



Educator Packets with Slide Shows

Packets enable teachers to bring Sanctuary habitats and animals into their classroom curriculum. They contain fact sheets, activities, slide show scripts, book and resource lists, web site lists, Sanctuary brochures, and more.

- *Rocky Intertidal Packet*
- *Salmon Packet*

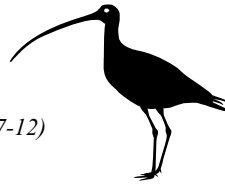
Cost: For packets, \$5 for printing and shipping costs.
For slide shows, a \$100 deposit is required.



Slide Presentations and Speakers

We have developed the following slide shows about the habitats and natural history of the Sanctuaries. With the provided script you can educate your students about the Sanctuary, or arrange for education staff to come to your classroom. All shows are available as 35 mm slides, while most are available as PowerPoint shows.

- *Gulf of the Farallones National Marine Sanctuary (grades K-6 & 7-12)*
- *Cordell Bank National Marine Sanctuary (7-12)*
- *Oceanography of the Gulf of the Farallones (grades 9-12)*
- *Food Web of the Gulf of the Farallones (grades 9-12)*
- *Sandy Beaches (grades 9-12)*
- *Oil Spills in the Gulf of the Farallones (grades 9-12)*
- *Life Between the Tides: The Rocky Intertidal (grades K-6 & 7-12)*
- *Salmonids in the Sanctuary (grades K-6)*



Cost: A \$100 deposit is required for slide show rental.

FREE Educational Resources

Fact Sheets: One page fact sheets are free at www.farallones.org as PDF files.

- *Local Sanctuaries of the San Francisco Bay Area*
- *Pinnipeds: Seals and Sea Lions of the Gulf of the Farallones*
- *Rocky Intertidal Habitat of the Gulf of the Farallones National Marine Sanctuary*
- *Sharks of the Gulf of the Farallones National Marine Sanctuary*
- *White Sharks of the Gulf of the Farallones National Marine Sanctuary*
- *Salmonids of the Gulf of the Farallones*
- *Shorebirds of the Gulf of the Farallones*
- *Oil Spills of the Gulf of the Farallones*
- *Sandy Beaches of the Gulf of the Farallones*
- *Islands, Banks & Seamounts: Geologic Features Under the Sea*

Information Cards: Available at www.farallones.org or at the Visitor Center.

- *Beach Wrack*
- *PADDLER'S Etiquette*



Brochure: Call with your request or stop by the Visitor Center.

- *Gulf of the Farallones National Marine Sanctuary*
- *Cordell Bank National Marine Sanctuary*



Marine Sanctuary Education Curriculum, Programs & Resources



Cordell Bank National Marine Sanctuary
P.O. Box 159, Olema, CA 94950
cordellbank.nos.noaa.gov
(415) 663-0314



Farallones Marine Sanctuary Association
PO Box 29386, San Francisco, CA 94129
www.farallones.org
(415) 561-6625

Gulf of the Farallones National Marine Sanctuary
Fort Mason Bldg 201, San Francisco, CA 94123
farallones.nos.noaa.gov
(415) 561-6622





The education staff of the Farallones Marine Sanctuary Association (FMSA), the Gulf of the Farallones National Marine Sanctuary (NMS), and the Cordell Bank NMS offer standard-supported curriculum, programs and resources to San Francisco Bay Area schools and educators. For all programs and resources, please send in your request at least four weeks before you need the materials.

As a teacher, for \$18 per year you can become a member of the Farallones Marine Sanctuary Association. Membership entitles you to unlimited use of the library, as well as discounts on all FMSA merchandise, such as posters and books. You will also receive the semiannual newsletter *Hydrosphere* and invitations to guest presentations and field adventures. Membership applications are available at www.farallones.org or by calling (415) 561-6625.

CURRICULUM

Coastal Ecosystem Curriculum (grades 9-12)

FMSA has developed a six-unit Coastal Ecosystem Curriculum that focuses on the open water and sandy beach habitats in the Gulf of the Farallones and supports education standards. This curriculum is currently available to educators who participate in our teacher workshop.

Teacher Workshop

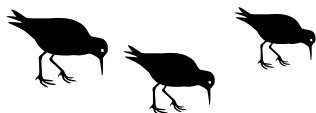
We offer a one-week professional development workshop for high school teachers during the summer. Teachers are trained to use the Coastal Ecosystem Curriculum, while learning about the oceanography and ecology of Gulf of the Farallones, the National Marine Sanctuary System, and oil pollution through activities, field trips, and data analysis. We present the background information and instruct teachers how to use the activities in the curriculum. Teachers are also trained to set up a sandy beach monitoring program at their high schools. Information: For this year's dates and application, contact the Education Coordinator at (415) 561-6625 x303.

Monitoring Handbooks

To help fulfill the Sanctuary's goal of monitoring the natural resources, monitoring projects have been developed for high school students. The education staff helps San Francisco Bay Area educators set up and run monitoring programs at their high schools. Handbooks describe the monitoring habitat and sampling protocol, and provide data sheets and data analysis methods.

- *Student Intertidal Monitoring Project – Teacher Handbook*
- *Sandy Beach Monitoring Project – Teacher Handbook*

Cost: \$5 for printing and shipping



Project Ocean Curriculum (grades K-8)

Available in the Resource Library, Project Ocean is a grade-level specific marine science curriculum, with different marine habitats targeted at each grade level. The habitats addressed are rocky seashore (grades K-1), sandy beach (grade 2), marshes and mudflats (grade 3), kelp forest (grade 4), open ocean (grade 5), islands (grade 6), and bay and estuary (grades 7-8). Physical, life, and earth science content is introduced as needed to interpret the habitat, and science processes (observing, communicating, comparing, ordering, relating, and inferring) are practiced throughout the curriculum.

PROGRAMS

Visitor Center School Programs (all grades)

The Sanctuary Visitor Center's education programs introduce your students to the living wonders of the Sanctuary waters. Students will experience hands-on activities geared towards developing an appreciation of this unique marine environment, while understanding why protected Sanctuaries exist. This is the ideal place to engage your students while fostering stewardship of marine environments that surround the San Francisco Bay Area. We offer a range of activities that address all grade levels including activities about:

- Salmon and whale migrations
- Sea lion populations of the Farallon Islands
- How pollution affects Sanctuary wildlife

Education programs are offered Tuesday through Friday, from 10 am to 3 pm. Group size is limited to 30 students, with at least one chaperone for every 10 students. Please make your program request at least four weeks prior to visit. Information: Contact the Visitor Center Manager at (415) 561-6625 x308 or download the visit request form at www.farallones.org.

Cost: \$5 for Teacher Preparation Packet, with slide show script



RESOURCES

Marine Education Resource Library for Members

The Library contains a wealth of material designed to bring the ocean into your classroom. Some of the resources available include curriculum guides, children's books, reference books, and videos. Members can borrow materials for up to three weeks and require a check deposit equal to their value, which is completely refunded when the items are returned.

