



Animal Traffic Connecting Zoo Guests to the Illegal Wildlife Trade

Mary Jackson

Habitat loss and climate change are arguably the greatest long-term threats facing the natural world, but for a growing number of plants and animals the illegal wildlife trade is the most immediate issue threatening their survival. Driven by a growing market demand for wildlife-derived products – sold as souvenirs, food, medicine, and pets – the illegal harvest and sale of animals and animal parts is now one of the most lucrative illegal activities in the world: so much so that the U.S. State Department now recognizes wildlife trafficking as the fourth largest global criminal enterprise, worth an estimated \$10 billion to \$20 billion annually.

Zoos and aquariums are home to many highly trafficked species, from elephants and tigers, to tortoise, parrots, pangolins, sharks, and sea cucumbers. In 2016, Woodland Park Zoo (WPZ),

located in Seattle, Washington, began to reconceptualize a large exhibition space left vacant after phasing out an elephant exhibit the previous year. Timeline and budget constraints required the new design to fit within existing horticultural and interpretive theming reminiscent of a tropical Asian habitat, but this space also offered new possibilities to connect guests to wildlife and their conservation stories. In 2018 the zoo opened the *Assam* Rhino Reserve (ARR) exhibition highlighting the amazing biodiversity found in India. This multi-species exhibition features Taj and Glenn, two greater one-horned rhinos, as well as Asian brown tortoises and demoiselle cranes. Given the threats facing these species, from the poaching of rhino horns to the harvest of tortoises for the illegal pet trade, the zoo seized the tremendous opportunity to put a spotlight on the illegal wildlife trade, including the role the United States plays in this growing global problem (fig. 1).

Strengthening Partnerships

Woodland Park Zoo was no stranger to promoting awareness and action in support of trafficked species. In 2015 we campaigned alongside Point Defiance Zoo and Aquarium, the Seattle Aquarium, and Vulcan Inc., which oversees Microsoft co-founder Paul Allen's business and philanthropic activities, to pass a voter-driven initiative expanding statewide protection to elephants, tigers, rhinos, and seven other commonly trafficked species – a first in the United States. The initiative passed with an overwhelming 70 percent voter approval, a huge indication that Washingtonians will take bipartisan action on behalf of wildlife.

This advocacy work also strengthened our relationship with the Washington Department of Fish and Wildlife (WDFW). The legislation expands this state agency's authority to

Unbeknownst to many Americans, the United States is one of the world's largest markets for illegally traded wildlife.

prosecute wildlife traffickers at the local level, but with funding for only a dozen officers, their capacity to monitor for suspicious activity remains limited. The WDFW instead appeals to public-facing organizations, like our zoo, to encourage state residents to be its eyes and ears, reporting any suspicious behavior to an anonymous tip line.

Finding the Local Perspective on a Global Issue

Communicating with the American public about the complex human dimensions of this modern threat can be challenging. Results from front-end interviews conducted at the zoo found that the majority of our adult visitors are already well aware of the threat poaching and/or trafficking poses to wildlife populations around the world. Their responses, however, showed both a lack of connection to the problem and the confidence that they can do something to address it. Indicative of this perspective, one interviewee said, "It [poaching] is happening so far away. I'm not sure how I can do anything to help from here." The majority of our visitors live in and around Washington State. That they were struggling to see how this issue related to their lives was not surprising. Unbeknownst to many Americans, the United States is one of the world's largest markets for

illegally traded wildlife. And, because the port of Seattle-Tacoma is the fifth busiest cargo port in the country, the state sees approximately 5,000 wildlife shipments annually. Because this is not widely known, there is a persistent gap between zoo visitors' recognition of wildlife trafficking as a significant global threat and their reflection on how this issue matters to their lives. This gap posed a great opportunity for WPZ to help visitors think about the topic in a new way.

The ARR exhibition's interpretive design team, composed of our two interpretive content developers, multiple education staff members, and the manager of field conservation, decided to create an interactive exhibit display that would highlight the relevance of the issue to

our local landscape and communities. Together the team identified three visitor outcomes to guide the wildlife trafficking exhibit's design, deciding that guests would:

- understand that wildlife trafficking is both a global and local issue;
- feel they are part of the solution to save animals from wildlife trafficking; and
- take a beneficial action to help save animals from wildlife trafficking.

As the internal evaluator on the project, I also collaborated with the team to develop an evaluation plan to measure our success at meeting these intended outcomes and promote organizational learning.



Fig. 2. Officer Benny, K9 sniffer dog, is trained to locate elephant ivory, bear gallbladder, and shark fin.



A New Interpretive Approach

In planning the exhibit, we resolved not to dedicate precious space to introducing the issue of wildlife trafficking, since testing had shown that guests had preexisting knowledge of the topic. We did decide, though, to be especially thoughtful and purposeful in how we unfolded the interpretation, because we knew that knowledge is not enough to motivate action, and that messages categorizing only the scale of damage generated by wildlife trafficking could easily engender a loss of hope for the future. We opted for an interpretive strategy that incorporated lessons from the environmental education and social marketing fields. We strove to instill a sense of responsibility and agency to support positive action rather than potential feelings of hopelessness. The team incorporated three interpretive strategies into the overall design of the exhibit display to provide guests with the opportunity to discover and find personal meaning in this topic.

1. Share success stories. Enter Officer Benny, the WDFW's first sniffer dog. Adopted from a shelter in 2017, this

black lab now works the ports sniffing out elephant ivory, bear gallbladder, shark fin and rhino horn. We prominently featured this innovative approach to the problem through interpretive content and a life-sized, touchable statue of Benny, the canine crime fighter (fig. 2).

2. Promote beneficial social norms.
Already, upwards of 3,000 Washington residents have used the anonymous tip line to support WDFW's efforts.
This drove the adoption of a social-norms approach to messaging on the exhibit signs, highlighting the positive choices that people just like

our visitors were already making to

support local wildlife.

3. Reduce barriers to tangible action. The WDFW's recommended action provides local residents with a tangible way to help illegally sourced or traded wildlife. The exhibit invites guests to save the anonymous tip line in their phone, minimizing a possible situational barrier to reporting suspicious behavior to the WDFW.

The wildlife trafficking exhibit takes up only 200 square feet within the larger ARR exhibition, and is strategically located in an area that functions as a natural gathering space for guests of all ages. Half of the exhibit's physical design is modeled to look and feel like Seattle-Tacoma International Airport's U.S. Customs warehouse, through which countless crates of cargo regularly pass. Zoo guests can open four of these crates – which contain replicas of rhino horn, ivory trinkets, baby tortoises, and illegally harvested geoducks, a large clam native to the Pacific Northwest. The crates purposely offered only minimal identifying information to motivate group

exhibition

Spring 2020

discussion or exploration. The other half of the exhibit features a large map of the region with interpretive panels communicating social-norms messaging and invitations to take WDFW's recommended action (intro image).

Evaluation Findings

We conducted a summative evaluation of the Assam Rhino Reserve in the summer 2018 to measure success at meeting the exhibition's outcomes. Using a mixed-methods approach, data collectors used systematic random sampling to gather 204 exhibition exit surveys and 60 exit interviews that assesses understanding of trafficking as a local wildlife issue and the likelihood of taking the action. We also conducted 98 observations using the Visitor Based Observational Framework (VBLF), which theorizes that guest engagement is a direct indicator of the learning taking place. The tool distinguishes three levels of engagement behaviors described as initiation

1 Chantal Barriault and David Pearson, "Assessing Exhibits for Learning in Science Centers: A Practical Tool," Visitor Studies 13, no. 1 (2010): 90-106.

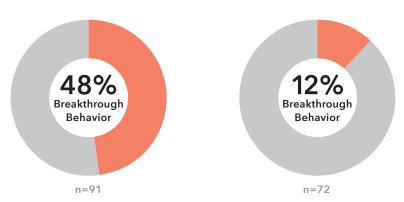
(e.g., watching others do an activity), transition (e.g., repeating an activity), and breakthrough (e.g., sharing information with others). We also recorded obvious indications of guests entering the tip line into their phone.

Results showed that that the geoduck crate and the Officer Benny statue most often attracted people to the exhibit. The VBLF indicated guests regularly engaged in "breakthrough" learning, characterized as behaviors that demonstrate the activity's relevance to one's life and a commitment to further explore the ideas presented. Almost half of those observed (48 percent) demonstrated breakthrough behaviors while exploring the shipping crates designed to tell the story of wildlife trafficking through our ports. A smaller proportion (12 percent) engaged in similar behavior with the interpretive panels that promoted social norm messages and focused solely on the state's native wildlife affected by illegal harvesting and trade (fig. 3).

Survey respondents indicated, however, a noteworthy difference in perception of wildlife

Interaction with the shipping crates encouraged significantly more breakthrough learning behavior than the other interpretive elements.

Proportion of observed groups that demonstrated breakthrough behavior



Source: Observation of zoo guests using the Visitor Based Learning Framework.

Fig. 3.

Comparison of quest expression of breakthrough learning behaviors. trafficking as a threat to faraway populations or local animals. When asked to rate their agreement with two statements, zoo guests reported significantly stronger agreement that wildlife trafficking is a problem around the world rather than in Washington State, with a respective 92 percent and 34 percent agreement (fig. 4).

Also revealing, not one guest was seen entering the WDFW's tip line into their phones. Uncertain if this inaction was due to confusion with exhibits messaging or perhaps disinterest in the action itself, we decided to invite a small number of guests to participate in an additional think-aloud activity. Think-alouds ask participants to think out loud and say what comes to mind as they complete a task.² At the wildlife trafficking exhibit, guests were asked to verbalize their thoughts and reactions as they explored the interpretive material. This technique provides deeper insight into guests' perspective, but is not representative of a typical guest experience.

Think-aloud participants clearly understood

2 Hannu Kuusela and Paul Pallab, "A Comparison of Concurrent and Retrospective Verbal Protocol Analysis," *American Journal of Psychology* 113, no. 3 (2002): 387–404. that the exhibit space was about wildlife trafficking and the tangible actions that people could take. For example, one person described the main message to be "People are trafficking animals and products here, you can call/text if you see something." More than three quarters of the think-aloud participants, said, however, that they would be unlikely to use the hotline number due to the implausibility of encountering illicit activity in their day-to-day life. About one in five were simply uncomfortable informing on other violators (e.g., "I don't want to be a tattletale").

Lessons Learned: Moving Forward

At Woodland Park Zoo we strove to bridge our guests' concern about global wildlife trafficking with a sense of personal responsibility, efficacy, and hope. The ARR exhibition was successful in reimagining an existing space, and the wildlife trafficking exhibit specifically promoted hands-on interaction and learning while also reinforcing public awareness of the global threat of wildlife trafficking.

The exhibit was less effective in fostering understanding and concern for trafficking in

Fig. 4.

Zoo guest perceive wildlife trafficking to be a much greater problem around the world than in Washington State.

Guests were much more likely to perceive wildlife trafficking as a global rather than a local problem. (n=260)

Rate of agreement with statements Illegal wildlife trafficking is a problem

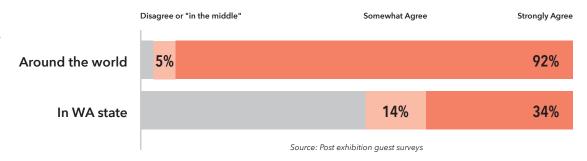




Fig. 5. Over 300 wildlife items were turned in at Woodland Park Zoo's recent "Toss the Tusk" event.

Washington State. Evaluation results indicate our recommended action failed to connect with our visitors and our application of social norms messaging did not affect behavior. Future conservation action messaging would likely be more effective if we first learned about the audience's barriers and motivations to taking the desired action and leveraged this understanding to design a more informed interpretive strategy.

Popular media exposes many Americans to stories about poaching and the illegal wildlife trade, but these communication channels regularly reinforce the notion that this conservation threat is only occurring in other regions of the world. Moving forward, Woodland Park Zoo plans to intentionally share stories demonstrating the significance of this problem in our communities and ecosystems. The zoo already implemented one such effort in April 2019, when we again partnered with the WDFW to host "Toss the

Tusk," a zoo event at which residents could drop off items now illegal to sell within the state. In four hours, over 300 ivory trinkets and furs were surrendered (fig. 5).

With only one in five Americans aware of wildlife trafficking in the United States,³ it's clear that zoos and aquariums have a profound opportunity to use their public reach to raise awareness of the impacts of wildlife trafficking and reduce U.S. demand for these products. We'll be more successful if we learn alongside our governmental and conservation partners to engender feelings of hope and responsibility in supporting coexistence between people and wildlife.

 $\label{eq:wildaid} 3 \quad \mbox{WildAid, "Stopping Wildlife Trafficking in the US," $WildAid.org$, accessed December 16, 2019, https://wildaid.org/programs/us/.$

Mary Jackson is Audience Research Supervisor at Woodland Park Zoo in Seattle, Washington. mary.jackson@zoo.org

Spring 2020 exhibition

111