

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:

- At least 20 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, 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 From Surface to Seafloor at SBNMS: Understanding the Geology & Physical Oceanography of the Sanctuary. Brad Butman, US Geol. Survey; **Weather & Waves, Storms & Seas: Meteorological Conditions at Stellwagen Bank & the Sinking of the Steamship Portland.** Bob Thompson, Nat'l Weather Svc.

Feb 15 The First Links of the Food Chain: Phytoplankton & Zooplankton of the Stellwagen Bank Region. Jefferson Turner, UMass, Dartmouth; **Understanding What Eats What: NOAA Fisheries Food Web Dynamics Program.** Elisabeth Broughton, Nat'l. Marine Fisheries Svc.

Mar 1 The Whales of Stellwagen Bank. Regina Asmutis-Silvia, Plymouth Marine Mammal Research Center & Cetacean Research in the Sanctuary. David Wiley, PhD., SBNMS.

Mar 8 The Other Marine Mammals: Seals in the Sanctuary. Greg Early, consultant, AIS, Inc.; **Vertebrates with Shells: Sea Turtles in Northern Waters.** Robert Prescott, Mass Audubon, Wellfleet Bay

Mar 15 A Garden of Benthic Invertebrates, speaker TBA; **Marine Bioinvasions: The Tunicates are Coming! The Tunicates are Coming,** Judith Pederson.

Mar 22 A Rogue's 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; **History of the Stocks: What Do We Mean by the Term Abundance,** spkr TBA.

Apr 5 Birds of a Feather: The Summer & Winter Birds of Stellwagen Bank. Wayne Petersen & Simon Perkins, Mass Audubon

Apr 12 Biodiversity & Threats to Biodiversity, spkr TBA; **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.



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