Ocean Treasure: The Natural & Cultural Resources of Stellwagen Bank National Marine Sanctuary

Take the full Course OR just enjoy one or more Lectures

National marine sanctuaries are ocean and Great Lakes sites of national significance. Stellwagen, just off the Massachusetts coast, is New England's only National Marine Sanctuary. CCMNH & SBNMS are pleased to co-sponsor this 12-week course or lecture series

Ocean Treasure is designed for:

- Traditional & non-traditional educators of Gr 5-12
- Whale watch naturalists, and
- Individuals interested in ocean science, sea birds, whales, seals, sea turtles, fish, storms, shipwrecks, maritime history, biodiversity.

Course Coordinators and Instructors:

- · Anne Smrcina, Ed. Coord. SBNMS
- · Brenda Boleyn, Professor Emerita, CCCC

Features:

- 17 specialists are presenters
- Course content linked to the Massachusetts Curriculum Frameworks
- CCMNH's superb Clarence Hay Natural History Library available as a resource to students
- · Videotaped sessions help students catch up

Time 6-9 pm, Tuesdays

Dates Feb 1 thru May 14. No class 2/22 & 4/19. Field trip to Stellwagen Bank add'l. cost.

Cost: Four Options

- 3 grad. credits: Framingham SC \$250, (option: 3 PDPs per night, or
- Audit \$100, or
- Whale watch naturalists \$50 with documentation of whale boat status, or
- Each Evening \$8M / \$10NM

Place All presentations are at the Museum.

Payment Check, cash, or MC/VISA to: Cape Cod Museum of Natural History 869 Rt.6A, Brewster, MA 02631 (508) 896-3867, Ext. 129

Registration Email adminsupport@ccmnh.org or call (508) 896-3867, Ext. 129

Refunds/Cancellation described in syllabus.

Download reading list/course syllabus: www.ccmnh.org

Feb 1 The World of National Marine Sanctuaries & Ocean Science. Anne Smrcina, Ed. Coord. SBNMS & Brenda Boleyn, Professor Emerita, CCCC

Feb 8 Weather & Waves, Storms & Seas: Meteorological Conditions at Stellwagen Bank & the Sinking of the Steamship Portland. Bob Thompson, Nat'l Weather Svc. Title TBA, Brad Butman, US Geol. Survey

Feb 15 The Foundation of the Food Chain: Phytoplankton and Zooplankton of the Stellwagen Bank region. Elisabeth Broughton, Nat'l. Marine Fisheries Svc.

Mar 1 Introduction to the Whales of Stellwagen Bank. Regina Asmutis-Silvia, Marine Biologist, International Wildlife Coalition. Tracking the Large Whales of the Sanctuary. David Wiley, SBNMS.

Mar 8 A Garden of Benthic Invertebrates and Marine Bioinvasions: The Tunicates are Coming! The Tunicates are Coming, Larry Harris, Prof. of Biology, UNH.

Mar 15 The Other Marine Mammals: Seals in the Sanctuary. Greg Early, consultant, AIS, Inc.; Vertebrates with Shells: Sea Turtles in Northern Waters. Dennis Murley, Sea Turtle Proj. Coord., Mass Audubon, Wellfleet Bay Sanctuary

Mar 22 A Rogues Gallery of Demersal Fish: One Fish, Two Fish, Codfish, Sand Lance, Les Kaufman, BU; Sounds at the Seafloor: Vocalization of Fishes, Rodney Rountree, UMass Dartmouth.

Mar 29 Tuna & Sharks: The Large Pelagics of the Sanctuary.
Gregory Skomal, Mass. Div. of Marine Fisheries; The Changing
Nature of Fish Abundance in the Gulf of Maine, Jeff Bolster, UNH

Apr 5 Birds of a Feather: The Summer & Winter Birds of Stellwagen Bank. Wayne Petersen, Swarovski Optics

Apr 12 Marine Biodiversity: the Gulf of Maine & Beyond, Larry Madin, WHOI; **Marine Protected Areas & Marine Reserves.** Ben Cowie-Haskell, SBNMS.

Apr 26 From Sail to Steam: A Maritime History of Stellwagen Bank, Deborah Marx, SBNMS; Time Capsules on the Seafloor: Shipwrecks in the Sanctuary, Matthew Lawrence, SBNMS.

May 3 Human Use & Resource Protection: Issues in Sanctuary Management. Craig MacDonald, SBNMS.

May 7 or 14 Field Trip: Stellwagen Bank NMS - A. Smrcina, R. Asmutis-Silvia, D. Wiley, S.Perkins. Space availability & fee TBA.



