VOICES 클 BAY

Capturing the Voices of the Bay

In this activity, students will learn more about the "place" where they live – Monterey Bay – and the people who helped build Monterey's reputation as one of the best-known fishing communities in the world. Working individually, and in groups, students will research, plan, and conduct personal interviews, first with each other and then with actual citizens in the community, to capture the rich stories, traditions, and knowledge that define Monterey's fishing legacy. Place-based learning allows students the opportunity to deeply explore the historic, economic, environmental, and cultural dimensions of a particular "place" and, perhaps more importantly, how all these dimensions inter-connect through the lives of those who live and work in the region.

DEDICATED TO JOEY JONES



Monterey Bay fisherman. Lost at sea on April 3, 2008.







Grade Level: 8-12, Community College

Time Frame *Preparation:*

 1-2 hours for teacher preparation.

Facilitation: If classroom time is limited, some steps in the following schedule may be suitable for homework.

- One 50-minute period for introduction, sample interview, and in-class practice interviews.
- One 50-minute period for fishery topic research and interview planning.
- One 50-minute period for classroom or communitybased interview.
- One 50-minute period for preparing presentations.
- At least one 50-minute period for student presentations.

Brief Overview

Monterey Bay is rich with maritime history and culture that is deeply rooted in the commercial development of a range of **fisheries** – from sardines to salmon – and the people who depend on those **fisheries** for their livelihoods. As **fisheries** have declined in recent decades, residents of the communities around the bay are progressively losing their connection to and knowledge of this unique local culture. The fishing way of life, once passed on from generation to generation, is increasingly becoming unknown to younger generations as employment opportunities tied to fishing in Monterey Bay have declined. And yet, still living within these communities are individuals and families with fascinating stories to tell about their lives

in the fishing industry. These individuals are the keepers of the history and culture that still attract millions to the Monterey region today. By listening to their voices, capturing their stories, and exploring their unique skills and knowledge, we honor their wisdom and experience while gaining a deeper understanding and appreciation of the significance of Monterey Bay's fishing heritage as well as its relevance and value today.

Research and interviewing skills have important value to students for their own



Students interviewing Santa Cruz salmon fisherman, Mike Stiller, 2008. (Photo: Lisa Uttal.)

futures. Through this activity, students will also build a stronger place-based value system and appreciation for their local heritage (Starnes & Crone, 2002). By capturing and sharing the rich and varied stories that have grown out of Monterey Bay's fishing past, students will gain a deep understanding of what the future of this special "place" might hold. A future that, while likely different in many ways from the past, will always be intrinsically linked to that past and the richness of the sea.

Skills/Outcomes

- Students will gain research skills by using a variety of sources, including the internet, published articles, historical archives, and personal interviews.
- Students will strengthen their critical thinking and analysis skills as they evaluate various data sources, published and/or unpublished information, and web-based resources.
- Students will develop interview protocols and skills.
- Students will learn to work individually and in groups to plan and conduct interviews of people associated with a Monterey fishery.
- Students will actively engage in a meaningful and memorable way with citizens who live and work around Monterey Bay.
- Students will learn how to effectively use a variety of media to gather, organize, and present creative stories.
- Students will improve their ability to evaluate information gathered and to make critical choices when presenting that information to each other and/or to a broader public audience.



Key Subjects/Standards

Science, Language Arts, English/Language Arts, History/Social Science, Visual and P	Performing Arts
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National	Science: NS.9-12.6 Personal and Social Perspectives. K-12.2 Places and Regions. NSS-G.K-12.5 Environment and Society. Language Arts: NL-ENG.K-12.2 Understanding the Human Experience. NL-ENG.K-12.4 Communication Skills. NL-ENG.K-12.5 Communications Strategies. NL-ENG.K-12.8 Developing Research Skills.
California	English/Language Arts: Writing Strategies (1.0). Written and Oral Language Conventions (1.0). Listening and Speaking (1.0). History/Social Science: Grade 11, United States History and Geography: Continuity and Change in the Twentieth Century (11.2.2, 11.5.7, 11.8.6). Visual and Performing Arts: Grade 8: Creative Expression (2.1, 2.3).
Ocean Literacy	6. The ocean and humans are inextricably interconnected (b, c, e, g).

Teacher Preparation

- 1. Read the entire activity and review all student handouts in advance.
- 2. Determine the amount of time you would like to dedicate to this activity. If classroom time is readily available, a minimum of five 50-minute classroom periods is advised. If classroom time is limited, students may complete some of their tasks as homework.
- 3. Check with the English, speech, and/or communications faculty at your school to see if they have an existing outline or protocol for planning and conducting interviews, and/or researching, evaluating, and referencing original source documents. If available, adapt these protocols for use with this activity to reinforce student skills being learned in other courses. For additional resources, refer to the National Oceanic and Atmospheric Administration's (NOAA) Voices from the Fisheries website (http://voices.nmfs.noaa. gov/).
- 4. Decide desired format and complexity of final student presentations: written paper or article, photo essays, PowerPoint presentations, community print or electronic publications, displays or demonstrations, and

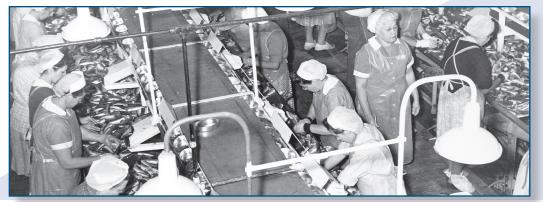
Materials List

- Notepad and pen/pencil, one per student
- Interview Feedback Forms, one per student for practice interviews, one per interview team for community interviews
- □ Write-up of sample interview with Joey Jones, one per student
- □ Interview Consent Form, one per interview team
- If possible digital tape recorder, digital camera, video camera for capturing voices and images while conducting their community interviews, one per interview team
- See Resources for Teachers section on the last page of this module for resources on Monterey Bay's fishing heritage and conducting successful oral history interviews.
- □ List of possible interview candidates. Contact Voices of the Bay (voicesofthebay@noaa.gov) or Seaberry Nachbar with the NOAA's Office of National Marine Sanctuaries' Fisherman in the Classroom program (seaberry.nachbar@noaa.gov).



electronic publications, displays or demonstrations, and web-postings are all possible vehicles for sharing the place-based stories and profiles that are produced through this activity.

5. For possible interview candidates, contact one or both of the resources provided in the Materials List.



Sardine canning at the California Packing Corporation ("Cal Pac"), circa 1949. (George Robinson photograph; courtesy Tim Thomas, Monterey Maritime and History Museum.)





Instructional Strategies/Procedures

Introduction

- 1. Introduce students to the rich history and culture of Monterey Bay. This can be done with a video clip from a movie, photos, reading a passage from a book, sharing personal stories, or from the provided PowerPoint.
- 2. Ask the students to think about who they know, or have met in the community, who might have an interesting story to tell about Monterey's legacy as a fishing community. What do they know about these individuals? What more would they like to know? Have them reflect on the full range of individuals in the community with ties to one or

more of Monterey Bay's **fisheries**. These could include fish wholesalers, cannery employees, market or restaurant owners, marine scientists, regulatory agency representatives, etc.

- 3. Hand out copies of and have the students read the Sample Interview with Joey Jones.
- 4. As a class, or in smaller groups of 5-6 students each, have students reflect on Joey's life as a fisherman in Monterey



Unloading squid to the Monterey Fish Company. (Photo: David Crabbe.)

Bay. How did he become a fisherman in the first place? What interested them the most about his chosen career? Was there anything about Joey's story that surprised them? What special knowledge or skills did Joey have that helped him succeed as a fisherman? What more would they like to know about Joey Jones?

5. Tell the students that they will have the opportunity to meet and personally interview a community member who has been, or still is, a part of Monterey's rich fishing legacy, but first they will practice their research, interview, and writing skills by interviewing each other.

Practicing for the Interview

- 6. As a group, spend about 15 minutes brainstorming a list of possible questions that would lead to interesting and thoughtful answers.
 - a. Begin with questions that introduce them to the individual Where were you born? Do you have any brothers or sisters? How long have you lived in this community?

b. Then develop a set of questions that lead to more interesting and personal answers. What is your favorite sport or subject at school? How did you get interested in that subject or sport? What do you have to know or be able to do in order to be really good at this subject

or sport? Have you ever met someone who makes their living at this? If you were trying to entice a friend to also like this subject or sport, how would you describe it to them?

c. Have the students select another student in the class to interview. Suggest they choose a classmate they don't know well.



Unloading sardines at Booth's Cannery. (Phillips Lewis photograph; courtesy Tim Thomas, Monterey Maritime and History Museum.)

- 7. Have each student interview their respective interviewee. Allow at least 20 minutes for the interview. Have the interviewees in each case fill out the Interview Feedback Form and return the completed form to their interviewer.
- 8. Use the remainder of the class period for students to write up their interviews. Encourage them to be creative in their summaries, developing a strong sense of who the individual that they interviewed really is and what makes them unique. Have them refer back to the Sample Interview with Joey Jones for ideas.
- 9. At the end of the day help the students reflect on the practice interviews. Allow students to provide suggestions to each other about the interview. What lessons did they learn from this practice interview with each other? Did they ask any questions that were not part of the prepared list of questions? How would they change their preparation or approach if they were conducting an interview with someone from the community that they did not already know?

Preparing for the Interview

10. Once students have gained confidence and experience with planning and conducting meaningful interviews, announce that it is time to meet and interview someone in the fishing industry. Contact Voices of the Bay (voicesofthebay@noaa.gov) or Seaberry Nachbar with NOAA's Fisherman in the Classroom program (seaberry.nachbar@noaa.gov) to receive a list of possible interview candidates and the date and time you would like to conduct the interviews.



a. First, divide the class into teams of 4. As a team, students will plan and conduct their interview and create a final presentation. Each member of the team must contribute. Possible roles are:

Interviewer - the student officially conducting the interview.

Recorder - the student recording the interview, preferably both audio recording and note-taking.

Photographer - the student responsible for capturing images during the interview and/or selecting existing photos that help illustrate the topics covered during the interview.

Producer - the student responsible for arranging the interview, coordinating team member involvement, and production of the final presentation.

- b. Introduce possible topics for the students to explore as a part of their interview, for example:
 - Natural habitats and habits of specific fish species.
 - The biology/ecology of Monterey Bay and how that impacts a fisherman.
 - What type of fishing boats, gear, technology, and techniques are used for harvesting or processing a particular fish species.
 - The specific activities of people employed by a particular **fishery** fishermen (and women), dockside buyers, processors, distributors/ wholesalers, etc.
 - The economy and culture that has grown out of the fishing industry in Monterey Bay what was life like in the past, how does that compare today, what can we expect in the future.
 - Fishing regulations why are they required, how do they impact a **fishery**.



c. Using the Sample Interview with Joev Jones as a model, each team should prepare a list of questions for their interview. Encourage teams to ask questions that really interest them and remind them

Duarte's Fish Market, circa 1900. (Courtesy Tim Thomas, Monterey Maritime and History Museum.)

that they should also think of creative ways to capture what their interviewee has to share. For instance, how might students best capture a unique element of their interviewee's life experience, like how to operate a specialized piece of equipment or identify a fish species at night, how a fisherman lives when on their boat for days or weeks at a time or how a fish processor re-tools their equipment to accommodate different fish species. With today's ready technology, encourage students to be creative about the use of photos, video, or both to help capture elements of their interview that are not easily described in words alone.



Unloading anchovies at Moss Landing, 2009. (Photo: Sabrina Beyer.)

Conducting the Interview

- 11. Be sure at the start of the interview that students explain to the interviewee up front who they are, why they are conducting their interview, and how they intend to use the information that is gathered. Have both the student team and interviewee read and sign the Interview Consent Form. After the interview, be sure they thank their interviewee for their time and write a thank you letter.
- 12. There are two options for how students can conduct interviews with an individual from the fishing community.

Option A.

There is nothing like real hands-on experience to get the feel of a particular setting, individual, or skill set. So, a field trip to visit a fishing-related site might be the best way for them to capture the knowledge or insights that will interest them the most. Once you have identified a suitable interviewee, then have the students develop their list of 10-12 questions. Have the students contribute to the planning of the trip, including arrangements, on-site logistics, mapping out a route to take, the time it will take, etc. This increases their ownership of the experience and will keep them more focused during the trip itself. If students will be making their own arrangements for place-based interviews or site-visits within the community, be sure they adhere to all school policies and regulations regarding transportation and safety. Also, be sure you have made the necessary advance arrangements with their interviewee off-site, such as where to meet, how much time they need, etc. Planning a field trip to a location where multiple interviews can be conducted by multiple student teams at the same time may be the most efficient choice.

Option B.

If it is not possible for teams to visit a fishing related site or leave school to meet with an



individual in the community, invite one or more individuals into the class for an interview and/or presentation. Again, the students should be the ones to facilitate such an experience in order to ensure they are gaining the most from making community connections and the responsibility and excitement associated with exploring an area of their own interest. Teams should conduct research so they have background knowledge on the classroom guest in advance of their visit. All groups should be prepared to facilitate a full interview with the guest, outlining their 10-12 questions in advance of the interview. The interview can either be conducted by a single team selected by the class or teams can take turns asking questions of the guest, resulting in a final presentation that includes contributions from each student team.



Barbara Emley, crab and salmon fisherman, 2004. (Photo: Larry Collins.)

Final Presentations

13. Allow time for student teams to prepare a presentation; the more freedom and flexibility students have with their presentations, the more creative they may be. Examples of formats for the final presentation include: transcription, video, photograph collage, short essay, newspaper article, podcast, monologue, poem, etc. To help ensure quality and consistency among the final presentations, consider requiring that student teams to use a certain framework for their presentation. This might include the following:

- 1. Introduction to the topic or individual
- 2. General information about the individual
- 3. Historical or cultural context
- 4. Special or unique insights
- 5. New knowledge or skills learned
- 6. Summary and Conclusions

Remind students that their presentations will be posted electronically.

14. Have student teams deliver their presentations to the entire class, if possible invited the interviewee to listen to the presentations.



Purse seiner at the Moss Landing Marina, 2009. (Photo: Lisa Uttal.)

15. Once the final presentation are finished make sure you have the signed Interview Consent Forms (signed by both the interviewee and the students) and electronic copies of the final presentations. The final presentation for all interviews along with an abstract about your class should be posted on the Voices from the Fisheries website (http://voices.nmfs.noaa.gov/) in the "Voices of the Bay" Collection. Contact voicesofthebay@noaa.gov for assistance in accomplishing this.

Extensions & Connections

- 1. Conduct both of the options listed above, beginning with inviting a guest speaker into the classroom, then arranging a team or class field trip to a fishing harbor or processing site.
- 2. Invite a panel of 3-4 individuals from the fishing community to visit the classroom. These invited guests could be involved in a single **fishery** or represent multiple **fisheries**. Again, divide the student teams so that each team conducts their own background research on an individual or **fishery**. Each team can specialize in an individual or **fishery** topic and ask questions that pertain to their specialty. The guests may be interviewed as a group (panel) or as individuals.
- 3. Have students research other place-based programs across the region or the nation and contact one to offer to share experiences or exchange stories. This could be done electronically, with video, web-postings, or in person. Involve the respective communities if possible, including individuals interviewed by both groups or specific knowledge, skills, etc. gained from their contacts with community members. A great example is the Local Fisheries Knowledge project in Maine (http://www.st.nmfs.noaa.gov/lfkproject/).



Background

Monterey Bay's rich cultural, economic, and ecological history has been defined primarily by the harvesting of natural resources from the sea. People of various ethnicities and geographical origins have participated in Monterey's commercial and recreational **fisheries** over the years, shaping the

economy, culture, and ecology of the Bay. This diversity in Monterey's fishing communities is a unique aspect of the regional fishing history. Sicilians, Japanese, Portuguese, Chinese, and Vietnamese came here to fish from the mid-1800s to the 1980s to take advantage of the rich resources. The strong synergy between many of these cultures does not exist in many other fishing communities in the United States.

Fisheries are rooted in the economics, culture, sea, and landscapes of their communities. They may be defined by geographic area (such as Moss Landing Harbor), by fish species targeted (**groundfish** or **wetfish** industry), or by some other economic or social factor. The 1996 revision of the **Magnuson-Stevens Fishery Conservation and Management Act (MSA)**, which is the basis for **fisheries** management in the United States, recognizes the importance of human communities and their relationship to **fisheries**. Among other things, its National Standard 8 declares that **fishery** conservation must take into account the importance of **fishery** resources to fishing communities, with the goals of maintaining employment stability and minimizing "adverse economic impacts" as much as possible (Pacific Fishery Management Council, 2006).

The Magnuson-Stevens Act defines a fishing community as:

A community which is substantially dependent on or substantially engaged in the harvesting or processing of fishery resources to meet social and economic needs, and includes fishing vessel owners, operators, and crew as well as fish processors that are based in such a community. To commercial fishermen and women (hereafter termed fishermen), fishing is a way of life usually passed down from one generation to the next. To a coastal community, it may be the lifeblood, or a major part, of the economy. California fisheries are an integral part of the state's economy, as well as its cultural history. While it is not exactly clear when commercial fishing began in earnest in California, its beginnings can be traced to the Gold Rush years around 1850, when floods of immigrants came to California in search of gold (Allen et al. 2006). California's **fisheries**, once bustling with almost 7,000 registered fishing vessels

(1981), now permits the operation of fewer than 2,000 commercial vessels.

The number of people and vessels fishing in **Monterey Bay National Marine Sanctuary (MBNMS)** waters has decreased dramatically in the last twenty years. Catches of coastal species have increased, but **landings** of all other species have greatly decreased. More restrictive regulations have led to shorter seasons and lower quotas for many species, thus reducing the flexibility and economic viability of many fishing businesses. New laws require more conservative approaches to fishery management and harvest. As a result, fish landings in the **MBNMS** will probably remain at or below current levels in the near future. According to the Pacific States Marine Fisheries Commission (2004), "in the late 1960s, Moss Landing and Monterey made up one of the county's largest commercial fishing fleets with 694 commercial boats, and two canning and production plants." Today, the diversity of the commercial **fishery**



Chinese fishermen ready their boat for fishing off the village shore. (J. K. Oliver photograph; courtesy Tim Thomas, Monterey Maritime and History Museum.)

includes salmon, albacore, Dungeness crab, **groundfish**, and **wetfish**, including sardines, squid, and anchovy, but the number of businesses and individuals supported by these **fisheries** continues to decline (Starr et al. 2002).

Monterey Maritime & History Museum historian, Tim Thomas, has been collecting Monterey Bay's rich fishing history over the last 20 years. He has collected over 30 oral histories (photographs, videos, written documents) of fishermen from the 1930s to the 1960s in three working harbors in the Bay - Monterey, Moss Landing, and Santa Cruz. Many of these fishermen have since passed away and many remaining Monterey Bay fishermen are more than 50 years old with fewer and fewer still making their living as a fisherman.

Place-based learning promotes learning about both the natural and human-built environments. (Sobel, 2004). This may include the history, culture, economy, social structure, or environmental landscape of a particular community and more importantly, how these all interact together. While there are certain challenges to developing and supporting a place-based approach to learning, research has shown that place-based learning can successfully increase academic achievement and give students the necessary skills they need to solve real problems outside of school settings. Place-based programs and strategies can also help students meet a range of science, social studies, and communications standards. But, most importantly, place-based exploration and discovery may be one of the most exciting and rewarding educational experiences that a student can have. They make personal choices about what and how they want to learn, they interact with each other as well as members of the community, and they become more aware of who they are and what their community means to them, sowing the seeds for future education, career, and citizenship choices later in life.



Resources for Teachers

- DoHistory: Step-by-Step Guide to Oral History. Available from: http://dohistory.org/on_your_own/toolkit/oralHistory.html.
- Hemp, M. K. 2002. Cannery Row: The History of John Steinbeck's Old Ocean View Avenue. Carmel: The History Company.
- Monterey Maritime and History Museum. Availble from: http:// www.montereyhistory.org.
- Steinbeck, J. 1945. Cannery Row. New York: The Viking Press, Inc.
- Thomas, T. and D. Copeland. 2006. Images of America: Monterey's Waterfront. Charleston: Arcadia Publishing.
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- Wigginton, E. 1968. The Foxfire Book. Garden City: Anchor Books.

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- Pacific Fishery Management Council. Backgrounder: Fishing Communities. Available from: http://www.pcouncil.org/ resources/fact-sheets/.
- Sobel, D. 2004. Place-Based Education: Connecting Classrooms & Communities. Great Barrington: Orion Society.
- Starnes, B. A. and A. Crone. 2002. From Thinking to Doing: The Foxfire Core Practices. Mountain City: The Foxfire Fund, Inc.
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Acknowledgments

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Vocabulary

Fishery: The people involved, species or type of fish, area of water, method of fishing, class of boats, purpose of the activities, or a combination of all of the above, engaged in raising or harvesting seafood.

Groundfish: Fish that live on, in, or near the bottom of the body of water they inhabit. Examples of common groundfish are rockfish, sole, halibut, and flounder.

Landings: The amount of fish (usually in pounds, sometimes as number of fish) caught by fishermen and delivered at the docks, then sold for profit.

Magnuson-Stevens Fishery Conservation and Management Act (MSA): This act provides for the conservation and management of fishery resources found off the coasts of the United States. It was enacted in 1976, and amended first in 1996 and then again in 2006. The act established a national fishery conservation zone, which aligns with our Exclusive Economic Zone (EEZ) extending from 3 to 200 nautical miles off the coast of the United States, set up a Regional Management Council oversite system, mandated fishery management plans, and set standards for management practices.

Monterey Bay National Marine Sanctuary (MBNMS): Designated in 1992, the MBNMS is a federally protected marine area offshore of California's central coast. The MBNMS encompasses a shoreline length of 276 miles and 6,094 square miles of ocean. Supporting one of the world's most diverse marine ecosystems, it is home to numerous mammals, seabirds, fish, invertebrates, and plants in a remarkably productive coastal environment. The MBNMS was established for the purpose of resource protection, research, education, and managed public use of this national treasure. The MBNMS is part of a system of 13 National Marine Sanctuaries administered by the National Oceanic and Atmospheric Administration.

Wetfish: Also known as coastal pelagic species. They are primarily caught by commercial fishermen using round haul gear (purse seine, drum seine, lampara) for human consumption, bait, and historically, animal feed, and oil. Wetfish species include squid, anchovies, sardines, and mackerel. They can be found anywhere from the surface to 1,000 meters deep.

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