

Exploring Effective Instagram Content Strategy and Environmental Communication Engagement at Zoos and Aquariums in the United States

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Winter 2026

EXECUTIVE SUMMARY

Introduction

Climate change is more than an environmental issue. First, it intersects with political systems because addressing it involves governments to make contested decisions ([Carvalho, 2010](#)) about energy systems, transportation infrastructure, economic priorities, and the distribution of shared resources. How the media links ideas that shape narratives and public perception can influence collective viewpoints ([Gulzar, 2023](#)).

Despite how many individuals love animals, value the ocean, care about their health, seek purposeful nourishment, and cherish having a safe home, climate change—which threatens all of these—is a very polarizing topic and often fails to resonate with the public. This disconnect is exacerbated by what is described as a "denial machine," a powerful and organized public relations engine composed of a loose coalition of fossil fuel interests and conservative foundations that actively shape public perception and obstruct climate action ([Almorian et al., 2020](#)).

The purpose of this study was to see how zoos and aquariums use Instagram for conservation messaging. As an applied research project, it aims to help communication practitioners craft more effective messaging that encourage environmental conservation action and understand how media messaging influences public perception and engagement.

Materials & Methods

This study was grounded in Aristotle's artistic proofs of persuasion, Walter Fisher's narrative paradigm, and agenda-setting theory.

There are three ways to persuade people. Ethos - ethics, logos - logic, or pathos - emotional appeal. These are Aristotle's artistic proofs of rhetoric. Aristotle underscored the moral and persuasive power of these appeals, and these ideas have laid the foundation for modern approaches to conservation communication ([Demirdöğen, 2010](#)). Pathos is the most evident in this research.

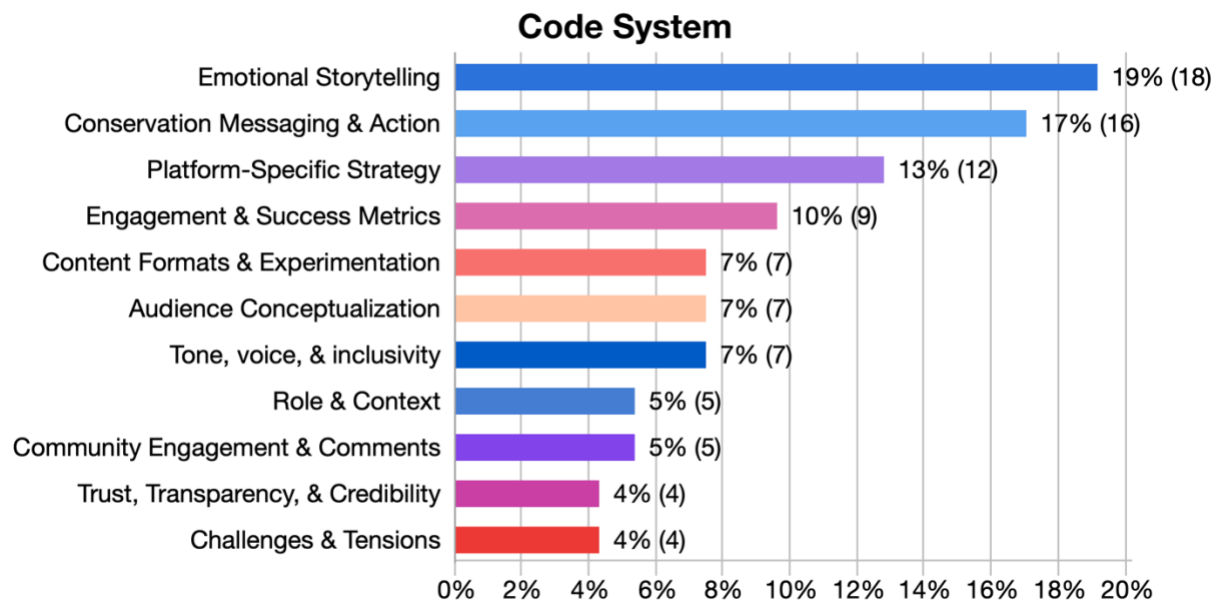
Building on emotion, Walter Fisher’s narrative paradigm helps explain why emotion proves so powerful. This theory expresses that effective storytelling draws on more than just facts and logic, but that persuasive communication depends on the narrative frames or values through which people make sense of the world (Fisher, 2009, p.6). Facts alone won't do it.

This research is grounded in agenda-setting theory. From the work of Maxwell McCombs and Donald Shaw, that the media doesn’t tell people what to think, more that they tell people what to think about through media cues (McCombs at al., 2014).

Using these theories, this study employed interviews with leading communication specialist, a visual rhetorical analysis of top Instagram posts from the Monterey Bay Aquarium and uses case studies to identify strategies practitioners can use to communicate conservation more effectively.

The five expert interviews were from a convenience-based sampling and boasted a collective 45 years of experience. They were thematically analyzed using grounded theory, and coded through MAXQDA, see figure 1 for coding system results from all five interviews.

Figure 1: Code system results from interviews

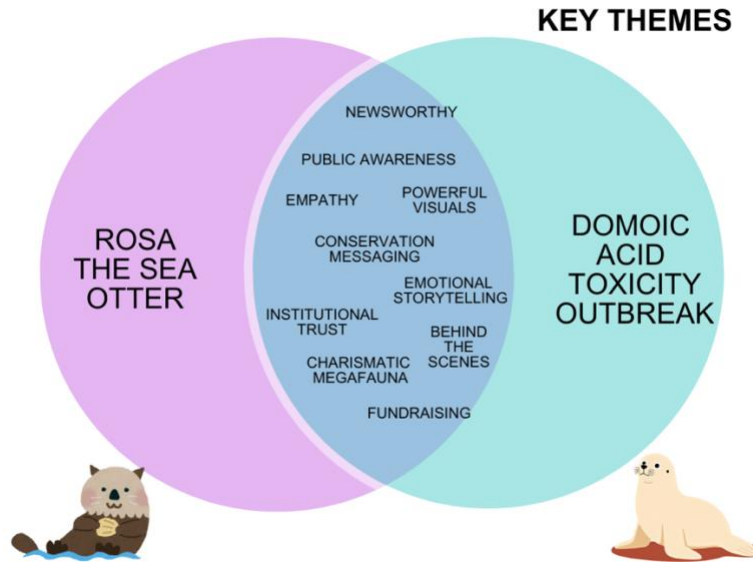


A visual rhetorical analysis was done of the Monterey Bay Aquarium’s Instagram top posts of 2024. A comprehensive Instagram metrics report was obtained using Sprout Social software with permission from the organization that was analyzed. All three posts were slightly different types of content, educational videos, behind-the-scenes glimpses, and social media trends. But all had a positive impact on engagement. The connection here is that they were authentic and fun.

The next method used in this research was case studies. To provide greater context for environmental messaging in nonprofit zoos and aquariums, successful social media campaigns that contained high engagement were utilized to provide context for the communication

professionals interviewed. Case studies (figure 2) from leading aquariums and marine mammal conservation organizations were used to punctuate the communication strategies that prove to be most effective.

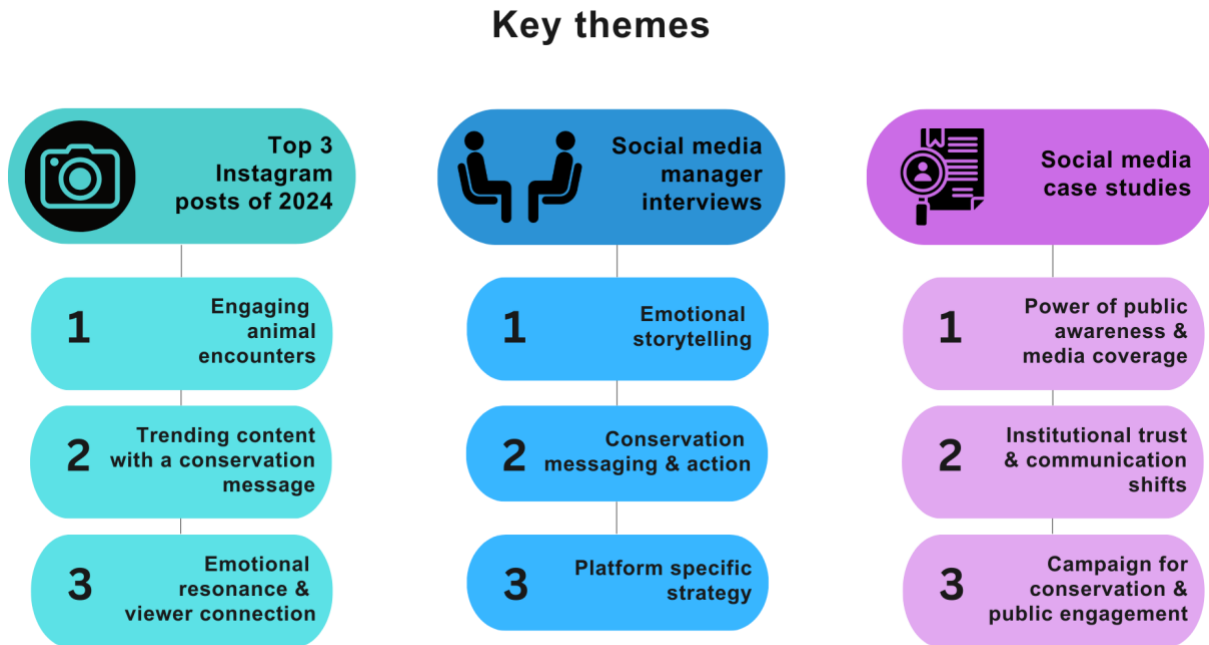
Figure 2: Venn diagram of key themes gathered from case studies



Results & Discussion

This research identified key themes and strategies that contribute to successful environmental engagement and conservation efforts from analyzing all the qualitative methods, Instagram posts, social media manager interviews, and case studies.

Figure 3: Key themes of all methods



The key themes gathered are all woven together so that each component reinforces the others. The interviews and case studies provide insight into the theoretical frameworks and strategic thinking that guide conservation communication. Meanwhile, the Instagram post analysis illustrates how these strategies are applied in practice.

Social media can increase pro-conservation behaviors in the public, increasing awareness, policy change and funding ([Bergman et al., 2022](#)). Together, these elements show how practitioner insights translate theory into action, with social media posts serving as real-world examples of how conservation messaging is designed to engage audiences and inspire connection with environmental issues.

The interwoven themes of engaging animal encounters, the blending of trending content with conservation messages, and the vital role of emotional resonance uncover powerful pathways for fostering audience connection. Emotion enables the individual to turn information into course of action ([Merry, 2010](#)).

Conclusion

The findings of this study provide insight into the dynamics, core themes, and strategies of conservation messaging and how these approaches continue to evolve in digital environments. The analysis highlights relationships between tailored content strategies, emotional framing, and clear, actionable messaging. These elements were identified as recurring themes within the data and may inform communication strategies used by conservation organizations. By recognizing

these key connections, institutions can refine their communication approaches to strengthen environmental engagement and support broader conservation efforts.

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