

Our Beautiful Bay

Frenchman Bay Partners E-Newsletter

Vol. 2, Issue 4 October 2013

In This Issue

610 Project makes progress

<u>Eelgrass decline raises</u> <u>questions</u>

Partner project updates

Diadromous fish dispatches

<u>Partner profile: Aquaterra</u> <u>Adventures</u>

Upcoming events

Conservation Targets



Eelgrass

MDIBL and SMCC complete benthic survey of Frenchman Bay

by Charlie Wray, MDIBL staff scientist and director of scientific resources

During the summer of 2013, a group from Mount Desert Island Biological Laboratory and Southern Maine Community College (SMCC) began a benthic survey of numerous sites in Frenchman Bay. The survey was undertaken to compare current benthic species diversity with historical records collected during the first half of the 20th century.



Seven sites in Frenchman Bay were surveyed using a remotely operated vehicle fitted with a color video camera. Many videos were taken at each site. In addition, benthic grab samples were collected at each site and benthic species were identified and counted. The seven sites represent locations sampled by the Proctor Survey of 1926-1930. Several sites were at ledges or areas where large numbers of groundfish were historically caught by fishermen from the Frenchman Bay area. The project was funded by a grant from the Davis Conservation Foundation to Charles Wray. Shannon White, MDIBL Marine Specialist, and Elizabeth Thompson and Brian Tarbox from SMCC all worked collaboratively on the survey project. Data and video will be made available once it is analyzed.

(Check the <u>Benthic Habitat page on the FBP website</u> for future updates.)



Mudflats



Diadromous Fish

Good news for mudflats: 610 Project receives funding, makes progress

by Bridie McGreavy,

PhD candidate, Department of Communication and Journalism and research fellow with the Sustainability Solutions Initiative, University of Maine

The 610 Project (pronounced six-ten) is a collaboration between Frenchman Bay Partners, the Frenchman Bay Regional Shellfish Committee and the Hancock County Planning Commission to build capacity towards the goal of opening closed clam flats in Frenchman Bay. This project received its initial funding from the Maine Community Foundation's Community Building Grant Program. Through a conservation action planning process, the Partners and shellfish committee have identified the five-year goal of opening all 610 acres of clam flats in Frenchman Bay in which harvesting is restricted due to unknown bacterial pollution sources. They will accomplish this by building capacity within the shellfish committee for



Subtidal & Benthic Habitat

Quick Links
FBP Website
Facebook
Twitter

::

watershed surveys and organizational development.

This project has made substantial progress since the grant was awarded in May, 2013. The 610 Advisory Committee formed and is composed of representatives from the Partners, the shellfish committee, marine industries, Department of Marine Resources, colleges and research institutions. The 610 Advisory Committee identified the need to better understand the information sources and decision making around mudflat monitoring and closures. As one advisor commented, when it comes to mudflat closures, it can sometimes seem like "the right hand doesn't know what the left hand is doing."



Continue reading on the 610 project page of the FBP website.

Read about more FBP mudflat related projects here.

Eelgrass decline raises questions

by Jordan Bailey, CEHL education and outreach coordinator

The Frenchman Bay Partners' plan of restoring an additional 228 acres of eelgrass this summer had to be put on hold when it became clear that eelgrass was not coming back in the restoration areas that had been thriving for years. Not only that, many formerly healthy beds that had been growing at least since mapping began in 1996 were



also lost this year. MDIBL's Community Environmental Health Laboratory (CEHL) had to quickly change gears to begin studies on possible causes of the loss. Scientists and interns looked into the possibilities of "wasting disease" (the pathogen *Labyrinthula zosterae*) which caused devastation to the plant in the 1930s, nutrient deficiency in the sediment, temperature changes, and invasive green crabs.

George Kidder, a staff scientist at MDIBL, deployed some new temperature data loggers to begin keeping more detailed records of temperature in the upper bay. Shannon White, a marine specialist at MDIBL, conducted studies of the areas where eelgrass had been growing, sampling for organisms in the sediment, seining for fish, and collecting larvae in the water column, which will be used as baseline data for comparison if and when the eelgrass returns. MDIBL Intern Lukas Thorburn conducted many of the studies into causes of the eelgrass loss. The results of his experiments indicated that the sediments in areas where eelgrass did not grow back did have sufficient nutrients to support eelgrass growth, that wasting disease was most likely not present in the root remnants left of the lost eelgrass, but that green crabs do cause damage to eelgrass when burrowing. Washed up eelgrass around the bay this summer had frayed stems characteristic of green crab damage. Jane Disney, president of Frenchman Bay Partners and director of CEHL, notes that there have been green crabs present in Frenchman Bay for some time, but if they are the cause of the eelgrass loss this year the question remains, what has changed to make them so destructive?

(Continue reading on the FBP website)

Partner updates

Education and Outreach

Frenchman Bay Partner and Hancock County Commissioner Antonio Blasi shares the good news that the County Commission voted to replace the septic system and leach fields at the Trenton airport terminal as part of the expansion plan. Blasi also says that he guided a group of Bangor High School students who were doing a week of research at MDIBL with Jane Disney to Stave Island on a low tide in August to do a green crab survey. "The students had fun and enthusiatically researched how the crabs affect eelgrass first hand," he said.

Frenchman Bay Atlas

The Frenchman Bay Atlas working group is gearing up to begin edits on the second edition of the Atlas, which should be completed in 2014. The Atlas has received great reviews from a wide range of people, from state employees to selectman to citizens. Several areas have been identified for improvement, mostly around natural resources, and the focus of the second edition will be to make a stronger interactive version of the Atlas, giving users more information as well as links to pictures and videos of sites. The GIS lab at College of the Atlantic will lead this work.

Diadromous fish dispatches

by Chris Petersen, faculty member at College of the Atlantic and FBP vice president

Frenchman Bay Partners is working closely with both the Department of Marine Resources and the Maine Inland Fish and Wildlife Service to develop fish-run restoration projects that will have the highest impact. In the last year, the groups set up monitoring on Flanders stream and examined Jones Stream as a possible next site for restoration in the bay.

Before Frenchman Bay Partners ever got started, individual partners were doing stream restoration to enhance diadromous fish populations. Sullivan resident Gary Edwards, who is now a Frenchman Bay Partner, spearheaded the Flanders Stream Alewife Restoration project, which involved opening a culvert and installing fish ladder in the stream. The project was completed this year and alewives could be seen moving up the stream in good numbers. Volunteers monitored the run, with more monitoring expected this year.

(Continue reading on the FBP website)

Partner profile: Aquaterra Adventures

David Legere is the owner and operator of Aquaterra Adventures, located at the pier in Bar Harbor.

Legere is as a member of the Lamoine Conservation Commission, which is working to protect water quality and enhance marine habitats on the Lamoine shoreline. Like Aquaterra Adventures on Facebook to see pictures of wildlife and beautiful scenes on the water.

David earned a Bachelor of Science Degree in Outdoor Recreation Administration from Unity College and is living their mission which emphasizes the environment and natural resources. Unity College graduates like David are prepared to be environmental stewards, effective leaders, and responsible citizens.



Upcoming events

Frenchman Bay Partners presents:

Tundi Agardy: Market-Based Solutions to Marine Habitat Conservation

Tundi Agardy is an internationally renowned expert in marine conservation, with extensive field experience in Africa, Asia, the Caribbean, the Mediterranean and North America.



She is Executive Director of Sound Seas, a marine conservation policy group based in the Washington D.C. area that develops initiatives to promote truly effective marine conservation by working at the interface between public policy and community-based conservation at the more localized level.

Wednesday October 2nd, 2013 4 pm McCormick Lecture Hall College of the Atlantic

Supported by the Alex C. Walker Foundation, MDI Biological Laboratory and College of the Atlantic

Forward this email





This email was sent to jdisney@mdibl.org by $\underline{idisney@mdibl.org} \mid \underline{Update\ Profile/Email\ Address} \mid \underline{Instant\ removal\ with\ \underline{SafeUnsubscribe}^{TM}} \mid \underline{Privacy\ Policy}.$

Frenchman Bay Partners | POB 35 | Salisbury Cove | ME | 04672

Try it FREE today.