On-Site Interpretation Project Toolkit

2026





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INTRODUCTION

Woodland Park Zoo's Advancing Empathy (AE) Initiative was launched in 2019 to expand the use of the empathy practices and build community and collaboration with other Association of Zoos and Aquarium (AZA)-accredited zoos and aquariums. As part of its AE Initiative, Woodland Park Zoo was privately funded to develop a grant program that builds capacity to foster empathy for wildlife in accredited zoos and aquariums across Alaska, Idaho, Minnesota, Montana, North Dakota, Washington, and Wisconsin.

The AE Grant Program supports organizational efforts to plan, build, and/or expand practices and programs that foster empathy for animals and wildlife. Through grant support, recipients are developing the resources and expertise they need to increase the long-term impact of empathy practices and programs at their zoo or aquarium and have a lasting influence on their organization and their peers.

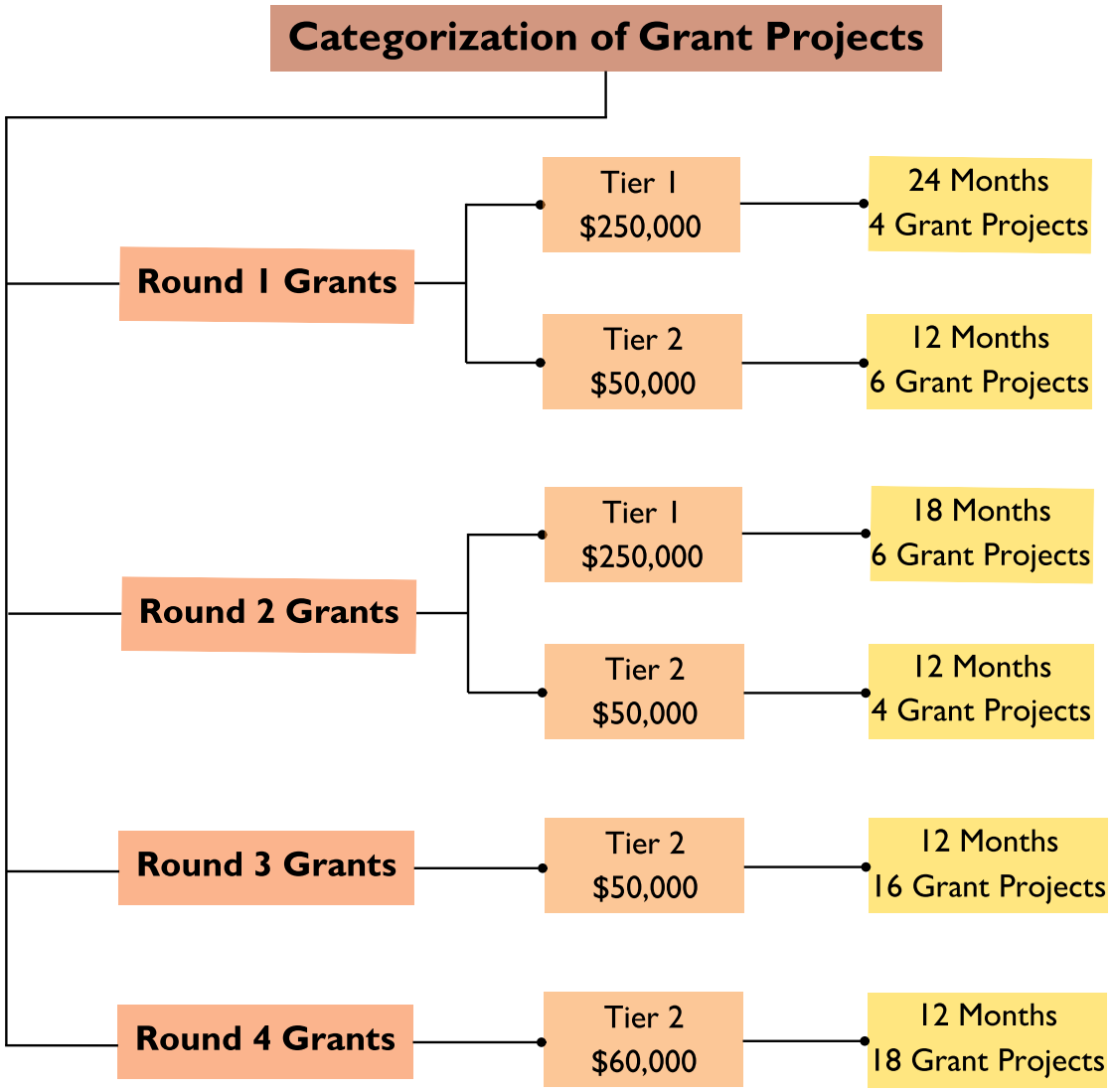
To date, the program has granted $9 million to support over 90 grant projects that have developed, implemented, and evaluated initiatives ranging from formal programs for children to infusing empathy into biofact usage, exhibit design, and interpretive plans. Grantees have also benefited from the program's collaborative nature and cross-institution knowledge sharing, which happens during grant periods, across grant rounds, and in professional forums such as peer-reviewed journals and panels at AZA conferences.

AE grant recipients also share best practices, lessons learned and resources developed through their grants with the Advancing Conservation through Empathy for Wildlife (ACE for Wildlife®) Network. The Network is a global learning community that creates and shares effective practices to foster empathy for animals and people. This amplification allows grant outcomes to support collaboration among all zoos and aquariums working to inspire conservation action.

To make the 142 resources developed by completed projects more accessible, the AE team has created this series of toolkits based on the 10 underlying themes that cut across grant projects including:

- *Animal Ambassadors*
- *Animal Care Play Spaces & Young Learners*
- *Animal Husbandry*
- *Construction*
- *Diversity, Equity, Accessibility & Inclusion*
- *Long Term Planning*
- *On-Site Interpretation*
- *Programs & Partnerships*
- *Signage*
- *Staff and Volunteers*

The toolkits include AE grants funded in the 2019 grant pilot program and AE Grants Rounds One through Four. As subsequent grant rounds conclude, additional resources will be added. In Rounds 1 and 2 (awarded in 2021), there were two funding tiers: Tier 1, up to $250,000 and up to 24 months (in Round 1) or 18 months (in Round 2); and Tier 2, up to $50,000 and up to 12 months. Round 3 only featured Tier 2 grants due to the timeline of the overarching AE grant that had been set to end in December 2023. Due to an AE grant extension, Round 4 Tier 2 grants were offered on a 12-month timeline as well, with an increase of up to $60,000 to account for rising costs.



Categorization of Advancing Empathy Grant Program

For insights into the collective impacts of funded projects and key takeaways from the grant program to date, see our culminating grant reports in the Resource Library. These reports highlight lessons learned, emerging themes, and recommendations as the granting program continues to evolve.

Organizations beginning or expanding staff and volunteer training may find the ACE for Wildlife Network Empathy Training Toolkit resources helpful. These materials were developed to support teams in integrating empathy-based practices into their work. Within this section, you will find five short form videos—Empathy & the ACE for Wildlife Network, Types of Empathy, Effective Empathy Practices, The Empathy Wheel, and Anthropomorphism.

In addition to the Empathy Training Toolkit, organizations may also find the Empathy Primer helpful as an introduction to core concepts and practices, and the Empathy Infographic for animal care staff, which was designed to support conversations about empathy in daily keeper practice.

EXECUTIVE SUMMARY

Zoos and aquariums are increasingly integrating empathy into on-site interpretation to help visitors build meaningful connections with animals, habitats, and conservation issues. Through funding from the Advancing Empathy Grant Program, organizations developed and strengthened a range of interpretive experiences, including signs, facilitated presentations, immersive exhibits, interactive media, hands-on activities, and field-based programs. Together, these projects demonstrate how intentional interpretation can encourage visitors to notice animals as individuals, consider their perspectives and needs, understand connections between animals in human care and their wild counterparts and habitats, and identify ways to support wildlife.

Projects Included

Building Organizational Capacity for Empathy through Interpretive Master Planning & Implementation

A Model for Inspiring Conservation Action through Empathy

Designing Exhibits and Revising Visitor Experiences to Foster Empathy for Wildlife

Where Cranes Dance: Connecting People with Endangered Species, Communities, and Wild Places

Discovery Tram Tour: A Vehicle for Increasing Empathy Outcomes

Becoming Bear: Bear Burrow Interpretive Exhibit

Discovery Zone: Education Courtyard Expansion

Fostering Empathy for Wildlife through Signage and Phase 1A Interpretive Plan

Fostering Empathy through Enriched Experiences

Fostering Empathy through Enriched Experiences

A Model to Build Public Conservation through Empathy in Adventure Island

Banding Together to Save Cranes

Bear Den Prep Kitchen

Increasing Empathy for Wildlife and Conservation Action through Biofact Use

Field Programs: Building Empathy for Marine Wildlife

Infusing Empathy into Biofacts Programs

Objectives and Strategies

Each project aimed to incorporate empathy practices into the visitor experience through interpretive planning, exhibit and program development, audience research, and direct engagement. Common strategies included sharing individual animal stories, using first-person or animal-centered language, interpreting visible animal behavior and care practices, inviting perspective-taking, and connecting visitors with meaningful conservation actions. Staff, volunteers, animal care professionals, apprentices, community advisors, and visitors also contributed to the development and delivery of interpretation.

Projects used a variety of formats suited to different visitor settings and experiences. These included self-guided signs and interactives, Keeper Chats and naturalist-led programs, digital games and virtual reality, nature play and participatory animal-care activities, biofacts, introductory films, and interpretation delivered at beaches and waterways.

Key Achievements

Grantees created and refined interpretive experiences that helped visitors explore animal individuality, wellbeing, behavior, habitats, and conservation. Several projects found increases in visitor knowledge, interest, empathy-related responses, or motivation to take conservation action following facilitated programs and other interpretive experiences. Visitor comments and observations also reflected curiosity, appreciation, perspective-taking, concern for animals, and stronger connections with individual animals.

Other projects strengthened the processes used to create interpretation. Organizations conducted community listening sessions, visitor surveys, observational research, and formative testing to shape messages, signs, programs, and exhibit experiences. Visitor feedback led teams to clarify language, simplify layouts, improve visual design, reconsider the placement of interpretive elements, and develop messages that were more relevant and accessible to intended audiences.

Outputs and Deliverables

Projects resulted in interpretive master plans, exhibit concepts, audience-tested signs, Keeper Chats, films, digital content, interactive exhibits, wildlife-trafficking programs, guidance for using biofacts, field-program materials, nature play experiences, and hands-on programs connecting participants with animal care and enrichment. Grantees also developed training materials, presentation frameworks, evaluation tools, and best-practice resources to help staff and volunteers deliver consistent empathy-based interpretation.

Some projects also included construction, habitat improvements, or behind-the-scenes facilities. Within this toolkit, those elements are presented as the settings and infrastructure that supported interpretive experiences rather than as the primary focus of the work.

Challenges

Projects encountered construction delays, staffing transitions, limited preparation time, shifting partnerships, and challenges collecting sufficient visitor data. Several teams found that effective interpretation required more time for collaboration, testing, practice, and revision than originally anticipated. Evaluation also showed that messages could have unintended effects, including visitor confusion or interpretations that placed blame on communities connected with conservation issues.

These experiences reinforced the value of testing interpretation with visitors before final production, involving animal care staff and community members in message development, and combining quantitative findings with visitor comments and observations. They also showed that interpretive approaches may affect audiences differently depending on the species, setting, delivery method, and individual animals involved.

Conclusion

Collectively, these projects demonstrate that empathy-based on-site interpretation is not defined by a single medium or activity. It can take place through a conversation with a keeper, a sign encountered beside an animal habitat, a child hiding food as enrichment for a bear, a film introducing a conservation landscape, or a naturalist helping visitors explore a beach as wildlife habitat.

Across these settings, effective interpretation connects information with personal meaning. By presenting animals as individuals, making behavior and care understandable, inviting visitors to consider other perspectives, and connecting experiences with relevant conservation actions, zoos and aquariums can create more thoughtful and meaningful encounters with wildlife. The plans, programs, evaluation approaches, and interpretive resources developed through these projects offer practical examples for other organizations seeking to strengthen this work.

PROJECTS

Building Organizational Capacity for Empathy through Interpretive Master Planning & Implementation

Henry Vilas Zoo, October 2021 - September 2023 (Round 1, Tier 1)

Project Summary: This project created a strategic framework to infuse empathy best practices throughout Henry Vilas Zoo's interpretive planning and development. Staff workshops, community listening sessions, visitor research, and front-end evaluation helped the zoo identify meaningful messages and strengthen how interpretation connects guests with individual animals, animal wellbeing, conservation, and caring action. The resulting Interpretive Master Plan also guided the early development of new visitor experiences, including the zoo's giraffe barn.

Achieved Outcomes: Henry Vilas Zoo developed a cohesive Interpretive Master Plan and used it to guide signage, murals, digital media, Keeper Chats, and other visitor-facing interpretation. This work enhanced nearly 80% of the zoo's interpretive elements, with many incorporating animals' names, individual traits, experiences, and choices to help guests build stronger connections with animals at the zoo and in the wild. Staff and volunteers also gained experience conducting visitor research and formative testing, while community and visitor input helped make interpretive messages more relevant to the zoo's audiences.

Click here to view the webinar and resources related to this project.

Success Story: *"On a recent visit, I noticed the signage for the Somali [Wild] asses and was thrilled. Posted names for all animals really help, and you taught us they encourage empathy--they absolutely do. I've watched parents teach their kids the animal names."*- Henry Vilas Zoo Volunteer



New educational displays showcase the remarkable adaptations of native snakes, encouraging visitors to see these animals in a new light to increase empathy.

A Model for Inspiring Conservation Action through Empathy

Idaho Falls Zoo, April 2022 - September 2023 (Round 2, Tier 1)

Project Summary: Idaho Falls Zoo created a new model for empathy-based zoo experiences and enhancements. This model, the "Inspiring Conservation through Empathy Model (ICE-M)," used visitor input and collaboration with community members, educators, researchers, and interns to strengthen how guests connect with animals and conservation. Exploration stations, live animal encounters, interactive elements, and digital content encouraged visitors to observe animals closely, recognize them as individuals, and consider actions they could take to support wildlife.

Achieved Outcomes: Idaho Falls Zoo engaged community members and expert stakeholders through a Community Advisory Board and used visitor research to guide the development of empathy-based interpretation. The zoo created and tested exploration stations, developed new digital content for its app, and trained staff and volunteers to use empathetic language and highlight animal individuality. Early evaluation found increased empathy following live animal encounters, while visitors who used the app reported higher empathy than those who did not. These findings helped refine ICE-M and guide future interpretive experiences.

Click here to view the webinar and resources related to this project.

Success Story: Undergraduate interns were instrumental in the completion of the grant. In turn, this opportunity was highly valuable for all the interns and their future career paths. One shared, *"not only has it given me great connections and valuable insight into the world of zoos and aquariums, it steered me in the right direction in my career… that clear direction is priceless."*



One of the empathy-based exploration stations developed through this project, designed to help visitors observe animals in naturalistic settings and connect with their behaviors and individuality.

Designing Exhibits and Revising Visitor Experiences to Foster Empathy for Wildlife

Zoo Boise, April 2022 - September 2023 (Round 2, Tier 1)

Project Summary: This project produced empathy-driven concept designs for new red panda, penguin, and snow leopard exhibits in Phase I of Zoo Boise's master plan. Visitor surveys and animal-behavior observations helped identify opportunities for interpretation to encourage guests to notice animal behavior, consider animals' thoughts and feelings, and understand how choice supports wellbeing. Zoo Boise also revised Zoo Chats, public feeding encounters, and private animal experiences to strengthen empathy-based interpretation.

Achieved Outcomes: Zoo Boise developed three empathy-driven exhibit concept designs informed by 276 visitor surveys and 734 animal-behavior observation sessions. The research showed that visitors' engagement and empathy were closely connected to opportunities to observe active animal behavior. Visitors were also curious about what animals might be thinking and feeling, providing a starting point for interpretation focused on perspective-taking, animal choice, and wellbeing. These findings informed the exhibit concepts and recommendations for future signage and interactive experiences.

The zoo also updated and evaluated four zoo chats and six visitor experiences, including public feeding encounters and private animal experiences. Animal care staff contributed their firsthand knowledge of the animals to the development of interpretive messages, and staff and volunteers were trained to incorporate animal individuality, wellbeing, choice, and conservation action into their interactions with guests. By early summer, all participating staff and volunteer teams were using the new empathy practices. Evaluation found significant increases in visitor empathy following the revised zoo chats and animal experiences.

Click here to view the webinar and resources related to this project.

Success Story: From survey taker Adri: "*I could see the emotions on people's faces better when the volunteers would try to connect the guest to the animal. I feel like I could physically see them understanding the animal better. Especially with little kids, you can see them connect better with the animal just by knowing their name or birthday*"



Renderings of Zoo Boise's new red panda exhibit, designed to encourage visitors to notice naturalistic animal behaviors, choice, and support wellbeing.

Where Cranes Dance: Connecting People with Endangered Species, Communities, and Wild Places

International Crane Foundation, April 2022 - September 2023 (Round 2, Tier 1)

Project Summary: International Crane Foundation created an immersive introductory film experience to prepare visitors for their journey through the site and strengthen connections between the resident cranes, their wild counterparts, and the people and places involved in crane conservation. The 14-minute film, Where Cranes Dance, uses stories and footage from around the world to introduce the landscapes where cranes live and allow visitors to hear directly from scientists, researchers, and members of local communities. Shorter films, a self-guided tour app, QR codes, and interpretive signage provided additional opportunities to explore individual species, conservation challenges, and actions visitors could take.

Achieved Outcomes: International Crane Foundation produced and evaluated Where Cranes Dance, a 14-minute film shown daily in its three-screen Theater for Global Crane Conservation. The film introduced visitors to all 15 crane species and connected the cranes living at the site with their native landscapes, wild counterparts, and the cultures and communities working to protect them. Evaluation found that the film increased visitor empathy, with viewers identifying scenes that resonated emotionally and demonstrating a stronger understanding of how the resident cranes serve as ambassadors for cranes in the wild.

The project also produced five shorter films that allowed visitors to explore individual crane species and conservation strategies in greater depth. Each film featured a specific conservation action, such as participating in a crane count, planting a pollinator garden, supporting wetland conservation, or signing a pledge. Visitors could access the films through QR codes throughout the site, while a self-guided tour app, mural panels, and audio features expanded access to these stories beyond scheduled tours.

Click here to view the webinar and resources related to this project.

Success Story: "*I love the video. It gives me goosebumps. Remarkable how much information there is in 13 minutes. Everything the word conservation means is lived, practiced, and executed on a daily basis at ICF. ICF enhances and gives hope to us all. And every viewer will leave with that knowledge.*" Click here to watch the full video. – Kathleen, Emeritus Board Director (Where Cranes Dance)





Footage from Where Cranes Dance, connecting visitors with crane species, habitats, and conservation stories around the world – additional short videos are accessible by guests through QR codes.

Discovery Tram Tour: A Vehicle for Increasing Empathy Outcomes

Northwest Trek, October 2021 - September 2023 (Round 1, Tier 2)

Project Summary: This project examined whether empathy best practices, which had primarily been developed for programs involving direct interaction with a presenter, were also effective during immersive visitor experiences. Northwest Trek evaluated and enhanced Tram Tours, Wild Drives, and Keeper Chats to explore how storytelling, animal individuality, and other empathy-based messages could strengthen guests' connections with wildlife and wild places. Naturalists and animal care staff received training to support these interpretive experiences.

Achieved Outcomes: The project provided empathy-based interpretation training to naturalists conducting tours in Northwest Trek's free-roam area and helped establish the consistent use of empathy messages throughout Tram Tours and Wild Drives. Following the training, naturalists delivered 2,695 tours reaching more than 55,000 guests. Evaluation found that guests who participated in tours led by trained naturalists were more likely to express clear motivations for caring for wildlife and wild places.

A customized training for animal care staff also supported the use of empathy best practices in Keeper Chats and other guest interactions. Naturalists and keepers incorporated personal stories, animal individuality, and conservation messages to create meaningful connections between guests and the animals they encountered. Northwest Trek also developed training materials, recordings, and a self-assessment tool to support continued empathy-based interpretation across the park.

Click here to view the webinar and resources related to this project.

Success Story: During the short beta phase of our electric tram experience we received a particularly positive visitor comment card, regarding the impact Naturalist Brady made on a group of guests. Brady experienced the initial grant-funded empathy training in 2022 and was a mentor to the newer Naturalist Staff that joined our team in 2023. The following comment was shared in September 2023: *"We had a fantastic experience on the tour lead by Brady! His passion for wildlife was noticeable, and the stories he told made us feel a special connection to the animals, particularly the bison. Thank you for an amazing tour that exceeded all our expectations!"*



A bison beside Northwest Trek's Discovery Tram during an interpretive tour of the free-roam area.

Becoming Bear: Bear Burrow Interpretive Exhibit

Racine Zoo, April 2022 - May 2023 (Round 2, Tier 2)

Project Summary: This project created a new indoor interpretive space that provides Racine Zoo's first non-guided, empathy-focused experience for general admission guests. Becoming Bear guides visitors through the life of a bear using hands-on interpretive elements, conservation information, and perspective-taking activities. Younger guests are invited to mimic bear behaviors, explore a bear-themed environment, and imagine how a bear experiences the world, while older visitors can learn about bear and arctic fox conservation and their significance in ecosystems and cultures.

Achieved Outcomes: With the addition of the Bear Burrow, Racine Zoo increased its capacity to offer both self-guided and facilitated empathy programming. Interactive elements invite guests to "become" a bear through a behavior wheel, forest-themed climbing and play materials, a mirror that adds Andean bear markings to their reflection, and a chalkboard activity inspired by bear scent-marking behavior. An adjacent viewing window and interpretive signs connect visitors with the zoo's arctic foxes and the cultural significance of foxes around the world.

Preschool-aged children demonstrated perspective-taking and animal mimicry through play, including pretending to move and behave like bears and using the forest-themed elements to create their own experiences. Although the absence of a resident bear made formal evaluation difficult, the Bear Burrow remained engaging and memorable for young visitors and provided a new setting for camps, preschool classes, and other interpretive programming.

Click here to see the resources and video recording related to this project

Success Story: *"We had the opportunity to share this new space with Katie Neville, Program & Audience Evaluation Specialist with Milwaukee County Zoo, who visited our Zoo for the first time with her 9-year-old son, Henry. Katie later informed me that Henry enjoyed building with and climbing on the log toys so much that in the weeks following their visit he asked multiple times not just when they could visit our Zoo again, but specifically when they could revisit the Bear Burrow! This was particularly impactful for us, as it shows us even with the absence of a bear to view the space is still engaging and memorable for our primary audience (young guests).*"





The inside of Racine Zoo's Becoming Bear exhibit, where guests can explore bear behavior through play and perspective-taking activities.

Discovery Zone: Education Courtyard Expansion

NEW Zoo & Adventure Park, September 2022 - September 2023 (Round 3, Tier 2)

Project Summary: This project transformed the NEW Zoo's previous Education Courtyard into the Discovery Zone, an interactive space where visitors can connect with animals and nature through observation, play, and self-guided interpretation. Outdoor "Vacation Station" habitats increased the visibility of ambassador animals previously seen mainly during scheduled programs. Interactive signs, games, puzzles, and nature play experiences were designed to encourage exploration, creativity, perspective-taking, and stronger connections with wildlife.

Achieved Outcomes: NEW Zoo expanded a private education courtyard into an 18,000-square-foot Discovery Zone open to all zoo visitors. The space includes three rotating animal habitats with species and "get to know me" signs, an interactive walking trail, animal-themed games and puzzles, wildlife scavenger hunts, an outdoor classroom, and a large nature play area. Signs introduce ambassador animals through their names, birthdays, favorite foods, activities, and unique traits, helping guests connect with animals previously visible primarily during facilitated programs.

The trail and nature play experiences invite visitors to notice local wildlife, use their senses, solve puzzles, and create with natural materials. A monarch butterfly mascot guides activities and provides a consistent interpretive voice throughout the space. The project also created signage templates and interactive approaches that can be adapted for future interpretation elsewhere in the zoo.

Click here to view the recording and resources related to this project.

Success Story: When asked about the new Discovery Zone, the NEW Zoo & Adventure Park's Operations Manager, Barbra Basten, remarked *"I love that it will provide access for our guests and our behind-the-scenes education animals a better opportunity to connect by offering more outdoor habitat space."*





The NEW Zoo's Discovery Zone, featuring nature play areas, expanded outdoor classroom space, and ambassador animal outdoor habitats and signage.

Fostering Empathy for Wildlife through Signage and Phase 1A Interpretive Plan

Zoo Boise, September 2022 - September 2023 (Round 3, Tier 2)

Project Summary: Inspired by ZooMontana's Animal Bios project, Zoo Boise created animal biography, animal care, and regulatory signs designed to foster empathy for wildlife. Several signs used first-person language and personal information to introduce animals as individuals, while regulatory messages used animal-centered language and humor to explain preferences, choices, and wellbeing. The project also developed interpretation for the red panda exhibit, giraffe encounter, and Conservation Plaza and an interpretive plan for the new education campus and renovated Small Animal Kingdom.

Achieved Outcomes: Updated animal biography, animal care, and regulatory signs encouraged guests to consider animals' feelings, preferences, choices, and wellbeing. Staff observed visitors commenting on the first-person signs, showing greater understanding when animals were not visible, and expressing curiosity about animal care and diets.

Zoo Boise also produced 31 interpretive signs and perspective-taking opportunities for the new red panda exhibit, giraffe encounter, and Conservation Plaza. These included a nature play element beside the red panda habitat that allows visitors to engage in parallel play while the animals climb and explore nearby. A comprehensive interpretive and theming plan established audiences, themes, objectives, and strategies for signs, discovery stations, Zoo Chats, animal encounters, and other visitor experiences in the education campus and Small Animal Kingdom.

Click here to view the webinar and resources related to this project.

Success Story: We overhear guests commenting on the different signs since they are written from a first-person perspective. Instead of complaining about an animal not being visible, guests seem more understanding. Humor has also worked well. One sign reads, "KEEP HANDS OFF MESH: I get nervous when people get too close. Plus, I eat a specialized diet that doesn't include fingers." After reading this sign, multiple guests commented, "I wonder what they eat." This tone sparked curiosity, deeper interest in animal care, and encouraged visitors to read posted signs.



Zoo Boise's new animal biography and regulatory signs, using first-person language and humor to help visitors understand animals as individuals.

Fostering Empathy through Enriched Experiences

Red River Zoo, September 2022 - September 2023 (Round 3, Tier 2)

Project Summary: Red River Zoo, in collaboration with the AWARE Institute, conducted a hybrid research and staff development project exploring how enriched animal experiences paired with empathy-driven Keeper Chats could strengthen visitors' connections with wildlife. Animal care staff participated in workshops on animal behavior, outcome-based husbandry, empathy practices, storytelling, and public interpretation. They then developed species-specific enriched experiences and Keeper Chats for bison, lynx, ravens, and kookaburra.

Achieved Outcomes: Red River Zoo developed four empathy-focused Keeper Chats and delivered 176 presentations featuring animals participating in enriched experiences. The presentations incorporated personal information, storytelling, perspective-taking, animal wellbeing, and invitations to take caring action. These messages helped visitors understand the behaviors they observed and connect the animals' experiences at the zoo with conservation challenges in the wild.

Evaluation found that guests generally reported feeling more connected to the featured animals when Keeper Chats were paired with enriched experiences. Visitors also reported greater awareness of conservation challenges and encouragement to take caring action. Results varied among species, reinforcing the importance of designing enriched experiences around the behaviors, preferences, and responses of individual animals.

Click here to view the webinar and resources related to this project.

Success Story: *"A highlight of this project was watching the enrichment projects go from a concept/idea to being put into practice for our animals; seeing their reactions to something new and stimulating."* - Zookeeper



Lynx signage from Red River Zoo's project, helping visitors connect observed behavior with the animal's individual needs and experiences.

Fostering Empathy through Enriched Experiences

Roosevelt Park Zoo, September 2022 - September 2023 (Round 3, Tier 2)

Project Summary: Roosevelt Park Zoo, in collaboration with the AWARE Institute, conducted a hybrid research and staff development project exploring how enriched animal experiences paired with empathy-driven Keeper Chats could strengthen visitors' connections with wildlife. Animal care staff participated in workshops focused on animal behavior, outcome-based husbandry, empathy practices, storytelling, and public interpretation. Staff then developed species-specific enriched experiences and Keeper Chats for river otters, tigers, hornbills, and okapi.

Achieved Outcomes: Roosevelt Park Zoo developed enriched experiences designed to encourage species-relevant behaviors such as hunting, foraging, exploration, problem-solving, and locomotion. These experiences were paired with Keeper Chats that incorporated personal information, storytelling, perspective-taking, messages about animal wellbeing, and invitations to take conservation action.

Evaluation compared Keeper Chats delivered on their own with presentations that combined the same interpretive content with enriched experiences. Results varied by species, and some sample sizes were too small for statistical comparison, but the project demonstrated how visible animal behavior and intentional interpretation can work together to help guests appreciate animals' skills, understand their care, and connect with their wild counterparts. The project also strengthened the interpretive role of animal care staff through species-specific presentation frameworks and practice delivering public programs.

Click here to view the webinar and resources related to this project.

Success Story: *"As a result of this process, the zoo staff has developed a new passion for the behavioral enrichment they provide to the animals in their care. While most days enrichment will remain the simpler types of enrichment such as scents or treat puzzle boxes, due to time constraints involved in creating the enhanced enrichment options. However, staff is now emboldened to develop those enhanced enrichment experiences for the animals in their care and supported by the management to expand those practices to all species within their areas. To maintain this momentum, the staff will meet monthly to focus discussions around enrichment and to assist one another with ideas and problem solving for developing enhanced enrichment for the more difficult animals to engage."*

Roosevelt Park Zoo's enriched animal experience, paired with Keeper Chat interpretation about behavior, wellbeing, and conservation.



A Model to Build Public Conservation through Empathy in Adventure Island

Idaho Falls Zoo, January 2024 - December 2024 (Round 4, Tier 2)

Project Summary: This project continued the development and documentation of Idaho Falls Zoo's Inspiring Conservation through Empathy Model through its application to Islands, originally called Adventure Island. Designed as an immersive empathy-based experience, Islands will use interpretive signs, physical interactives, digital content, virtual reality, and animal experiences to explore how wildlife habitats can become isolated like islands. Zoo staff, community advisors, and visitors helped review messages, refine exhibit flow, and strengthen the interpretive experience.

Achieved Outcomes: Idaho Falls Zoo developed a cohesive educational plan and central conservation message for Islands, connecting animal adaptations with habitat fragmentation, wildlife corridors, and coexistence. Visitor feedback was used to test and refine draft signs before production. Guests commented on message clarity, the amount of information, image size, visual clutter, and consistency with the rest of the zoo. In response, the zoo clarified messages, enlarged images, simplified layouts, adjusted branding, and revised the placement of interpretive elements.

The experience also includes virtual reality, a habitat-themed play area, a puzzle wall, empathy-focused animal information, and digital content that invites visitors to make choices from an animal or conservation perspective. Although Islands was not open during the grant period, evaluation across Idaho Falls Zoo continued to show increases in visitor empathy, knowledge, and reported conservation action. These broader findings informed the interpretive approach used in Islands, but outcomes specific to the completed exhibit will need to be evaluated after it opens.

Click here to view the webinar and resources related to this project.

Success Story: At the end of 2024, the project evaluator conducted an online survey of IFZ staff, CAB (community advisory board) members, interns, and key partners to gather feedback about the project. Respondents reported positive feedback about the project. Specifically, one shared, *"I have appreciated the collaboration which has helped us come to conclusions and decisions based on multiple points of view rather than just my own."* Another commented, *"I really appreciate the work that has gone into the mission. And the graphics and design have been super cool."*



Visitor feedback on draft signage helped Idaho Falls Zoo clarify messages, simplify layouts, and improve placement before final production.

Banding Together to Save Cranes

International Crane Foundation, January 2024 - December 2024 (Round 4, Tier 2)

Project Summary: This project enhanced and expanded the International Crane Foundation's Keeper Chat program to foster empathy for cranes through on-site interpretation. Crane Conservation Department apprentices worked with the Conservation Education Department to develop themed presentations on crane care, enrichment, eggs, and raising cranes. Apprentices received training in interpretation, theming, storytelling, public engagement, and empathy-based messaging, then practiced their presentations and received feedback throughout the summer season.

Achieved Outcomes: Four Crane Conservation Department apprentices delivered 27 Keeper Chats to 270 visitors. The presentations shared firsthand animal care and conservation experiences, helping visitors build a more personal understanding of cranes and the work required to protect them. Monthly evaluation meetings allowed apprentices and staff to review visitor responses, refine program themes and language, and strengthen the use of empathy and conservation actions throughout the season.

Evaluation found that all surveyed visitors reported increased knowledge about cranes, 90% became more interested in cranes, and 91% wanted to share what they learned. Eighty-three percent reported increased concern for cranes in the wild, while 77% said cranes felt more special to them after the program. Visitor questions and comments also reflected curiosity, appreciation, perspective-taking, concern for animal wellbeing, and recognition of crane individuality.

Click here to view the webinar and resources related to this project.

Success Story: *"This experience reaffirmed for me that I enjoy education. I got new experience in public speaking with the specific goal of encouraging conservation empathy in our guests. I also learned how important it is to leave guests with a strong takeaway, either in learning something new or in ways to take action."*



A Keeper Chat at the International Crane Foundation, where apprentices shared crane care, conservation, and empathy-based interpretation with visitors.

Bear Den Prep Kitchen

Grizzly & Wolf Discovery Center, January 2024 - December 2024 (Round 4, Tier 2)

Project Summary: This project completed the prep kitchen for the Grizzly & Wolf Discovery Center's new bear den, increasing its capacity to prepare varied enrichment for resident bears and expand the Keeper Kids program. Through Keeper Kids, children learn about bears and animal care, prepare and place enrichment in the habitat, and watch the bears search for what they created while hearing the individual bears' stories. The project also included the first formal evaluation of the program.

Achieved Outcomes: Completion of the Bear Den Prep Kitchen increased the Center's capacity to provide meaningful, varied food-based enrichment for resident bears. The expanded kitchen supports a broader range of enrichment opportunities that keep bears mentally and physically engaged while allowing visitors to observe natural foraging behaviors in the habitat. These experiences can help visitors better understand each bear as an individual and connect their behavior and needs with those of bears in the wild. The new kitchen will also support the continued expansion of the Keeper Kids program, which fosters empathy and respect for bears through hands-on enrichment activities and observation.

The Center also completed its first formal evaluation of Keeper Kids, collecting 119 surveys. All respondents said they would recommend the program and felt their child gained an understanding of bear care practices. Responses reflected learning about bear safety, enrichment, individual bears, and caring actions such as securing food attractants, practicing safe camping, and giving wild bears space. Empathy-related responses also reflected connections with individual bear stories, specific behaviors, and becoming less fearful and more respectful of bears. This evaluation provides a baseline for future assessment of the expanded program.

Click here to view the webinar and resources associated with this project.

Success Story: *"We need facilities and practices that are really delivering on the promise of good animal care so that the visitors can develop trust. Once they start to develop trust in us, then they're able to observe the animals and observe natural behaviors and healthy and happy animals. That allows them to then be open to these conversations that we want to have with them—learning about the animals and learning about what they need and what they might need in the wild. That's when we start to create the connection."*

After learning about bear adaptations and behaviors, children in the Keeper Kids program hide food in the habitat and observe how the bears use those adaptations to find it.



Increasing Empathy for Wildlife and Conservation Action through Biofact Use

Minnesota Zoo, January 2024 - December 2024 (Round 4, Tier 2)

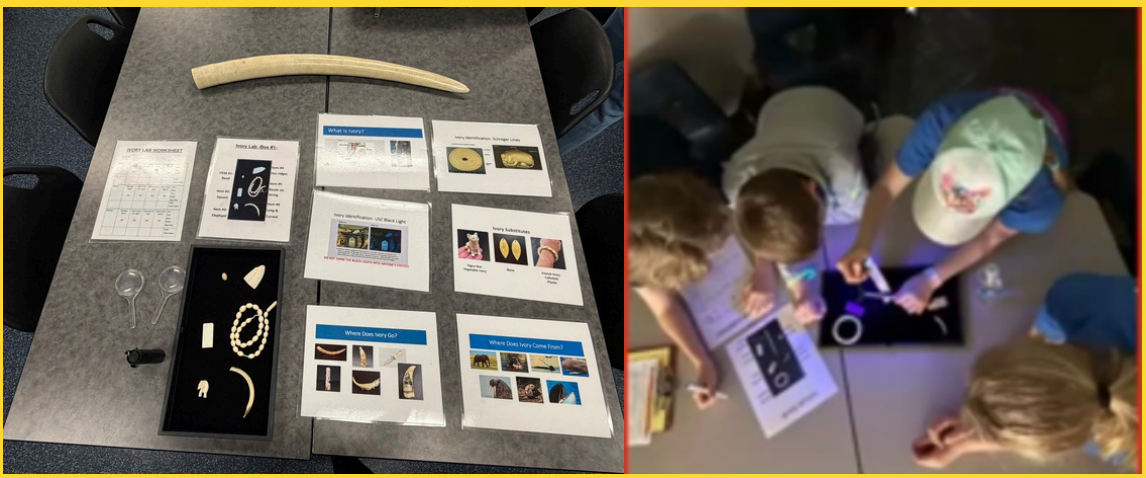
Project Summary: Minnesota Zoo used engaging biofacts and empathy for wildlife best practices to educate youth and families about wildlife trafficking and inspire conservation action. The project included on-site and off-site programs, a wildlife trafficking display on the Tropics Trail, and the Vanishing Animals class for students in grades 6–12. Through hands-on activities and responsible-travel messaging, participants explored how wildlife trafficking affects animals and communities and considered actions they could take locally and while traveling.

Achieved Outcomes: Minnesota Zoo developed and tested a range of biofact-based interpretive experiences, including 22 Vanishing Animals classes, 36 Zoo Camp presentations, 22 booth programs, and a permanent wildlife trafficking display. Activities included examining commonly trafficked wildlife items and completing an ivory investigation using observation and inquiry skills. The zoo also created best-practice guidance and evaluation tools to support the intentional use of biofacts to foster empathy and conservation action.

Evaluation led the zoo to revise its interpretation after staff observed that increased concern for trafficked animals could also lead some students to blame the communities where those animals originated. The revised class included the perspectives and conservation work of young people in Namibia, helping students develop empathy for both wildlife and human communities. Staff and volunteer training also emphasized using biofacts to share individual animal stories with care and respect and to discuss wildlife trafficking as a complex conservation issue.

Click here to view the webinar and resources related to this project.

Success Story: *"Touch, feel, and proximity to animal artifacts excites such a natural wonder and awe that generates a human-nature connection in a very unique way. I'm grateful that science institutions have leveraged this way of interacting with guests and I applaud the MN Zoo for taking the matter so seriously in a curator sense and the way the artifacts of animals that people have had relationships with are handled." – Zookeeper*



Children in the Vanishing Animals program examine biofacts and explore how wildlife trafficking affects animals and communities.

Field Programs: Building Empathy for Marine Wildlife

Seattle Aquarium, January 2024 - December 2024 (Round 4, Tier 2)

Project Summary: This project expanded the use of empathy best practices throughout the Seattle Aquarium's Beach Naturalist, Cedar River Salmon Journey, and community outreach programs. The Aquarium developed new and updated interpretive signs, wayfinding materials, welcome stations, and training resources to help visitors observe local wildlife, understand beaches and waterways as animals' homes, and explore these environments with care. Staff and volunteer naturalists also received expanded training in storytelling and empathy-based interpretation.

Achieved Outcomes: Seattle Aquarium created new interpretive signs designed to present marine animals as individuals with distinct behaviors, roles, and needs; emphasize the sentience and agency of marine invertebrates and salmon; and encourage visitors to recognize themselves as guests in wildlife habitat. New A-boards, feather banners, canopies, and yard signs also improved wayfinding and established expectations for gentle, respectful exploration.

The Aquarium retained or refreshed messages that effectively sparked curiosity and empathy while revising or retiring signs that visitors found confusing. New signs used accessible language and illustrations to draw attention to often-overlooked wildlife, including moonsnail egg collars and feeding barnacles, and introduced empathy-focused signage to the Cedar River Salmon Journey for the first time. Two new empathy trainings, including storytelling techniques and guidance on what empathy looks like on the beach, strengthened naturalists' ability to connect visitors with wildlife through personal interactions and interpretive materials.

Click here to view the webinar and resources related to this project.

Success Story: *"We were reminded that even a small rock can be a creature's home, so step carefully and don't take anything." - Visitor at Olympic Sculpture Pocket Beach*



Seattle Aquarium naturalists use new signs and empathy-based interpretation to help visitors explore beaches and waterways as wildlife habitat.



Infusing Empathy into Biofacts Programs

Zoological Society of Milwaukee, July 2024 - December 2024 (Round 4, Mini Grant)

Project Summary: This Mini Grant helped the Zoological Society of Milwaukee formalize its BioFacts program and strengthen how staff and Zoo Pride volunteers use animal and conservation biofacts to foster emotional connections with wildlife. The Society created interpretation and maintenance video resources that model empathy-based storytelling, connect animal stories with personal conservation choices, and support the safe and respectful care of the collection.

Achieved Outcomes: The Society produced two interpretation videos and three maintenance videos covering classroom and conservation interpretation, biofact handling, pelt storage, taxidermy care, and arsenic testing. One example pairs a gorilla biofact with a deconstructed cellphone to help participants understand threats to gorilla habitats and actions they can take. The publicly available series has also been shared with partner organizations, providing practical resources that help address a gap in biofact interpretation and collection care.

The project's two interpretation-focused resources, How to Interpret with Conservation Biofacts and How to Interpret in the Classroom, provide practical guidance for using biofacts to foster empathy and conservation learning.

Click here to view the webinar and resources related to this project.



Still images from How to Interpret with Conservation Biofacts, demonstrating how biofacts can be used to share animal stories and support empathy-based interpretation.