The first few steps into the gallery reveal that this natural science museum visit will be different. A large metal sculpture of a stylized oak tree towers overhead. You walk through a giant culvert where the sounds of running water mix with those of passing trains. Drawers installed into the hood of a real SUV show taxidermied roadkill found on Bay Area roads. Throughout the gallery, kiosks display colorful sticky notes where you are prompted to share your own experiences of nature and community. You enter a hands-on “lab” area, where you pick up a specimen, touch it, smell it, and look at it under a microscope. Installed on the lab walls are bulletin boards highlighting urgent environmental issues—California’s deepening drought, the effects of sea level rise and forest fires, and findings from local citizen science projects.

This brand-new gallery at the Oakland Museum of California (OMCA) reflects a changing California. The bulletin boards—one of its key features—allow the museum to respond quickly to pressing issues by displaying current news articles, graphics, images, and announcements for local events. In keeping with the Oakland Museum of California’s mission to place the visitor at the center of the museum experience, these flexible, responsive spaces foster conversations and generate feedback, allowing visitors to reflect on the changes they are experiencing in their daily lives.

Including Humans in a Natural Sciences Gallery

Culminating in 2013 with the opening of the new Gallery of California Natural Sciences, the Oakland Museum of California has now completed the renovation of all three of its permanent galleries. Our goals reflected both a new strategic plan and an overall institutional philosophy that places visitors at the heart of the museum experience, by:

- including community members’ voices and stories;
- using those voices to inspire action;
- catalyzing dialogue on urgent California issues;
- presenting timely and relevant science content;
- and incorporating multiple perspectives.

With the aim of presenting a collective portrait of California’s rich biodiversity and the interaction of humans with the natural world, the natural sciences exhibition development team was charged with the renovation of a 25,000-square-foot permanent exhibition space that included developing new exhibition elements and recontextualizing habitat cases and dioramas from the original gallery.

To represent the state’s enormous biodiversity, the new gallery focuses on seven real places in California. They range from the unfamiliar—Cordell Bank, an underwater reef that is a designated marine sanctuary—to the familiar—Yosemite, an area impacted by three million annual visitors—to the unexpected—the city of Oakland, a complex urban environment that still has remnants of earlier habitats. We found...
it was almost impossible to tell the story of California’s unique natural history without including the profound connection between people and nature. Through the voices of community and tribal members, as well as the perspectives of a variety of experts, we tried both to show how people are working to develop sustainable conservation practices and to convey their love and concern for nature, be it in the middle of dense urban areas or in remote undeveloped environments. We also hoped to alert visitors to the latest findings and encourage them to take action and effect change in their own communities. Thus, armed with our overall goals, we took an approach that OMCA had used before to the next level—we created responsive spaces centering on the creative use of bulletin boards.

**The Evolution of Responsive Spaces at OMCA**

Including spaces where visitors can respond to specific questions or exhibits is not new at OMCA. Feedback walls and sticky notes are incorporated throughout the art and history galleries, which were redesigned before the natural sciences gallery. The museum has an evaluation team that uses front-end and formative evaluation to guide exhibition development. Prototyping occurs regularly at OMCA, and evaluators often ask visitors to experience and respond to cardboard mock-ups set up in galleries and hallways. Inviting visitors to help inform interpretation is a first step in realizing one of the goals of the museum’s new strategic plan—“[to] catalyze dialogue on urgent and compelling issues in California [and] inspire action for the state’s future.”

Within the new natural sciences gallery, in the hands-on areas we call “labs,” we display specimens that can be touched or smelled and provide visitors the chance to look closer and longer at things they might have taken for granted—such as the tiny California native green sweat bee, or the intricate seedpods of a variety of common plants. There may be an iPad nearby displaying inspirational interviews with science experts or community and environmental activists. Here is where we designate specific spaces to function as bulletin boards displaying current science news, visitor feedback, and local events and program postings. Often we report seasonal changes seen in the OMCA garden or giveaway guides for bird, moth, or butterfly watching (fig. 1).

**Fig. 1. The Urban Nature Lab is a central platform for posting current news, citizen science projects, and local events. Bulletin boards provide places for visitor feedback, and the space a gathering place for public programs. In observance of National Moth Week (July 19-27), we demonstrated how a moth attract can be easily constructed. Courtesy of Nadja Lazansky**
Why Do This?
Exhibitions usually take months or years to develop and design, and if our charge is to present timely and relevant science content, we need to be able to respond quickly to environmental changes. For this gallery we felt it was important to bring current news and events into the gallery in order to support the issues we are tackling in our permanent exhibits, such as the effects of climate change, urban sprawl, and ocean pollution.

Our research into how other institutions have brought current news into a gallery revealed that the Newseum in Washington, D.C., created an in-gallery kiosk featuring oversized printed front pages of newspapers from around the world. We also discovered that several museums have implemented blogs on their websites where curators or experts can post recent findings or relevant news articles, such as the Nature Lab blog at the Natural History Museum of Los Angeles County.

We were not able to do this digitally, so we decided to experiment with a quicker, analog solution—a slightly updated bulletin board. The bulletin board surface we designed is a steel plate covered with smooth frosted glass to which we can attach materials with small, strong magnets. It is attractive, contemporary, and modular. With these intentionally flexible spaces, and by posting carefully curated articles and graphics, we can bring pressing issues into the museum and present a forum for visitor discussion about current events.

What Do These Flexible Spaces Look Like?
Our responsive spaces are deliberately designed to look different from our permanent exhibitions; they are more casual, more handmade-looking, and less polished. Elements presented on the bulletin board include curated content from outside sources, such as graphs, maps, articles from newspapers, journals, or websites, often with a visitor feedback component (fig. 2).

Given all the possible news articles, how were we to choose? We started by identifying news and events that we thought were too important to ignore—California’s escalating drought, or specific issues pertaining to climate change—and developed broad questions that we
believed would help begin the dialogue with our visitors:

“How is the drought affecting you?”

“How will your favorite places in California change in the next 20 years?”

“What do you wish you knew about sea level rise?”

To illustrate text-heavy elements, we researched reliable sources for simple graphics and charts that could visually explain complex topics. When faced with the problem of how to include articles from online and print sources, we tried several formats. Eventually, we settled on an 11” x 17” newsletter-like template. To convey clearly that these articles did not originate with the museum, we used a large-sized font, a simple heading featuring the title, and the logo of the news source. We always credit our sources and have found local news media (including radio) to be especially helpful for reporting current events. In addition, we included blog postings and articles from reliable environmental organizations and government websites. We often piggybacked on themes already touched on or established in the gallery, but sometimes we wanted to include new information. In all cases, we felt we were enriching the visitor experience.

Along with the graphics and reformatted articles, we also used handwritten prompts or invitations to attract visitors’ attention and encourage them to spend a minute thinking about the news topic. Below the bulletin boards, we always provided sticky notes and golf pencils for visitors to respond and add to the conversation. Through these devices, we can quickly connect relevant and topical content with our audiences in the moment, when understanding these issues matters most.

An important benefit to dedicating space for feedback on the bulletin boards is that we can learn about our visitors in a low-cost and relatively unobtrusive way. Interestingly, by asking our visitors what they wanted to learn—for instance, about sea level rise—we learned that our interpretive strategy had to shift in order to unpack the many misconceptions and questions visitors had, not only about rising sea levels, but about the related topics of tidal systems and climate change.

We learned that an overwhelming majority of our visitors did not understand the mechanics of normal tides, much less the impacts of rising sea levels. We took this as an opportunity to begin a discussion about sea level rise, with a detailed graphic explaining how normal high and low tides work, and by clearly interpreting a United States Geological Survey map predicting higher sea levels in the San Francisco Bay Area. We would never have known that we had to provide this basic information without the knowledge gained from the visitor responses on the bulletin boards (figs. 3 & 4).
The development of a responsive space that promotes a dialogue between visitors and the museum about trending events and concerns requires a significant level of commitment from a dedicated staff member.

Challenges and Recommendations
As temporary project staff working furiously to finish the natural sciences gallery renovation, we willingly took on the charge of curating these responsive bulletin boards, but we were often limited in the amount of time we could spend developing them. Researching and checking sources, designing and formatting, and culling sticky notes and older articles took a lot of thought and time that we often couldn’t manage along with our other responsibilities. The development of a responsive space that promotes a dialogue between visitors and the museum about trending events and concerns requires a significant level of commitment from a dedicated staff member. We recommend that an institution consider making this role (which includes curating, designing, and advocating for visitors) part of a curator or gallery manager’s job description. The development process could also involve programming and education staff.

If we had the capacity, we might have developed a blog on which a curator or staffer could post articles and photos. But as it turned out, we like the immediacy and look of handwriting and papers hanging at angles on the boards. It looks friendly and approachable and is noticeable from a distance. Plus, a hands-on, thought-provoking interactive element in the gallery is an added bonus for our visitors.

As an added note, we should mention that early in the development process, the team discussed what our position should be in regard to posting articles that were not written by a museum curator or in the “museum voice.” We decided that including “outside voices” in the gallery was in keeping with the overall approach to the redesign; throughout the gallery, we were already featuring “community voice” elements as a way to include multiple perspectives. And to include multiple perspectives meant we were also allowing ourselves to cede a degree of control by not having to write every word or conceive every idea presented in the gallery.

Through the bulletin boards, we provide a place where our visitors can obtain information and interpretation that allows for a better understanding of current events that are affecting California. In addition, we can listen in and learn about what our visitors are thinking. By fostering a dialogue between the museum and our audience, these flexible, low-tech spaces serve as an essential complement to the permanent exhibits in the Gallery of Natural Sciences. We look forward to seeing how responsive spaces are developed and maintained in other institutions.

References:

Endnotes: