

TORCH Rocky Intertidal Protection Program Outreach and Education

FINAL REPORT 2011-2014 Appendix A



California Tidepool Interpretive Sign Survey And Evaluation

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TORCH Rocky Intertidal Outreach and Education Program

Final Report- Appendix A

California Tidepool Interpretive Sign Survey And Evaluation

Tidepools and other components of rocky intertidal shores represent a species-rich habitat which attracts a wide array of visitors and collectors. Human disturbance of tidepool areas is of concern and includes trampling, turning rocks, displacement of both living and nonliving resources, and collecting of intertidal species or shells. With more than 1,100 miles of California coastline, visitors can engage in tidepooling at many popular access sites with little oversight, direction or interpretation. There is an obvious need for effective and compelling signage that informs, inspires and enhances experiences for the public.



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Abalone and drift kelp mired in oil after spill.

BACKGROUND

The Torch/Platform Irene Oil Spill Natural Resources Trustee Council designated funding for rocky intertidal interpretive signs as part of a selected restoration proposal to compensate the public for natural resource injuries resulting from the 1997 Platform Irene spill. Based upon evidence from the spill, the Trustees estimate that black abalone (*Haliotis cracherodii*) suffered a 10-15%

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loss in the oil spill exposure zone.

The Channel Islands National Marine Sanctuary led the implementation of the Torch Rocky Intertidal Habitat Protection Program beginning in 2011 and extended through 2014. The goals of the program were to provide local community outreach and education regarding the sensitivities of rocky intertidal habitats and to reduce the impacts from human disturbance on tide pools.

Program components included the design, fabrication and installation of interpretive signage and exhibit panels about rocky intertidal habitats. The interpretive signs were designed for various public locations such as overlooks, beaches and other popular ocean-view sites that are managed by federal, state or private partners.



SIGNAGE GOALS

The 'Explore Tidepools With Care' signs were designed to provide the viewer information on four major themes: physically challenging environment, specifics on black abalone and their adaptations to surviving in the rocky intertidal zone, common species identification ('Tidepool Neighbors'), and tips for reducing human impact. These tips, or tidepool etiquette, suggest ways to gently explore tidepool communities while minimizing harm.

Spanish translations are also provided for the tips, which are Step Carefully, Watch Quietly, Be Gentle, and Leave Them.



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Charismatic photos of tidepool residents were included to foster curiosity, which leads to a sense of value and understanding. Once beach-goers have a better appreciation for tide pool life, they will care more about protecting it.

The primary audience was Santa Barbara and San Luis Obispo County communities and visitors to the area's beaches. Northern Santa Barbara County was the primary target, but since public access is limited along the stretch of coast where the spill occurred, other popular sites to the north and south were considered.

METHODS

The California Tidepool Interpretive Sign Survey was designed to evaluate the value and effectiveness of the information provided on the sign and to gain a better understanding of what people do when they visit tidepools.

The original goal was to place 4 signs, but due to cost-savings in other programmatic areas we were able to fabricate ten and thereby greatly increase the scope of our outreach program. Signs were installed between Campus Point, UCSB and Montaña del Oro, San Luis Obispo County. This also increased the reach of our survey tool. We limited the survey to 10 multiple-choice questions.

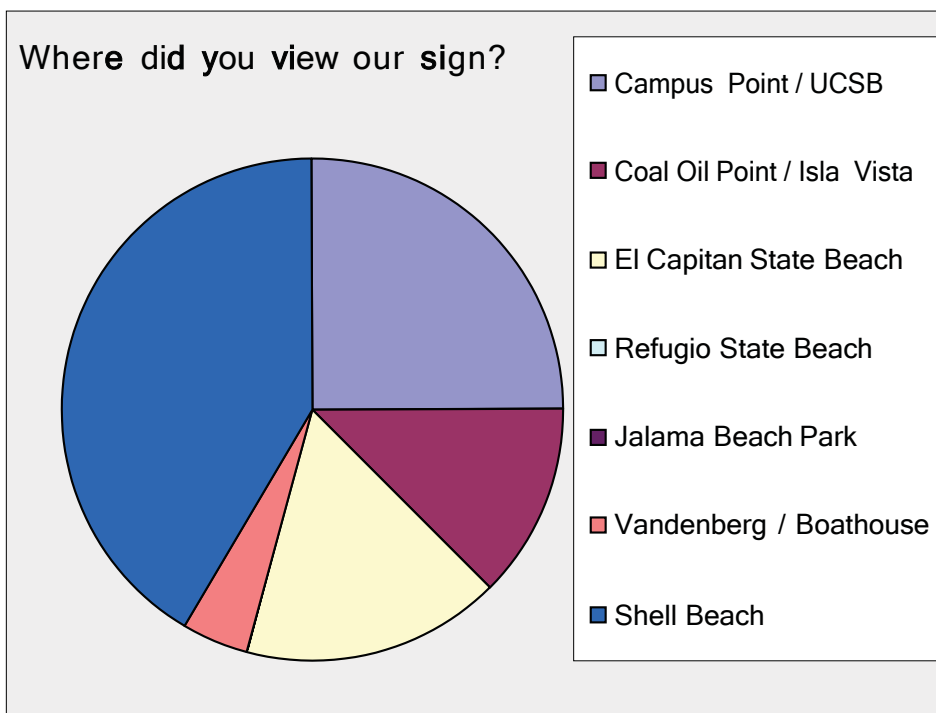
The interpretative sign survey was accessible to anyone who used their cell

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phone to read the QR code printed on each sign. This link takes the viewer to a dedicated webpage (cis-anctuary.org/tidepools) where the viewer was asked to take the survey (the rest of the page provides additional information on the rocky intertidal). A click of the link opened the survey, which was built using SurveyMonkey. In order to access and complete the survey in this manner, a good phone connection (with data plan) was necessary.



We recognized that some people were not going to have smart phones, some may not understand how to use a QR code, and at least one sign was placed in an area of limited cell service. The viewers could go to the website at a later date and take the survey then. However, since we were trying to see how many viewers would complete the steps, we did not advertise the website and link independently of the QR code on the signs other than at teacher training workshops. Those who completed the survey were given the chance to claim a NMS Frisbee.



RESULTS

There were 30 respondents. The survey was available many months before the last two signs were installed, and therefore those sites were not added to the list.

Question 1. Where did you view our sign?

California Tidepool Interpretive Sign Survey

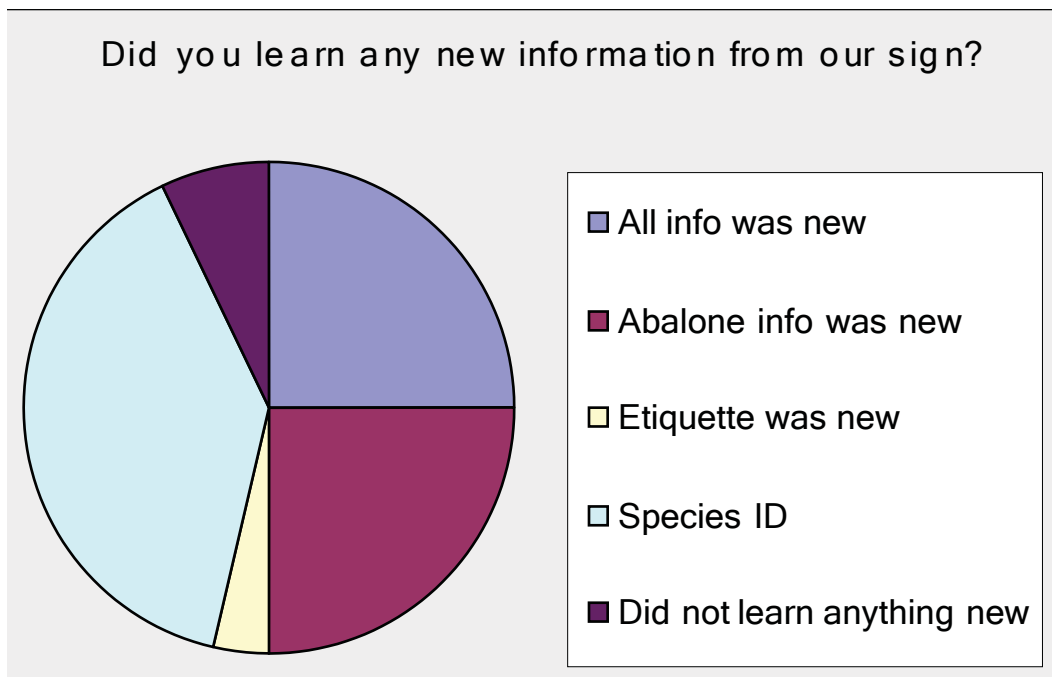
The majority of respondents were at Shell Beach (where there are two signs), followed by Campus Point and El Capitan State Beach. One fifth of respondents skipped the location question, so they may have been viewing a sign at Alegria or Jalama Beach (limited cell coverage) or Montaña del Oro (installed last).

Question 2. Do you plan to download the free California Tidepools app?

79% responded that they planned to download the free California Tidepools app. 10% answered no, and 10% were not sure.

Question 3. Did you learn any new information from our sign?

A quarter of respondents replied that all information on the sign was new, a quarter found that the abalone info was new, while nearly 40% replied that the species ID info was new.



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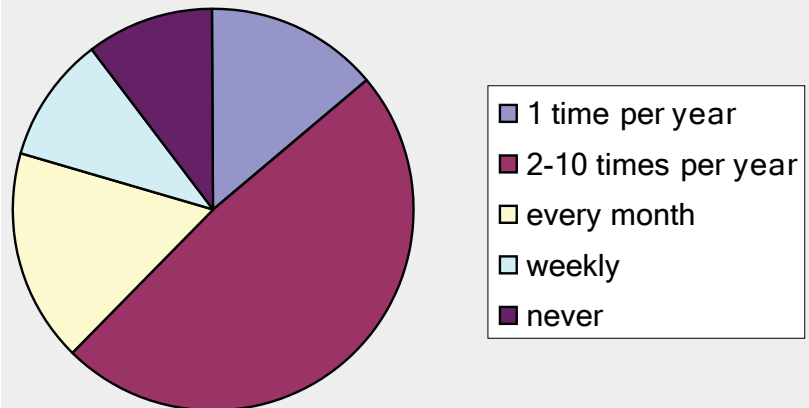
Question 4. What is your overall opinion of the sign?

On a five-point scale, with 1 = not at all informative, and 5- very informative, the average rating was 4.2.

Question 5. How often do you visit tidepools?

Three-quarters of our respondents visit tidepools at least once a month. Three individuals visit every week. The remainder either never visit, or else once a year. This group may include people able to read the sign but unable to access the beach.

How often do you visit tidepools?



Question 6. What do you do when you visit tidepools?

This question allowed the viewer to check as many out of six categories that applied.

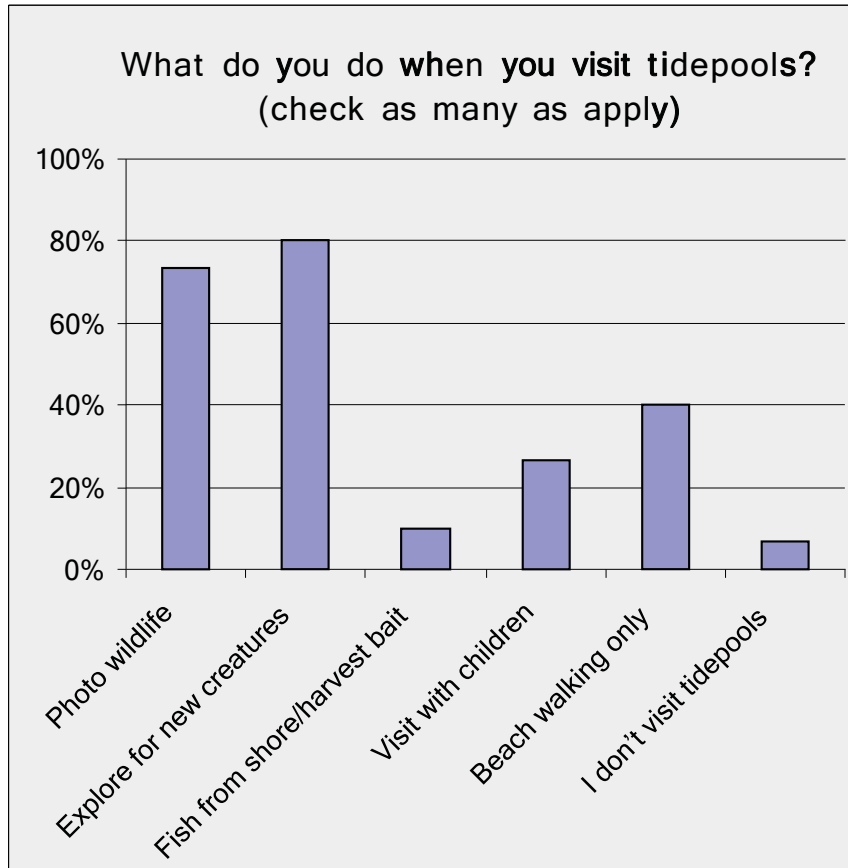
Respondents reported exploring for new creatures (80%) and photographing wildlife (78%) as the top choices, followed by beach

California Tidepool Interpretive Sign Survey

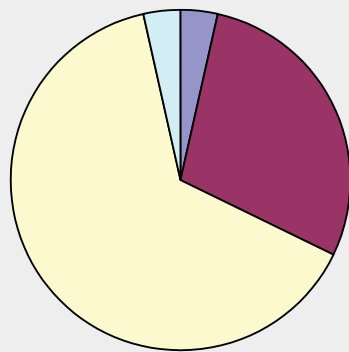
walking (40%) and visit with children (27%). Surprisingly, fishing or harvesting bait was at only 10%.

We offered a choice of categories to address if the participants were actively using the resource (exploring), or if they favored more passive use (photography) - and the two categories are comparable.

Question 7. Next time you visit tidepools, will your behavior (choose one)?



Next time you visit the tidepools, will your behavior:



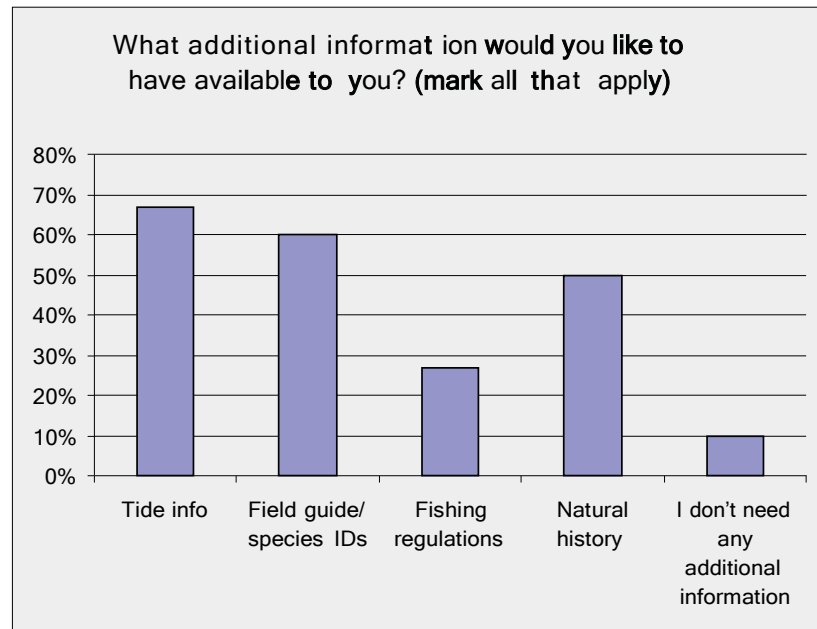
- Stay the same
- Change to be more aware of plants and animals
- I already practice tidepool etiquette
- I don't visit tidepools

Nearly two-thirds of respondents report that they are already practicing tidepool etiquette. Even better was that one-third report that their behavior will change to become more aware of plants and animals during their next visit.

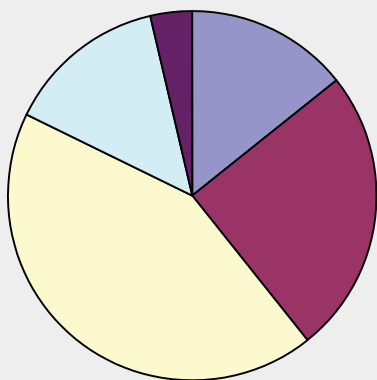
California Tidepool Interpretive Sign Survey

Question 8. What additional information would you like to have available to you?

Two-thirds of responses were for more information on tides, followed closely by field guide/species IDs and natural history. Even though this information is publically available in both hard copy and on the internet, people either need better directions on how to access it or a different format or venue. These needs (in the face of readily available information) could shape the content or delivery of future signage.



Would you be interested in having the information on the sign or signs available in another medium?
[Mark one response.]



- Yes, I'd like to have the information in a brochure.
- Yes, I'd like to access the information via a website.
- Yes, I'd like to access the information via a mobile phone application.
- No, I prefer getting the information from a sign.
- No, I'm just not that interested in the information in any format.

Question 9. Would you be interested in having the information on the sign available in another medium?

Forty-three percent of respondents would like to have additional tidepool information available via mobile phone or device. An-

California Tidepool Interpretive Sign Survey

Other twenty-five percent would like the material accessible on a website. Equal numbers of individuals (4) favored brochures and signs.

The California Tidepools App should help meet this need as it features outside links to NOAA tide tables.

CONCLUSION

The purpose of the Explore Tidepools With Care sign campaign was to provide local communities with information regarding the sensitivities of rocky intertidal habitats and to reduce the impacts from human disturbance on tidepools.

As California's shores will remain heavily visited, the need for better interpretation will continue. Our survey results indicate that respondents use the intertidal for both active and passive activity, are already sensitive to ways to minimize harm, but are eager to learn more details about the flora and fauna. Even though an abundance of information is already available across multiple formats, beach-goers would choose to access it via a mobile device.

