

All right, welcome everybody. Give folks a little bit of time to trickle in to our learning group today, we'll get started if, in the meantime, you want to pop your name and where you're joining us from in the chat. That would be awesome. My name is Emily Burnet. I'm the empathy network specialist. My camera's over here. I'm the empathy network specialist at Woodland Park Zoo, and I'm really excited for us to gather and chat in this learning group today about using effective empathy practices to promote wildlife coexistence. I think this is a really interesting topic, and as we saw from our kind of pre registration questions, something that a lot of folks are thinking about as well. So I do want to recognize that for some folks, this might be the first ace for wildlife network event you've ever attended, if that is you. Here's a little bit of background on who we are. The ACE for wildlife network facilitates the sharing of knowledge, experiences and data to drive conservation change through fostering empathy for animals and the environment that sustains them. We are currently made up of 27 partner organizations. These are AZA accredited zoos and aquariums across the country that have committed to using empathy as this kind of conservation Catalyst. We have over 400 folks that are either staff or volunteers at those partner organizations involved, but we also have hundreds of affiliates all over the globe engaged in this work as well. And when we are talking about empathy, this is the definition that we are really grounded in. So we define empathy as a stimulated emotional state that relies on the ability to perceive, understand and care about the experiences or perspectives of another person or animal. And so that is kind of a lens that we're all approaching this work with today. And we know that when in tandem with other factors, that empathy can be this really impactful catalyst, catalyst for somebody taking beneficial action for animals. And I think this conversation that we're having today is a really interesting one, because it highlights a lot of these other factors that are working in tandem with empathy that we also need to consider in our conservation messaging. And so with that in mind, because this is a pretty new intersection for the network, right? We're kind of taking this topic that's really big in the broader conservation field, and then kind of focusing it through a Zoo and Aquarium lens, and then focusing it even further into like, what is the role of empathy when we're talking about this topic with our guests, and so this is why we had some of those pre registration questions in the event for you all to fill out. So let me kind of get a sense of where everybody is coming to this conversation, and how you're kind of approaching this topic, the lens you're coming at it with, and that way, we can be on the same page, although a little bit more on the same page in our Q and A and discussion later on. And I think it was really exciting for me to look through these because it really illuminated that we are thinking about a lot of the same things and approaching this topic in very similar ways. So 100% of the folks who registered answered yes to that first question, does your organization have species commonly involved in human wildlife conflict. And I turned the responses to the next question, which is, what are some of those animals into a word cloud? You can see that on the screen here. So the top three, perhaps unsurprisingly, were wolves, snakes and bears. But as you can see, there's a lot of other animals in this word cloud as well. We have mountain lions and sea urchins, insects, lemurs, big cats, harbor seals. So a lot of folks were thinking about human wildlife conflict in very nuanced and like setting specific ways. The follow up question for that was, why do you think folks have negative sentiment? Sentiments towards those animals that you listed or so the species in that word cloud? And I went through and I kind of coded those responses for a variety of things, most of the folks listed fear, fear, afraid, scared. But kind of other themes that came up were, these animals pose threats to livelihoods. People don't have a enough information about the animal, or there's misconceptions about the animal. Animals can cause property damage. There's cultural differences. These animals pose a direct danger to humans.

The language used about the animal causes negative sentiments. And there were also a couple folks that mentioned disgust or some other responses that didn't get, you know, more than one, but we're still an interesting kind of thing to see folks bring to this conversation. So if it's helpful later on, we can share these screens again before we do our discussion and our Q and A, but also wanted to share them just at the beginning so we can all kind of get a grounding of how we're coming into this conversation. But I'm going to go ahead and stop sharing my screen and turn it over to our first presenter, noeli from the Boise Zoo, and I'm really excited to hear about the program that they are sharing today. So let me

15:36

stop sharing.

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No Elmi, the floor is yours.

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Thank you so much. Emily.

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Okay, good morning, everyone. Today, I am joined with Colin Usher. He is the wildlife officer and I am the Education Officer, and together, we have put together this presentation for you all to speak about the work that the Belize zoo is doing in terms of using effective empathy practices to promote coexistence in our programs. So I'm going to start just to give a brief little history about our program. Initially, the name of this program, which tackles jaguars and how they come in conflict, conflict with humans. The name of the program is called the problem Jaguar rehabilitation program, and just to give a back story of Jaguars in Belize, the Jaguar is the largest Wildcat in Belize, Anna predator, and like Melia predators around the world, they are constantly at odds with people as human dominated landscapes expand and a conflict. Jaguar is a Jaguar who has been repeatedly preying upon livestock or domestic animals. They are almost always Jaguars that are older or injured or sick and thus cannot compete successfully with other healthy individuals for food and territory. ANNA Belize, the loss of habitat combined with increased hunting Jaguar pre species such as Pacos, deer and peccary had contributed to increase survival pressures for the remaining Jaguar population, and as habitat and wild prey are reduced, they venture into farms and rural communities, seeking food and beginning to prey on livestock and domesticated animals. This often results in the Jaguars being shot by residents to protect their livelihoods. However, fear and prejudice against Jaguars have also caused them to be prosecuted and killed without cause. They're often blamed for any disappearance or death of livestock if they are in the area, even if there is no evidence. And this program was first established in 2003 in collaboration with the Belize forest department in an attempt to reduce the number of killings of Jaguars. And it was meant to intervene on behalf of the Jaguars who were verified to be repeated livestock predators. So along with the forest department, these Jaguars were brought to a facility in the Belize zoo that is selected for these joggers that have been, you know, the repeated livestock predators. And here they received a lot of care. And because they came from the wild, of course, they would have a lot of stress being in a new environment. So the zookeepers and the animal care personnel ensure that they would take care of these joggers as best as they could. And eventually, these joggers got a little more comfortable with people, and they would become animal ambassadors.

However, as the care came upon these jaguars, they would realize, the professionals would realize that many of them had shots and pellets and embedded under their skin. So all of them, almost all of them, had at least one sort of injury or disease or issue that would cause them to eventually come near and in contact with humans and especially farmers. This is some of the images or cartoons that were drawn for the initial campaign in 2003 I want you to take a keen look once more at the title of this program when it first began in 2003 the problem Jagger rehabilitation program, and if we consider words that matter, we are basically continuing and encouraging blaming the jaguar in The situations. But in its 20th year, this program changed its name to the human Jaguar conflict program. In an effort to remove the blame from the Jaguar, the Belize zoo decided to incorporate the word human in the title now the this program, the human Jaguar conflict program, as it is called. Now, it's more than just rescue and rehabilitation and also promotes coexistence through Jaguar conflict monitoring partnerships, like I mentioned, with the Belize forest department, empathy, best practices, educational outreach and mitigation strategies that include non lethal deterrents. And now I pass it on to Mr. Colin Usher, and just before he gets to speak, I'll just speak on behalf of why we what was the need for these empathy best practices in this work. So the use of best practices because of conservationists, building a relationship with a person in conflict with wildlife is not always easy, and therefore we needed to explore strategies that would help us to communicate with these persons and earn their trust and cooperate to help the joggers. Henry,

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hi morning or good afternoon. So I'll be going over some of the work I do as the wildlife officer in the conflict program, and how we go about addressing human drug or while or human wildlife conflict in Belize. So first of all, I like to say that the belizeo doesn't operate on its own. We do everything under the mandate of the Belize forest department. So we collaborate with them in every step of the way. Part of conflict is also research and to to better understand the situation in the country as a whole. So there are different NGOs in Belize that do conflict. It's not unique to the Belize zoo, but it's definitely something that's very important to us. Um, like no, they said, this started in 2003 since 2003 the Belize zoo has dealt with over 43 conflict situations for the two jaguars and one Puma, which were able to capture and remove from areas they were in conflict, conflict with humans, where they had lethal contact with livestock or domestic animals, usually someone, the person who's experienced conflict will immediately reach out to one of the partners, either from word of mouth or directly contact the Belize zoo, there after myself or someone at the zoo will immediately try to reach out to that person and respond to their case, try to listen to every all the information they have, all the information they've gathered in Belize. They're mainly tree animals that have conflict, sorry, with jaguars, Pumas and, more recently, coyotes, right? In our case, more and more often than not, we're dealing with Jaguar conflict. Many of these times people end up seeing the Jaguar. All the times these people come the way they communicate, they have preconceived prejudice for these kinds of animals and they that's why the empathy best, empathy practice practices have become instrumental in the way we've done outreach and response to these countries, right? So initially arriving to these areas, to the area of conflict, of course, we engage with the land owner, the property owner, trying to understand their situation. But the same time, learning these empathy practices have helped me to adjust or move away from just having discussions or conversations with these people, to more structure, right, trying to understand their perspective, and to give them or perspective as it as in regards to the research, right the facts. A lot of the times people fall into an area of they believe they they believe that because they're experienced

conflict, that the animals that there are too many of these conflict animals in the area, there are too many Jaguars. They believe that the animals are a danger to themselves, to human life, but one of the things we have to properly communicate to them is that the animals here in Belize are affected by so many different things, urbanization, forest loss, like you know what they said many of the times these cats are injured, all of those 43 cats we have captured at the zoo, about eight out of 10 of those cats have been suffered. Are were suffering from some old injury. About eight out of the 10 cats do have pellets embedded in your skin. A lot of times, people, when they go hunting, they see these cats from distance, and because of the gun laws and bees we will we're only able to provide bird shot for hunting, and bird shot won't kill the animals. We only injure them. And a lot of times, people don't realize they're creating their own problems by engaging these animals in the wild, right? They create their own problems, and they end up creating these conflicts. So after the explanation, we try our best to assess the situation. Again, we work very close to the police force department. To do that, we have to set up cameras to make sure we identify the animals, the animal in conflict, properly, most more recently, as recent as yesterday, actually dealt with the case where I went to go and check cameras for an individual. And on those cameras, there were several Wildcats passing through the air. So there was an ocelot, a Dragoon Puma, right? And even some other indicator species, like the great corusoe, which was excellent for the era. It means the area is very bio diverse. These are rural communities, and one of the things that they need explanation on is the fact that they live so closely with wildlife, so closely with the environment, that there isn't a situation where they will ever not be around these animals. So it's best to live with them and learn how to mitigate properly and to to explain it properly. Of course, empathy, that's where the empathy best practices come into place, right? Being able to explain to these people coherently, without agitation. A lot of times when you're explaining these kinds of things, people are very dismissive of the fact that they could be doing better with your husbandry. But at the same time, you don't want to offend anyone by telling them they're doing something bad, right? The Empathy best practices have been so, so good in regards to making a step by step process as to how to communicate best these persons, to explain to them, like the situation. Like I said, Before, there are animals around a healthy animal won't necessarily do anything to your livestock. It's just one of animal that is injured or something is wrong with them, or is a situation where you likely have to improve on the husbandry you are doing the moment right. So after identifying the problem animal, we do report that to the forest department, where they advise on if, whether or not we should continue implementing mitigation strategies. For example, we have the fox lights. As recently as October 4, we have a farmer who implemented the fox lights. Heard a puma, the Puma that he is in conflict with, and he told us that because of the Fox lights, the Puma no longer ventured into the property so he could hear the animal, but because of the lights, because of the mitigation strategies, they didn't experience any conflict that night, right? And he strongly believed that the fox lights were effective in dissuading the animal from doing so. So that's another evidence as to you can live with these animals, right? You can live with wildlife, but you have to put in the work to avoid any conflict. If it's a situation where there isn't any perceivable way to avoid conflict, of course, you move into trapping, but of course, when you do the trapping, I always explain to people that that's the last resort, because there's a lot of things that can go wrong, not just with the welfare of the animal, but also we don't understand how that animal was living in that environment. You don't want to remove a top predator. You don't want to remove an individual that had very lush established territory. You don't know what effects that would have. One example is we did were able to remove a Jaguar that was eating dogs, some domestic animals. And what we ended up realizing is that without that Jaguar in the area, that person started to have conflict with gray

foxes, the gray foxes started to eat their chickens, right? So you go from one situation to the next, and you have to explain to people that you might be avoiding one one problem, but you might create be creating a lot. So mitigation is always the best, best pathway to go about it, and thereafter, we just try to make sure that people are up keeping those mitigation strategies.

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And the way that we utilize these empathy best practices is that we use the empathy towards animals observational assessment framework that is found in the ACE for wildlife resources, and I use this to evaluate Khalid before starting his monitoring sessions. So on the first or second visit, I would accompany Khalid, and I would use some of the indicators, and I put them together here just to, just to give you a little idea. And it was to identify if Khalid was prompting some of these empathetic expressions, so as it would be reciprocated by the individual in a conflict. So for example, here I have does the officer reinforce animals as individuals, inform about the animals needs, highlight similarities and differences. And the reason why we wanted to look for these is because we wanted to identify the presence or the absence of these expressions that may prompt empathetic behavior from the persons in conflict with animals, and also to guide the conversation surrounding the Jaguars in conflict with humans, and set the tone for monitoring business visits, because, as Khaled mentioned, sometimes we would get calls or reports From farmers or individuals very quite agitated that we wouldn't even really know what to expect when getting to the field. So after evaluating Khalid and identifying what needs to improve, I also had a chance to evaluate the individuals in conflict with Jaguars or any Wildcat just to identify the presence or absence of their of their empathetic expressions, and to able to identify areas that need improvement when conducting interview surveys and monitoring as well. So Khaled already mentioned what some of the things that he did there after the evaluation of the wildlife officer. And some of the things that we were able to identify similar to that graph that Emily showed at the beginning, as to why, you know, people fear or they feel discuss for animals, or they simply think that they should not be in that same area. Or they cannot coexist. One thing that we found when dealing with Jaguar conflicts is that people here in Belize tend to think that we have black jaguars, and the black jaguars are always the culprits of being near their farms and either eating their livestocks and their dogs. So one of the things that we decided the best practices helped us to do is to not dismiss this information from them, because even though it was misinformation, they kind of became very much more curious about the Jaguar. If the Jaguar is a black Jaguar, whereas to a regular and normal Jaguar. And again, with these we're able to see that many of our participants in our program also demonstrated fair and negative perceptions, and somehow they expected lethal management from our behalf. So we also had to ensure that we state and we clarify our purpose as to why we are there, as well as the same time as not dismissing their their anger or their fear. And Colin can speak a little bit more on how we used the best practices of understanding of encouraging people to understand animals needs by framing and increasing knowledge. For example, what I mentioned with the black Jaguar effect, Khalid was very patient in giving out natural history about jaguars and how Jaguars hunt, their method of hunting, as well, as how to idea the Jaguars as well. And he can speak a little bit on mapping and perspective taking, how he used maps to encourage

34:07

this. So like Noli said, talking with some of the farmers, really get some eye opening responses from them when you mention certain things. It was before talking about the perspective taking something as

simple as giving them some of the research data, right, packaging it in a way where they're able to understand one of the things that really surprise these people with coordinate conflict is finding out that Jaguars group 13 armadillos, right? The research states that about 42% of the drug wars, while diet is armadillo, and it's very easy for them to understand that a Jaguar without teeth, without canines, can't come to Armadillo because the armadillo shell is hard. And that's that's one of the main things that people are always like, really. They really take that information very well, right? They immediately are able to understand why the Jaguar might be hunting their livestock, what might be stopping the drug war from hunting in the wild, just by that simple example, just because Belize and rural communities are very they're dominated by a culture of hunting and subsistence farming. So a lot of people are able to see themselves in the Jaguar because they also eat our meals, right? That's something that's very close to home for them. And taking it a step further, when we're doing the mapping is very good. I started to implement just taking up my phone, opening up Google Maps, showing them where their farm is, explaining to them the territory the Jaguar might be occupying, and trying to identify and talking to them about the factors that are around those areas. For example, one farmer might state to me that, okay, on two miles to the right of my land, there's another clearing two miles to the north. My neighbor just cleared his land. He had he set a fire to clear the land two miles to the left that there is a river, so the animal will be walking along the river. And those are some of the things. When taking those perspective, the perspective, taking a mapping from the empathy, best practices, they're able to immediately think to themselves, Oh, this Jaguar has no other choice but to come into my area. Right my area, there's a there's fire, there's our clearing, and revert leads directly to my land, so you're able to understand why the Joker might be coming in. And with other empathy best practices, it just gives them a lot better perspective.

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Yes, and with those empathy Best Practices implemented and improvements, we are able to encourage and suggest these mitigation strategies, which I would say that all of them agree to, and adjust for some key highlights to sort of wrap up the persons in conflict with Jaguars agreed to monitoring visits and mitigation strategies, therefore decreasing the likelihood of retaliatory killings and increasing understanding of Jaguar behavior and empathy. Some persons who were in conflict with a jaguar, with jaguars, were willing to share their testimony on social media, to speak on behalf of the Jaguars. And more than 50% of the persons in our program that are or were in conflict with Wildcats have demonstrated at least four indicators of empathy towards jaguars, and zero participants have verbalized positive feelings about a Wildcats characteristics. But we cannot force everyone to to love jaguars, but we can encourage persons who have experienced conflicts with Jaguars to understand them and the threats that they face in Belize. It is our only hope that individuals can seek help when in these situations to prevent retaliatory killings. The human Jaguar conflict program has rescued over 20 Jaguars from retaliatory killings and is currently monitoring five active cases of human Jaguar conflict. We'd like to thank the Zoological Society of Milwaukee and Palm Beach zoo for their help. Without them, we wouldn't be able to go out in the field and do the work that we do. Thank you.

38:36

Thank you so much that was so incredible to hear about. Thank you so much for sharing.

38:43

Okay, let me make sure I've got all of my ducks in a row, which I evidently don't. Okay, here we go. Alright? So I am going to take over for a little bit and do a little bit of kind of context setting before Leanne and Katie share this kind of topic of, how do we use effective empathy practices to address human wildlife conflict as part of our networks learning agenda? It's kind of one of these big questions that we're trying to answer. And so when I was thinking about this question, I like to kind of really zoom out at like the 1000 foot level and kind of understand some of the systems that at least folks in North America might be working in when we're talking about coexistence with wildlife. And so I kind of want to talk a little bit about various meanings that carnivores have played and narratives throughout history that have impacted how we think about North American carnivores on our landscape today. So like our previous presenters got out, we know that conversations about carnivore conservation can be really, really emotionally tense on both sides of this spectrum, and one of the reasons for this is especially in North America, carnivores operate within this really interesting kind of part of our psyche. They're both charismatic megafauna and then revered because of that, but also can be the focus of negative attitudes and behaviors that can significantly impact the conservation efforts and so briefly today, I hope to kind of illustrate that throughout American history, carnivores have played various roles and stories or narratives that have been used to uphold or promote cultural ideals, and that those have kind of trickled down into the way we think about these animals, in terms of conservation and the public understandings of those animals. And so I'll briefly summarize three of these kind of narratives, the role that corner works play within them, and then briefly touch on some effective empathy practices or informed recommendations that folks can use to kind of provide counter narratives. A lot of the research that informs these slides and a report that should hopefully be published by the end of this year that focuses on this, focuses on gray wolves and grizzly bears. So you can draw a lot of parallels to other species that we saw in that word cloud and Leanne, I love that you can recognize that this is June, or she's my secret. So there are three kind of themes that I'll talk about really briefly. We've got carnivores kind of representing this theme of other carnivores representing this challenge to dominion over nature, and then carnivores representing these symbols of erasure of American tradition within this first bucket of carnivores is other and thinking about how carnivores come to represent folks or those outside of this dominant group, there are three kinds of sub themes that emerge. There's othering through dehumanization, othering through this creation of a foreign threat or an outside group to this dominant one. And then there's also political and ideological othering within this othering to through dehumanization. This really starts in Europe, where wolves are representations of devilry or witchcraft and those that kind of exist outside of the social and religious norms at the time. And these perceptions exist across Europe. We have the last wolf in England being killed in the 1600s and in Germany, we have folks going out on witch hunts, killing the wolves and then hanging them from the gallows in the local town, but dressing them up as humans, these create kind of shared understandings on the continent about threats that wolves and other carnivores can pose to society, allowing sensationalized narratives kind of form the basis of public understanding, and this understanding shifts and evolves as these Europeans eventually come to colonized North America. In the early years of colonization, the perceptions of wolves quickly expands to represent unsafe and savage landscapes, as well as the people living there as colonists begin to experience conflicts with Native nations and carnivores on the landscape in Europe, as we just saw, people dealt with those threats to their civilizations and lethal persecution, this eventually evolves into what we come to see as settler colonialism here in North America, the repercussions of which can be reverberated in a bunch of facets of our society, including conservation. So to justify this kind of violent removal of not only people, but

animals from a landscape, colonists had to effectively dehumanize them and then share that rhetoric. And we can see an example of that on the screen here where Cotton Mather, who was a really influential preacher in New England, you might recognize his name from his role in the same witch trials here, straight up, just dehumanizes people by likening them to ravenous, howling wolves. And it didn't take long for these sentiments to then spread throughout New England and colonial America, moralizing settler violence against people and other animals. 300 years later, we see a relatively modern example of this dehumanization and rhetoric surrounding a prolific kind of case, the Central Park Five coverage of that case used really extreme language that played into racist stereotypes of black youth, and it's argued that a lot of the language used during the case, like the screenshot of the front page of the newspaper, really made it difficult for those suspects to have a fair trial. And these two examples, even though separated by 300 years, kind of illustrate the intersectionality of oppressive systems that we see in American history, and the fact that these systems remain influential to our discourse today. Wolves continue to represent these kind of groups outside of the dominant culture or tradition, and can become symbolic of ideological differences between various groups as well. Carnivores can also be used to represent threatening outsiders, often paralleling anti immigration sentiment. So we see this in Yellowstone National Park in the late 90s, when wolves from Canada were brought down to be reintroduced to the area, those who were really against this proliferated rhetoric that these wolves were invasive, non native and foreign. They were bigger, more dangerous, ferocious, diseased, a different species, and their existence on the landscape would pose a threat to not only the people living there, but the ecosystem in the animals as well. There's often a parallel some of the anti immigration rhetoric that we see today where immigrants are framed as people who exhaust community resources, steal jobs and pose threats to American safety and security, by symbolically linking wolves to perceived adversaries of American culture and safety. Anti Wolf, Abbotts transform an ecological conversation into a political one. Conversations no longer become about what is best for a landscape, but instead become these moral arguments informed by patriotism, nationalism and what it means to be a quote, unquote, good American. Lastly, within this theme, we see carnivores representing political and ideological othering, because reintroduction efforts specifically are often done by the federal government. Carnivores become kind of proxies of federal overreach or intrinsic fundamental freedoms. We see this again in Yellowstone in an analysis of the letters written to the Fish and Wildlife Service expressing either pro or anti wolf sentiment. For the pro wolf letters, 96% of those came from outside of the Yellowstone Area, with only 4% coming from within the area. And so not only do folks within these reintroduction areas potentially feel kind of under surveillance or suppression from the federal government, but culturally as well, right? These outsiders are kind of driving the decisions for their area, and this can make existing tensions already more prevalent between like the urban and rural divide is a common what we see here. Carnivores can also represent this challenge to dominion over nature. Values that colonists brought with them to North America often emphasized man's dominion over nature that was informed by many of the religions that they practiced, and so emphasizing that exercising control over the environment was not just like a way to survive in a landscape. It was doctrine. It was a right. And so when combined with the act of dehumanization that we see in the carnivores, this other theme, this allowed colonists to moralize narratives, to justify their actions and carnivores often become this kind of final boss, quote, unquote, that needs to be conquered in order for a landscape to be considered safe or tame and suitable for settlement. So we see this through government sponsored eradication campaigns, and the trappers who were doing these often wrote about their experiences and then proliferated this rhetoric throughout kind of eastern North America that

you know, like you see on the screen here, the wolf is the enemy of civilization. And so in our efforts to tame the wilderness, we kind of eradicated these animals across the continent, but then also cordoned off these areas that were specifically designated to be wilderness. And so anything outside of that area is not wilderness. If an animal transgresses those boundaries, as we know they often do, it becomes a glaring reminder of our inability to truly cordon off or control nature. And when the animal has teeth and claws and can pose a really, real threat, that can be really scary.

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Lastly, carnivores come to represent these erasures of ways of life traditionally associated with kind of like classic America. And in the report, I focus mostly on the Mountain West here and throughout the Mountain West, we've kind of seen a consistent shifting of community and moral values as more and more people have migrated from urban to rural centers. And this became really kind of exacerbated during the pandemic, where there was not only increased migration to rural areas, but also increased recreation in those areas as well. This often comes in contrast with a lot of the traditional ways of life in those areas. So ranching, farming, mining, timber, a lot of these kind of extractive industries. And as you get people moving to these areas or recreating in these areas that want to be close to nature, they want to be outside, it comes in kind of contrast with what is already perceived to be the right way to live on the land. As you get more folks in these areas who value wildlife, who value kind of environmentalism, you get these tensions between these two groups, and a lot of the times now, these traditional ways of life are either updated, seen as outdated or morally incorrect or even illegal to folks who want to use the land for conservation or recreation, and so for those who are fighting to preserve their ways of life in those areas, it often becomes a fight against environmentalism, a fight against carnivores. But it doesn't actually have to do anything with the animal. It has more to do about what the animal represents to that space. And so that's those are big those are really big narratives that we as Susan aquariums, have to kind of provide these counters for. And so what can we do? These are just kind of six really high level ways that we can kind of provide these alternative narratives to these really big and daunting themes. The first is identify and highlight these shared fundamental values between your organization and community. These can be things like stewardship of the environment or a healthy environment. Start from a place of commonality instead of a place of opposition. Opt for benefit focus instead of conflict focused messaging. Saying something like a fed bear is a dead bear gets kind of To the Point really quickly, but it's not the most effective way to frame your message. Instead, try something like by putting your food in the bear proof cooler, you're helping to keep grizzly bears and then the North Cascade safe, right? It emphasizes what you are doing to help not only yourself, but other animals on the landscape. This third one is something we're all pretty familiar with, right? Refer to animals as unique individuals by sharing their names, their stories, their personality traits. Kind of break down that barrier of this animal as an other, get somebody seeing them as an individual instead of an object or an entity. Create accurate perspective, taking opportunities that was talked about really well for the Jaguar conflict program. There's other great examples happening throughout our network that I think we'll hear about today as well that get up to at this point. And then lastly, be transparent about the fact that living alongside carnivores or any wildlife for that matter, does entail degrees of conflict. I think often when we think of coexistence, we think that that means absolutely no conflict. It means 100% peace. And so whenever there is a conflict, it is really dramatic. And so how can we kind of shift the narrative to recognize that conflict is more of a spectrum, instead of this point on a map that we have to get to and stay there? But I'm sure that Leanne and Katie have really great ways of putting these or

other ones that I don't mention into practice, so I want to make sure to not take too much time away from them. So Leanne, I'll pass it off to you.

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All right. Hi everyone. I think I can share my

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screen. If you need me to let me know, I think I have it up

51:46

to Okay. All right. Are you seeing

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Yes, okay.

51:56

All right. Hi everyone. First of all, thank you so much, Emily, that was I learned some stuff in that, that, you know, does put things in context about, you know, why people do things they do, why they believe things they believe, which is going to be different for every single individual out there, of course, but it's, you know, good way of, kind of seeing where the history is. So hi, my name is Leanne Chu. I am with the grizzly and Wolf Discovery Center in West Yellowstone, Montana. And I'm going to be kind of talking about how we talk about conflict, human wildlife conflict in the context of having empathy for people, which you know is, is something we all naturally do anyway. And sometimes it can be a lot to ask again, especially when you are working in the heart of wildlife conflict areas, and how it can be an effective tool. So to a little bit of context, Emily had previously referred to like the Yellowstone ecosystem. So the Greater Yellowstone ecosystem is that part on the map that is pretty like shaded in we in West Yellowstone are that red. so we are just outside the border of Yellowstone National Park. We are in the heart of that ecosystem. Who else is here? So in this region, we have ranchers, people who have ranch for generations, also new ranchers. We have Outfitters, people who make their living by guiding hunts. Residential. And more and more residential every single year, especially since the pandemic, a lot more people are living here. A lot more people are recreating here. So there's amazing recreation opportunities year round in this area. And of course, we see a lot of that come in. Historically, this area has been used by Shoshone, crow, Nez, Perce, other tribes still use it today. So essentially, we have a lot of stakeholders in this area, a lot of folks who have had a long time in this area, or very recently in this area. There's a lot of opinions going around. Of course, some very controversial animals to buy, to spread a little bit more backgrounds for the two most Hot Topic animals we deal with, grizzly bears, gray wolves. On the left is the historic range of grizzly bears in North America, that the yellow is their current range. We are that little, tiny red. in the that southernmost area that grizzly bears still exist at the time of their listing on the endangered species list in 1973 there was assumed to be maybe two to 300 Grizzlies in this ecosystem today, we have about 800 to 1000 that is an amazing success story, in part because there are more bears. But of course, that comes with its own challenges. Similarly, over on the right, that upper map shows the historic range of gray wolves, and then that dark green spot up in northern Minnesota is the last place that there was an official pack living as of the 1970s when gray wolves were also listed, and then the yellow or more recently that map on the bottom, kind of shows

right now where you might expect to have gray wolf packs living. So yes, they only inhabit a fraction of their historic range, but they are inhabiting more space than they did 50 years ago, which is, you know, the our generational lifetime, how people are thinking of things is, this isn't something they've had to deal with in their time. Now, in correlation with that, though, yes, grizzly bear and gray wolf populations have increased, but so have people. This is the growth of Montana since 1900 with 245,000 people, to last year with over a million people. We actually might have to get a second area code soon here in Montana. So there is a lot of growth of people too, and that's just something we don't want to miss out as part of that conversation. Quick content warning from the next slide, it does show an injury with some blood on it, as we talk about conflicts. So the biggest thing, of course, that we do, and that Emily kind of touched on at the end, is we want to be real, that conflicts exist. Fear exists, and there's not always the entire founding behind it that people believe, but there is a founding the video on the right that's playing shows. It's a video taken from one of our co workers properties just north of town in March, and that is one of the wolves from the wapiti Lake pack, who is, of course, outside of Yellowstone, because Yellowstone does not have fences, that wolf did not get into conflict. But it illustrates just how in it we are. We are right up against the boundary of this national park. Besides that, we are in the middle of National Forest, and that is honestly why a lot of people want to live here, is they want to be around that wildlife. Again, comes with conflict. The middle photo is a friend of ours who was involved in a grizzly attack in 2020 he did survive. It was, overall, a pretty standard textbook grizzly attack with grizzly with cubs, was startled, runs out, the person, knocks the person down, leaves the person. Of course, they're just very large animals with claws and teeth. There's going to probably be some injury. So, you know, he did have an injury from that, but he actually had this picture taken before he even sought medical help. On the left is a picture just taken in May of this year, where there's a grizzly bear euthanized in Yellowstone for getting access to garbage that was not quite ready to be used yet. And just by that, I mean, we didn't have staff in the park who were taking trash, so the trash that he got into behind that was not actually bear resistant, really, because it was meant to be picked up every night, was not being we had a lot of visitors in May, and then the more upfront photo is the 800 pound dumpster that that grizzly was able to flip. So we are very realistic that, yes, there is fear, there's conflicts. If you say there's not, that's just kind of perpetuating that distrust that people already have, of like rural, urban, local versus tourist, government versus people, and so we want to be honest about that. So conflicts exist, and one of the ways that kind of we want to bridge that gap of how people are viewing in a large carnivores is here at the center providing experience. We want to showcase natural behavior. We also do want to showcase maybe some not so natural behavior, things that these animals shouldn't be doing, but we want people to be able to witness that and see that. So that video playing is a one of our bears here working on a container test. So that is an official program we do to test out if something is bear resistant or not, versus on the left, that wolf is just going Abbots day, and people get a chance to see that and and we honestly do believe that's one of the biggest connections people make to animals, is just watching them do their thing, which is why most people come to this area, especially to Yellowstone. But seeing these animals out in the wild is very challenging. They're elusive. They don't like people. There's not that many of them. We want to give people a chance to just watch what they would be doing, or maybe again, watch what they should not be doing. But while they are watching this big, important thing is that we are providing context. We are there the little red shirts you see, and all these pictures are staff members who are out every day, all day long. We're always available somewhere where people can get to us, sometimes doing formal programs and sometimes just informally talking about the behavior people are seeing or around to answer questions. So whether that

animal is doing something you know, very up and interesting, or if that animal is taking its midday nap, we're there to explain to people about why they're seeing what they're seeing. And again, we really believe that helps add to that knowledge. The picture on the right shows me actually doing one of our bear spray demonstrations, which is, again, how we help with that fear, that idea of there's these large, scary animals out there, we're helpless against them. You're not. And again, we do talk about how your chance of actually having a bear encounter is incredibly low. But when you are more prepared for it, gets even lower, so knowing how to use bear spray, but also, most importantly, how to not need to use bear spray, incredibly important. And we see we do this program daily in the summer and then by demands the rest of the year. And we see lots of people come in, and we let people come back who say we use that information. You know, we just felt more secure being out there. Fantastic. Another big thing we do, especially we have a revamped museum exhibit indoors, and this one, it previously just focused on, like the history of bears, this one focuses a lot more on the ecosystem as a whole, and especially when it comes to predator conflict, which people most know that about wolves once they're in this area and kind of hear from locals, they do understand, you know, bears are actually just as capable of having those conflicts, but wolves are the ones that are most famous for it. So we have things like on the left, examples of things people have successfully used to protect their livestock. We got this from another group that works in the area on people in carnivores. And so they showed us the equipment they use that helps reduce those predation risks. So if people come in with the idea that lethal removal is the only way they get another perspective. If people come in thinking these animals are amazing, no one should ever have conflict with them. No one should ever kill them. On the right, we have viewpoints from different stakeholders in in this area, and one of them is hearing from a Montana rancher. So of course, it can't possibly encapsulate everything that ranchers view, but it is, you know, somewhere they can hear. We we don't exclude anyone from that conversation. We want there to be all perspective involved, and people to not have those extreme, like polarizing views, but to then meet more towards that middle. So we encourage them to again, take perspectives of other people.

1:01:27

Now, of course, challenges, the challenges with this, one of the best advice that we can give from our experience here is meet people where they're at and make the games that are available meeting people where they're at. We have a really diverse background in our education department. We have had folks who you know are hunters, worked on ranches, grew up around livestock, folks who have lived in this area their whole life, and also people who you know just came in from the city but learned things. So we have interests and hobbies that can connect to people you're talking to, they do seem focusing a lot more readily, able to accept what you're talking about, if they see that you have something in common with them, and then again, make the gains that are there. If that person comes in hating Grizzlies and then leaves loving Grizzlies amazing. We do know that's that's not realistic of everyone's experience. But if they come in hating wolves, and then we saw them take a picture of a wolf and then kind of mutter something to their their partner, about, okay, that wolf looks cool, or, wow, they're big, or something like that. That is, that's a gate that's amazing. Sometimes, just be encouraged by the next generation adults can be a bit more challenging to change their views of how things are, and not that we're trying to, you know, brainwash kids, but sometimes the family is watching just how their kids are so excited to see something or to learn something, helps them be a bit more open to learning it. And that's that's amazing. Know when to leave a situation. So I want to reference Abby Flores is coffee chat in September about bridging resistance. One of the things that stuck most with me

was, you know, she, she made the comment of, find peace with the possibility that they may never agree with you, and that that's okay, and you'll have some people come in very confrontational. There's always that 1% who's coming in ready to argue, have a bad time, and so no one to get yourself out of there. We are able to, you know, paint out who's out there, if they just need someone different to look at. Or if they're escalating in a big way, we can make them but usually, if they've come step foot in the grizzly and Wolf Discovery Center, they do understand they are going to see grizzly bears and gray wolves. And some part of them might be a little open to hearing that. And then finally, empathy overload, you know, so we are. We do like empathy. We want to encourage it. Know, your energy, we have this little cartoon that we have drawn in our office that is still up there today about, you know, we can get frustrated about, why should we always have to be the bigger person and, you know, see their point of view? Why can't they see our point of view? And that's a challenging thought, and it is sometimes frustrating. Sometimes it is very hard to try to see everyone, single, everyone's point of view, and empathize with it. So, you know, careful with that. And you know, maybe have a good general idea of how they might be things, but you know, hold true to you know. What you might know is you know a fact, or you know how things are going. So be open to things. But again, just be aware. And then, finally, does this work? So that is another challenge. And I like to kind of know Ellie's, you know, frankness about some people, you know, at the end, just still didn't have anything positive to say about Jaguars. We were working on, kind of translating our qualitative observations into more quantitative stuff with the understanding ideas take a while to sink in. You might not have someone leave that day with a completely changed view, but down the line, something might pop up where they interpret or apply what they learned here. And that's amazing. We are. We do passive observations in the museum with our new exhibit, being around people and kind of hearing how they talk to each other about those more, again, hot topics of conflict, just so they don't think we're there to, you know, slam our agenda down their throat, just kind of more passively seeing how they're doing it. We also want to acknowledge we don't do this alone. We do have partnerships with, you know, us, Forest Service, bear managers who come and do talks here. They do work out in this area. We hope that together with them, we are increasing that knowledge, and they have more opportunities to meet people on the field who are more, maybe more directly experiencing this conflict, who don't come in. But one sign that we do see is that graph over on the left, the top one, shows Yellowstone's visitation over the years. And then the graph right below is kind of matching up year wise, with fair conflicts in the park. And there are some outstanding factors of why those conflicts dropped a lot, but overall, we would expect, if what we were doing wasn't making a difference, if there was no more education, then as people visiting rose, so would bear conflicts. And we don't see that rise in a proportionate way, which is a positive sign. And we have hope that this is what's working. And we reach people our facility, we give about 200,000 visitors a year, and I want to say fairly confidently, most of those visitors leave learning having learned something that they didn't know. Coming in, which is amazing. And again, those small steps are what we see here. So thank you guys very much for been coming out today and about this. And yeah, I love hearing from everyone else too.

1:06:22

Yeah, Katie, did you want me to feature for you? Yes, let me pull that up.

1:06:29

Thank you everyone this it's so great to be among this group and sharing these stories. I feel very honored. So thank you all. I'm Katie Vermin with Woodland Park Zoo here in Seattle, and I'm going to share a bit about our journey with exploring human human, carnivore coexistence in a more urban context. So, and I'll try to make sure we leave plenty of time for discussion as well. So to start off, just to talk about, what, how folks kind of internally within Woodland Park Zoo, we've talked about, you know, what does human wildlife coexistence look like? So these are some of the ways we envision it, that people in wildlife are meeting their needs in integrated landscape, that people are developing developing empathy for wildlife that's linked with mutualistic wildlife values people accept and respect wildlife in our shared spaces, and that people recognize and consider the needs of wildlife and thus avoid behaviors that can lead to negative interactions. And in our context here in the greater Seattle area, the carnivores we're talking about are coyotes, black bears, Racine, and to some extent, cougars or Pumas and then some other smaller carnivores as well. But focus mainly on coyotes, black bears, Racine for this. So our understanding and approach to human wildlife coexistence has definitely evolved over time. We've taken inspiration from different research and talks and experiences that we've had. This definition has been really influential for us understanding and as folks have mentioned here, that human wildlife coexistence is a dynamic but sustainable state in which humans and wildlife co adapt to living in shared landscapes and on the next slide, we are seeing, at least in the US, according to different research, that the traditional values that do emphasize that domination over wildlife that Emily talked about are giving way, over time, to mutualism, values that regard wildlife as fellow beings in a common social community. So so we can take that and take heart that there is some shift happening, at least in the US, with people's feelings towards wildlife and towards coexistence. So how did we get here? I'm just going to kind of do a little bit of a chronological look at some of the different ways Woodland Park Zoo has approached urban carnivores and coexistence. We are involved in a lot of what we call like wildland carnivore those ones the wolves and the grizzly bears and the other wildlife that kind of live out in the mountains. We do work on those species as well, but I'm going to focus on our urban carnivores, and going back to 2011 sharing about some of the multi faceted approaches that we've taken. And we do acknowledge like, like everyone here has said that human carnivore coexistence is a difficult and dynamic process. It's not a stable or perfect state, and this is where that that empathy for our fellow people in our landscape, and that we're all kind of struggling with this. We human communities shift and change. Wildlife communities shift and change. It's an ongoing dance. We'll make mistakes, we will all learn, and we'll all keep trying. So I appreciate how everyone's addressed that empathy for for people in on this coexistence journey is a big part of this. So back in 2011 our conservation and education staff came together and identified coexisting with carnivores as a common priority, and as a part of that, our one of our education teams launched a program called Wild wise co existing with carnivores, and it was a middle school curriculum focused on science investigation, building students skills and Scientific Investigation and inquiry, but around the topic of coexistence with carnivores. And so the students would undertake an investigation about carnivores in their community and present posters about their work that shared recommendations for coexistence actions for their communities. And by 2017 this program was able to expand to all the middle schools in this one community. So let me tell you a little bit about kind of the landscape context of this. So in the kind of Greater Seattle area we have the more urban areas towards the west, where Woodland Park Zoo is on the left side of this and then the Cascade Mountains are in towards the east on the right side of this map, and at the interface, kind of that urban wildland interface, are the foothills of the Cascade Mountains. There's a lot of expanding development, a lot of new residents, and this program focused in

on this community. Circled here Issaquah. That's right in those foothills. Nature is really important to that community, but there were a lot of there have been a lot of issues of CO existing with carnivores in that community. Slide. So we did, we're able to do some evaluation of that program and student attitudes about large carnivores did significantly improve. Their positive affects improved increased, and their negative affects decreased, as you can see in this chart. So it was very helpful to see that this program, we also looked at the science learning outcomes, but as far as attitudes toward carnivores, we were heading in the right direction with that program. And on the next slide, the students were also after their participation in the program, they were able to suggest more relevant actions to promote coexistence. So they really focused on reducing attractance, and that kind of is the main key action that can help promote coexistence, and they definitely understood the importance of that at the end of the program. So we were then able to get some federal funding to expand that program. That's when we were able to reach all the middle schools with the school based program, and we also added two community components. One was doing camera trapping with the local parks district in the area and with community volunteers and to better understand the carnivores in the area. And then we also worked with a small group of community members, and they created what they what they titled the carnivore coexistence Action Team, recognizing that a lot of people listen to their neighbors and talk to their neighbors and might be more likely to do what their neighbors say than what the city tells them to do. So it was kind of like, can we reach people through their neighbors and that group, they really wanted to learn together about the carnivores in their community first, so kind of developing that understanding their needs and how they go about their lives and and use that understanding to then build some tools to help their neighbors with coexistence With carnivores. They develop things like door hangers, and then the pandemic hit, and they were like, we can't hang things on people's doors, so let's make yard signs and a digital scavenger hunt to teach people about carnivores and coexistence. So from our external evaluation, since we had federal funding for that project, we did some external evaluation, and we did learn that our camera trapping participants gained a greater awareness of the large carnivores in their area, and the action team volunteers gained new knowledge about actions to avoid attracting carnivores. Folks that were involved in the program, basically, you know, were interested in carnivores and appreciated them. So we didn't see increases in that, but they did strengthen their desire to help their neighbors take action, and they, almost all of them, reported having conversations with their neighbors about ways to avoid attracting carnivores. So at the same time that was going on, Woodland Park Zoo and our partner, Seattle University, launched the Seattle urban carnivore project, and this is an urban carnivore research project with an aim of fostering human carnivore coexistence through a better understanding of our local carnivores. So as that kind of federal funding for the Issaquah based program wound down, we launched this project, and it ended up kind of subsuming the Issaquah work. So we get data in two different ways. In the Seattle urban carnivore project, we use camera trapping so we're able to incorporate that Issaquah project and then also broaden that out across the whole Greater Seattle area. Volunteer teams manage those camera sites and help us collect the data from those sites. We also launched carnivore spotter, which is an online observation sharing tool where public can share their observations of carnivores in our communities.

1:16:00

So from the camera chapping, we can start to visualize data like this. So this is kind of detections of different carnivores at different times of the day and night, so we can better understand carnivore behavior and share that understanding with our community. So things like, you know, it's actually not

uncommon for coyotes to be active during the daytime. They're kind of the coyotes are here in kind of the light yellow. They can be active through all times of day and night. So it's not unexpected to see them during the day. So we can share things like that about carnivores to help people understand their patterns that can promote coexistence. And then with our camera trap volunteers, they're going to their camera site. So this is one example of several photos through the seasons at one camera site. Our volunteer teams are going to that site once a month throughout the year, and seeing the photographs of the wildlife, and we haven't explored this yet, but I'm very interested in whether you know what kind of empathy that might promote for the place. You know, does it build a sense of nature place? Does it build a sense of better understanding of the wildlife in that place? So that's something that I'm hopeful that we could explore and then with carnivore spotter, we've seen a lot of great engagement with this tool. We get about 2000 reports every year. That's been pretty consistent, and we see all sorts of we've done some different analyzes. I don't have time to go into here, but of you know whether people are showing positive affect towards the carnivores in their comments, if they leave comments, or if or negative. But one thing we've kind of hoped through carnivore spotter is we just normalize that coexistence like this is showing just the area around Woodland Park Zoo like, I've worked at the zoo for a couple of decades, and I've never seen, I've seen, once seen a coyote around the area of the zoo. But if you look on carnivores, Potter like, it's not that uncommon to see coyotes, either to the West in the neighborhood or to the east of the zoo in the park. So so so our thought is, you know, hey, look, you're already co existing, and you didn't even know it like, that's easy. So again, something we haven't fully looked into, but that is a hope with carnivores Potter. And then, as this program became more established, different communities have reached out to set up community panel discussions about the carnivores in their communities, from here in Seattle, you know, and then also out in Issaquah, We've continued our engagement there. And so we try to bring a range of voices, community members themselves, as well as different different representatives, to talk about the coyotes and or the any carnivores in the area and coexistence, and to hear people's concerns and questions about that. And one way on the next slides, we've set those conversations up is working with a local graduate student who's studying coyote diets in Seattle, and kind of starting off those discussions with her presenting about, you know, a year in the life of a Seattle Coyote. What is, what does that look like? What are they doing at different times of year? You know, how are their family structures organized? What? How do they take care of their pups? So just again, to kind of give what folks have already mentioned here, that better understanding of the behaviors and the patterns and the life of the wildlife that we're talking about. So we also do get a lot of media inquiries, again, as the program has established itself as a resource to the community. We do get a lot of outreach. These headlines and media pieces are very cherry picked, of course, not all of the newspaper headlines locally present positive images of our local carnivores, but we are trying to kind of change that narrative as we're talking with media and our local Fox 13 has been very receptive to that, and Did some wonderful spots on the work that we do, to work on CO existing with Northwest nature, and that's just been really fantastic. So continually working on that angle, we actually held like a workshop at the zoo for media outlets about coexisting with wildlife, and that was one of our efforts to kind of shift that narrative a bit. And then finally, we have worked with our State Department of Fish and Wildlife on producing some coexistence tools. And I think others have mentioned this. It's like just trying to get on the same page with all of your partners in your region about how you talk with communities about coexistence. If you all are having these messages of normalizing coexistence, and, you know, deepening understanding of the wildlife to begin with, that can really help. So this was one of our efforts to kind of literally, literally get on the same page, and it was funded by a

local tribe, and we were able to get input from that native nation on the wording, which really, I think, helped us to reflect that respectful relationship between humans and wildlife. And the wording also promotes a deeper consideration of animal behaviors, social structures and needs. So these are posters that we have available and that we distribute out in the community. And we also have social media toolkits, knowing that a lot of these conversations do happen on social media. So as others have said, is it all working? It can be hard to know. It could take a significant investment to really gather all the relevant metrics to fully understand one thing that's been hopeful to me is, you know, the interest out in Issaquah and that original community that we're working with has really maintained and has even grown. They've launched a new, what they hope to be annual wildlife coexistence event that we participated in last summer in the Seattle area. Certainly challenges with CO existing, with coyotes in particular pop up, but they pop up in different neighborhoods now and again, and a lot of our partners say this has just happened for many years, and then they kind of fade out. So it's hard to say, like, what's changing, but we continue to kind of keep an eye on that, and we're working with a group at the University of Washington right now. They're really taking all of our carnivore spotter data and then data that they have on coyotes and raccoons and instances of conflicts, and trying to see like, can we find patterns or trends that start to happen before a conflict happens? Can we make a predictive model so that if we can keep tabs on those patterns, maybe we can take proactive measures to really avert conflict before it happens with with coyotes and Racine in particular. So that's all I have. Emily, if you want to kick off the discussion with this next slide, you can or you can quickly get rid of it and go to something else, but it's there if you need it. I would love to

1:23:53

talk about that, but

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I'll turn it over to you for our question time. Awesome.

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Thank you so much everybody for your presentations and your contribution to this discussion. We have about 15 minutes left, so yeah, there's a couple kind of avenues we can do. I already see a question in the chat, so we can kind of transition to Q and A, and then maybe we'll, like, naturally get to this question of like, does empathy go too far. And you know, if we don't get to that, then I'll pop it up when we have, like, seven minutes left and see what people think. So we can kind of do either or. But Megan has a question in the chat, does conflict include car accidents? Is

1:24:39

that a question for Katie Megan, or for anybody

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I can, I can take a step, but others may also it's not one that, I mean, it definitely is a significant mortality factor for wildlife In our area. It's not one that we've addressed directly, because we're a bit more focused on, you know, our people setting up more direct conflict between humans often, and pets as well, and coyotes, for example. But certainly it's a negative impact for carnivores in our area, for sure.

1:25:29

Thank you. Katie, yeah, i The question was inspired when you were talking about your work with UW and like looking at the data, and I was just curious if that data included incidents like car accidents.

1:25:41

I don't believe it does. I think in that case, they're looking at were carnivores, intentionally removed, and that's one of the conflict things that they're looking at.

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Yeah, makes sense? Yeah. Thank you. Yeah.

1:26:03

Any other questions that folks have?

1:26:18

I had a question for noeli. So something you know, we run into here when, because we the bears that live here are we're all removed from the wild for conflict, and then we have people say, Oh, but that can happen with every bear. And we're like, Absolutely not. There is nowhere near enough space. So I was wondering, with no Elmi, if you guys run into that, where people think, Hey, since you guys can take jaguars, that's just what will happen with every Jaguar. Or, like, how you do messaging for that, or if you know you do have, like, enough partnerships where, like the Jaguars you can remove, can find placement.

1:26:49

Yes, we do run into that. And for that, we work with the forest department as well, because they are the leading authority here in Belize. So they decide what to do with the conflict cut. However, in several cases, like Khaled Said that the cut is just passing through. It's not even causing any conflict, any significant conflict. So for that, we do relocations if, well, the Jaguar is first rescued from that situation, and it's taken for a veterinary checkup, a checkup, and then when they find that the Jaguar is in, it has good health, then the Jaguar is released into a more remote location, far away from The establishment where it was in, quote, causing conflict. So the end point of our we always ensure to make sure that when we have conversations with people that have sightings of jaguars, is to let them know that we won't always 100% just remove them from your area and take them to the zoo, because we don't have a lot of space for so many Jaguars in the zoo, either. And even, know, even though the the habitat is getting smaller here in Belize, we do try to make our our best effort to put them in places that are intentional. You know, we try to be intentional with the areas and release where the Jaguars can be released back into the wild. To answer your question,

1:28:34

yeah, thank you. No, that's That's great to hear.

1:28:41

And I do I want to remember to read Laurie's comment in the chat says regarding car incidents, I NCAS, in Brazil, has done some great work on this for giant anteaters and giant armadillos, reframing animal road fatalities As public safety or a road safety issue.

1:29:02

Well, Emily, if there's not a burning question from anyone else right now, I'd love to bring up

1:29:10

the Yeah. Let me pop my Minnesota over here.

1:29:16

Yeah, go ahead and I don't know if this is, you know, relevant for folks in their contexts, but I wrestle often with the fact that it seems like empathy for individual animals can actually lead to behaviors that could set up conflict, like if people really care about that coyote that looks like maybe it's not doing well, and They want to put food out for it, or even unintentionally. You know, maybe people have empathy for birds, and they put out food for birds, and then that gets attracts black bears. So how do we, how do we employ empathy for wildlife, for conservation action and not maybe encourage these actions that actually aren't helpful for wildlife. That's kind of one of the things I wrestle with. So curious what, what folks have thoughts on that?

1:30:21

I mean, I can take this one first, yeah, we, we, I wouldn't say, struggle with it, because we talk about it a lot here. We, you know, do make the conscious effort to talk about, you know, the individual, especially like the bears, who all have stories that relate out to the wild. And we talk about them as individuals. But every time we do, we do make, like, the very deliberate effort to say this isn't an isolated incident. This happens all over the place. So do think of the bigger species. And you know, understand that sometimes they're here because people thought they were doing the right thing. And you know when that happens in this area, sometimes it does get very public when people try to save a drowning bison calf and then realize that it had to be killed because now it can't go anywhere. You know, people do cure those so media, I don't say almost it helps, but sometimes people realize, and even if they were about to do that, they're like, oh, yeah, that person did something bad. I now I know that, and that's tough to do, but yeah, here we especially when it comes to, like the wolves, having people see them as something that is doesn't need to be hated is also not a pet. We're like, okay, don't swing too far in the other direction. Come back to this middle of like, it's just a wild animal that's just living its life out there. You don't need to hate it. You don't need to absolutely love it. Just respect that it's doing its own thing. And in having people understand compassion is great. It'd be we'd be crazy if we didn't have it learn how to use it in the best way.

1:31:52

Uh, Katie, for us here in Belize, we get done a lot with crocodiles. Um. Crocodiles are feared very much, but they're one of the animals that come very close to people, especially in the coasts and in the islands. So what we have seen has been adopted in the island and islands is signage. There's signage everywhere, signage even in the homes where crocodiles would tend to come very close and just bask in their backyard. So the residents have taken that initiative of putting up signs so we can see that once

again, like perhaps not specifically conflict initially, but just siting of a crocodile, nearby residents are very quick to put it up on social media, circulate the information, and then, thankfully, we have some people that would, you know, take the time to speak on behalf of those crocodiles and to let them know that they're just there. They have nowhere else to go, and they just found a spot to chill. And the signs work very well, we get to see that those signs, the people online, respond to them very much, and are grateful to have signage that indicate that those areas crocodiles have been habituated there, and therefore to not feed or try to touch or have your pets and In your clothes. And that also helps residents to ensure that crocodiles are not pets. They're not their pets either. So I think signage would be a very strong one as well.

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That's helpful. What are the signs say? So they say, Don't feed like they're habituated. Just give them space, that kind of thing,

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yeah, do not feed into crocodiles, is what you mostly see. Yeah, that's great. Thank you.

1:33:55

Yeah, and I just popped something in the chat. I don't remember how I came across this, but I think it's interesting because I measures these two questions that we have, like these car accidents as conflict, and then, like, where's the line of empathy in mitigating conflict? And it's some signs in, think, near Grand Teton National Park that went in after 399 was killed in a car accident that aimed to kind of use empathy to for a positive action, right? Like, maybe that doesn't get at your question of, like, does it come too far? But like, we really kind of contrast to traditional stuff in the area. Megan says I remember seeing signage crane Canyon. This is like the deer feet themselves. And then Leanne is popping in the chat and Banff, kindness kills wildness, a little extreme, but same or similar kind of thing. It

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was also Canada. So they were more like, okay with they're like, Yeah, this makes sense. We're very straightforward.

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Any other questions or things that folks have about four minutes left?

1:35:11

This is a little less of an empathy question, but I was curious with the Jaguars. Like, what was the fascination with the black coloration, like, why did that seem to make them distinct from the other Jaguar color?

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So the situation with the blood

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draw, or is this a distinction. It's merely just so people can differentiate, because a lot of times the beliefs people tend to think the black jaguars are entirely different species. They don't understand that it's melanistic and just for ID purposes, especially when we're doing these surveys that we have to report to the government body, it's always better to have the correct information. Basically, most of the time when we're doing conflict work, people will cite having seen a black Jaguar, but a lot of the times, it's just because they've seen a jaguarunde, which is one of the smaller cat species that has a darker coat, and just because it's cat shape, they tend to think it's a jaguar. Sometimes, most sometimes, they see these cats during the night time. So it's just like a differentiation, like if you're seeing a black Jaguar, was it a Jaguar name? Were they just not able to see the animal properly? Does that person think a black drug or is entirely different species than regular drug war? So these are some of the questions we have to ask when we have to tackle when people say they've seen a black drug war.

1:36:54

Okay, and then that gets a little bit at your point that, like everything, is sort of being blamed on jaguars, where it could have been a different cat species altogether. Okay, interesting. I looked them up. They're gorgeous.

1:37:11

My My thing is more of a comment than a than a question, and it's also not necessarily focused on carnivores. But I actually used to work at the grovels of Discovery Center with Leanne and Leah and I were talking about this earlier. So now I live on the east coast, and I work at a facility that focuses on pollinator conservation, using caterpillars as, like our gateway bug to get people excited about and it's been very interesting to go from working with large carnivores and then going to something so small and seeing some of the same coexistence issues, as well as, just like, lack of empathy towards things that are affecting essentially, like, quote, unquote livelihood. So like, caterpillars are often seen as pests and defoliators, and we it's it's been interesting. So I've been bringing some of, like, the verbiage and stuff that we somewhat used at the visible Discovery Center, but using it on smaller creatures, which has just been like a very, very interesting transition for me. But it's, it is just shows how, how similar kind of people's perceptions and mindsets can be across across species, whether they are big carnivores or not. But, you know, there's caterpillars that like decimate apple orchards and things like that, and they are native caterpillars, and they're supposed to be there, but that is like someone's livelihood. So it's kind of like similar relationship, like ranchers and wolves and that kind of thing. But, yeah, it's, it's a very different, different world, but still a lot of the same problems, which is an interesting thing to think about.

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Yeah, that's a really interesting parallel to draw, and a really interesting parallel to close on and just kind of leave folks with, because I think that intersects well with another question that's been circulating a lot, and the network is kind of these empathy for for non charismatic, quote, unquote, or kind of your invertebrates, your slimy things, and how a lot of those parallels kind of intersect with conversations that we're having about kind of the megafauna, these big critters and your the issues are copy pasted across contexts, which is really interesting. But thank you all for coming today. We are at time, so I want to make sure that I'm respectful of that. If you have any questions, please let us know. You can reach out to us at empathy@zoo.org, and I also want to ask, when you leave the zoo meeting, there

will be a pop up to take a post event survey. Please do so let us know how we did. This is a new topic, a long event. We're very curious. If this is something you want more of you want less of it, let us know. So thank you all so much for coming, and I hope to see you all in network spaces soon.

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Thanks everyone. Noeli and Kali say hello to Celso. Please. Will do see

1:39:59

you sometime. Thanks. Thanks all. Bye. You.