Green Turtle	100	Shipyards quarters	Mystic Marine
		White Elephant	200	Shipyards quarters	
		Sleep Afloat	150	Shipyards quarters	
5/9/2011	1	Boston Belle	60	Marina Bay	
5/11/2011	7	Outward Bound	150	Thompson Island	Mystic Marine
		Columbia Point	330	Fox Point Landing	
		Lexington	100	Commonwealth Pier	
		Evelyn Ruth	40	Battery Wharf	
5/13/2011	6.5	Green Turtle	100	Shipyards quarters	Mystic Marine
		Orion	120	Shipyards quarters	
		Luna Tuna	50	Shipyards quarters	
		Full Moon	50	Shipyards quarters	
5/16/2011	3	Island Adventurer	100	Long Wharf	Mystic Marine
5/17/2011	1.5	Boston Belle	90	Marina Bay	Mystic Marine
		Flying Colors	50	Marina Bay	
5/20/2011	6.5	Belle	350	Liberty Wharf	Mystic Marine
		Green Turtle	100	Shipyards quarters	
		Cassiopeia	100	Shipyards quarters	
		Sleep Afloat	100	Shipyards quarters	
		Recreational	50	Shipyards quarters	
5/23/2011	4.5	Boston Belle	100	Marina Bay	Mystic Marine
		Flying Colors	30	Marina Bay	
		Lexington	0	Commonwealth Pier	
		Full Moon	30	Commonwealth Pier	
5/25/2011	5	Belle	200	Liberty Wharf	Mystic Marine
		Lexington	300	Commonwealth Pier	
		Outward Bound	30	Thompson Island	
5/27/2011	5	Island Expedition	150	Long Wharf	Mystic Marine
		Green Turtle	75	Shipyards quarters	
		White Elephant	100	Shipyards quarters	
		Aquarius	50	Shipyards quarters	
		Cuckoo's Nest I	150	Shipyards quarters	
		Lira	150	Shipyards quarters	
		Iron Maiden	30	Liberty Wharf	
5/31/2011	8	Columbia Point	250	Fox Point Landing	Mystic Marine
		Island Expedition	180	Long Wharf	

		Island Adventurer	50	Long Wharf	
		Full Moon	50	Shipyards quarters	
		Belle	200	Liberty Wharf	
6/1/2011	7	Lexington	120	Commonwealth Pier	Mystic Marine
		Freedom Boat Club	30	India Wharf	
		Flying Colors	50	Marina Bay	
		Boston Belle	200	Marina Bay	
		Liberty Clipper	400	Central Wharf	
6/2/2011	4.5	Island Expedition	210	Long Wharf	Boston Shipyards
		Liberty Clipper	100	Central Wharf	
		Green Turtle	100	Shipyards quarters	
6-Jun	7	Island Discovery	250	Long Wharf	Boston Shipyards
		Island Expedition	100	Long Wharf	
		Liberty Clipper	350	Central Wharf	
		Boston Belle	200	Marina Bay	
		Flying Colors	30	Marina Bay	
6/7/2011	6.5	Outward Bound	30	Thompson Island	Mystic Marine
		Belle	150	Liberty Wharf	
6/8/2011	7	Lexington	400	Commonwealth Pier	Mystic Marine
		Marika	100	Rowes Wharf	
6/9/2011	6	Island Adventure	100	Long Wharf	Mystic Marine
		Marika	300	Rowes Wharf	
		Green Turtle	75	Shipyards quarters	
		Evelyn Ruth	40	Battery Wharf	
		Liberty Clipper	120	Central Wharf	
6/10/2011	5	Liberty Clipper	300	Central Wharf	Mystic Marine
6/13/2011	7	Boston Belle	150	Marina Bay	Mystic Marine
		Flying Colors	50	Marina Bay	
		Belle	130	Liberty Wharf	
		Full Moon	50	Shipyards quarters	
		Marika	300	Rowes Wharf	
6/14/2011	7	Island Discovery	250	Long Wharf	Boston Shipyards
		Island Adventurer	100	Long Wharf	
		Lexington	500	Commonwealth Pier	
6/15/2011	5.5	Island Adventure	50	Long Wharf	Shipyards Marina
		Freedom Boat Club	50	India Wharf	
		Green Turtle	100	Shipyards quarters	
		Recreational	20	Shipyards quarters	
		Recreational	30	Shipyards quarters	
6/20/2011	6	Boston Belle	100	Marina Bay	Marina Bay
		Niza Nice	210	Marina Bay	
		Flying Colors	50	Marina Bay	
		Full Throttle	30	Rowes Wharf	

		Full Moon	60	Shipyards quarters	
		Golden Slipper	30	Commercial Wharf	
6/21/2011	6	Island Discovery	250	Long Wharf	Mystic Marine
		Island Adventurer	100	Long Wharf	
6/22/2011	5	Island Discovery	250	Long Wharf	Marina Bay
		Lexington	300	Commonwealth Pier	
		Houseboat	50	Shipyards quarters	
		Houseboat	50	Shipyards quarters	
6/23/2011	7	Iroquois	250	Rowes Wharf	Marina Bay
		Green Turtle	100	Shipyards quarters	
		Evelyn Ruth	50	Battery Wharf	
6/24/2011	4	Columbia Point	270	Fox Point Landing	Marina Bay
		Full Moon	30	Commonwealth Pier	
6/27/2011	6	Flying Colors	40	Marina Bay	Marina Bay
		Boston Belle	150	Marina Bay	
		Full Moon	30	Commonwealth Pier	
6/28/2011	6.5	Island Adventure	100	Long Wharf	Boston Shipyards
		Viking Starliner	50	Liberty Wharf	
		Miss Leah	50	Marina Bay	
6/30/2011	6	Island Expedition	150	Long Wharf	Marina Bay
		Freedom Boat Club	30	India Wharf	
		Lexington	400	Commonwealth Pier	
		Green Turtle	100	Shipyards quarters	
		Marika	100	Rowes Wharf	
		Miko ii	30	Rowes Wharf	
		Outward Bound	100	Thompson Island	
7/1/2011	7	Full Moon	50	Shipyards quarters	Marina Bay
		Dauntless	50	Commercial Wharf	
		Golden Slipper	50	Commercial Wharf	
		Miss Leah	50	Marina Bay	
7/5/2011	5	Island Expedition	250	Long Wharf	Marina Bay
		Island Adventurer	100	Long Wharf	
		Full Moon	50	Commonwealth Pier	
		BPD Guardian	100	EDIC Black Falcon	
		Miss Leah	50	Marina Bay	
		Boston Belle	200	Marina Bay	
		Flying Colors	50	Marina Bay	
7/6/2011	5	Evelyn Ruth	50	Battery Wharf	
		Oldie But Goodie	10	East Boston	
		Lexington	0	Commonwealth Pier	
7/7/2011	1.5	Island Adventurer	100	Long Wharf	Marina Bay
		Island Expedition	250	Long Wharf	
7/8/2011	5.75	Lexington	400	Commonwealth Pier	Marina Bay

		Green Turtle	100	Shipyards quarters	
		Marika	300	Rowes Wharf	
		Miss Leah	50	Marina Bay	
7/11/2011	7.5	Boston Belle	200	Marina Bay	Marina Bay
		Flying Colors	30	Marina Bay	
		Miss Leah	50	Marina Bay	
		Full Moon	30	Commonwealth Pier	
		Lexington	360	Commonwealth Pier	
		Namoh	600	Waterboat Marina	
		Boston Light	30	Rowes Wharf	
7/12/2011	6.5	Island Adventure	100	Long Wharf	Mystic Marine
7/13/2011	5	Iroquois	250	Rowes Wharf	Marina Bay
		Freedom Boat Club	50	India Wharf	
		Golden Slipper	55	Commercial Wharf	
		Columbia Point	450	Fox Point Landing	
		Disabled Vessel	30	Boston Shipyards	
7/14/2011	7	Island Adventure	100	Long Wharf	Marina Bay
		Lexington	400	Commonwealth Pier	
		Full Moon	30	Commonwealth Pier	
		Miss Leah	50	Marina Bay	
		Green Turtle	100	Shipyards quarters	
		Tuna charter boat	60	Shipyards quarters	
7/15/2011	6	Full Moon	30	Commonwealth Pier	Marina Bay
7/18/2011	6	Boston Belle	200	Marina Bay	Marina Bay
		Miss Leah	50	Marina Bay	
		Flying Colors	50	Marina Bay	
		Full Moon	30	Commonwealth Pier	
		Lexington	660	Commonwealth Pier	
7/19/2011	5.5	Island Adventure	100	Long Wharf	Marina Bay
		Freedom Boat Club	30	India Wharf	
		Golden Slipper	55	Commercial Wharf	
		Patabsco	350	Anchorage 1	
		Marika	400	Rowes Wharf	
7/20/2011	7	Iroquois	250	Rowes Wharf	Marina Bay
		Outward Bound	60	Thompson Island	
7/21/2011	7	Island Adventure	100	Long Wharf	Marina Bay
		Lexington	250	Commonwealth Pier	
7/22/2011	6	Miss Leah	50	Marina Bay	Marina Bay
		Boston Belle	100	Marina Bay	
		Patabsco	300	Anchorage 1	
		Full Moon	60	Commonwealth Pier	
		Boston Light	30	Rowes Wharf	
		Courageous Sailing	50	Pier 8	

		Green Turtle	100	Shipyards quarters	
7/25/2011	6	Boston Belle	50	Marina Bay	Mystic Marine
		Miss Leah	50	Marina Bay	
		Flying Colors	50	Marina Bay	
		Full Moon	30	Commonwealth Pier	
		Lexington	250	Commonwealth Pier	
		Golden Slipper	55	Commercial Wharf	
		Patabasco	300	Anchorage 1	
7/26/2011	5	Island Adventure	100	Long Wharf	Mystic Marine
		Evelyn Ruth	50	Battery Wharf	
7/27/2011	6	Island Discovery	250	Long Wharf	Marina Bay
		Freedom Boat Club	30	India Wharf	
		Summerwind	150	Yacht Haven	
		Iroquois	200	Rowes Wharf	
		Liberty Clipper	170	Barking Crab	
7/28/2011	6	Island Adventure	100	Long Wharf	Marina Bay
		Lexington	300	Commonwealth Pier	
		Green Turtle	100	Shipyards quarters	
7/29/2011	7	Full Moon	60	Commonwealth Pier	Marina Bay
		News	450	Waterboat Marina	
		Looney	30	Fox Point Landing	
		Miss Leah	50	Marina Bay	
		Boston Belle	30	Marina Bay	
8/1/2011	7	Boston Belle	50	Marina Bay	Boston Shipyards
		Miss Leah	50	Marina Bay	
		Flying Colors	50	Marina Bay	
		Full Moon	30	Commonwealth Pier	
		Lexington	500	Commonwealth Pier	
		Spirit of South Carolina	250	Fan Pier	
		Columbia Point	400	Fox Point Landing	
8/2/2011	4.5	Island Adventure	100	Long Wharf	Marina Bay
		Liberty Clipper	90	Central Wharf	
8/3/2011	5	Freedom Boat Club	30	India Wharf	Marina Bay
		Golden Slipper	50	Commercial Wharf	
8/4/2011	5	Lexington	200	Commonwealth Pier	Marina Bay
		Green Turtle	100	Shipyards quarters	
8/5/2011	6	Full Moon	60	Commonwealth Pier	Marina Bay
		sail boat	60	Boston Shipyards	
8/8/2011	7.5	Boston Belle	100	Marina Bay	Marina Bay
		Miss Leah	55	Marina Bay	
		Flying Colors	50	Marina Bay	
		Full Moon	60	Commonwealth Pier	

		Lexington	450	Commonwealth Pier	
		Spirit of South Carolina	300	Fan Pier	
8/9/2011	6	Island Adventure	100	Long Wharf	Marina Bay
		Liberty Clipper	100	Barking Crab	
		Gloucester Belle	60	Barking Crab	
8/10/2011	5	Golden Slipper	50	Commercial Wharf	Marina Bay
		Miss Leah	55	Marina Bay	
8/11/2011	5	Island Adventure	100	Long Wharf	Marina Bay
		Green Turtle	100	Shipyards quarters	
8/16/2011	6	Island Adventure	90	Long Wharf	Marina Bay
		Iroquois	300	Rowes Wharf	
		Liberty Clipper	160	Barking Crab	
		Full Moon	20	Commonwealth Pier	
		Lexington	450	Commonwealth Pier	
		Virginia C	50	Liberty Wharf	
		Miss Leah	50	Marina Bay	
		Flying Colors	50	Marina Bay	
		Boston Belle	200	Marina Bay	
8/17/2011	5	Freedom Boat Club	30	India Wharf	Marina Bay
		Golden Slipper	50	Commercial Wharf	
8/18/2011	3.5	Island Adventure	150	Long Wharf	Mystic Marine
		Liberty Clipper	200	Barking Crab	
		Green Turtle	150	Shipyards quarters	
8/19/2011	6	Evelyn Ruth	50	Battery Wharf	Marina Bay
		Full Moon	30	Commonwealth Pier	
		Lexington	400	Commonwealth Pier	
		Miss Leah	50	Marina Bay	
8/22/2011	6	Boston Belle	200	Marina Bay	Marina Bay
		Flying Colors	30	Marina Bay	
		Miss Leah	55	Marina Bay	
		Lexington	500	Commonwealth Pier	
		Full Moon	30	Commonwealth Pier	
8/23/2011	6	Island Adventure	100	Long Wharf	Marina Bay
		Outward Bound	100	Thompson Island	
		BPD Guardian	90	EDIC Black Falcon	
8/24/2011	6	Columbia Point	500	Fox Point Landing	Marina Bay
		Miss Leah	30	Marina Bay	
		Golden Slipper	50	Commercial Wharf	
8/25/2011	5	Island Adventure	100	Long Wharf	Mystic Marine
		Lexington	450	Commonwealth Pier	
		Green Turtle	50	Shipyards quarters	
8/26/2011	2	Boston Belle	50	Marina Bay	Marina Bay

		Miss Leah	50	Marina Bay	
8/29/2011	3	Flying Colors	50	Marina Bay	Marina Bay
		Miss Leah	55	Marina Bay	
8/30/2011	3	Island Adventurer	100	Long Wharf	Marina Bay
		Full Moon	60	Commonwealth Pier	
		Lexington	300	Commonwealth Pier	
8/31/2011	5	Evelyn Ruth	50	Battery Wharf	Marina Bay
		Golden Slipper	50	Commercial Wharf	
		Freedom Boat Club	30	India Wharf	
		Miss Leah	30	Marina Bay	
		Charles I	300	Cambridge Side Galleria	
9/1/2011	4	Island Discovery	250	Long Wharf	Marina Bay
		Island Adventurer	100	Long Wharf	
		Lexington	300	Commonwealth Pier	
9/2/2011	6	Miss Leah	50	Marina Bay	Marina Bay
		Full Moon	30	Commonwealth Pier	
		Green Turtle	100	Shipyards quarters	
9/6/2011	6	Boston Belle	100	Marina Bay	Marina Bay
		Lexington	600	Commonwealth Pier	
		Miss Leah	100	Marina Bay	
9/8/2011	7	Island Adventurer	100	Long Wharf	Mystic Marine
		Iroquois	200	Rowes Wharf	
		Lexington	50	Commonwealth Pier	
		Golden Slipper	50	Commercial Wharf	
		Green Turtle	100	Shipyards quarters	
9/9/2011	6	Miss Leah	60	Marina Bay	Marina Bay
		Full Moon	30	Commonwealth Pier	
9/12/2011	7	Boston Belle	150	Marina Bay	Marina Bay
		Flying Colors	50	Marina Bay	
		Miss Leah	100	Marina Bay	
		Full Moon	60	Commonwealth Pier	
		Lexington	300	Commonwealth Pier	
		Outward Bound	100	Thompson Island	
		Gloucester Belle	100	Barking Crab	
9/13/2011	4	Belle	100	Long Wharf	Marina Bay
		Freedom Boat Club	30	India Wharf	
		Sercio's Boat	30	Liberty Wharf	
14-Sep	1	Golden Slipper	55	Commercial Wharf	Marina Bay
9/16/2011	6	Miss Leah	100	Marina Bay	Marina Bay
9/19/2011	5	Miss Leah	100	Marina Bay	Marina Bay
		Flying Colors	30	Marina Bay	
		Boston Belle	200	Marina Bay	
		Belle	200	Waterboat Marina	

		Lexington	450	Commonwealth Pier	
		Full Moon	30	Commonwealth Pier	
9/20/2011	2.5	Island Discovery	200	Long Wharf	Marina Bay
		Island Adventurer	100	Long Wharf	
		Columbia Point	300	Fox Point Landing	
21-Sep	5	Golden Slipper	50	Commercial Wharf	Marina Bay
		Freedom Boat Club	30	India Wharf	
		Miss Leah	90	Marina Bay	
9/22/2011	6	Boston Belle	150	Marina Bay	Marina Bay
		Island Discovery	75	Long Wharf	
		Island Adventurer	100	Long Wharf	
		Green Turtle	50	Shipyards quarters	
		Belle	100	Waterboat Marina	
		Lexington	30	Commonwealth Pier	
		Evelyn Ruth	50	Battery Wharf	
9/23/2011	4	Miss Leah	10	Marina Bay	Marina Bay
26-Sep	6	Flying Colors	30	Marina Bay	Marina Bay
		Full Moon	60	Commonwealth Pier	
		Belle	100	Waterboat Marina	
27-Sep	7	Island Adventurer	100	Long Wharf	Marina Bay
		Island Discovery	150	Long Wharf	
		BPD Guardian	100	EDIC Black Falcon	
		Outward Bound	100	Thompson Island	
28-Sep	4	Boston Belle	100	Marina Bay	Marina Bay
		Lexington	450	Commonwealth Pier	
		Golden Slipper	55	Commercial Wharf	
29-Sep	3	Island Discovery	100	Long Wharf	Marina Bay
		Island Expedition	200	Long Wharf	
		Green Turtle	100	Shipyards quarters	
30-Sep	7	Belle	150	Long Wharf	Marina Bay
3-Oct	4	Miss Leah	130	Marina Bay	Marina Bay
		Flying Colors	30	Marina Bay	
		Full Moon	30	Commonwealth Pier	
5-Oct	7	Golden Slipper	50	Commercial Wharf	Marina Bay
		Lexington	700	Commonwealth Pier	
		Gloucester Belle	50	Barking Crab	
		Columbia Point	300	Fox Point Landing	
		Miss Leah	50	Marina Bay	
6-Oct	6	Island Adventurer	100	Long Wharf	Marina Bay
		Evelyn Ruth	55	Battery Wharf	
		Green Turtle	100	Shipyards quarters	
		Dardanella	600	Constitution Marina	
7-Oct	6	Belle	100	Long Wharf	Marina Bay

		Miss Leah	100	Marina Bay	
11-Oct	5	Boston Belle	150	Marina Bay	Marina Bay
		Flying Colors	30	Marina Bay	
		Miss Leah	150	Marina Bay	
		Belle	100	Waterboat Marina	
		Dardanella	400	Constitution Marina	
		Outward Bound	100	Thompson Island	
12-Oct	3	Golden Slipper	55	Commercial Wharf	Marina Bay
		Full Moon	30	Commonwealth Pier	
		Lexington	250	Commonwealth Pier	
13-Oct	5	Green Turtle	100	Constitution Marina	Marina Bay
		Columbia Point	400	Fox Point Landing	
14-Oct	5	Boston Belle	200	Marina Bay	Marina Bay
		Miss Leah	150	Marina Bay	
18-Oct	2	Looney	30	UMB	Marina Bay

Selected images:



HotH crew lending support to a sailboat that was sunk by Hurricane Irene



HotH on duty in downtown Boston with students from the Mayor's Boston Summer Jobs Campaign through the Boston Private Industry Council (PIC)

(<http://www.flickr.com/photos/11368020@N03/4838028203/>)



Onboard *HotH*, Chris McIntyre monitors invasive species as part of the Green Boston Harbor Project (GBH), www.gbh.umb.edu



The *HotH* at Fan Pier participating in an outreach event;

(<http://v19.lscache1.c.bigcache.googleapis.com/static.panoramio.com/photos/original/44390930.jpg>)